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COASTAL TOURISM AND CLIMATE CHANGE: RISK PERCEPTIONS OF TOURISM STAKEHOLDERS IN SOUTH AFRICA'S GARDEN ROUTE

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Abstract: Coastal tourism destinations are highly vulnerable to the ramifications of climate change. Research conducted in South Africa has identified the potential losses associated with climate change on beach or coastal environments as one of the largest concerns for the tourism industry. In addressing the challenge of climate change a critical research issue is advancing our understanding of the risk perceptions of tourism stakeholders. The aim is to investigate risk perceptions of business stakeholders towards climate change impacts in one of South Africa's leading coastal destinations, the Garden Route District Municipality in Western Cape province. The results are analysed from 30 qualitative interviews conducted with tourism business owners and managers. Four core themes were scrutinised, namely awareness of climate change, perceptions of the potential climate change risks, the prioritisation of climate change as compared to other business risks, and greening and adaptive measures pursued by businesses. Overall, climate change is not considered as a major issue for tourism businesses in the Garden Route especially as compared to the immediate or pressing challenges relating to marketing, infrastructural deficits, government regulations and local human resource development for tourism. This conclusion raises significant concerns for the resilience of coastal tourism destinations and local economic development futures in South Africa.

Key words: coastal tourism, climate change, risk perception, business adaptation, local economic development, South Africa

* * * * *

INTRODUCTION

Coastal tourism is acknowledged as the largest segment of the tourism industry with coastal areas worldwide identified as exposed to a range of risks as a result of climate change (Hall, 2008; Scott, 2011; Zeppel and Beaumont, 2011; Becken, 2013; Kaján and Saarinen, 2013; Gómez-Martín et al., 2014; Santos-Lacueva et al., 2017; Atzori et al., 2019; Dumitrescu et al., 2021). The impacts of climate change are projected to result in substantial damage to many coastal tourism facilities, important beach or leisure areas, and to key aspects of marine ecosystems that serve to attract tourists to destinations (Belle and Bramwell, 2005; Rutty and Scott, 2016; Arabadzhyan et al., 2020; Dumitrescu et al., 2021).

Jarratt and Davies (2020: 423) maintain the impacts of climate change on the coast need to be recognised as significant given that climate change related events “are already damaging coastal tourism economies”. Scott (2011: 19) observes that the overall costs of damage to coastal areas where extreme events are identified goes beyond direct costs relating to infrastructure damage as there are indirect “implications for property values, insurance costs, destination competitiveness, marketing and wider issues of local social and economic wellbeing”. According to Weatherdon et al. (2016: 1) the impacts of climate change for coastal destinations “may also induce changes in tourism flows, leading to substantial geospatial shifts in economic costs and benefits associated with tourism revenue and coastal infrastructure protection and repairs”. The vulnerability of beach tourism destinations to climate change is flagged by Santos-Lacueva et al. (2019).

Shaaban and Ramzy (2010: 243) point to a wide array of climate change related impacts which are projected to have a profound effect on coastal tourism. These include shifts “in water availability, biodiversity loss, reduced landscape aesthetic, altered agriculture production, increased natural hazards, coastal erosions and inundation, and damage to infrastructure”. In facing these challenges tourism adaptation may be problematic in situations where “structural coastal protection is not well suited to the business objectives of coastal resorts” where traditional product and services appear set around “providing unobstructed views of the sea and maintaining unhindered access to the beach” (Scott et al., 2012: 893-894).

Buzinde et al. (2010) document the significant “displeasure” displayed by some tourists visiting beaches in Mexico after encountering enhanced coastal defences and which interfered with their perceptions of unhindered, pristine white sands. A disconnect in priority between risk reduction and preoccupation with aesthetics prompts comparison of such (in) action to ignoring the proverbial “canary in the coalmine” (Bicknell and McManus, 2006). Gómez-Martín et al. (2014: 305) point to several knock-on-effects that a decline of coastal tourism can have on activities which function “as a complement to the main activity of sun-and-sand tourism”. For local economies reliant on coastal tourism climate change presents a core policy challenge most especially for local economic development futures (Hyman, 2014; Rogerson, 2016).

* Corresponding author

In addressing the challenge of climate change a critical research issue is understanding the risk perceptions of tourism stakeholders. Ghilardi-Lopes et al. (2015: 85) emphasize the significance of evaluating “tourists’ perceptions of the impacts of climate change on coastal and marine environments in order to support decision making in touristic coastal areas”. Equally important are the perceptions and adaptation of local tourism business stakeholders to climate change. Research conducted in South Africa has identified the potential losses associated with climate change on beach or coastal environments as one of the largest concerns for the tourism industry (Pandy and Rogerson, 2018, 2020, 2021). Dube et al. (2021) demonstrate the risk of climate change and with rising sea levels an internationally recognised coastal destination such as Cape Town could experience significant damage to 80% of the city’s Blue Flag beaches. The occurrence of drought episodes also has been demonstrated to negatively impact tourism arrivals in South Africa’s leading international destination for international travellers (Dube et al., 2020). Against such a backdrop the aim in this paper is to analyse the risk perceptions of business stakeholders within one of South Africa’s leading coastal destinations. The next section turns to provide an overview of the case study region and of research methods. The results of the study are analysed in the subsequent section of material.

CASE STUDY AND RESEARCH METHODS

The empirical focus is Garden Route District Municipality within Western Cape Province (Figure 1). The Garden Route is one of South Africa’s leading tourism destinations because of a unique combination of natural tourism assets based around the coast. For Visser and Barker (2004: 114) the Garden Route represents one of the country’s best known “internationalised tourism corridors” because of its provision of a high variety of experiences. The major tourism nodes are the towns of George, Mossel Bay, Knysna and Plettenberg Bay (Figure 1).

The region’s flora forms a crucial segment of the Cape floral region that has been recognised by the United Nations as a world heritage site as 70% of the plant species present do not exist anywhere else in the world. Its importance and diversity of habitats was recognised in 2017 with international status as a UNESCO Biosphere Reserve. Sections of the Garden Route include coastal wetlands which provide high levels of species diversity within the region. The Garden Route is thus a destination in which to experience a diversity of coastal attractions that include lagoons, rivers, valleys, lakes, and forests as well as traditional sun, sea and sand-based attractions. Historically, it developed as a popular domestic tourism destination for outdoor activities including caravanning and camping (Rogerson and Rogerson, 2020a, 2021a). The small towns on the Garden Route continue to be major destinations for domestic caravanners (Rogerson and Rogerson, 2021b).

Beyond leisure-based beach experiences, the area’s tourism offerings also include mountaineering, hiking, game viewing and eco-tourist based activities. In terms of marine tourism the Garden Route offers several tourism products or experiences such as whale and dolphin watching, scuba diving, snorkelling and shark cage diving. The area also has a range of water sports that include fishing, surfing, yachting, and water skiing. All of these activities are within the bounds of the United Nations definition regarding coastal tourism as “a unique resource combination at the interface of land and sea offering amenities such as water, beaches, scenic beauty, rich terrestrial and marine biodiversity, diversified cultural and historic heritage, healthy food and good infrastructure” (United Nations Environment Programme, 2009: 10).

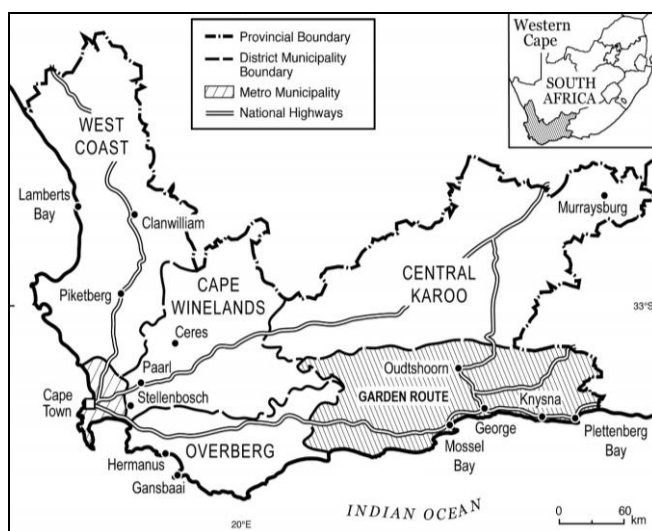


Figure 1. The Garden Route District Municipality within the Province of the Western Cape (Source: Authors)

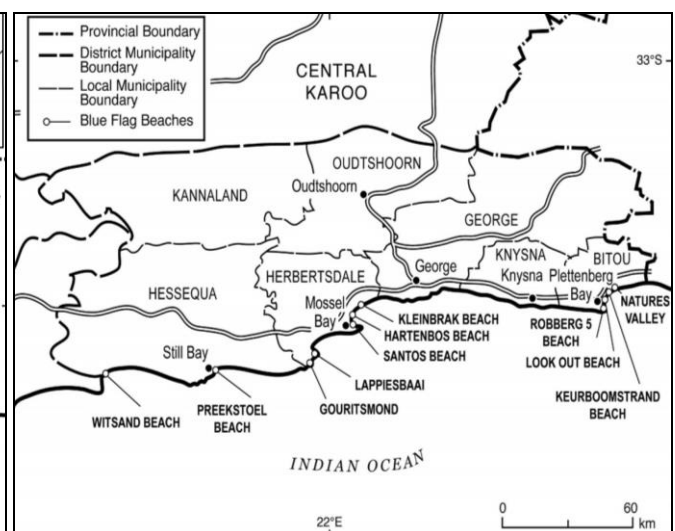


Figure 2. Blue Flag beaches along the Garden Route coastline (Source: Authors)

In pinpointing the significance of the natural environment upon which much of the Garden Route’s tourism economy is anchored it must be appreciated the region’s beaches are vital. The coastline of the Garden Route has 11 different blue flag beaches which assume a crucial role in “keeping the environment safe, clean and healthy” while also creating “expectations of clean, safe and environmental friendly beaches of visitors when they visit the beach” (Geldenhuys and Van Der Merwe, 2014: 13). The geography of these blue flag beaches in the Garden Route Municipality is shown on Figure 2. Van Zyl (2006: 33) considers the beaches as vital to the Garden Route’s overall tourist image wherein “unspoilt natural beauty, pristine coastlines

and vast open spaces” provide the perfect venue for tourism development. The Western Cape Province (and specifically the Garden Route) is recognised as highly vulnerable to the impacts and implications of climate change. Indeed, the province is viewed the most disaster prone in South Africa. In terms of specific provincial climate change-based projections, the Western Cape is anticipated to face increased drying conditions and a decrease in annual precipitation especially in the winter rainfall season. Shifts in rainfall patterns further are projected to include intense rainfall events leading to increase in the likelihood of extreme events such as localised flooding. Moreover, as for the rest of South Africa, the Western Cape is expected to endure significant increases in both minimum and maximum temperatures (Pandy and Rogerson, 2021). The outcomes of climate change are set be a range of impacts that increase the risk profile by introducing or increasing levels of vulnerability and exposure. The provincial government has identified several key climate change related impacts or areas of vulnerability that pose particularly serious challenges. The most prominent relates to water availability. As a water stressed province, water availability has already reached levels where demand in some localities already outstrips available supplies. In the wake of critical deficits, water shortages are projected as the greatest climate change related threat to the province and for the Garden Route (Western Cape Government, 2018). Further threats of climate change are for biodiversity of key areas of the Western Cape as a result of increasing temperatures and reduced water availability (Midgley and Roberts, 2001; Midgley et al., 2002). Biodiversity associated with water bodies such as rivers, estuaries or wetlands faces increased pressures as water shortages are exacerbated. Climate change threats raise significant concerns and the provincial government has conceded that “ecosystem goods and services are the foundation of our economy in the Western Cape necessary for inclusive economic growth and the sustainable delivery of basic services” (Western Cape Government, 2017: iv).

Another critical impact associated with climate change in the Western Cape surrounds the increased likelihood of extreme events able to damage the natural environment, critical infrastructure and endanger people’s lives and livelihoods. Other risks relate to increased fire occurrences as a result of wildfires which would be enhanced by dry conditions. Certain climate change predictions anticipate an increase in fire frequency and intensity in the eastern sections of the province by up to 40% of current risk conditions (Kraaij et al., 2013). Research on the effects of such increased fire risk and event occurrence has concluded that increased fires are also likely to significantly impact on key aspects of biodiversity due to the manner in which soil conditions would be altered as well as creating a platform for invasive or alien species to encroach on locations where rare species currently reside (van Wilgen et al., 2016). In terms of the specific climate change related challenges facing the Garden Route District Municipality the area encompasses 320 kms of coastline with 21 recognised estuaries that assume an important role in the area’s biodiversity. The provincial Department of Environmental Affairs and Development Planning identified the majority of the Garden Route’s coastal zones as at a “low to moderate risk to sea level rise induced coastal erosion and inundation” (Western Cape Government, 2010: ii).

The particular areas identified as most at risk are the Mossel Bay area, Wilderness to Knysna area, and the Plettenberg Bay to Nature’s Valley area. All these areas form the backbone for the coastal tourism economy (Rogerson and Rogerson, 2020b). Historically, the Garden Route has been prone to flooding events which occurred most recently in 1998 and 2003. The District is observed to experience also extreme events with hail, drought, and fire (Raju and Van Niekerk, 2013). Overall, the tourism economy of Garden Route thus presents a valuable case study on climate change for several reasons.

First, the Garden Route remains a relatively under-researched destination in terms of tourism studies in South Africa (Rogerson and Visser, 2020). Second, for international tourists visiting South Africa the Garden Route is among country’s most popular coastal destinations, including for backpackers (Visser and Barker, 2004; Rogerson and Rogerson, 2020b). Third, the Garden Route District Municipality has been identified as set to confront some of the highest levels of climate change related risk and exposure to extreme events. Finally, the Garden Route contains some of South Africa’s most tourism-dependent localities with coastal local economies anchored upon income and employment opportunities which are highly reliant upon leisure tourism (Rogerson and Rogerson, 2020b, 2021c).

Analysis is undertaken of the risk perceptions and adaptive responses undertaken by 30 tourism business stakeholders within the Garden Route District Municipality. Qualitative interviews were conducted with a cross-section of managers or owners of coastal tourism businesses mainly focussed on the provision of accommodation services. Interview respondents were purposively sampled in order to capture the array of different kinds of accommodation service establishments and tourism services. Hotel and time share-resort managers, bed and breakfast owners, guest house entrepreneurs, backpacker hostel operators and camping/caravan site managers were included in the study. The details of the 30 respondents are provided in Table 1. All respondents were in managerial positions. Interviews were conducted in person at the place of work of respondents. Length of interviews varied with an average interview duration approximately 30 minutes. Interviews were manually coded thematically for analysis in terms of several overlapping themes.

RESULTS OF COASTAL TOURISM STAKEHOLDER RISK PERCEPTIONS

The findings are analysed in this section from the 30 interviews to understand the risk perceptions of local tourism stakeholders in relation to climate change. Four core themes were under investigation. First, the study sought to identify stakeholders’ awareness of climate change and sources of knowledge. The second was perceptions of the potential risks that climate change might pose to tourism in the Garden Route. Third, the research explored the relative prioritisation of climate change as compared to other business risks that were impacting the local economy as perceived by respondents. Finally, the interviews explored the extent of greening actions currently either being undertaken or planned in relation to climate change adaptation or mitigation. In situations of no actions being undertaken by local stakeholders to tackle climate change the reasons for inaction were examined.

Awareness of Climate Change

At the outset of the analysis the first questions related specifically to the extent to which tourism stakeholders in the Garden Route were aware of the issue of climate change. It was disclosed that all interviewed stakeholders acknowledged that they had indeed 'heard of' climate change before. They stated the source of climate change information as from a variety of predominately public and social (online) sources. These included television, radio, newspaper articles, magazines, social internet platforms (especially Facebook), and in some instances from local community and government training forums. This said, in acknowledging that they had indeed heard of climate change before, the degree to which stakeholders understood, acknowledged or felt concerned about climate change appeared to vary. Table 2 captures the perceptions of tourism business stakeholders about climate change causation.

Table 1. Details of the 30 Interviewed Respondents (Source: Authors)

Respondent's Role	Business Type
Business Owner	Guesthouse (G2)
	Guesthouse (G8)
	Guesthouse (G22)
	Guesthouse (G28)
	Lodge (G3)
	Lodge (G12)
	Lodge (G18)
	Camp (G6)
	Surf school & restaurant (G10)
	Caravan park (G13)
General Manager	Backpackers lodge (G30)
	Game reserve (G1)
	Ocean safari services (G4)
	Adventure experience providers (G5)
	Lodge (G9)
	Lodge (G11)
	Lodge (G16)
	Lodge (G27)
	Guesthouse (G14)
	Guesthouse (G19)
Assistant Manager	Guesthouse (G20)
	Guesthouse (G21)
	Timeshare Based Hotel & Resort (G23)
	Timeshare Based Holiday Resort (G24)
	Tourism office (G26)
	Backpackers lodge (G29)
	Nature reserve (G7)
	Hotel (G15)
	Lodge (G17)
	Lodge (G25)

Table 2. The Perception by Garden Route Tourism stakeholders of the Cause of Climate Change (Source: Authors)

Position on Climate Change	No. of interviewees	%
Human-made	19	63
Climate change is 'natural'	8	27
Appear unsure or uninterested	3	10

Table 3. Perceived Risks Associated with Weather and Climate in the Garden Route (Source: Authors)

Perceived Type of Risk	No. of Respondents	% of Respondents
Drought/water shortages	15	37.5
Increased temperatures/heat waves	9	22.5
Storms/flooding	4	10
Ocean swells/storm surge	4	10
Beach erosion	4	10
Fire	3	7.5
Increased spread of disease	1	2.5

Note: Some respondents indicated more than one perceived risk

Note: The number in brackets refers to the respondent ID and was allocated in order of the interview schedule

It is evident that as much as 40 percent business owners in the Garden Route did not perceive (or care) human-based action as playing a role in the existence of climate change. As shown on Table 2 27% of all interviewees disclosed in some instances that they believed in 'natural' patterns and variations in climate. Another 10% of respondents suggested that while they were aware of climate change they were unsure or 'uninterested' of its underlying causes. Local stakeholders, such as one guest house owner, maintained that: *"It's not something you can really explain"* (G2).

The assistant manager of one lodge contended that *"the jury is still out on climate change"* (G25). Other tourism interviewees expressed doubts over the key cause of climate change. A general manager of a lodge maintained that to the best of their knowledge when it comes to the topic of weather and climate, *"It all works in natural cycles"* (G11). This view was re-stated by another lodge owner that *"Climate change is a natural process"* (G12). Other respondents – such as the general manager of a timeshare resort - offered perceptions based on their personal experience, stating *"I don't really pick it up, you have cycles in years"* (G23). Likewise, a guesthouse owner argued that in their opinion for the most part *"The weather can't change, at best the patterns usually shift a bit"* (G19). Another guesthouse owner considered as follows: *"The climate and the environment have not changed much in the last few years"* (G19).

Such views about the existence and perceptions of climate change stand in stark contrast to the position of the minority of interviewees who – such as one lodge owner - stated emphatically that *"The temperature is increasing"* (G3). A hotel owner similarly reflected that *"Climate change is making things hotter and hotter"* (G15). Other responses were *"It's definitely gotten warmer with less rain"* (G20) and that *"Weather and climate are a definite issue"* (G4). Although the perception of natural cycles as responsible for climate change was frequently highlighted by stakeholders who appeared to suggest that climate change was not as a cause of human activities or behaviour, several interviewees who acknowledged the existence of the phenomenon appeared less inclined to discuss specific human actions that underpinned climate change. Another lodge owner concluded: *"You can't get too deep into it, but yeah the climate is changing"* (G27). A few interviewees indicated that whilst they had heard of climate change that they were not fully aware of its cause. A guest house owner responded in terms of the causes of climate change: *"I have no idea, I've never thought about it"* (G2).

Risk Perceptions

A second key theme in exploring the climate change perceptions of those tourism stakeholders interviewed in the Garden Route District Municipality related to the degree to which interviewees perceived climate change as presenting a risk to their business or to local tourism as whole. A range of perceptions were offered. Some interviewees, such as an Assistant Manager of one lodge, acknowledge that climate change as representing a potential issue for the country: *"Climate change might definitely have an impact on South Africa, although many tourists would still keep coming. Climate change wouldn't really affect tourism, just the way we sell ourselves"* (G17).

This position was reinforced by other lodge owners who, unsure of its long-term potential implications, argued instead that *"It (climate change) could impact on tourism depending on how severe things get"* (G12), or *"The only major threat that climate change could pose is if it stops our international tourist flows"* (G16).

These perceptions critically reflect what has been identified in other perceptions research on climate change, namely a phenomenon whereby climate change is acknowledged by an individual as affecting others in localities far away from them, while considering themselves and their immediate environment immune from its impacts and implications. Typically, stakeholders expressed the view: *"Climate change might not have much of an impact on us here along the coastline. The inland will definitely be more affected"* (G4). One manager of a camping site considered that: *"We are in a little bubble here in the Garden Route, the hectic and radical effects of climate change might take longer to reach us"* (G6). Other interviewees reflected that: *"I don't think climate change will have a big impact on our (the Garden Route) tourism, if we're still a safe place to go on holiday people will come"* (G20).

In unpacking the range of climate change perceptions among tourism stakeholders several indicated potentially positive local benefits such that increasing average daily temperatures *"might not necessarily be for the worst"* (G12). A lodge owner considered also that given the possibility of warmer weather all year round *"Climate change could be positive by increasing our winter tourism"* (G16). The potential that climate change might be a solution to the seasonality issues of Garden Route tourism was raised. One hotel manager stated that climate change effectively *"extends our seasons"* (G15) and a lodge owner similarly that it could produce *"more sunshine for guests"* (G3).

By contrast to these positive views other interviewees expressed concerns over the potential long-term direct and indirect impacts associated with climate change. One campsite manager stated that: *"Tourism in the area is all built off nature and our ecosystems, if climate change affects that then it will affect the economy, and that will impact on me"* (G6). Likewise, the manager of a local timeshare resort expressed a similar view: *"What we have to offer is beaches. Water and power restrictions caused by climate change would have an impact"* (G23). A local guest house owner offered a similar sentiment: *"You come to Plettenberg to go to the beach, or to do outdoor activities. It's a seaside resort. Periods of bad weather or climate will cause people to leave early"* (G20). Beyond threats of climate change to beaches certain interviewees such as one lodge owner pinpointed the critical importance and aesthetic of the natural environment that draws tourists to the Garden Route noting *"We need the forests, if anything happened to them it would impact tourism"* (G17).

As for perceptions surrounding the impact of short-term weather or more immediate atmospheric conditions, several stakeholders did acknowledge the potential impacts on their respective tourism businesses. More particularly, those tourism businesses reliant on providing tourists with outdoor experiences as their service or product offering showed higher levels of concern with regards to the impacts of weather and climate. A manager of one outdoor camping resort commented *"Weather and climate are an issue! Our biggest issue is when it rains"* (G6). A timeshare resort manager observed *"Weather and climate do have an influence to a certain extent. If the weather is really bad we do see a small impact"* (G24). In discussing the challenges attached to Garden Route attracting coastal focused tourists, one interviewee simply observed: *"You can't do sandboarding in the wet"* (G27).

The above sentiments were further echoed by other Garden Route respondents: *"The weather and climate do play a role, the business and guests are very outdoors based"* (G3). Or, as one popular timeshare-based hotel and resort manager noted: *"Weather is the main challenge, our challenges change with the weather"*. Certain interviewees who suggested that they did not perceive climate change to be an issue still noted concerns as to the manner in which more immediate weather patterns could affect tourism highlighting its potential impacts for popular tourism products. An operator of ocean safaris considered that *"Whale watching is peak season and weather dependent"* (G4). Rainy weather was noted to impact on tourist occupancies as expressed by several respondents:

"Weather and climate do have an effect. Rain can be a challenge" (G17).

"Rainy days and bad weather impact more on international tourists" (G15).

"Weather plays a role in last minute bookings, as well as how long people stay. When the weather is bad people tend to move on to other locations and experiences, especially international tourists" (G19).

"Short stays and walk-ins are affected by weather" (G2).

The tourism business stakeholders were asked whether there were any particular weather or climate related impacts or hazards perceived as presenting a particular risk. The results are shown on Table 3. It is evident that the hazards involving drought or water shortages, increased temperatures or heat waves, storms or flooding events, ocean swells or storm surges, and beach erosion were the main risks identified. Lesser identified risks related to fire and concerns surrounding an increased spread of disease due to climate change. Overall, in terms of climate change related risk perceptions, drought or water shortages, and increased temperatures or heat waves were ranked by interviewees as representing the most significant perceived risks facing them as tourism dependent stakeholders. The qualitative responses of numerous stakeholders elaborated upon these threats, especially issues around water. For example, one lodge owner asserted that *"Water shortages would have a major impact on us"* (G12). Likewise, the time-share manager averred: *"Water is one of our biggest*

challenges" (G23). Another lodge owner when interviewed about their respective risk perceptions surrounding climate change went so far as to declare: *"If you don't have water, you might as well shoot yourself"* (G17). Further respondents opined that the impact of climate change could be *"huge"* and stated that *"We didn't get rain this summer. In fact, we haven't had a quarter of our usual rainfall which caused a lot of worries"* (G16). Moreover, others lamented *"water is already a problem, we ran out of water in January two years ago"* (G25). It was also disclosed that specific forms of tourism, such as wine tourism, would be at relatively greater levels of risk given their reliance on water availability. In terms of stakeholder perceptions regarding the impact of increasing temperature variable responses were offered. In the case of one larger well-capacitated enterprise, a hotel, it was stated that: *"Heat is easy to deal with. We have air conditioning"* (G15).

For smaller enterprises, those less well-resourced or cost conscious (such as a guest house): *"We wouldn't be able to do air conditioning, we are (power and cost wise) already at our limit"* (G28). Another similar enterprise respondent from a backpacker lodge observed: *"We don't have the infrastructure to accommodate extreme heat"* (G29). One stakeholder revealed concerns surrounding the wide-ranging effects of water shortages beyond the tourism enterprise itself: *"Heat and drought affect the animals and vegetation that make the Garden Route such a popular attraction"* (G4). One entrepreneur with a variety of tourism investments including a restaurant highlighted that *"Heat affects people's behaviour, sometimes when it's really hot people are less inclined to eat out. They seem to prefer to rather stay on the beach"*, a situation that would impact the firm's profits (G10). Finally, worries were raised about potential impacts of increased heat by one respondent of the diversion of tourism flows: *"If it gets hotter than it was this last December, people might go somewhere else"* (G5).

Issues surrounding intense storm events or flooding, the impacts of ocean swells or storm surges along the coastline as well as beach erosion were of concern to several respondents. On flooding, a timeshare resort manager volunteered concerns about a past extreme event, noting *"In 2008 before the current owners took over we had flooding. The water came all the way to the chalets'. The N2 highway nearby was almost completely under water"* (G24). A guest house owner also reflected on past extreme events of *"Severe rainfall, it was so bad that the town's annual oyster festival had to be cancelled"* (G18). Other stakeholders variously expressed concern about the dangers of ocean swells, the regularity of beach erosion and of its advance as is evidenced by the following group of responses.

"Storm surges affect tourist's enjoyment of the sea" (G4).

"In 2007, the waves were so high that they actually hit the hotel and did a lot of damage... we really had to worry about people's safety" (G23).

"Every year beach erosion completely stops and stalls things...It usually takes about two weeks to get everything back into shape" (G4).

"Last year, the beaches washed away three times" (G10).

"A few years ago when the lagoon broke through. We lost the lookout beach" (G20).

In general, the financial consequences for tourism businesses were appreciated by many respondents concerning the damage to beaches and of the ocean becoming too dangerous for pleasure seekers (G4; G5; G10).

One other aspect of the risk perceptions as shown in Table 3 concerns fire-based events. Three tourism stakeholders acknowledged concerns relating to fire and the manner wherein climate change could increase risk levels. A camp site manager stressed *"We are in a high fire risk area"* and as a result the risks associated with fire represented an important subject of concern which often went unnoticed by a lot of residents (G6). This sentiment was re-iterated by another interviewee: *"When it comes to fire you have to be prepared. We make sure to clear away excessive dead wood and have fire breaks in place"* (G1). Given that the Garden Route District Municipality is projected to face increasing climate change related impacts, including enhanced fire risk, the need to understand the perceptions of tourism stakeholders becomes clear.¹

The Relative Significance of Climate Change to Local Tourism Businesses

The above discussion demonstrates that for many Garden Route tourism businesses climate change, albeit acknowledged as a potential future issue, does not rank as a key immediate priority. This sub-section turns to show further the relative (in) significance of climate change in relation to other challenges that face tourism businesses in Garden Route District Municipality. Figure 3 summarises the responses offered by the 30 tourism stakeholders of the current challenges faced by the area's coastal-based tourism economy. It reveals that there are at least eight issues mainly impacting the immediate competitiveness of the local tourism economy as viewed as of much greater priority than climate change.

Overall, the content analysis discloses that tourism businesses identify at least 12 specific issues or topics of concern, albeit several are overlapping in character. The four most important relate to (1) marketing, (2) the state of key public infrastructure, (3) government regulations, and (4) human resource or staffing issues. Concerns relating to improving marketing strategies centred on consumer awareness campaigns in order to increase sales or tourist volumes and these made up the largest and most significant issue that businesses view as of overall concern or area of focus. The challenges concerning the poor condition of key public infrastructure and service delivery were put forward by many stakeholders. It was stressed by respondents that damaged or inadequately maintained infrastructure undermined enterprise marketing initiatives whilst at the same time making difficult a variety of daily business functions. Issues relating to government regulations (including controls) as well as 'red tape' also were highlighted frequently by

¹It should be noted that during June 2017 (almost a year after the research interviews in the Garden Route were completed) a severe fire event occurred. The event- a mega-fire - has been described as the worst wildfire disaster in South African history causing seven deaths and destruction of hundreds of homes. In total 30 tourism accommodation businesses were either damaged or destroyed with the consequence of diminishing the overnight tourism carrying capacity of the area by over 500 beds (Western Cape Government, 2017).

respondents. Finally, in terms of providing appropriate levels of service delivery for potential guests, business owners and managers consistently referred to concerns surrounding the recruitment and training of suitable qualified staff. Other issues which ranked higher than climate change for Garden Route stakeholders included water shortages, general financial concerns, and questions about the unreliability of electricity supplies.

Further detail was offered by respondents on the importance of the above issues which were perceived as more immediately significant and prioritised higher than climate change (Figure 3). Numerous stakeholders stressed the imperative to “restructure our marketing” (G6) in the face of increasing regional and local competition. Indeed, some of the ‘older’ or more ‘well-established’ tourism stakeholders in the Garden Route complained that existing marketing initiatives were “fragmented” and forged an image of a local destination such as “Plettenberg Bay as nothing more than a through-point” (G10). The outcome of poor marketing is to arrest the growth of paid bednights by leisure tourists, most especially by international visitors. Stakeholders observed that “marketing has seen a huge shift” (G3) towards such initiatives as “collective cross-marketing” (G17). With technological advancement the marketing tools used by accommodation providers have shifted with TripAdvisor noted as particularly significant (G11). One small guest house owner pinpointed the new marketing challenges: “Social media has meant that we have to be more interactive” (G19).

Arguably, Garden Route tourism businesses prioritise the immediate challenges of enhanced marketing and give it far greater attention than the ramifications of climate change. Beyond marketing the poor state of public infrastructure within the Garden Route was of serious concern. The timeshare resort operator opined that: “There is no point in even advertising to tourists if the roads are so bad that no one can get to us” (G23). Lodge owners complained of “limited municipal services” and seen as “a major challenge that often puts people off coming” (G17). Specific concerns for entrepreneurs in coastal tourism, where public infrastructure or management is heavily reliant on by a range of private tourism stakeholders (such as for toilet facilities at local beaches), are to provide “a safe environment for tourism” (G20).

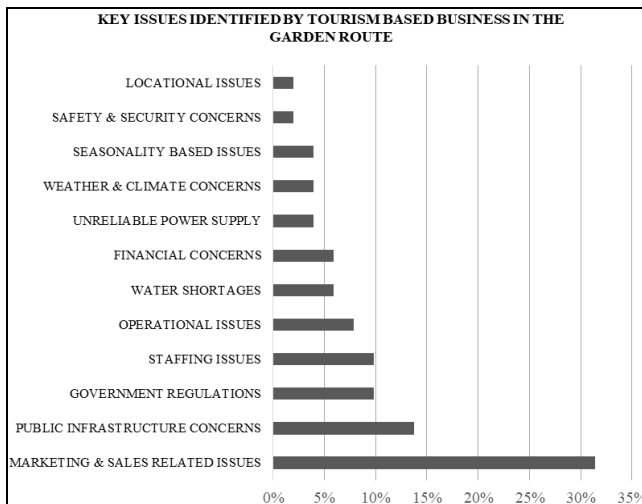


Figure 3. Key issues and priorities of tourism stakeholders in the Garden Route District Municipality (Source: Authors)

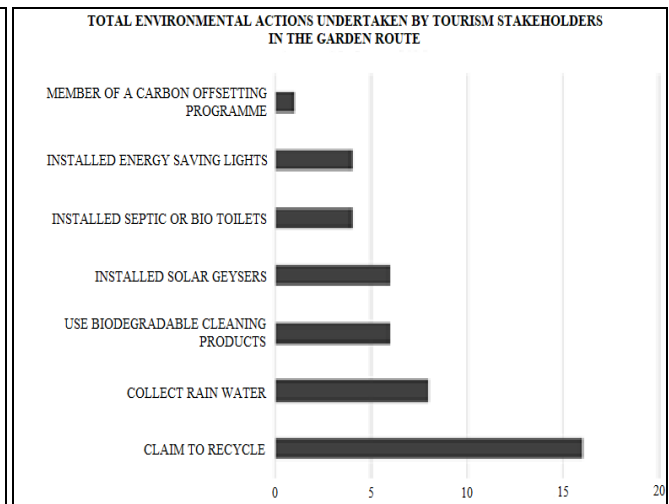


Figure 4. Environmentally-friendly products and actions undertaken by tourism stakeholders in the Garden Route (Source: Authors)

Many entrepreneurs considered that the decline in local public infrastructure damaged the overall tourist experience as “a lot of public facilities are not up to standard people require” (G10). Mostly when discussing the role of infrastructure and governance within the Garden Route, the common sentiment expressed by tourism stakeholders revealed the perception that: “government has more important things on their plate than worrying about climate change” (G4).

Particular criticism was directed by interviewees to misguided visa regulations that negatively impacted the arrivals of international tourists. One typical response given by a lodge owner was: “With visas there was no planning or preparation, the decision just got made without ever thinking about the consequences on us” (G18). Human resource development issues and recruitment of staff was a final issue ranked as more important than climate change. The nature of human resource issues impacting tourism development in the Garden Route is evidenced in the following responses:

“Hiring experienced and well-trained staff remains a constant challenge” (G9).

“It can be really difficult when you first get staff who have never even been on holiday before to understand that being helpful and polite to guests can make all the difference to their experience” (G4).

According to the assistant manager of an exclusive hotel, the core challenge associated with labour “is teaching everyone that in our industry you can never have an off-day, being polite and going the extra mile is part of what people pay for” (G15).

Greening, Adaptation and Climate Change

The fourth theme under scrutiny was greening and adaptation measures by tourism businesses. In analysing the extent to which environmentally friendly or ‘green’ based actions are prioritised or undertaken by Garden Route tourism stakeholders it was observed that numerous interviewees indicated a wish to reach the point of being completely off-the-grid for electricity; none, however, had succeeded in doing so. Cost considerations were the major factor: 60% of stakeholders pointed to the significant costs associated with adopting a wide range of products to be considered as being

'green'. The general manager of a local timeshare resort responded that: *"I don't think we've gone too far into things. We have worked very hard on our recycling but we would like to move into being far more green"* (G24).

Figure 4 shows the most common environmental actions as undertaken by tourism stakeholders in the Garden Route. The most prevalent activities were recycling, collection of rainwater, use of biodegradable cleaning products and the installation of solar geysers; other interventions relate to use of septic or bio-toilets and energy saving lights. The actual commitment to greening is questionable. In particular, a high proportion of stakeholders cited the installation of infrastructure to capture and hold rainwater, but the main driver as already discussed had little to do with being 'green' and instead was a response to the challenge of low water availability. The interview responses revealed constraints other than cost considerations in terms of limits to the greening of businesses or the pursuit of other environmentally friendly actions. An important issue that was flagged related to the age of existing building infrastructure. For many stakeholders the age of buildings was a challenge as some, such as one lodge, were *"old and never designed to be green"* (G18).

Such infrastructure was needed because regular water-borne sewerage was either unavailable or financially not viable. As a result green infrastructure was relatively cheaper and where bio-toilets or septic tanks are in use, biodegradable products must be used in order to maintain such a system. A lodge owner confirmed: *"As a result of being on septic tanks, we have to use biodegradable solutions"* (G18). Cost concerns were again in evidence with one tourism enterprise involved with the carbon offsetting programme. The interviewee disclosed: *"We are heavily invested in carbon reversal and greening, planting 67 trees a year, as well as having dropped the size of the engines we use"*. This said, one of the core drivers for such activities was that it was part of the criteria required to maintain the businesses licence required to operate (G4). Nevertheless, the long-term impact was considered beneficial as it *"represented a win-win scenario"*, given that *"in the course of doing business we are able to make a real difference"* (G4).

Finally, in analysing the position of climate change as a current or future priority for the tourism dependent stakeholders in the Garden Route, along with the specific actions which businesses have thus far undertaken as regards adaptation and mitigation, it must be concluded that the results are varied. In other instances, regardless of many interviewees' perceptions regarding the cause, importance or risk relating to climate change some forms of adaptation have taken place. Arguably, the major driver has been water shortages and local severe drought events. One lodge owner elaborated: *"Over the course of running the business we went through a two-year drought. It was really serious and forced us to make a lot of water saving adaptations"* (G17). The general manager of a timeshare resort remarked: *"These days everyone has rain-tanks to catch and recycle rainwater. You also put a sign up to let everyone know that you are using grey water and not wasting"* (G23).

In addition to the driver of water shortages adaptation responses were occasioned by the pressures from local community social networks in a small-town setting. This is illustrated by the responses respectively from the assistant manager of a hotel and from a local lodge.

"Adaption happens quicker because it's a small town where the community stands together. We have a tight sense of community and use social media to name and shame those people who are being inconsiderate of others. Like those people foolish and selfish enough to be watering their gardens with clean drinking water during a drought" (G15).

"You have to keep up with the Jones's. You have to maintain the standards people expect" (G1).

In discussing the importance of pro-activity, another hotel manager noted the extent to which the business was willing to invest in adaptation in terms of a desalination plant and stated: *"We do our own reverse osmosis"* (G24).

In this instance, however, it should be observed that the actions taken were specific to issues that represented a tangible and immediate challenge for which the broader context of climate change was ignored. In final analysis, this illustrates a situation wherein Garden Route stakeholders focus on treating the symptoms associated with climate change without ever really addressing the underlying causes. In several cases unwillingness was expressed even to contemplate that proactive planning and action might be needed in relation to climate change. Typical responses, such as from a backpackers lodge, were: *"To be honest, I wouldn't know. Everyone would need to get involved"* (G30). By contrast other stakeholders – such as the manager of a timeshare resort – were of the opinion: *"Sometimes people make the right noises, but I really don't think they have their head around it (climate change) yet"* (G24). In explaining the main reasons for a lack of proactive climate change related planning or action, the general manager of a small game reserve reflected that: *"If you keep on working on threats, you'll end up working on something you don't know. So rather work with what is in front of you"* (G1). In one case where it was discussed that climate change might have far-reaching impacts on the future availability of key resources (such as water, food) if proactive action were not implemented, the lodge owner reasoned that such a resource could always be procured from somewhere else with little disruption given that: *"most travellers don't care where food or services come from"* (G16). A hotel manager, however, was more positive in the ability to react adaptively stating: *"I'm a glass half full person, when the time comes that we need to, we'll adapt"* (G15).

Overall, the core theme that emerged repeatedly in interviews to explain inaction was that Garden Route tourism enterprises perceived more immediate and pressing businesses challenges at this time than climate change. The manager of a backpacker lodge typically stated: *"There are other big issues that we need to look at first"* (G29). Others – such as a manager of a camping operation – justified inaction by reasoning that in the case of the severe flooding that impacted their business: *"The road being washed away once, was a random event"* (G6). Of interest is explanations for inaction were defensive perceptions whereby the stakeholders interviewed preferred to adopt either a stance of learned helplessness or religious position. In response to questions where climate change and the need for action was involved as a means of offsetting the potential impacts and implications the manager of one restaurant opined *"What can you do? It's nature"* (G10) whereas an assistant manager of a lodge responded: *"You can do nothing about acts of God. You can't actually worry about it"* (G17).

CONCLUSION

Climate change must be understood effectively as conditioning the sustainability of coastal tourism destinations (Santos-Lacueva et al., 2017). Indeed, according to Dwyer and Gill (2019) climate change is one of the 'wicked problems' that challenges the development of coastal tourism destinations because of the damage it can inflict. As a consequence of climate change, coastal areas and the natural systems which underpin them are confronted with increasingly adverse impacts. Significant outcomes exist for tourists visiting coastal spaces as well as for tourism businesses owners (Hall, 2001; Scott et al., 2012; Arabadzhyan et al., 2020; Jarratt and Davies, 2020).

In South Africa coastal tourism is a significant dimension of the national tourism economy both for domestic and international tourism flows (Rogerson and Rogerson, 2020b). The ramifications of climate change are projected to present significant policy issues for tourism-dependent localities and businesses in South African coastal areas (Dube et al., 2020, 2021). The aim in this paper was to investigate the perceptions of tourism stakeholders in one leading South African coastal destination. The empirical work used original qualitative-based research to analyse the perceptions of coastal tourism stakeholders in the Garden Route about the risks, impacts and implications of climate change on this tourism destination. Issues under scrutiny were stakeholder awareness of climate change, perceptions of the risks posed by climate change for coastal tourism, the main climate change-based risks as perceived by respondents; and, the extent of actions currently being undertaken in relation to climate change adaptation or mitigation.

The major findings from the Garden Route study point to a significant disconnect between the manner in which numerous stakeholders perceive the issue and of expert climate change projections. Tourism business stakeholders struggle to view climate change as relating to human-made or anthropogenic actions. Moreover, whilst all tourism stakeholders acknowledge their awareness of the phenomenon from a variety of sources, not all are convinced climate change presents a potential risk to local tourism or their respective businesses. This perception was mirrored in the business responses undertaken by those stakeholders who consider climate change as nothing more than a 'natural occurrence' and consequently do not take mitigation actions. Overall, climate change is not considered or currently perceived as a major issue for tourism businesses in the Garden Route and most especially as compared to the immediate or pressing challenges relating to marketing, infrastructural deficits, government regulations and local human resource development for tourism. This conclusion raises significant concerns for the long-term adaptation of local businesses, the resilience of coastal tourism destinations and for local economic development futures in South Africa.

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REFERENCES

- Arabadzhyan, A., Figini, P., Garcia, C., González, M.M., Lam-González, Y.E., & León, C.J. (2020). Climate change, coastal tourism and impact chains – a literature review. *Current Issues in Tourism*. <https://doi.org/10.1080/1368500.2020.1825351>
- Atzori, R., Fyall, A., Tasci, A.D., & Fjelstul, J. (2019). The role of social representations in shaping tourist responses to potential climate change impacts: An analysis of Florida's coastal destinations. *Journal of Travel Research*, 58(8), 1373-1388. <https://doi.org/10.1177/2F0047287518802089>
- Becken, S. (2013). A review of tourism and climate change as an evolving knowledge domain. *Tourism Management Perspectives*, 6, 53-62. <https://doi.org/10.1016/j.tmp.2012.11.006>
- Belle, N., & Bramwell, B. (2005). Climate change and small island tourism: Policy maker and industry perspectives in Barbados. *Journal of Travel Research*, 44(1), 32-41. <https://doi.org/10.1177/2F0047287505276589>
- Bicknell, S., & McManus, P. (2006). The canary in the coalmine: Australian ski resorts and their response to climate change. *Geographical Research*, 44(4), 386-400. <https://doi.org/10.1111/j.1745-5871.2006.00409.x>
- Buzinde, C.N., Manuel-Navarette, D., Yoo, E.E., & Morais, D. (2010). Tourists' perceptions in a climate of change: Eroding destinations. *Annals of Tourism Research*, 37(2), 333-354. <https://doi.org/10.1016/j.annals.2009.09.006>
- Dube, K., Nhamo, G., & Chikodzi, D. (2020). Climate-change induced droughts and tourism: Impacts and responses of Western Cape Province, South Africa. *Journal of Outdoor Recreation and Tourism*. <https://doi.org/10.1016/j.jort.2020.100319>
- Dube, K., Nhamo, G., & Chikodzi, D. (2021). Rising sea levels and its implications on coastal tourism development in Cape Town, South Africa. *Journal of Outdoor Recreation and Tourism*, 33, 100346. <https://doi.org/10.1016/j.jort.2020.100346>
- Dumitrescu, G.C., Poladian, S.M., & Aluculesei, A.C. (2021). Repositioning of Romanian seaside tourism as an effect of climate change. *Information*, 12, 108. <https://doi.org/10.3390/info12030108>
- Dwyer, L., & Gill, A. (2019). Coastal and marine tourism: Addressing some wicked problems. *Acta Turistica*, 31 (2), 213-242. <https://doi.org/10.22598/at/2019.31.2.213>
- Geldenhuys, L.L., & Van der Merwe, P. (2014). The impact of Blue Flag status on tourist decision-making when selecting a beach. *African Journal of Hospitality, Tourism and Leisure*, 3 (2), 1-16.
- Ghilardi-Lopes, N.P., Turra, A., Buckeridge, M.S., Silva, A.C., de Souza Berchez, F.A., & de Oliveira, V.M. (2015). On the perceptions and conceptions of tourists with regard to global environmental changes and their consequences for coastal and marine environments: A case study of the northern São Paulo State coast, Brazil. *Marine Policy*, 57, 85-92. <https://doi.org/10.1016/j.marpol.2015.03.005>
- Gómez-Martín, M.B., Armesto-López, X.A., Cors-Iglesias, M., & Muñoz-Negrete, J. (2014). Adaptation strategies to climate change in the tourist sector: The case of coastal tourism in Spain. *Turizam*, 62 (3), 293-308.
- Hall, C.M. (2008). Tourism and climate change: Knowledge gaps and issues. *Tourism Recreation Research*, 33 (3), 339-350. <https://doi.org/10.1080/02508281.2008.11081557>
- Hyman, T.A. (2014). Assessing the vulnerability of beach tourism and non-beach tourism to climate change: A case study from Jamaica. *Journal of Sustainable Tourism*, 22(8), 1197-1215. <https://doi.org/10.1080/09669582.2013.855220>

- Jarratt, D., & Davies, N.J. (2020). Planning for climate change impacts: Coastal tourism destination resilience policies. *Tourism Planning & Development*, 17(4), 423-440. <https://doi.org/10.1080/21568316.2019.1667861>
- Kaján, E., & Saarinen, J. (2013). Tourism, climate change and adaptation: A review. *Current Issues in Tourism*, 16(2), 167-195. <https://doi.org/10.1080/13683500.2013.774323>
- Kraaij, T., Baard, J.A., Cowling, R.M., van Wilgen, B.W., & Das, S. (2013). Historical fire regimes in a poorly understood, fire-prone ecosystem: Eastern coastal fynbos. *International Journal of Wildland Fire*, 22(3), 277-287. <https://doi.org/10.1071/WF11163>
- Midgley, G.F., & Roberts, R. (2001). Past climate change and the generation and persistence of species richness in a biodiversity hotspot, the Cape Flora, South Africa. In G. Visconti, M. Beniston, E.D. Iannorelli, & D. Barba (Eds.), *Global Change and Protected Areas*. Dordrecht: Kluwer, 393-402. https://doi.org/10.1007/0-306-48051-4_36
- Midgley, G.F., Hannah, L., Millar, D., Rutherford, M.C., & Powrie, L.W. (2002). Assessing the vulnerability of species richness to anthropogenic climate change in a biodiversity hotspot. *Global Ecology and Biogeography*, 11(6), 445-451. <https://doi.org/10.1046/j.1466-822X.2002.00307.x>
- Pandy, W.R., & Rogerson, C.M. (2018). Tourism and climate change in South Africa: An exploratory analysis of stakeholder perceptions of at-risk tourism market segments. *Euroeconomica*, 37, 98-112.
- Pandy, W.R., & Rogerson, C.M. (2019). Urban tourism and climate change: Risk perceptions of business tourism stakeholders in Johannesburg, South Africa. *Urbani izziv*, 30 (Supplement), 225-243. <https://doi.org/10.5379/urbani-izziv-en-2019-30-supplement-015>
- Pandy, W.R., & Rogerson, C.M. (2020). Tourism industry perspectives on climate change in South Africa. In J.M. Rogerson & G. Visser (Eds.), *New Directions in South African Tourism Geographies*. Cham, Switzerland: Springer, 93-111. https://doi.org/10.1007/978-3-030-29377-2_6
- Pandy, W.R., & Rogerson, C.M. (2021). Climate change risks and tourism in South Africa: Projections and policy. *GeoJournal of Tourism and Geosites*, 35 (2), 445-455. <https://doi.org/10.30892/gtg.35224-671>
- Raju, E., & Van Niekerk, D. (2013). Intra-governmental coordination for sustainable disaster recovery: A case-study of the Eden District Municipality, South Africa. *International Journal of Disaster Risk Reduction*, 4, 92-99. <https://doi.org/10.1016/j.ijdr.2013.03.001>
- Rogerson, C.M. (2016). Climate change, tourism and local economic development in South Africa. *Local Economy*, 31 (1-2), 322-331. <https://doi.org/10.1177/02F0269094215624354>
- Rogerson, C.M., & Rogerson, J.M. (2020a). Municipal caravan parks in South Africa: Geography, management and planning. *Bulletin of Geography: Socio-Economic Series*, 49, 109-124. <http://doi.org/10.2478/bog-2020-0027>
- Rogerson, C.M., & Rogerson, J.M. (2020b). Coastal tourism in South Africa: A geographical perspective. In J.M. Rogerson & G. Visser (Eds.), *New Directions in South African Tourism Geographies*. Cham, Switzerland: Springer, 227-247. https://doi.org/10.1007/978-3-030-29377-2_13
- Rogerson, C.M., & Rogerson, J.M. (2021a). Mundane urban tourism: The historical evolution of caravan parks in South Africa 1930-1994. In C.M. Rogerson & J.M. Rogerson (Eds.), *Urban Tourism in the Global South: South African Perspectives*. Cham, Switzerland: Springer Nature.
- Rogerson, C.M., & Rogerson, J.M. (2021b). Municipal assets for tourism and small-town local economic development: Caravan parks in South Africa. In J. Saarinen & J.M. Rogerson (Eds.), *Tourism, Change and the Global South*. London: Routledge, 205-221.
- Rogerson, C.M., & Rogerson, J.M. (2021c). Looking to the past: The geography of tourism in South Africa during the pre-COVID-19 era. In C.M. Rogerson & J.M. Rogerson (Eds.), *Urban Tourism in the Global South: South African Perspectives*. Cham, Switzerland: Springer Nature.
- Rogerson, J.M., & Visser, G. (2020). Recent trends in South African tourism geographies. In J.M. Rogerson & G. Visser (Eds.), *New Directions in South African Tourism Geographies*. Cham, Switzerland: Springer, 1-14. https://doi.org/10.1007/978-3-030-29377-2_1
- Rutty, M., & Scott, D. (2016). Comparison of climate preferences for domestic and international beach holidays: A case study of Canadian travelers. *Atmosphere*, 7(2), 1-12. <https://doi.org/10.3390/atmos7020030>
- Santos-Lacueva, R., Clavé, S.A., & Saladié, Ò. (2017). The vulnerability of destinations to climate change: A comparative analysis of contextual socio-political factors. *Journal of Sustainable Tourism*, 27(8), 1217-1238. <https://doi.org/10.1080/09669582.2019.1607865>
- Santos-Lacueva, R., Ariza, E., Ramagosa, F., & Saladié, Ò. (2019). The vulnerability of coastal tourism destinations to climate change: The usefulness of policy analysis. *Sustainability*, 9(11), 1-19. <https://doi.org/10.3390/su9112062>
- Scott, D. (2011). Why sustainable tourism must address climate change. *Journal of Sustainable Tourism*, 19(1), 17-34. <https://doi.org/10.1080/09669582.2010.539694>
- Scott, D., Gössling, S., & Hall, C.M. (2012). International tourism and climate change. *Wiley Interdisciplinary Reviews: Climate Change*, 3 (3), 213-232. <https://doi.org/10.1002/wcc.165>
- Shaaban, I., & Ramzy, Y. (2010). The impact of climate change on tourism in Egypt as perceived by both policymakers and tourism managers. *WIT Transactions on Ecology and the Environment*, 139, 241-251. <https://doi.org/10.2495/ST100211>
- van Wilgen, B.W., Fill, J.M., Baard, J., Cheney, C., Forsyth, A.T., & Kraaij, T. (2016). Historical costs and projected future scenarios for the management of invasive alien plants in protected areas in the Cape Floristic Region. *Biological Conservation*, 200, 168-177. <https://doi.org/10.1016/j.biocon.2016.06.008>
- Van Zyl, L.M. (2006). *The Garden Route Golfscapes: A Golfing Destination in the Rough*. PhD dissertation, Stellenbosch University, Stellenbosch.
- Visser, G., & Barker, C. (2004). Backpacker tourism in South Africa: Its role in an uneven tourism space economy. *Acta Academica*, 36(2), 97-143.
- Weatherdon, L.V., Magnan, A.K., Rogers, A.D., Sumaila, U.R., & Cheung, W.W. (2016). Observed and projected impacts of climate change on marine fisheries, aquaculture, coastal tourism, and human health: An update. *Frontiers in Marine Science*, 3, 1-21. <https://doi.org/10.3389/fmars.2016.00048>
- Zeppel, H., & Beaumont, N. (2011). *Green Tourism Futures: Climate Change Responses by Australian Government Tourism Agencies* (Vol. 2). Toowoomba: University of Southern Queensland, Australian Centre for Sustainable Business and Development.
- *** United Nations Environment Programme. (2009). *Sustainable Coastal Tourism: An Integrated Planning and Management Approach*. Nairobi: UNEP.
- *** Western Cape Government (2010). *Sea Level Rise and Flood Risk Assessment for a Select Disaster Prone Area Along the Western Cape Coast*. Cape Town: Western Cape Government Department of Environmental Affairs and Development Planning.
- *** Western Cape Government (2017). *Western Cape Biodiversity Spatial Plan Handbook*. Cape Town: Western Cape Government.
- *** Western Cape Government (2018). *Western Cape Climate Change Response Strategy 2nd Biennial Monitoring & Evaluation Report 2017/18: Progress in Preparing for Climate Change*. Cape Town: Western Cape Government.

TOURISM IN COASTAL AREAS: ITS IMPLICATION TO IMPROVE ECONOMIC AND CULTURE ACCULTURATION (CASE STUDY IN GOA CHINA BEACH, MALANG)

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Abstract: The study aimed to determine: (1) tourism carrying capacity development in Goa China Beach (2) opportunities and challenges in developing Goa China (China Cave) Beach to improve the community's economy (3) cultural acculturation in communities around the coast of Goa China. Survey was used as main data collecting method in this research, followed by interview, observation and documentation. The results indicated that the beach carrying capacity is in a positive and strong condition. The attraction of the Goa China (China Cave) Beach is the natural beauty and myths that are believed by the community, causing an increase in the number of visitors on this beach compared to other beaches, especially at weekends.

Key words: tourism carrying capacity, economic improvement, cultural acculturation

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INTRODUCTION

The tourism industry is needed to be developed because the activities carried out in the ecosystem have an impact on many economic sectors in society (Arintoko et al., 2020). The tourism sector can be used to encourage economic change (Jarvis et al., 2016), open up job opportunities (Purwanto et al., 2015), increase income (Ernawati et al., 2017) and increase the quality of life of local communities (Marlina et al., 2020; Ramanda et al., 2020). One approach that can be used in the development and planning of tourism studies is the community-based approach model known as a participatory approach (Prabhakaran et al., 2014). The approach is based on the alignments of the local community to maintain the local culture and have an impact on improving the welfare (Ernawati et al., 2017; Keyim, 2018; Munien et al., 2019).

The community also has an important role in tourism development (Marlina et al., 2020; Sumarmi et al., 2020). The community will be encouraged to participate in tourism activities if the community knows the positive benefits of tourism (Suwanto, 1997; Thomas, 2007). There are several development models of community-based empowerment, one of which is by increasing marketing and accessibility, improving quality and service through human resource development (Goodwin, 2002; Haywood, 1988; Timothy, 1999). Besides, the community can actively participate in spatial planning, spatial use and control of spatial use (Yankholmes, 2018). Beaches in South Malang are feasible to develop and have many advantages included: Lenggoksono Beach, Sendiki Beach, Goa China (China Cave) Beach, Bajul Mati Beach, Batu Bengkung Beach, Nganteb Beach, Selok Beach and Ngliep Beach. The research was conducted to analyze the tourism development strategy of Goa China (China Cave) Beach in Malang Regency. Analyzing the key factors in the development of Goa China Beach tourism can be done through 2 stages: 1) identify factors that influence the development of Goa China Beach tourism and 2) determine several key factors in tourism development discussed with experts from marine tourism, institution, and literature study. The key factors referred are the potential objects of natural tourism attraction, management policies, demand for ecotourism, community participation, facilities and infrastructure, security, spatial tourism planning, promotion and marketing, institutional capacity, attraction management, economic contribution, culture (Damanik and Weber, 2006; Hilman and Kartika, 2020). The study aimed to determine: (1) tourism carrying capacity development in Goa China Beach (2) opportunities and challenges in developing Goa China (China Cave) Beach to improve the community's economy (3) cultural acculturation in communities around the coast of Goa China.

METHODOLOGY

The research used survey method with quantitative and qualitative analysis techniques. Bogdan and Taylor stated that qualitative methodology is a research procedure that produces descriptive data from observable behaviors (Moleong, 2004; Sugiyono, 2014). Therefore, qualitative research produces descriptive data from the implementation that occurs naturally. Data is divided into 2: primary and secondary data. Primary data was obtained through interviews and focus group

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discussions (FGD) with beach managers, homestay managers, seller, visitors, business owners around the coastal area. Observations were made at the beach area (Dyana Peak, a place to see sea view from the top of the cave), at homestay, and around the cave. Secondary data were obtained from villagers, sub-district and district government officers.

The analysis technique used SWOT analysis to analyze the environmental conditions of Goa China (China Cave) Beach internally and externally, formulate strengths, weaknesses, opportunities and threats including supporting and obstacle factors from the internal and external environment, the concept of developing Goa China beach tourism in Malang Regency, and making related data interpretations based on findings from the literature studies or related theories.

RESULTS AND DISCUSSIONS

The research subject is Goa China (China Cave) Beach located in Gedangan District, Malang Regency, about 58 kilometers from south of Malang City. The detail shown in Figure 1.

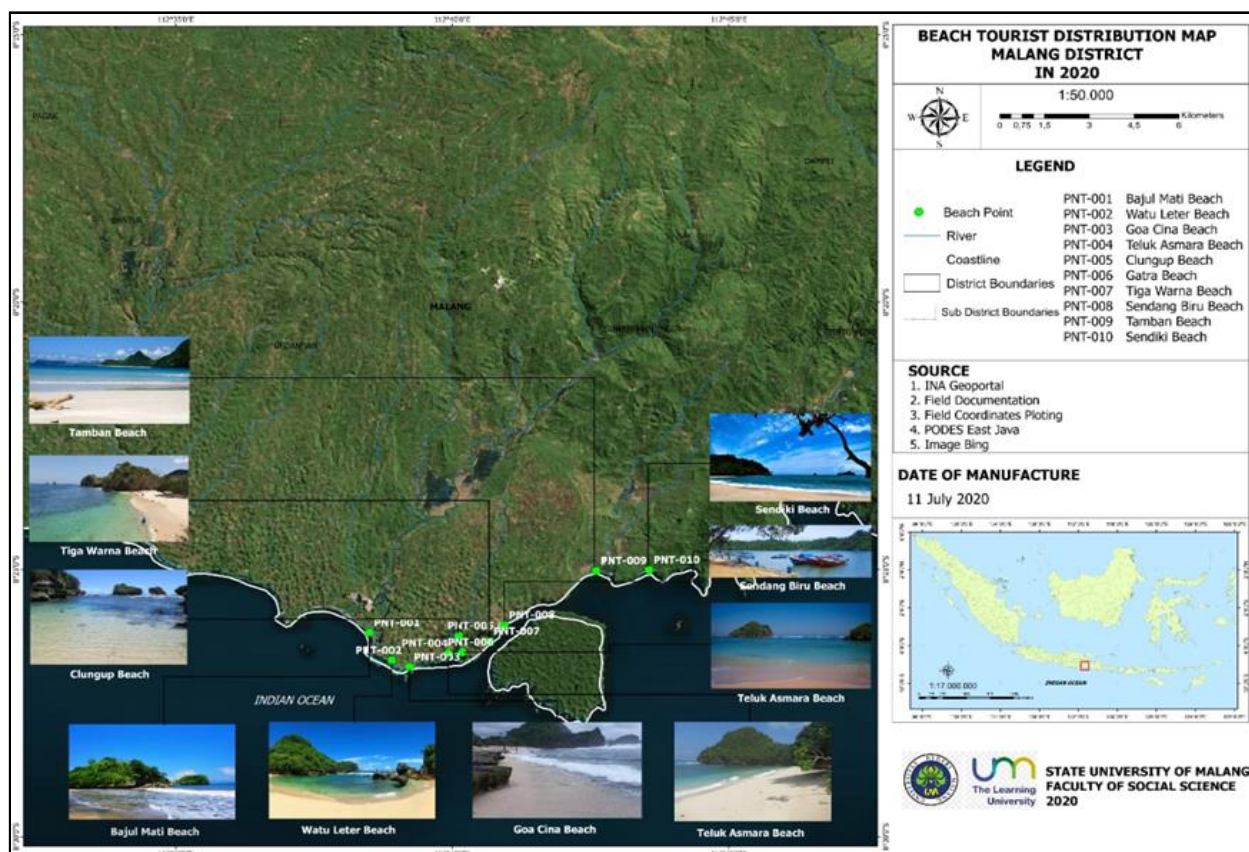


Figure 1. Goa China Beach and the Surrounding Beaches in Malang Regency

Carrying Capacity of Goa China Beach Tourism Development

The beach in the southern Java has characteristics of big waves which is different from the beaches in the northern part. It is due to the position of the south coast directly facing the Indian Ocean. In general, the south coast has steep beaches (cliff) and a relatively flat beach. The southern coast of Java in the East Java region has very varied cliffs. The beach is dominated by limestone, but there



Figure 2. Bajul Mati Bridge to the Goa China Beach

are high and low parts. In this low part, it is filled with volcanic sediments from the eruption of several volcanoes, such as Semeru and Kelud occurred in the last decades and years. It caused some beaches to have white and yellowish sand made from limestone, and there are black sand beaches made from volcanic breccia (Herlambang, 2004). Goa China (China Cave) Beach is located on the southern coast of Malang Regency, Tumpak Awu Hamlet, Sitarjo Village, Sumbermanjing Wetan District. The beach has the cavity in the cliff with a depth of 8 meters and a height of 2 meters. The cavity was extensive and allowed anyone to enter directly into the Cave.

The beach is famous because it has natural scenery, and the waves are pounding. The sand of Goa China Beach is sparkling white, and there are *cembrit* and *ketapang* trees along the coastline. There is also a view of some row of cliffs on the beach. Goa China (China Cave) is 50 meters on the right side of the beach. The Goa China (China Cave) Beach comes from limestone or coral from a natural change process. It can be seen from the cliff ruins in the coastal waters of islands and on the coastline of hills. Goa China (China Cave) Beach is separated by a hill that cuts the coastline from Watu Leter beach in the west. The eastern boundary is also separated by a hill from the coast of Teluk Asmara. Before entering Goa China (China Cave) Beach, there is a bridge called Bajul Mati Bridge opened in the mouth of the river. The bridge has a length of about 80 meters with a width of about 20 meters with two lanes (Figure 2). It has a pretty good architecture with curved poles in the middle of the bridge in a longitudinal position with a height of up to 20 meters. The bridge has a very distinctive and artistic mode. Goa China Beach is part of the South Coast, so it has strong ocean tides. However, the tides have unique waves, as it diverges from three directions: East, South and West and hit between Nyonya and Bantengan Islands, causing a clash. The islands were added beautiful on Goa China Beach (Figure 3).



Figure 3. Beautiful Scenery at Goa China Beach

Goa China (China Cave) Beach is a great place for camping, and tourists are also allowed to do some beach sports such as beach volleyball and beach soccer. There are many facilities around the beach area such as stalls that sell food and drinks, prayer rooms, toilets and food stalls, parking lots. The beach has a unique cave that was once used by a monk from China. Local people usually use this cave for rituals of asking for blessings and luck by bringing papaya stems as a condition.

In general, there are several participations implemented by the community along with the coastal tourism of South Malang, such as Forest Village Community Organization (Lembaga Masyarakat Desa Hutan/LMDH) Tani Maju in charge of the development of Goa China Beach. Furthermore, there is the community participation as the members of the Youth Cares for the Archipelago Forest Organization (Paguyuban Pemuda Peduli Rimba Nusantara) were mostly immigrants from Dampit, Malang, and Blitar managed by the Local Government. Starting from borrowing money from a bank, the immigrant community then developed. Also, some people are members of the LMDH under Forest Management Organization (Perum Perhutani KPH) in Malang. The community also participated in managing tourism as ticketing collector, parking assistant, security guard, and also tourist guide. The ticket revenue is then paid to the village to be managed, stored, and partly given to Perhutani. Community participation along Goa China Beach Tourism tends to be dominated by the functional participation models. The model invited the community to develop, advise and plan the

tourist destinations (Purnomo et al., 2020). Therefore, a local community organization was formed to appreciate the community participation, but decision-makers in planning tourist destinations were still dominated by parties outside the community (Kodir et al., 2019). The Income distribution of Perhutani can be seen in the Figure 4, and number of Beach Tourism in Sumbermanjing Wetan District can be seen in the Figure 5.

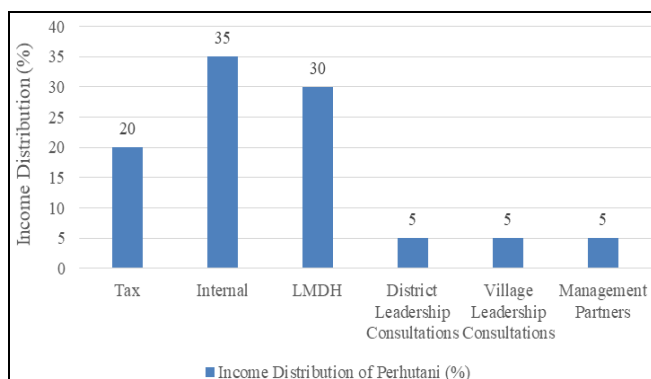


Figure 4. Perhutani Revenue Sharing (Ramanda et al, 2020)

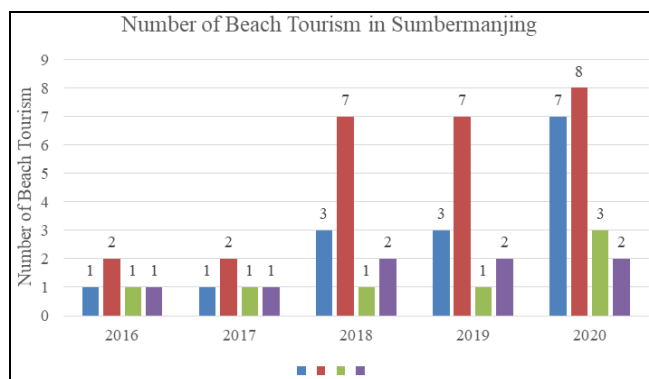


Figure 5. Number of Beach Tourism in Sumbermanjing Wetan District (Source: BPS, 2020)

Opportunities and Challenges in Developing the Goa China Coast for the Community Economy Improvement

The coastal area is a transitional area between the terrestrial ecosystem (sub-district administration area) and the sea (as far as 12 (twelve) nautical miles measured from the coastline) (Bengen, 2010). The tourism development strategy is carried out by developing attractions that include natural, cultural and human-made tourism that are integrated spatially by taking the global advantages and competitiveness through: a) identification of potential natural, cultural and human-made tourist attractions; b) determine the potential for leading tourist attractions; c) establish a tourism development that is integrated with regional infrastructure development; d) developing tourism support activities; e) preserving the traditions or wisdom of local communities; and f) increasing guidance, counseling and training for the community and local artisans for tourism development. Several beaches and the contribution to improving the economy of the surrounding community can be seen in the following figure.

Table 1. Number of Restaurants and Kiosks in Sumbermanjing Wetan Sub-district (Source: BPS, 2020)

No	Villages	Year				
		2016	2017	2018	2019	2020
1	Sitiarjo	22	24	29	30	65
2	Tambakrejo	21	24	26	26	67
3	Kedungbanteng	17	17	17	17	23
4	Tambakasri	125	126	129	133	140
5	Tegalrejo	18	18	18	18	23
6	Ringinkembar	19	19	19	19	27
7	Sumberagung	19	19	19	19	24
8	Harjokuncaran	36	36	36	36	41
9	Argotirto	25	25	25	35	39
10	Ringinsari	24	24	24	29	38
11	Druju	28	28	28	34	35
12	Sumbermanjing Wetan	43	43	43	44	44
13	Klepu	23	23	23	23	23
14	Sekarbanyu	20	20	20	23	25
15	Sidoasri	23	26	29	29	33
Total		463	472	485	491	647

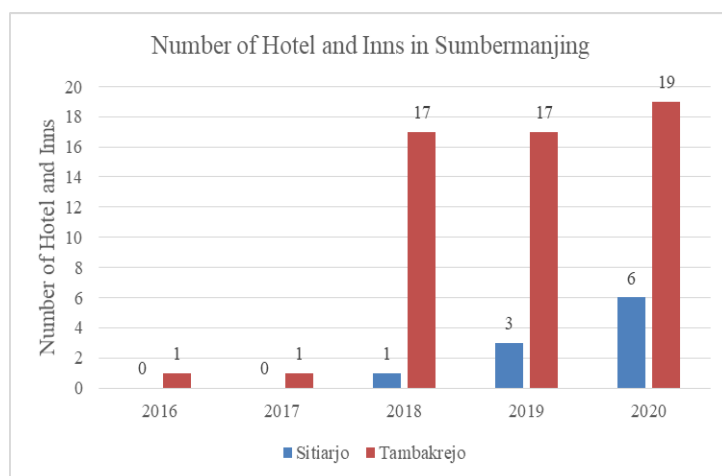


Figure 6. Number of Hotels and Inns in Sumbermanjing Wetan Sub-district (Source: BPS, 2020)

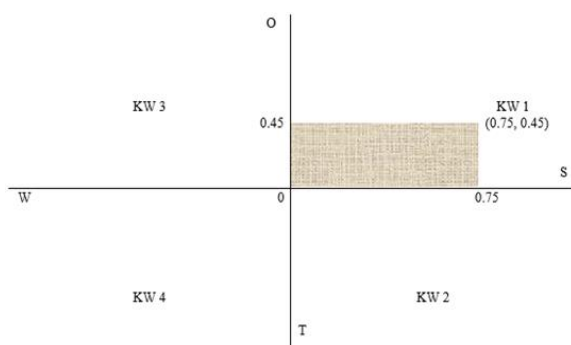


Figure 7. SWOT Analysis Quadrants for Goa China Beach

Several villages did not have beaches, such are Kedungbanteng, Tegalrejo, Ringinkembar, Sumberagung, Harjokuncaran, Argotirto, Ringinsari, Druju, Sumbermanjing Wetan, Klepu and Sekarbanyu, but they have growth of restaurants and kiosks that shown in the following Table 1. Based on Figure 6 showed that only two villages, Sitiarjo and Tambakrejo, that have hotels and homestays while other villages did not have it. SWOT analysis was used to measure the strengths, weaknesses, opportunities and challenges in the development of Goa China Beach (Asmit et al., 2020). Based on IFAS and EFAS matrix in table 2, the SWOT analysis quadrant then used as shown in the following Figure 7.

Table 2. IFAS and EFAS Matrix

Internal Factors (IFAS)				
Strengths (S)		Weight	Rating	Score
1	Has clear water and a very good view	0.20	5	1.00
2	Has a large parking area	0.10	4	0.40
3	Has a unique tourist attraction, namely a cave	0.10	5	0.50
4	There is a mosque which is the acculturation of Chinese colors	0.20	5	1.20
5	Has a panoramic view of clean white sand beaches	0.15	5	0.75
6	There are many restaurants and adequate toilets	0.10	4	0.40
7	There are hotels in the top of Goa China	0.5	5	0.25
Total				4.50
Weaknesses (W)				
1	Lack of balance management between Perhutani and the community	0.20	5	1.00
2	Limited trash bins	0.25	4	1.00
3	The community has not been accommodated to maintain cleanliness and environmental sustainability	0.25	4	1.00
4	Creative economy is not in maximum capacity	0.15	5	0.75
Total				3.75
Strengths and weaknesses				0.75
External Factors (EFAS)				
Opportunities (O)				
1	Have a well-known name branding	0.20	5	1.00
2	Has very close distance from the Southern Cross Line	0.20	5	1.00
3	Close to other developed beaches	0.15	5	0.75
4	The formation of other cultural elements in this place	0.25	4	1.00
5	There is a myth about blessing	0.15	4	0.60
Total				4.35
Threats (T)				
1	Competition with tourism area around	0.20	4	0.80
2	Environmental Pollution	0.35	5	1.75
3	Lack of awareness of visitors to maintain cleanliness and sustainability of the beach	0.30	3	0.90
4	Vertical conflict in management - Opportunities	0.15	3	0.45
Total				3.90
Opportunities - Threats				0.45



Figure 7. Site of the Legend of China Cave (Goa China)



Figure 8. Ritual Places in Goa China (China Cave)

Cultural Acculturation that Occurs in Communities around the Goa Beach of China

Goa China (China Cave) Beach was formerly known as Rawo Indah Beach. In 1930, a monk came to this beach and changed its name. The word "Goa China (China Cave)" comes from a Chinese monk who never came out, was later found dead, leaving behind his bones, and Chinese writings on the cave walls along with a bowl. The monk left a will with the identity of his name "Hing Ho" so that it indicates that the monk was Chinese. Further, the Goa (Cave) was given the name "Guwa China" by the local community. Moreover, this name changed writing, namely Goa China (China Cave). The cave is located in Sitiarjo village, Sumbermanjing Wetan sub-district, Malang Regency.

Tourism then developed around the Goa China (China Cave) area along with the increasing mobility of people to visit, especially to the beach. The beach attracted because it is related to rituals. There are three beach tourism related to ritual activities, such as Balekambang beach, Goa China beach and Nganteb beach. The ritual is an attraction for ritual actors and tourists outside. Some people believe that blessings will come after performing rituals in Goa China (China Cave).

Goa China (China Cave) Beach has a beautiful panoramic view with white to yellow sand, small islands and coral hills. The main object of this beach is the hill above the cave, where several homestays are now established. There are nuances of cultural acculturation in the development of this tourist attraction. The spatial layout or mandala is arranged based on Javanese culture, vertically and horizontally. Vertically, there is the main room in the top of the hill to see the view at the bottom. There is also a symbol for the coast Queen as the ruler of the coast and southern seas. Horizontally there are cliffs on edge that

cannot be disturbed or changed, as well as intermediate rooms which are occupied by several homestay buildings. The outermost room is a path that connects the rooms and the entrance or gate to the hills of Goa China (China Cave).

The cave has an "anthropomorphic" concept that comes from nature in Javanese Hindu culture by using "wastra" or yellow and white cloth and a black and white square pattern. Trees are personified as "partners" who complement the existence of living things in this tourist attraction. There are stairs to the hill of Goa China, which was built based on Chinese architecture. It can be seen in the ornamentation dominance of red, as in the sacred buildings of the Chinese or Chinese community.

Goa (cave) is a natural condition in the karst area (Kodir, 2018). The cave is formed from the process of erosion and dissolving by water against lime (Dahuri et al., 2001). As a tourist attraction, the existence of Goa is its main attraction. The Chinese monk who died in Goa has given a name to the coastal area, which then branding this object in the development of tourism, especially in the Malang area. The concept of space (mandala) in the cave adopts the traditional Javanese spatial layout. The main room is Goa (cave) which is believed by local people to be a place of the hermitage.

Therefore, this place is sacred by residents and visitors. It can be seen from the facilities and infrastructure in flower beds and censer, as well as the altar. The existence of these facilities and infrastructure exists in Hindu, Javanese and Chinese rituals. The middle room (Madya) is a path on the eastern cliff of the hill from the gate to the door or mouth of the cave. In this space, there are three mythological animal statues found in Javanese, Hindu and Chinese cultures.

Artificially, the statue draws something creepy and is made of rock as the main material. The last room is the entrance or gate with the nuances of Chinese culture. The main object of this tourist area is Goa, the beach and sea view from the top of the hill. The combination of physical and cultural aspects is a tourist attraction (Kurniawati et al., 2020; Marlina et al., 2020). The main gate was built to enter these two objects. The gate was built in Chinese architecture as a gate like a place for ritual activities. The gate further adds to the nuance of being a spiritual tourism object in Malang area as well as for national tourists. Along with the development of international tourism, Goa China has become an attraction for international tourism, especially from countries with a background of Chinese culture.



(a) Mosque in coastal area



(b) Cheng Hoo Mosque in Sitiarjo village, donated by the Cheng Hoo Foundation



(c) Ticketing booths and entrances to Dyana Peak



(d) The dragon headress in front of the cave entrance

Figure 9. Acculturation of Islamic, Chinese, Hindu, and Culture on Goa China (China Cave) Beach

CONCLUSION

The results indicated that the beach carrying capacity is in a positive and strong condition. The coast development of Goa China affected the economy of inside and outside the community. Most of the people around the Goa China coast are

original residents of Sitiarjo, Malang, but some people are from other areas looking for work, so it made harmonious and balanced culture in the village. Cultural acculturation is a unique attraction in the Goa China (China Cave). It is necessary to attract International tourist for visiting Goa China (China Cave) through promotion. further research needs to be carried out to inventory the physical potential as tourist attractions for Goa China (China Cave).

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REFERENCES

- Arintoko, A., Ahmad, A.A., Gunawan, D.S., & Supadi, S. (2020). Community-Based Tourism Village Development Strategies: A Case of Borobudur Tourism Village Area, Indonesia. *GeoJournal of Tourism and Geosites*, 29(2), 398–413. <https://doi.org/10.30892/gtg.29202-477>
- Asmit, B., Syahza, A., Mahdum, A., & Riadi, R.M. (2020). Opportunities and Prospect for Tourism Deveopmnet on Rupert Island, Indonesia. *Folia Geographica*, 62(2), 133–148.
- Bengen, D. (2010). *Maritime State Development Perspective*. Indonesia Maritim Institute, Jakarta.
- BPS. (2020). *Kecamatan Sumbermanjing dalam Angka (Sumbermanjing in numbers)*. Badan Pusat Statistik Kota Malang (Central Statistics of Malang).
- Dahuri, R., Rais, J., Ginting, S.P., & Sitepu, M.J. (2001). Integrated Resource Management of the Coastal and Ocean Areas. *Jakarta: PT. Pradnya Paramita*.
- Damanik, J., & Weber, H.F. (2006). *Perencanaan Ekowisata dari Teori ke Aplikasi (Ecotourism Planning: Theory to Application)*. Penerbit Andi.
- Ernawati, N.M., Sanders, D., & Dowling, R. (2017). Host–Guest Orientations of Community-Based Tourism Products: A Case Study in Bali, Indonesia. *International Journal of Tourism Research*, 19(3), 367–382. <https://doi.org/10.1002/jtr.2119>
- Goodwin, H. (2002). Local Community Involvement in Tourism around National Parks: Opportunities and Constraints. *Current Issues in Tourism*, 5(3–4), 338–360. [https://doi.org/10.1016/S0160-7383\(98\)00104-2](https://doi.org/10.1016/S0160-7383(98)00104-2). 1080/13683500208667928
- Haywood, K.M. (1988). Responsible and Responsive Tourism Planning in the Community. *Tourism Management*, 9(2), 105–118. [https://doi.org/10.1016/0261-5177\(88\)90020-9](https://doi.org/10.1016/0261-5177(88)90020-9)
- Herlambang, S. (2004). *Dasar-Dasar Geomorfologi (Fundamental of Geomorphology)*. Jayadinata.
- Hilman, Y.A., & Kartika, T. (2020). Dinamika Kelembagaan Sektor Pariwisata di Kabupaten Ponorogo [The Changes in Tourism Office of Ponorogo]. *Indonesian Journal of Tourism and Leisure*, 1(1), 26–37. <https://doi.org/10.36256/ijtl.v1i1.82>
- Jarvis, D., Stoeckl, N., & Liu, H.B. (2016). The Impact of Economic, Social and Environmental Factors on Trip Satisfaction and the Likelihood of Visitors Returning. *Tourism Management*, 52, 1–18. [https://doi.org/10.1016/S0160-7383\(98\)00104-2](https://doi.org/10.1016/S0160-7383(98)00104-2). 1016/j.tourman.2015.06.003
- Keyim, P. (2018). Tourism Collaborative Governance and Rural Community Development in Finland: The Case of Vuonislahti. *Journal of Travel Research*, 57(4), 483–494. [https://doi.org/10.1016/S0160-7383\(98\)00104-2](https://doi.org/10.1016/S0160-7383(98)00104-2). 1177/0047287517701858
- Kodir, A. (2018). Tourism and Development: Land Acquisition, Achievement of Investment and Cultural Change (Case Study Tourism Industry Development in Batu City, Indonesia). *GeoJournal of Tourism and Geosites*, 21(1), 253–265. <https://doi.org/10.30892/gtg.221112200-228855>
- Kodir, A., Tanjung, A., Sumarmi, Ahmad, R., & Simanjuntak, T.B. (2019). Tourism Governance in Komodo National Park, Indonesia: Blessing or Curse?. *GeoJournal of Tourism and Geosites*, 27(4), 1401–1417. <https://doi.org/10.30892/gtg.27424-443>
- Kurniawati, E., Sumarmi, S., & Aliman, M. (2020). Participation of Green Environmental Group and Ulur-ulur Local Wisdom on Buret Lake Ecotourism Management in Karst Area of Tulungagung, Indonesia. *GeoJournal of Tourism and Geosites*, 30(2 supplement), 889–895. <https://doi.org/10.30892/gtg.302spl15-519>
- Marlina, Sumarmi, & Astina, I.K. (2020). Sustainable Marine Ecotourism Management: A Case of Marine Resource Conservation Based on Local Wisdom of Bajo Mola Community in Wakatobi National Park. *GeoJournal of Tourism and Geosites*, 32(4), 1317–1323. <https://doi.org/10.30892/gtg.32419-575>
- Marlina, Sumarmi, Astina, I.K., & Susilo, S. (2020). Social-Economic Adaptation Strategies of Bajo Mola Fishers in Wakatobi National Park. *GeoJournal of Tourism and Geosites*, 34(1), 14–19. <https://doi.org/10.30892/gtg.34102-613>
- Moleong, L.J. (2004). *Metodologi Penelitian Kualitatif [Qualitative Research Methodology]*. PT Remaja Rosdakarya.
- Munien, S., Gumede, A., Gounden, R., Bob, U., Gounden, D., & Perry, N.S. (2019). Profile of Visitors to Coastal and Marine Tourism Locations in Cape Town, South Africa. *GeoJournal of Tourism and Geosites*, 27(4), 1134–1147. <https://doi.org/10.30892/gtg.27402-421>
- Prabhakaran, S., Nair, V., & Ramachandran, S. (2014). Community Participation in Rural Tourism: Towards a Conceptual Framework. *Procedia - Social and Behavioral Sciences*, 144, 290–295. <https://doi.org/10.1016/j.sbspro.2014.07.298>
- Purnomo, A., Idris, I., & Kurniawan, B. (2020). Understanding Local Community in Managing Sustainable Tourism at Baluran National Park–Indonesia. *GeoJournal of Tourism and Geosites*, 29(2). <https://doi.org/10.30892/gtg.29210-485>
- Purwanto, P., Astina, I.K., & Suharto, Y. (2015). *Pemanfaatan Sistem Informasi Geografi untuk Pemodelan Spasial Pengembangan Wisata Pantai di Kabupaten Tulungagung. Jurnal Pendidikan Geografi: Kajian, Teori, dan Praktek dalam Bidang Pendidikan dan Ilmu Geografi*, 20(1), 12–23. <https://doi.org/10.17977/jpg.v20i1.281>
- Ramanda, P., Hakim, L., & Pangestuti, E. (2020). *Partisipasi Masyarakat dalam Pengelolaan Objek dan Daya Tarik Wisata Koridor Jalur Lintas Selatan Kabupaten Malang (Community Participation in the Tourism Management for the South Crossline of Malang). Profit: Jurnal Administrasi Bisnis*, 14(1), 22–31. <https://doi.org/10.21776/ub.profit.2020.014.01.3>
- Sugiyono (2014). *Metode Penelitian Kuantitatif Kualitatif dan R&D [Qualitative and Quantitative Research Methods R & D]*. Alfabeta.
- Sumarmi, Kurniawati, E., & Aliman, M. (2020). Community-Based Tourism (CBT) to Establish Blue Economy and Improve Public Welfare for Fishing Tourism Development in Klatak Beach, Tulungagung, Indonesia. *GeoJournal of Tourism and Geosites*, 31(3). <https://doi.org/10.30892/gtg.31307-530>
- Suwantoro, G. (1997). *Dasar-dasar Pariwisata [Tourism Basics]: Vol. Cetakan pertama*. Penerbit Andi.
- Thomas, R. (2007). Tourism Partnerships and Small Firms: Power, Participation and Partition. *The International Journal of Entrepreneurship and Innovation*, 8(1), 37–43. <https://doi.org/10.5367/000000007780007344>
- Timothy, D.J. (1999). Participatory Planning a View of Tourism in Indonesia. *Annals of Tourism Research*, 26(2), 371–391. [https://doi.org/10.1016/S0160-7383\(98\)00104-2](https://doi.org/10.1016/S0160-7383(98)00104-2). 1016/S0160-7383(98)00104-2
- Yankholmes, A. (2018). Tourism as an Exercise in Three-Dimensional Power: Evidence from Ghana. *Tourism Management Perspectives*, 25, 1–12. <https://doi.org/10.1016/j.tmp.2017.11.001>

THE IMPORTANCE OF SPRINGS, SELF-FLOWING ARTESIAN WELLS, UNDERGROUND CAVE LAKES OF WESTERN KAZAKHSTAN IN TOURISM

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Abstract: The use of springs is becoming increasingly important in tourism. There are many springs in Western Kazakhstan that can be used to develop various types of tourism. Springs can be used for health, ecological, religious and other types of tourism. Today, health and spa tourism is one of the fastest growing sectors of world tourism. The historical and cultural heritage, and biodiversity associated with the springs also fascinate people, and many of them can become unique tourist destinations with high visual impact. The article gives characteristics of springs, self-flowing artesian wells, underground cave lakes of Western Kazakhstan and indicates their tourist potential for travellers and local. However, despite the high recreational potential of springs, tourism as a whole is not developed enough to provide quality tourism services and attract a large number of tourists to the region. An analysis of the tradition of tourist use of springs has been carried out and the main types of modern recreation are justified based on an assessment of the tourist potential of springs.

Key words: springs, self-flowing artesian wells, underground cave lakes, balneology, geotourism, natural hot springs, health and wellness spa tourism, religious tourism, West Kazakhstan

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INTRODUCTION

The basis for the development of domestic and inbound tourism in Western Kazakhstan is the effective integrated use of a rich natural heritage. Springs are one of the main elements of the recreational and resource potential of the region. In this aspect landscapes with the exits of fresh drinking, medical mineral and thermal waters are of great interest.

At the moment, many springs are used in tourism activities for health tourism, for instance thermal mineral springs in Turkey (Ozcelik et al., 2000; Karakaya and Karakaya, 2018), in China (Liu et al., 2021), in Iceland (Huijbens, 2011), in Japan (McMorran, 2008), in Australia (Jones et al., 2019), in the USA (Mueller et al., 2017). Springs are also actively used as objects of religious tourism (Egresi et al., 2012; Climo et al., 2017). Cold water springs around the world also provide valuable services to society, including irrigation and drinking water, the maintenance of biodiversity and habitat, and the provision of recreational and aesthetic values. Increased water production and other economic activities have led to the deterioration of many sources (Barquín and Scarsbrook, 2008). In the United States springs are also actively used as tourism facilities. For example, one of Florida's most picturesque natural resources is karst springs, once called "bowls of liquid light" (Wu et al., 2018). These springs are popular places for swimming, scuba diving, canoeing, picnicking and diving (Bonn and Bell, 2003). They are one of the oldest tourist attractions in Florida and are currently under threat due to increased groundwater abstraction from the Florida aquifer and pollution from various sources (Wu et al., 2018).

On the territory of Kazakhstan there are dozens of artesian pools with water of varying degrees of mineralization, having therapeutic properties and having a high temperature. A significant part of underground mineral and thermal waters has not been studied enough. Their use with rare exceptions is in the initial stage, and meanwhile many mineral waters of Kazakhstan have balneological properties. Resources must be carefully guarded and used for health purposes without loss.

Currently, in Kazakhstan, Russia and several other post-Soviet countries, mainly underground mineral waters are used for balneological treatment, which in recent years have been drilled in many new areas, sometimes from very deep depths. Springs and mineral groundwater were actively studied in Soviet times, for example, hydrochemical characteristics and typification of mineral springs opened by wells in Aralsk, Chelkar, Donguztau and several other areas of Western Kazakhstan were given (Sydykov, 1999; Mukhamedzhanov et al., 2020; Osipov et al., 2020). Springs belong to the most common and numerous water bodies, collectively forming an important part of the hydrographic network of the region. However, they are usually peculiar in terms of geographical conditions, historical heritage and are inhabited by specific flora and fauna, which makes them very attractive in terms of use as a tourist resource. The use of springs for tourism development is an important research task from both scientific and applied points of view (Erfurt-Cooper and Cooper, 2009; Boys et al., 2017). It is of particular importance for Western Kazakhstan, as a region with an arid climate and a

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shortage of water resources. However, despite the uniqueness of the natural complexes of the spring oases of Western Kazakhstan, their environmental characteristics and application in tourism have not been studied enough to date. It was mainly considered for recreational use and rarely for religious tourism (Akhmedenov, 2020). The aim of the study was to identify the possibilities of tourist springs and determine possible management models for the development of successful areas of sustainable tourism, with the main goal of preserving the natural heritage of Western Kazakhstan.

MATERIALS AND METHODS

Western Kazakhstan is one of the most dynamically developing regions of Kazakhstan, located on the border of Europe and Asia. The groundwater resource potential of Kazakhstan is characterized both by projected resources - the potential use of groundwater, the main share of which (up to 100%) is natural groundwater resources (underground runoff), and operational reserves of deposits and underground water sections. According to various estimates, the total estimated groundwater resources in Kazakhstan as a whole do not differ radically: from 61.8 km³/year (Akhmedsafin et al., 1979) to 64.3 km³/year. The bulk of the forecast resources of fresh groundwater (75%) is concentrated in the southern and eastern regions, 19% are concentrated in the central region, in the western region: Aktobe, Atyrau, Mangystau and West Kazakhstan regions - 6%; in the northern region - 1.2%. The climate of Western Kazakhstan is arid and semi-arid - in the south-western part, the average annual air temperature is + 10.5 ° C; in the northern + 2 sound+ 3.9 ° C. The amount of precipitation decreases from north to south from 300-350 to 150-200 mm. The maximum humidity is 33-60% (rarely up to 90%) and is observed in summer, mainly in the central and southern parts. In hydrogeological terms, it belongs to the Caspian hydrogeological region (Sydykov, 1999). The research methodology is based on a comparative geographical method, a method of retrospective analysis, applied on the basis of an interdisciplinary approach, based on the achievements of modern scientific knowledge in tourism, balneology, spa treatment.

The initial data for this work are obtained by studying published sources, collecting and processing stock and archival documents for the study of springs, the results of studies of mineral groundwater and artesianians.

We have selected 7 springs in Western Kazakhstan because they represent the most characteristic types of springs in terms of geographical distribution. Information on water temperature, flow rate, chemical composition and availability of biota is collected in each spring. The obtained field data are supplemented by information from the literature.

They are often visited and they offer recreational opportunities both on water and on land. Three of them are located in the Mangystau region: Sauyr, Ystyk su, Karagan-Bosaga. Two in the Aktobe region: Upper and Sarzhansay Marzhanbulak, and one each in West Kazakhstan (Kyz aulia) and Atyrau regions (Tuzdybulak).

Field surveys of springs were conducted in 2012-2020 (Akhmedenov et al., 2013; Idrisova et al., 2018; Idrisova et al., 2019). An analysis of the sanitary and technical state indicators was carried out, the flow rate was determined, the coordinates of the spring were determined using a 12-channel GPS receiver of the Garmin eTrex model, pH, temperature and oxygen directly in the field. Also, an abris of the object was compiled, geological and geomorphological binding, a draft version of the spring passport was compiled, and the object was photographed. The content of nitrates, turbidity, hydrocarbonates, chlorides, sulphates, calcium, magnesium, permanganate oxidability, dry residue, total stiffness, sodium and general mineralization and other laboratory chemical analyses were carried out at the accredited test center of the Zhangir Khan West Kazakhstan Agricultural and Technical University. The results of hydrochemical indicators were compared with the regulatory documents of the Republic of Kazakhstan and the Russian Federation (Kurlyandsky and Sidorov, 2003; Korolev et al., 2003; Duisenova, 2015). In the course of our study, data on springs were supplemented, an analysis of their current state was made. Although this study focused on seven popular sources, their values could be used to infer the values provided by springs with similar characteristics.

RESULTS AND DISCUSSION

Springs are places where underground water emerges onto the Earth's surface, often forming a stream, pond, or marsh. In this study, we accepted under the term springs both natural and artificial exits of groundwater, as well as underground lakes in caves, which are also manifestations of groundwater. Artificial self-flowing artesian wells are also generically accepted as springs. According to typological classification of water currents (Illies and Botosanean, 1963), springs belong to a special zone – krenal. Authors of classification allocated several types of a krenal – limnokren (the spring with the expressed bowl), rheokren (a spring stream), a geokren (the place of diffusion unloading of underground waters which isn't followed by formation of a spring bowl or the constant course) (Figure 1).

A special kind of geokrens is gelokrens – the spring bogs which are formed in a zone of a seeping ground waters. Reokren pours out the waters on slopes or at foundation of hills, on slopes of river valleys or other erosive cuttings. Forms rather narrow and fast spring stream flows on a slope and usually falls into other larger reservoir. Limnokren forms at an exit a small flowing reservoir, so-called "bathtub" from which the stream follows. At the bottom of a limnokren bathtub, griffins on whom underground waters on a day surface arrive are often observed. A griffin – the water bringing channel (core) which comes to an end at a surface with the bowl-shaped hollow. The largest griffins the spring Kyz aulie (the Chingirlausky Region of WKP) forms (Figure 1) reaching diameter about a meter. Gelokren is characterized by the existence of small underground waters to rather plain surface therefore the fenny, boggy place is formed. The Tuzdybulak spring is a reokren, its waters flow into Lake Inder, the Sauyr spring is also a reokren, since brackish water comes from the stone walls, falling from the cornice in thin jets and flows into Lake Karakol. Geokrens are the springs Ystyk su, Sarzhansai, Marzhanbulak upper. Limnokrens are the springs of Kyz aulie and Karagan-Bosaga. Below we give a brief characterization of the 7 springs studied. The Kyz aulie spring is a unique natural

complex with Sarkyrama waterfall located in the sands, near the village of Aksuat, Chingirlau district, West Kazakhstan region. Spring water originates from the upper Cretaceous layer of the Poduralsky plateau. Sarkyrama - the waterfall feeds from a spring Kyz auliye, various tree-shrub plants grow abundantly around the spring and waterfall. The small waterfall (height 3.5 m) is located near the villages of Konyr and Karagash (formerly Aksuat). The Sauyr spring is located in the tract of Saur, Tupkaragan district of the Mangistau region. In the blue bay on the coast of the sea, a gorge with woody vegetation, shrub thickets attracts attention. Deep freshwater Lake Karakol is located in the depths of the gorge, which attracts numerous inhabitants (Figure 1). There is an isolated population of freshwater marsh turtle.

The thermal spring Ystyk su is located 15 km northwest of the village of Sarga on a plain in the Beineu district of the Mangistau region. Not far away are two pits and a sand quarry. The water tastes very salty and gives away a metallic taste. Vegetation is practically absent. According to local residents, earlier the source was actively used for medical purposes. The Karagan-Bosaga spring is an underground spring lake in the cave of the same name in the Karakiyan district of the Mangystau region. The upper spring Marzhanbulak is located 1 km from the village Marzhanbulak of the Alginsky district of the Aktoobe region, equipped with an iron hood ring with a pipe. The Sarzhansai spring is a bottom spring of the river Elek of the Martoksky district of the Aktoobe region (Figure 1). It has a southeastern extension. The spring tract is well equipped: gazebo, garbage cans, fenced. There is a potential risk of the spring functioning in connection with the construction of economic facilities near it. The Tuzdybulak spring is located on the north-eastern shore of Lake Inder of the Inder district of the Atyrau region, forms a wide valley overlooking the lake and watering the coast of Inder, along the banks of which there are many mud baths.



The main tourism sectors using springs are: spa and wellness tourism, health and medical tourism, geotourism and ecotourism adventure tourism, nature-based tourism, sacral and religious tourism, speleotourism, agrotourism and ethnic tourism. Religious tourism has become increasingly popular in recent years. This type of tourism is associated with visiting religious shrines to meet the spiritual needs of tourists. Religious travel is an integral part of the modern tourism industry, and also plays a huge role in the system of international and domestic tourism. The objects of visiting religious tours are springs, spiritual centers, cathedrals and monasteries. Springs have been regarded as sacred, magical places haunted by spirits and thus have been the focus of special religious celebrations and ceremonies. Each region is famous for holy springs, many of which are known for miraculous power, so holy springs have great potential as objects of religious tourism.

Springs have the potential for sacred tourism, as objects that are a revered natural place of pilgrimage and worship, shows high spirituality and its origins in ethnic consciousness, a medium of information about the past and modern times.

Springs are a "place of memory" in space with unique landscape features associated with natural places, the traditional worldview of Kazakhs, and the most important values of consciousness in the history of ethnic groups. Numerous medical studies have provided evidence that the mineral properties of some kinds of spring water have therapeutic value especially for skin, arthritic, respiratory, and gastrointestinal ailments. Bathing in warm, mineral spring waters at spas has been and continues to be very popular worldwide. The scientific field of balneology has been established to explore the health benefits of these activities. Since the beginning of the 1990s environmental tourism begins to develop at a rapid pace. Springs are an excellent object for the development of ecotourism. Since springs have significant properties of ecological tourism: reversal to nature, use of mainly natural resources; environmental sustainability; focus on environmental education and education, on the formation of equal partnership with nature; concern for the preservation of the local socio-cultural environment; economic efficiency and sustainable development in the areas where it is implemented.

Spring tourism is often paired with other experiences as a marketing and visitor attraction tool. There is also often an overlap between springs environments and cultural/religious significance in many places. In spring tracts, agrotourism can be developed, providing for acquaintance with the folklore-ethnographic heritage and the traditional way of life of the rural population around the springs. A special type of resettlement is characteristic of the ethnographic region of Western Kazakhstan, where cattle breeding farms located near springs have been preserved. They preserve the ancient traditions of adaptability of the population to local environmental conditions, which gives rural settlements patriarchal-exotic features. Springs have long been important sources of drinking water, peculiar oases and played an important role in everyday life.

Rest on natural springs provides psychological détente, satisfies the aesthetic needs of people, and restores physical health. The names of springs often reflect their chemical composition (e.g., mineral springs, soda springs, and sulphur springs). Springs as visual attractions play a significant role in several tourism sectors. Springs for human use such as treatment for health conditions depend on factors like access, temperature, mineral content and a sustainable quality of the water. The following is a list of the range of springs that may be used:

1. Freshwater Springs - these are springs with clean fresh water. It is used as a source of drinking water supply. Their water is sometimes considered healing. They also serve as places for relaxation and recreation, swimming, diving and aesthetic enjoyment of the beauty of nature.

2. Saline Springs – spring water with a very high salt content is also used for many health spa facilities. Saline spring water spas have their own place in health and wellness treatments and are useful for treating skin conditions and joint problems and they are widely used for physical water therapies.

3. Hot Springs - commonly known for their curative powers and their therapeutic benefits. Hot Springs - warm water, with curative powers and they can be taken internally as well. Natural mineral and geothermal waters are used in balneology, balneotherapy, hydrotherapy and crenotherapy, which can be combined under the umbrella of thermalism.

Table 1 shows the conditions and possibilities of rest on seven springs of Western Kazakhstan.

Table 1. Characteristics of tourism springs in Western Kazakhstan.
Data source: (personal original data, and also Akhmedenov et al., 2013; Idrissova et al., 2019)

Name of the spring	Location	Flow rate, l/s	t °C	pH	Mineralization, g/l	Chemical composition	Practical use
Marzhanbulak top	Aktobe region, Alginsky district, 25 km from Aktobe, located 1 km from the village. Marzhanbulak.	0.1	13.2	6.97	0.28	sulphate-hydrocarbonate, calcium-magnesium	drinking water source, recreation
Sarzhansay	Aktobe region, Martok district, is located between the villages of Karatogay and Sarzhansay.	0.07	10.0	7.35	0.22	bicarbonate-calcium	drinking water source, recreation
Kyz auliye	West Kazakhstan region, Chingirlau district, near the village of Aksuat (Karagash).	0.1	14.0	7.75	0.31	bicarbonate-calcium	drinking water source, recreation
Sauyr	Mangystau region, Tupkaragan district, 53 km south-east of Fort Shevchenko, 71 km northwest of Aktau.	0.1	11.5	7.78	1.63	chloride-sulphate, sodium-potassium	balneological source
Tuzdybulak	Atyrau region, Indersky district, 17 km from Inderborsky settlement.	0.7	11.1	7.34	53.68	sodium chloride	balneological source
Ystyk su	Mangystau region, Beineu district, 15 km. from the village of Sarga, in the northwest direction.	0.5	52.0	6.16	159.73	chloride-sulphate, magnesium-calcium	hydrothermal spring
Karagan-Bosaga	Mangystau region, Karakiyansky district, 293 km east of Aktau, northern border of the Ustyurt reserve	0.3	14.0	7.87	3.95	sulphate-chloride, calcium-magnesium	speleotourism

In size of an output (expense) all explored springs belong to the class marginal (less than 1 p/a) (Table 1). According to the water temperature, the studied springs are cold (0-20 °C), except for the Ystyk su spring, which belongs to very hot (more than 42 °C). According to the classification of groundwater according to the hydrogen ion concentration indicator (pH), the studied springs are slightly alkaline (7.0-8.3), except for the Ystyk su spring, which belongs to weakly acidic (4.1-7.0) (Table 1). Depending on the general mineralization, the waters of the springs are divided into the following species: weakly mineralized (0.22-1.63, Marzhanbulak upper, Sarzhansay, Kyz auliye, Sauyr), small mineralization (3.95, Karagan-Bosaga), brine mineral waters (53.63, Tuzdybulak) and strong brine water (159.73, Ystyk su) (Manshina, 2004). According to the chemical composition, the water of the springs Marzhanbulak is upper, Sarzhansay, Kyz aulie is fresh (less than 1 g/l), the springs Sauyr and Karagan-Bosaga are brackish (1-25 g/l), the springs Tuzdybulak and Ystyk su are salty (more than 25 g/l) (Table 1). The sulphate-chloride, calcium-magnesium

composition of water in the Karagan-Bosaga spring is obviously associated with the fact that the waters are saturated with minerals after contact with gypsum or anhydride in the cave. The content of chlorides in the water of the Ystyk su spring exceeds the MPC value (350 mg/l) by 279.8 times. The highest value of calcium and magnesium was noted in the spring Ystyk su - 7100 and 900 mg/l, respectively. In the analyzed water samples of the Ystyk su spring, the total stiffness indicator exceeds the established standard (7 mg-eq/l) by 61.4 times. Oxidability characterizes the content in water of organic and mineral substances oxidized by a strong oxidizing agent. In the course of the studies, it was found that the oxidability is higher than the MPC value (5 mg/l) in the water of the Ystik su spring - 1.7 times. Analysis of the dry residue content revealed a deviation from the standard value (1000 mg/l) in Ystyk su - 113 times. A study of the ecological state of the springs showed that water samples of the Karagan-Bosaga spring did not meet hygienic standards, since it contained a significant amount of chlorides and sulphates, had significant values of total stiffness, dry residue, general mineralization, and an increased value of chlorides was recorded in the Sauyr spring.

A special group is represented by underground lakes fed by rising mineral waters. This includes Karagan-Bosaga Cave and Balayuk Cave. In the first lake, sulphate-chloride-calcium-magnesium waters with mineralization of 3.95 g/l have a temperature of 14°C. The lake in the Balayuk cave with a temperature of 6°C is characterized by sulphate-sodium-chloride-calcium waters and mineralization of 6.18 g/l. Thus, the studied underground lakes belong to the sulphate-calcium hydrochemical facies of karst lakes during mineralization > 1.25 g/l (Golubeva, 1953; Maksimovich, 1959).

In general, the studied springs are used by the local population for recreational and recreational purposes (Figure 2). 40-50 kilometers from the city of Aktau, in the Munailinsky district of the Mangystau region there is a radon source - well number 21 (Figure 3). Back in Soviet times, the local water was examined, and it was recognized that it corresponds in chemical composition to the famous Essentuki 17. Essentuki 17 - natural therapeutic chloride-hydrocarbonate sodium, boric drinking mineral water of medium mineralization (10.0-14.0 g/l). They like to come here, but the landscaping of local wells for tourists leaves much to be desired (rusty fence around the perimeter, lack of canopy and safe paths to the pool). There are always vacationers here, especially in the summer (Figure 2).

Springs in the territory of the Western Kazakhstan are places of concentration of biological diversity. They are unique habitats and by that make the significant contribution to a variety of a landscape and a biota (Pankov et al., 2008; Moroz et al., 2008; Abrosimova and Golovatyuk, 2011). Despite the territory insignificant by area, springs form the peculiar oases having unique features (Dedkov and Gunin, 2014; Davis et al., 2017; Cartwright et al., 2020).

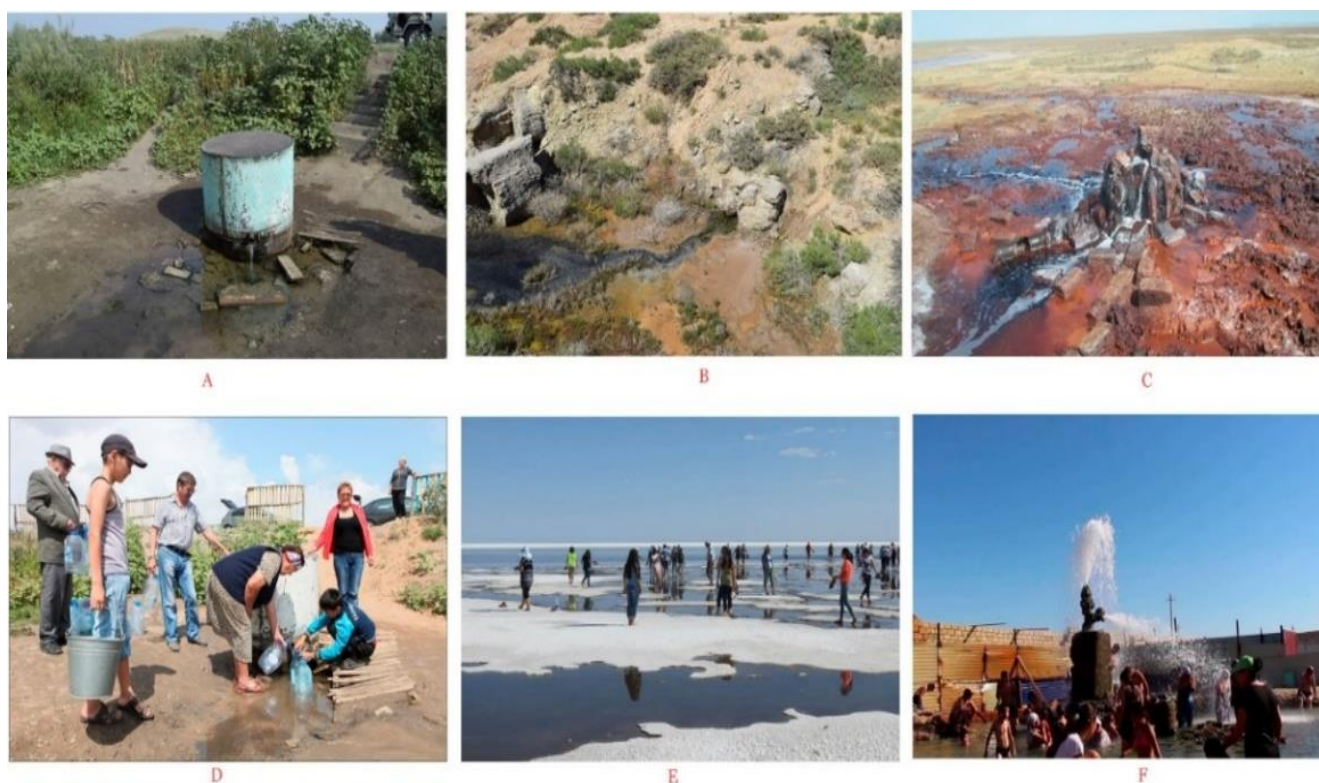


Figure 2. Recreational use of springs of West Kazakhstan: A- upper spring Marzhanbulak; B- spring Tuzdybulak; C - spring Ystyk su; D - a set of drinking water from the spring Marzhanbulak upper; E - mud treatment on Lake Inder, where the spring Tuzdybulak flows; F - reception of procedures with thermal water of Radon spring - well number 21 (Source: Prepared by the authors, 2021)

From the functional party these oases often are the only source of water resources in desert landscapes and, therefore, are concentrators of life and refuges of the majority of rare, endemic and relic species. The self-flowing artesian wells of the Western Kazakhstan for decades formed the unique microclimate, the area of thickets of reed and a cane on some sites is 5 hectares, with the internal system of small reaches. In general, a microclimate in the oasis is more contrast that creates a considerable biotopical variety for the development of plants and animals, than in the desert surrounding it. This

determines, as a result, the value of natural oases for the conservation of biodiversity in drought-tolerant environmental conditions of West Kazakhstan. Artesian wells drilled back in Soviet times are used as water supply by wild and domestic animals. Despite its small size, springs and artesian play an important role in the lives of many vulnerable and red-book species of birds and mammals (Kodric-Brown and Brown, 2007; Palacio-Núñez et al., 2007; Davis et al., 2017). Artesians are the dream of any ornithologist, because in a small area near the reservoir you can observe an amazing variety of birds. For some types of artesian - only a stop to restore strength on the path of migration, for others - this is a place of courtship, marriage dancing, and then breeding chicks (Karenina et al., 2015; Belyalov, 2017; Neruchev, 2018). Thermal springs play a key role for migratory birds and for some species serve as wintering places (Tymoshenko et al., 2019).

Springs can become birdwatching points and enter the map of tourist routes. Birdwatching or bird watching is one of the world's rapidly gaining popularity in environmental tourism (Puhakka et al., 2011; Czeszczewik et al., 2019). In the future, it is planned to develop birdwatching as one of the areas of scientific and environmental tourism in the territories of location of springs. According to the results of our research, it is possible to develop a comprehensive concept for the development of birdwatching at springs and artesian wells as a separate area of scientific and environmental tourism.

Springs can thus be actively used for the development of environmental tourism, they should be included in tourist routes and trails. It is also planned to create modern visit centers, glampings, campgrounds, ethno-auls and places for caravanning without capital construction, using light constructions. In rural areas where one type of tourist resource is lacking to act as a major source of attraction, the possibility of combining different types of attractions to increase attendance may be considered (Huang et al., 2016). In this regard, springs are a unique object for combining various types of tourism. On springs, specific types of tourism with national color can be developed, for example, equestrian tourism (Sigurðardóttir, 2018). In the conditions of spread on the territory of Kazakhstan in its numerous artesian basins, pressure groundwater, there are more than three thousand artesian wells (some fountain 40-50 years), the water of which either does not find use or is used in small volumes. The total flow rate of artesian wells is 0.4 km³/year (10% of proven reserves). Uncontrolled unregulated spawning of artesian wells causes significant damage to groundwater reserves, primarily fresh water, and in cases of opening of waters of increased mineralization, it negatively affects the environmental situation, leading to salinization of soils, successions of vegetation and waterlogging of territories.

All this requires adequate management decisions to prevent these negative events by switching wells to crane mode or their plugging (Poryadin et al., 2017). The need to keep existing artesian operational, as well as assess the possibility of creating new ones is required. In Kazakhstan, the amount of water received by the population from underground artesian and groundwater sources and used for household needs, animal husbandry and irrigation agriculture is 35.1%, of the total volume of fresh and weakly mineralized water consumed. Self-flowing artesian wells in the Atyrau and Mangystau regions can also be used not only for the development of tourism, but also as an alternative source of drinking water supply to the population. For example, in the Atyrau region there are 180 self-flowing artesian wells, of which 53 wells were equipped with adjustable gate valves, but now they are no longer working. In the Mangystau region, an inventory of the state of fountain wells was carried out in 1984 by the Mangyshlak regime party of the former Kazakh Hydrogeological Association. According to its results, in 1988-89, the Mangyshlak exploration expedition eliminated about 50 self-flowing artesian wells. Nevertheless, the total number of foundry wells in the Mangystau region is currently more than 250. The total flow rate of all the sewage wells available in the area is more than 100 l/s (8640 m³/day) or 3154 thousand m³/year. At the moment, all foundry wells have remained orphan.

The extraction of groundwater in all these areas and their free outflow through the foundry wells affects the groundwater resources of the region, triggering their reserves, and also contributes to various types of pollution of aquifers. Direct and indirect use of cold water sources brings a wide range of benefits to human society around the world, but such use of resources can also involve significant environmental costs, including loss of biodiversity and degradation of water quality. Despite the importance of sources, little attention has been paid to their management and conservation. A key element in the management and conservation of springs is the recognition of their position at the junction of three different ecosystems - groundwater, surface water and terrestrial. Human impacts on all three contributing ecosystems can have a significant impact on the integrity of the spring habitat.

Effective source management should take into account the full range of environmental and social values associated with them, understand the threats to the sustainability of those values and formulate strategies that balance potentially conflicting uses. As with any management strategy, a clear definition of the objectives of spring management is a prerequisite for effective conservation, protection and recovery (Barquín and Scarsbrook, 2008; Bhat and Pandit, 2020). Underground lakes are attractive for tourism in Western Kazakhstan in some caves of the region. In South Ustyurt there are karst and artificial caves of origin (Goltz and Epifanov, 1965; Potapova, 1974; Koshim et al., 2020). Artificial caves: Surule, Sultan epe, Ungoza, Kapam, Shakpak ata, Karaman ata, Shopan-Ata and others were created as a result of human processing of natural karst cavities and are actively used in religious tourism (Potapova, 1974; Yegemberdiyeva et al., 2018; Koshim et al., 2020). The best known are 2 natural caves Balayuk and Karagan-Bosaga with underground lakes (Figure 3).

One of the popular caves of the Western Kazakhstan is the cave Karagan-Bosaga at the foot of the Mount Baskaragan. Within the Ustyurt national nature reserve the cave of "Karagan-Bosaga" is poorly studied, its local name is "Zheroyyk". It is located on a slope sole. The entrance represents a roundish failure with a diameter about 8.0 - 10.0 m in the plan with sharply expressed brow (Figure 3). The cave impresses with the favor - an entrance from far away as specially made funnel, and close - inside - a step entrance. The cave is presented by one course consisting of the alternating the steeply inclined and horizontal sites. Inclined sites of corridor type from 6 to 10 meters high, with the step ceiling and an uneven floor covered with fragments and huge blocks of limestone. Walls - limestone, plaster layers.

The biggest hall is located at a depth of 160 m, comes to an end with the deadlock and is occupied with the small lake with a blue shade. Power of a hypsonic layer of 50-70 cm (there is a layer of plaster roses).

At a cave entrance a big failure. On all cave cracks with height about 1 m, depth of 7 m, goes down to 1.5 m, width on all cave of 8 m are observed. The left side of the cave is flat, and the right side - with an inclined plane and fragments. The thickness of fragments sometimes reaches 1 m. The cave of Karagan-Bosaga serves as the shelter during bad weather for representatives of fauna of the Ustyurt national nature reserve. Traces of mouflons are visible. In a distant part of a cave there is a small lake about 1.0-1.5 m in depth leaving under a wall (Figure 3). Crystal-clear and cold water. The area of a water mirror is about 4.0-5.0 sq.m. Water is considered sacred, water on taste bitter and salty here. It is possible to make ablution in the lake. Sulphate-chloride water as has obvious smack of plaster and a few chlorides. In a cave in process of removal from an entrance the humidity of air increases and reaches the maximum in a distant part at the lake. Air temperature in a cave is near $+10^{\circ}\text{C}$ (Golovachev, 2017).



Figure 3. Caves of West Kazakhstan with underground lakes: A - entrance to Karagan-Bosaga cave; B - an underground lake in the Karagan-Bosaga cave; C - entrance to Balayuk cave; D - an underground lake in the Balayuk cave (Source: Prepared by the authors, 2021)

The second cave - Balayuk Cave is located in the Aksaksaul tract in the southeast of the Ustyurt plateau, in the south side of the Kolyniyazkolka tract and 52 kilometers southeast of the Karynzhyrk depression 350 km from the city of Aktau, 40 km south of Turkmenistan and 60 km east of Uzbekistan. Balayuk cave is located in a karst funnel 50 m long, 6-15 m wide, 7 m deep, in a southeast direction from the Balayuk cemetery, at a distance of 2.5 km from the Balayuk cemetery. Balayuk Cave begins with a small gallery, which very quickly slopes, expands and leads to the first hall to a depth of 28 meters. Going further, you will find another gallery and hall at a depth of 75 meters. Then there will be a steep descent of several meters and another gallery, which leads to the third hall at a depth of 120 meters. In this hall is a lake with beautiful blue water. The entrance to the cave is located in a karst funnel 50 meters long, 6-15 meters wide and about 7 meters deep. The cavity ends with a very vast lake, 20 m long, 10 m wide and 4.5 m deep. The cavity is dry all the way to the lake. The water of the lake is clear, slightly salted with a total mineralization level of 6 g/l. The air temperature in the cavity is 16°C , the water temperature in the lake is from 6° to $+13^{\circ}\text{C}$. The water in the underground lake in the Balayuk cave is clear, cold and has the following composition (g/l): sulphates - 2.73, calcium - 0.57, magnesium - 0.38, sodium and potassium - 0.93, mineralization - 6.18. The lake is fed by the groundwater of the Lower Miocene aquifer (Potapova, 1974).

Tourist routes have been developed for the development of environmental tourism in which, the Sauyr springs described by us and the underground lake of the Karagan-Bosaga cave, are visited (Yegemberdiyeva et al., 2018).

Natural caves began to open for tourism more than 400 years ago, and now, probably, there are at least one, and often dozens of show caves in all countries of the world. There are about 800 large exhibition caves in the world with more than 50,000 visitors per year, and more than 250 million visitors annually pay to visit them (Lobo and Moretti, 2009; Garofano and Govoni, 2012). Thus, the caves of Western Kazakhstan can now become one of the most important

geotouristic goals and represent an important economic resource for Kazakhstan. High-value geological formations are among the least-protected heritages of our globe. In the West Kazakhstan context, the study on geosites, geoheritages and geodiversity is at its infant stage. Springs and underground lakes in caves are certainly “geosites”, i.e. geological or geomorphological sites with recognised value (Hose, 1995; Brilha, 2016). Geosite is a geological heritage site (Wimbledon, 1999; Ruban and Kuo, 2010). And they can be used for geotourism (Pralong, 2005; Dowling, 2011). The concept of geotourism was introduced in the early 1990's. The background of geotourism may be related to caves (Cardozo and Neto de Carvalho, 2013). Caves were the earliest tourist attractions, and nowadays one of the most appreciated geotourism destinations in the world (Anderson, 2010). At present, water bodies in Western Kazakhstan, including spring tracts, are becoming increasingly concerned about the general nature of the threat to public health and the state of natural ecosystems. The pilgrimage of those wishing to self-medicate grows every year, because our free medical care is inaccessible to many. Crowds of people suffering from skin diseases, musculoskeletal system every summer rush to the springs of Western Kazakhstan and as a result di-bone not only with excessive (excessive in time and temperature) use of spring resources, rapeseed and grains, but also in behavior on the shores. On freshwater springs, almost all pilgrims collect water, and many of them wash directly at the source. Improving the environmental situation on the springs of Western Kazakhstan is impossible, without the mouth of order in the tourist sector of water use.

CONCLUSION

Springs are an integral part not only of the natural heritage of the region, but also an object of water supply and recreation, therefore, an assessment of the quality and condition of the spring is a prerequisite for providing the population with drinking and therapeutic water that meets sanitary and hygienic requirements. All the above-described springs of West Kazakhstan can be included in tourist and excursion routes when designing a regional tourist product and will be used in the future by tourist companies, public associations of tourists for travel planning, as well as institutions for additional education of children of ecological and tourist orientation. It is necessary to continue recording, certification and comprehensive study of springs. Special research, from the point of view of balneotherapeutic properties, requires mineral waters and springs. It is necessary to develop a network of ecological tourist routes and trails, natural methods for protecting these trails from natural destruction, as well as protecting springs with clean water. The description of ecological routes may include traditions and crafts of the people, thus, the implementation of projects for the development of tourism will also contribute to the popularization of natural monuments and ethnocultural traditions of Western Kazakhstan.

It is necessary to provide for the restoration of destroyed sections of hiking trails leading to springs, waterfalls and other natural monuments, as well as the arrangement of recreation areas near the springs. We propose a number of measures for the most rational use and protection of springs. For example, given the uniqueness of the objects studied, it is possible to organize small visit centers (with a shower and beds for overnight accommodation in accordance with the throughput) in the ethno style and around it areas for installing tents and yurts. It is necessary to regularly clean the reservoir (spring bath) from household garbage and other foreign objects. Waste containers and toilets shall be installed in the surrounding area. Periodically clean and remove garbage. In our opinion, as well as in accordance with the provisions on water protection zones and coastal lanes, and taking into account the uniqueness of the natural object, we propose to have small architectural forms of a recreation area over a distance that do not adversely affect the ecosystem of springs. Restrict citizens' access directly to the source of the spring in the main bath, fencing it at least within the 20-meter zone around the main bath. Pilgrims' access to water for washing is indicated downstream of the stream. To take water directly from the main bath, install a mechanical pump, with water withdrawal outside the fence. Thus, springs should become not only alternative places for drinking water supply to the population and an excellent resting place for local residents, but also a base for the development of tourism. All these events will allow rational use of springs for tourist purposes, as well as for users of various state departments and republican departments. Tourist and recreational activities at the springs should be aimed at increasing the employment of the population, creating comfortable conditions for the development of tourism and recreation, and most importantly at restoring and improving the health of the nation.

REFERENCES

- Abrosimova, E.V., & Golovatyuk, L.V. (2011). *Vidovoj sostav makrozoobentosa rodnikov Samarskoj oblasti [The species composition of macrozoobenthos springs Samara region]*. Samarskaya Luka: problems of regional and global ecology, 3, 79-87, (in Russian).
- Akhmedenov, K.M. (2020). Assessment of the prospects of springs in Western Kazakhstan for use in religious tourism. *GeoJournal of Tourism and Geosites*, 31(3), 958–965. <https://doi.org/10.30892/gtg.31304-527>
- Akhmedenov, K.M., Iskaliev, D.Z., & Akhmedenova, S.G. (2013). Factors of the spring waters formation and the evolution of spring areas of West Kazakhstan. *Life Science Journal*, 10(12s), 710-720. http://www.lifesciencesite.com/ljsj/life1012s/113_22403life1012s_710_720.pdf
- Akhmedsafin, U.M., Dzhabasov, M.Kh., & Sydykov, Zh.S. (1979). *Territorial'noe raspredelenie resursov podzemnyh vod Kazakhstana [Territorial distribution of groundwater resources in Kazakhstan]*. Almaty, Nauka, 152, (in Russian).
- Anderson, J. (2010). Caves and karst geotourism in Australia. *Global Geotourism Perspectives*, 49-66, Good fellow Publishers Ltd., Oxford.
- Barquín, J., & Scarsbrook, M. (2008). Management and conservation strategies for coldwater springs. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 5, 580-591.
- Belyalov, O.V. (2017). Materialy po ornitofaune Mangyshlaka i Ustjurta [Materials for the ornithofauna of Mangyshlak and Ustyurt]. *The Russian Journal of Ornithology*, 1546, 5511-5527.
- Bhat, S.U., & Pandit, A.K. (2020). Water quality assessment and monitoring of Kashmir Himalayan freshwater springs-A case study. *Aquatic Ecosystem Health & Management*, 3, 274-287. <https://doi.org/10.1080/14634988.2020.1816771>
- Bonn, M.A., & Bell, F.W. (2003). *Economic Impact of Selected Florida Springs on Surrounding Local Areas*. Florida Department of Environmental Protection: Tallahassee, FL, USA.

- Boys, K.A., White, K.D., & Groover, G. (2017). Fostering rural and agricultural tourism: exploring the potential of geocaching. *Journal of Sustainable Tourism*, 25:10, 1474-1493. <https://doi.org/10.1080/09669582.2017.1291646>
- Brilha, J. (2016). Inventory and Quantitative assessment of geosites and Geodiversity sites: a review. *Geoheritage*, 8(2), 119–134. <https://doi.org/10.1007/s12371-014-0139-3>
- Cardozo, M.J., & Neto de Carvalho, C. (2013). Worldwide speleotourism: approaches for economic and heritage sustainability. *Tourism and Karst Areas*, 6 (1), 4-8.
- Cartwright, J.M., Dwire, K.A., Freed, Z., Hammer, S.J., McLaughlin, B., Misztal, L.W., Schenk, E.R., Spence, J.R., Springer, A.E., & Stevens, L.E. (2020). Oases of the future? Springs as potential hydrologic refugia in drying climates. *Frontiers in Ecology and the Environment*, 18(5), 245–253. <https://doi.org/10.1002/fee.2191>
- Climo, M., Blair, A., Stott, M., Mroczek, E., & Addison, S. (2017). Geothermal Tourism in New Zealand: Borrowing from International Examples. *Proceedings 39th New Zealand Geothermal Workshop*, New Zealand.
- Czeszczewik, D., Ginter, A., Mikusiński, G., Pawłowska, A., Kałuża, H., Smithers, R.J., & Walankiewicz, W. (2019). Birdwatching, logging and the local economy in the Białowieża Forest, Poland. *Biodiversity and Conservation*, 28(11), 2967-2975. <https://doi.org/10.1007/s10531-019-01808-6>
- Davis, J.A., Kerezy, A., & Nicol, S. (2017). Springs: conserving perennial water is critical in arid landscapes. *Biological Conservation*, 211, 30–35.
- Dedkov, V.P., & Gunin, P.D. (2014). On the microclimate of natural oases extremely arid desert Transaltay Gobi. *Arid Ecosystems*, 20, 4 (61), 36-43.
- Dowling, R. (2011). Geotourism's global growth. *Geoheritage*, 3(1), 1–13.
- Duisenova, T. (2015). *SanPiN RK. Sanitarno-jepidemiologicheskie trebovaniya k vodoistochnikam, mestam vodozabora dlia hozjajstvenno-pit'evyh celej, hozjajstvenno-pit'evomu vodosnabzheniju i mestam kul'turno-bytovogo vodopol'zovanija i bezopasnosti vodnyh obektov (16 marta 2015 g. № 209) [Sanitary rules and norms of the Republic of Kazakhstan. Sanitary and epidemiological requirements for water sources, places of water intake for household and drinking purposes, drinking water supply and places of cultural and domestic water use and safety of water bodies (March 16, 2015 No. 209)]*. Astana, 137, (in Russian).
- Egresi, I., Bayram, B., Kara, F., & Kesik, O.A. (2012). Unlocking the potential of religious tourism in Turkey. *Geojournal of Tourism and Geosites*, 9(1), 63 – 80.
- Erfurt-Cooper, P., & Cooper, M. (2009). *Health and Wellness Tourism: Spas and Hot Springs*. Bristol, UK: Channel View Publications.
- Garofano, M., & Govoni, D. (2012). Underground Geotourism: a Historic and Economic Overview of Show Caves and Show Mines in Italy. *Geoheritage*, 4, 79–92. <https://doi.org/10.1007/s12371-012-0055-3>
- Golovachev, I.V. (2017). *Geologicheskie nabljudeniya na plato Ustjurt (hronika odnoj jekspedicii) [Geological observations on the Ustyurt plateau (chronicle of one expedition)]*. Astrakhan local history bulletin, VI, Astrakhan: Publisher: Sorokin Roman Vasilievich, 35-53, (in Russian).
- Goltz, S.I., & Epifanov, M.N. (1965). *Karstovye vpadiny Central'nogo i Vostochnogo Ustjurt. Tipy karsta SSSR [Karst depressions of central and eastern Ustyurt. Types of karst of the USSR]*. Moscow, Science, (in Russian).
- Golubeva, L.V. (1953). Himicheskij sostav vod nekotoryh karstovyh ozer Permskogo kraja [The chemical composition of the waters of some karst lakes in the Perm region]. *Hydrochemical materials*, 21, 81-85, (in Russian).
- Hose, T.A. (1995). Selling the story of Britain's stone. *Env. Interpret*, 10 (2), 16-17.
- Huang, W.J., Beeco, J.A., Hallo, J.C., & Norman, W.C. (2016). Bundling attractions for rural tourism development. *Journal of Sustainable Tourism*, 24, 1387-1402. <https://doi.org/10.1080/09669582.2015.1115510>
- Huijbens, E.H. (2011). Developing Wellness in Iceland. Theming Wellness Destinations the Nordic Way, *Scandinavian Journal of Hospitality and Tourism*, 11, 20-41. <https://doi.org/10.1080/15022250.2011.525026>
- Idrisova, G.Z., Sergeeva, I.V., Shevchenko, E.N., & Ponomareva, A.L. (2018). Redkie i ohranjaemye vidy rodnikov Zapadnogo Kazahstana [Rare and Protected Plant Species of Springs in Western Kazakhstan]. *Bulletin of Botanic Garden of Saratov State University*, 16, 2, 66–71. (in Russian). <https://doi.org/10.18500/1682-1637-2018-2-66-71>
- Idrisova, G.Z., Sergeeva, I.V., Shevchenko, E.N., Ponomareva, A.L., & Akhmedenov, K.M. (2019). Bioecological Characteristics of the Flora of the Territories Adjacent to the Springs of Western Kazakhstan. *Povolzhskiy Journal of Ecology*, 4, 419 – 431. <https://doi.org/10.35885/1684-7318-2019-4-419-431>
- Illies, J., & Botosaneanu, L. (1963). Problemes et Methodes de la Classification et de la Zonation Ecologique des Eaux Courantes, Considerees surtout du Point de vue Faunistique. *Internationale Vereinigung für theoretische und angewandte Limnologie*, Stuttgart., Bd., 12, 1–57.
- Jones, C., Stanton, D., Hamer, N., Denner, S., Singh, K., Flook, S., & Dyring, M. (2019). Field investigation of potential terrestrial groundwater-dependent ecosystems within Australia's Great Artesian Basin. *Hydrogeology Journal*, 28(1), 237-261. <https://doi.org/10.1007/s10040-019-02081-1>
- Karakaya, M.Ç., & Karakaya, N. (2018). Chemical composition and suitability of some Turkish thermal muds as peloids. *Turkish J Earth Sci*, 27, 191-204.
- Karenina, K.A., & Gilev, A.N. (2015). Why are the steppes artesian? *SCIENCE First Hands*, 3, 88-99.
- Kodric-Brown, A., & Brown, J.H. (2007). Native fishes, exotic mammals, and the conservation of desert springs. *Frontiers in Ecology and the Environment*, 5, 549–53.
- Korolev, A.A., Bogdanov, M.V., Semenova, A.A., Nedachin, A.E., Artemova, T.Z., Suslikov, V.L., Ivanov, A.V., Orlov, A.A., Gasilina, M.M., & Veselova, A.P. (2003). *SanPiN 2.1.4.1175-02. Gigienicheskie trebovaniya k kachestvu vody nentralizovannogo vodosnabzhenija. Sanitarnaja ohrana istochnikov [Sanitary rules and norms 2.1.4.1175-02. Hygienic requirements for water quality of non-centralized water supply. Sanitary protection of sources]*. Moscow, 20, (in Russian).
- Koshim, A.G., Sergeyeva, A.M., Saparov, K.T., Berdibayeva, S.K., & Assylbekova, A.A. (2020). Underground mosques of Mangystau as the objects of religious tourism. *GeoJournal of Tourism and Geosites*, 34(1), 33–41. <https://doi.org/10.30892/gtg.34105-616>
- Kurlyandsky, B.A., & Sidorov, K.K. (2003). *Gigienicheskij normativ «PDK himicheskikh veshhestv v vode, vodnyh obektov hozjajstvenno-pitevogo i kul'turno-bytovogo vodopol'zovanija. GN 2.1.5.1315-03» [Hygienic Standard of Russian Federation "TLV of chemicals in water, water bodies of drinking and cultural and domestic water use. HS 2.1.5.1315-03"]*. Moscow, 214, (in Russian).
- Liu, Q., Browne, A.L., & Iossifova, D. (2021). Creating water demand: bathing practice performances in a Chinese hot spring tourist town. *Journal of Sustainable Tourism*. <https://doi.org/10.1080/09669582.2021.1876716>
- Lobo, H.A.S., & Moretti, E.C. (2009). Tourism in Caves and the Conservation of the Speleological Heritage: The Case of Serra da Bodoquena (Mato Grosso do Sul State, Brazil). *Acta Carsologica*, 38(2/3), 265-276. <https://doi.org/10.3986/ac.v38i2-3.127>
- Maksimovich, G.A. (1959). *Podzemnye karstovye ozera. Speleologija i karstovedenie [Underground karst lakes. Speleology and karst studies]*, Moscow, MOIP, (in Russian).

- Manshina, N.V. (2004). *Putevoditel' po kurortam mira. 200 evropejskih kurortov* [A guide to the resorts of the world. 200 European resorts], Moscow, Medsi, (in Russian).
- McMorran, C. (2008). Understanding the 'Heritage' in Heritage Tourism: Ideological Tool or Economic Tool for a Japanese Hot Springs Resort? *Tourism Geographies*, 3, 334-354. <https://doi.org/10.1080/14616680802236329>
- Moroz, M.D., Nagorskaya, L.L., & Tishchikov, I.G. (2008). *Vodnye i okolovodnye bespozvonochnye rodnikovo-ruch'evogo kompleksa «Istoki Lani»* [The invertebrate's fauna of aquatic and semi-aquatic spring-stream system «The beginnings of the River Lan»]. *Bulletin of the Belarusian State University*, 1, 42-46, (in Russian).
- Mueller, J.M., Lima, R.E., & Springer, A.E. (2017). Can environmental attributes influence protected area designation? A case study valuing preferences for springs in Grand Canyon National Park. *Land Use Policy*, 63, 196-205.
- Mukhamedzhanov, M.A., Rakhimov, T.A., Rakhmetov, I.K., & Muratkhonov, D.B. (2020). Problem of drinking water supply to population of Mangistau and West-Kazakhstan regions. *International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management SGEM*, 693-700. <https://doi.org/10.5593/sgem2020/1.1/s02.084>
- Neruchev, V.V. (2018). New data on the birds of the lower Emba and the coastal deserts. *The Russian Journal of Ornithology*, 27, 1457-1463.
- Osipov, S.V., Yermenbai, A.M., & Akyzbekova, A.Zh. (2020). The negative impact of anthropogenic factors on the state of groundwater of Kazakhstan. *News of the National Academy of Sciences of the Republic of Kazakhstan, Series of Geology and Technical Sciences*, 2, 132-140. <https://doi.org/10.32014/2020.2518-170X.40>
- Ozcelik, S., Polat, H.H., Akyol, M., Yalcin, A.N., Ozcelik, D., & Marufihah, M. (2000). Kangal hot spring with fish and psoriasis treatment. *The Journal of Dermatology*, 27, 386-390.
- Palacio-Núñez, J., Verdú, J. R., Galante, E., Jiménez-García, D. & Olmos-Oropeza, G. (2007). Birds and fish as bioindicators of tourist disturbance in springs in semi-arid regions in Mexico: a basis for management. *Animal Biodiversity and Conservation*, 30, 29-41.
- Pankov, N.N., Krashennnikov, A.B., Starova, O.S., & Pankova, N.V. (2008). *Fauna rodnikov Urala i Predural'ja (Permskij kraj). Rybnye resursy Kamo-Ural'skogo regiona i ih racional'noe ispol'zovanie* [Fauna of the springs of the Urals and Cis-Urals (Perm Kama region). Fish resources of the Kama-Ural region and their rational use]. *Permian*, 146-151, (in Russian).
- Poryadin, V.I., Absametov, V.K., & Adenova, D.K. (2017). *Upravlenie resursami podzemnyh vod dlja reshenija problemy vodosnabzhenija jekonomiki Kazahstana na dolgosrochnyj period* [Management groundwater resources for solutions water supply of economy of Kazakhstan on the long-term period]. *News of the National Academy of Sciences of the Republic of Kazakhstan. Series of geology and technology sciences*, 5, 93-102, (in Russian).
- Potapova, G.M. (1974). *Peshhery juga Mangyshlaka i jugo-zapada Ustjurtu* [Caves of the south Mangyshlak and south-west Ustyurt]. *Caves. Perm*, 15, 76-88, (in Russian).
- Pralong, J.P. (2005). A method for assessing the tourist potential and use of geomorphological sites. *Géomorphologie: Relief, Processus, Environnement*, 3, 189-196. <https://doi.org/10.4000/geomorphologie.350>
- Puhakka, L., Salo, M., & Sääksjärvi, I.E. (2011). Bird diversity, birdwatching tourism and conservation in Peru: A geographic analysis. *PLoS One*, 6(11), e26786. <https://doi.org/10.1371/journal.pone.0026786>
- Ruban, D.A., & Kuo, I.L. (2010). Essentials of geological heritage site (geosite) management: a conceptual assessment of interests and conflicts. *Natura Nascosta*, 41, 16-31.
- Sigurðardóttir, I. (2018). Wellness and equestrian tourism – new kind of adventure? *Scandinavian Journal of Hospitality and Tourism*, 18:4, 377-392. <https://doi.org/10.1080/15022250.2018.1522718>
- Sydykov, Zh.S. (1999). *Podzemnye vody Kazahstana (Resursy, ispol'zovanie i problemy ohrany)* [Underground waters of Kazakhstan (Resources, use and protection problems)]. *Almaty, "Gylm"* (in Russian).
- Tymoshenko, A.Yu., Putilin, A.V., Zhakenov, I.E., Orynbasarov, A.O., Aldanov, K.K., & Tolepbergenov, T.A. (2019). Zimnie vstrechi ptic na termal'nyh istochnikah v rajone solonchaka Shalkar-Teniz Aktjubinskoj oblasti [Winter meetings of birds at thermal springs in the area of saline Shalkar-Teniz, Aktobe region]. *The Russian Journal of Ornithology*, 28, 1129-1132.
- Wu, Q., Bi, X., Grogan, K., & Borisova, T. (2018). Valuing the Recreation Benefits of Natural Springs in Florida, *Water*, 10, 1379. <https://doi.org/10.3390/w10101379>
- Yegemberdiyeva, K.B., Yushina, Yu.A., & Orazbekova, K.S. (2018). Osnovnye jetapy razrabotki turisticheskikh marshrutov dlja razlichnyh vidov jekologicheskogo turizma (na primere Mangistauskoj oblasti) [Main stages of tourist routes development for different types of environmental tourism (on the example of the Mangystau Region)]. *Issues of Geography and Geoecology*, 1, 89-98.
- *** Wimbledon, WAP. (1999). Geosites – a new conservation initiative. *Episodes*, 19, 87-88.

A REVIEW OF WINE TOURISM DESTINATION IMAGE STUDIES FROM 2001 TO 2020

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Abstract: As wine tourism destination image research attracts more attention lately, it is necessary to synthesize the literature and monitor its development. By analyzing the accumulated knowledge in the field, our study aims to form a practical guide based on which future research can avoid duplication and focus on the detected gaps. The paper uses literature review methodology of 21 studies published between 2001 and 2020. Sample articles were coded and analyzed by different variables. The results explain some of the features of the field such as common measurement methods, study subjects and objects, samples and their size, destination types, scales, topics, and so forth. It summarizes strengths and weaknesses as well as future research possibilities. Based on the results, it is proposed to diversify the subjects of the study, also, to improve the measurement techniques of wine tourism destination image and focus on projected image which lacks the attention.

Key words: destination image, literature review, wine tourism, winescape, destination image measurement, wine region imagery, perceived image

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INTRODUCTION

Research about destination image (DI) concept in tourism was initiated in the early 1970s (Echtner and Ritchie, 1991; Stepchenkova and Mills, 2010) and after almost a half-century-long popularity, now it occupies an important role in tourism-related studies. Researchers' extended interest in DI is linked to its importance for individual's behavior regarding travel decision-making (Chon, 1990; Gallarza et al., 2002; Stepchenkova and Mills, 2010; Tasci et al., 2007). The results of DI studies are often used by destination marketing organizations (DMO) as they realize that "in order to be successfully promoted in the targeted markets, a destination must be favourably differentiated from its competition, or positively positioned, in the minds of the consumers" (Echtner and Ritchie, 1991: 37). Exploring and monitoring DI enables DMOs to better manage perceived or projected DIs in target travel markets (Stepchenkova and Mills, 2010). The significance of tourism destination imagery for wine regions has been recognized by several authors (Bruwer et al., 2016; Bruwer and Gross, 2017; Scorrano et al., 2018), who note that wine tourism destination image (WTDI) research is limited. In his study about WTDI Williams (2001b) notices that wine regions manage to be differentiated from other kinds of destinations, but "they may fail to distinguish how one wine area is distinguished from the next" (Williams, 2001b: 53).

He suggests that for the successful positioning of wine tourism destinations, the projected images should match the wine tourists' preferences (Williams, 2001b). Bruwer et al. (2016) consider that wine tourism product and experience need a research perspective adapted to their nature and differentiated from the generic DI studies. Given this framework, the purpose of our paper is to summarize and synthesize the literature related to WTDI with the goals of understanding its current state of knowledge, providing a practical guide for fellow researchers and encourage future studies. Current paper acknowledges the recommendation by Tasci et al. (2007): "frequent and critical monitoring of the image construct through literature reviews is required to shed light on the necessary adjustments of methodological rigor and focus of inquiry" (Tasci et al., 2007: 195). In DI field, several authors (Chon, 1990; Echtner and Ritchie, 1991; Gallarza et al., 2002; Nghiêm-Phú, 2014; Pike, 2002; Stepchenkova and Mills, 2010; Tasci et al., 2007) have reviewed previous literature, and these studies have been used as a guide for our research design process. In this research, similarly to some of the preceding studies (Chon, 1990; Nghiêm-Phú, 2014; Tasci et al., 2007), the literature review methodology was applied. As Grant and Booth (2009) explain, "the literature review method seeks to identify what has been accomplished previously, allowing for consolidation, for building on previous work, for summation, for avoiding duplication and for identifying omissions or gaps" (Grant and Booth, 2009: 97), however, it does not usually involve comprehensive data. To overcome this methodological weakness, we tried to include all the research papers about WTDI, which met the criteria discussed below in the Data collection section. Therefore, the research questions of this review are:

1. What is the existing knowledge about WTDI?
2. What are the characteristics of WTDI studies between 2001 and 2020?

LITERATURE REVIEW

Previous reviews of DI research

Chon (1990) was one of the first authors who reviewed 23 most frequently cited studies about DI in tourism and

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classified them under six topics: “(1) the influence of a destination image in traveler satisfaction; (2) the role of a destination image in traveler buying behavior, i.e. his travel related decision making; (3) the change of destination image; (4) the formation and modification of a destination image through cross-national and cross-cultural contacts; (5) destination image assessment and measures; and (6) the role of a destination image and tourism development” (Chon, 1990: 3). Based on this review, he suggested a conceptual model of a relation between DI and traveler’s behavior (Chon, 1990).

One year later, Echtner and Ritchie (1991) reviewed 15 papers about DI in tourism to assess its conceptualization and measurement. This paper found a dominance of quantitative methods over qualitative ones, meaning a lack of research focused on holistic and unique components of DI (Echtner and Ritchie, 1991). Echtner and Ritchie (1991) also provided a list of DI attributes summarized from the reviewed quantitative studies.

Around a decade later, Pike (2002) has examined 142 papers about DI published from 1973 to 2000. This study discussed some characteristics of DI research, such as measurement approaches, data analysis methods, focus of studies etc.

Gallarza et al. (2002) provided a conceptual model of tourism DI as well as a classification of the applied methodologies and a summary of utilized DI attributes. This paper is based on an overview of 65 studies published during the period of 1971-1999, which were grouped in seven different topics such as “conceptualization and dimensions”, “destination image formation process (static and dynamic)”, “assessment and measurement of destination image”, “influence of distance on destination image”, “destination image change over time”, “active and passive role of residents in image study”, and “destination image management policies (positioning, promotion, etc.)” (Gallarza et al., 2002: 58).

Tasci et al. (2007) carried out a critical review of DI articles sourced from renowned journals of tourism and other related fields. This study concluded that conceptualization and operationalization constructs had not yet been systematized, and it highlighted some of the methodological issues regardless of the fact that many researchers took into consideration “evolutionary advances” (Tasci et al., 2007: 217) provided by Echtner and Ritchie (1991). Stepchenkova and Mills’ (2010) intention was to identify “current and emerging trends” (Stepchenkova and Mills, 2010: 582) in DI research with a qualitative meta-analysis of 152 articles published between January 2000 – October 2007. This article discusses ten trends in DI studies that assist an efficient development of future research. One of the latest reviews of such scale and importance as the former studies was conducted by Binh Nghiê-m-Phú (2014), who identified characteristics of 177 DI papers published between 2008-2012. He provided aspects of previous studies and recommendations for the development of the literature body.

Destination image

DI definition has often been unclear or even omitted (Echtner and Ritchie, 1991), which lead Echtner and Ritchie (1991) to design a conceptual framework of DI involving its attribute-based and holistic perception, functional and psychological characteristics, and common and unique features. This structure requires the use of a combination of qualitative and quantitative methodologies for proper measurement of DI (Echtner and Ritchie, 1991). In other words, structured methods should be dealing with functional and psychological attributes, while unstructured methods such as open-ended questions should be exploring the holistic perceptions and unique component of the DI (Echtner and Ritchie, 1991). After more than a decade from Echtner and Ritchie’s (1991, 1993) framework proposal, the studies still were not using a uniform definition and measurement of DI (Gallarza et al., 2002; Tasci et al., 2007). Therefore, Tasci et al. (2007) synthesized the components of the DI and proposed a system, which has a cognitive knowledge of destination’s common and unique attributes and the affective feelings about them at its core; based on these aspects, a holistic image is formed and assists the individual in travel decision-making. In this system “factors cannot be comprehended in isolation; therefore, they should be studied in an integrated manner. Thus, a DI is an interactive system of thoughts, opinions, feelings, visualizations, and intentions toward a destination” (Tasci et al., 2007: 200). As a result of an overview of DI constructs, Stepchenkova and Mills (2010) also concede with cognitive, emotional or affective, and conative or behavioral elements of DI, as well as its overall impression.

Wine tourism destination image

WTDI papers (Madeira et al., 2019; Scherrer et al., 2009; Sottini et al., 2019) often study wine-producing regions as a type of destination in interest. In other words, from travel perspective, wine region and wine tourism destination terms could probably be used interchangeably. One more term which intends to describe a similar concept is winescape. Wine region is a place where wine is produced and with appropriate facilities it can become a travel destination (Dávid and Bujdosó, 2007; Nemethy et al., 2016). Wine tourism destination could be a wine region or any other place where wine tourism activities take place. Quintal et al. (2015) refer to winescape as a “grape wine environment” (Quintal et al., 2015: 597), Johnson and Bruwer (2007) define it as a connection of “vineyards; wineries and other physical structures; wines; natural landscape and setting; people; and heritage, town(s) and buildings and their architecture and artefacts within, and more” (Johnson and Bruwer, 2007: 277). Winescape is studied from macro (wine region) and micro (winery) approaches (Quintal et al., 2015). Hall et al. (2000) interpret winescape as “the attributes of a grape wine region” (Hall et al., 2000: 4). Researchers who assess WTDI (Bruwer and Gross, 2017; Scorrano et al., 2018; Williams, 2001a) use all these three concepts. Therefore, WTDI studies beliefs, perceptions, thoughts, feelings, ideas, expectations, and knowledge about a wine tourism destination, in other words, wine region or winescape, that is projected by destination management bodies and perceived by wine tourists. Thus, it is important for a proper research of WTDI to establish a framework suitable for wine tourism product (Bruwer et al., 2016).

METHODOLOGY

Data collection

This study is a review of the literature about WTDI. The data collection and data analysis had several steps, which is

summarized in Figure 1. Firstly, we decided which database to use for the paper search. We were considering choosing between Google Scholar, a free search engine, and Scopus and Web of Science (WoS), which we had access to. All these databases have their advantages and disadvantages. The main reason why we decided not to use Google Scholar in our search was that its content is not limited only to scholarly materials, and its algorithm does not let users filter the data based on its publication type, i.e. article, student hand-book, editorial notes, theses and so forth (Noruzi, 2005). On the other hand Scopus and WoS offer “scholarly and professional literature” (Jacso, 2005: 1540), and unlike Google Scholar, their contents are comprehensive and disclosed (Jacso, 2005). We collected data from Scopus and WoS.

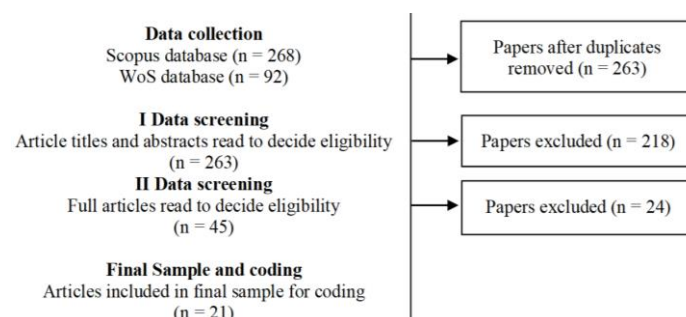


Figure 1. Data collection and analysis process
(Source: Author's elaboration)

Table 1. Keywords used to search articles in Scopus and WoS databases and corresponding number of findings
(Source: Author's elaboration)

Keywords used for search	Keywords used to filter the results	Number of articles found in the Scopus database	Number of articles found in the WoS database
"destination image"	"wine"	155	33
"winescape"		28	33
"brand equity"	"wine tourism"	54	8
"brand image"	"wine tourism"	31	18
Total		268	92

Secondly, we selected the following keywords “destination image”, “wine”, “winescape”, “brand equity”, “brand image”, “wine tourism” and their combinations to gather the results. Table 1 explains the keyword search process in a more detailed way. Then, we picked only academic peer-reviewed journal articles for our study, which was done by filtering the results according to the document type. The number of papers identified on Scopus and WoS databases was 268 and 92, respectively. Finally, we have removed the duplicates and read the titles and abstracts of 263 remaining works to decide which papers to include in our primary sample. This search procedure was repeated twice, in November 2020, and in January 2021 to ensure that all the necessary documents were found. The primary sample incorporated 45 articles. Afterwards, we thoroughly read and coded the papers in Microsoft Excel. At this point, the final sample was decided too. We excluded 24 articles, as some were not in English, others were preprints, and the rest was not focused on DI and wine tourism. As our goal was to collect the papers exhaustively, we did not limit our sample to any period, which means that the time span when the sample articles were published was known only after the final sample was identified. Table 2 displays 21 articles covered in our research. They study WTDI and are published during 2001 - 2020.

Data analysis

The analysis of the literature was made using a coding system with the variables adopted from the previous DI reviews (Chon, 1990; Echtner and Ritchie, 1991; Gallarza et al., 2002; Nghiêm-Phú, 2014; Pike, 2002; Stepchenkova and Mills, 2010; Tasci et al., 2007). We reviewed each full-text paper to find out about the variables such as journal title and ranking, authors and publication year. We also coded papers according to the topic, focus on perceived versus projected image, countries for study, wine-producing region, and type and number of destinations in interest. Other variables were study sample and its size, DI measurement methods (data collection modes), and attributes. Table 2 shows the analyzed characteristics for each article. All the articles in the sample are empirical. However, some papers provide a more in-depth review of concepts and literature than others; they could be considered a combination of conceptual and empirical studies, but we did not classify them according to this variable, as it was beyond our study goals.

Table 2. Summary of characteristics of WTDI studies between 2001 and 2020 (Source: Author's elaboration)

N	Author, year	Country	The number of destinations of interest	Topics
1	(Williams, 2001a)	Country	NA	Projected image
2	(Bruwer and Lesschaeve, 2012)	NA	1	Winescape framework, focus on WTDI
3	(Gómez and Molina, 2012)	Canada	4	Destination image as a part of the brand equity construct
4	(Sampaio, 2012)	Spain	1	Links between destination image and other concepts
5	(Pratt and Sparks, 2014)	Portugal	NA	Links between destination image and other concepts
6	(Bruwer et al., 2016)	NA	1	Winescape framework, focus on WTDI
7	(Bruwer and Joy, 2017)	Australia	1	Winescape framework, focus on WTDI
8	(Bruwer et al., 2017)	Canada	1	Winescape framework, focus on WTDI
9	(Bruwer and Gross, 2017)	USA	1	Winescape framework, focus on WTDI
10	(Scorrano et al., 2018)	Australia	NA	Winescape framework, focus on WTDI
11	(Bruwer et al., 2018)	NA	1	Links between destination image and other concepts
12	(Scherrer et al., 2009)	Australia	1	Winescape framework, focus on WTDI
13	(Gómez et al., 2013)	Spain	2	Destination image as a part of the brand equity construct
14	(Gómez, Lopez, et al., 2015)	Spain	5	Destination image as a part of the brand equity construct

15	(Madeira et al., 2019)	Spain	1	Links between destination image and other concepts
16	(Wu and Liang, 2020)	Portugal	1	Links between destination image and other concepts
17	(Bauman et al., 2020)	China	1	"Destination image acts as the conceptual lens with which this research aims to explore tourists' perceptions of a destination impacted by natural disaster" (Bauman et al., 2020: 2479)
18	(Bruwer and Alant, 2009)	USA	1	Winescape framework, focus on WTDI
19	(Sottini et al., 2019)	South Africa	1	Analyzing only one attribute of winescape: an image of rural landscape
20	(Gómez, González-Díaz, et al., 2015)	Italy	5	Destination image as a part of the brand equity construct
21	(Bruwer and Rueger-Muck, 2019)	Spain	1	Winescape framework, focus on WTDI

Summary of characteristics of WTDI studies between 2001 and 2020 (continued) (Source: Author's elaboration)

N	Sample	Sample size	Technique for generation of attributes
1	Wine tourism destination visual images published between 1991 and 1999 in The Wine Spectator	50	Literature review
2	Winery visitors (first-time and repeat visitors)	996	NA
3	Winery managers	173	Literature review
4	Winery visitors	303	Literature review
5	Wine consumers	696	Literature review and qualitative research (qualitative research details not discussed)
6	Winery visitors (in-state and out-of-state visitors; wine-tourist and non-wine-tourist; first-time and repeat visitors)	265	NA
7	Winery visitors (wine tourism specialists and generalists; first-time and repeat visitors)	510	NA
8	Winery visitors (first-time and repeat visitors; in-state and out-state visitors)	334	NA
9	Winery visitors (who consumed wine at least once in the last 3 months)	407 (pick-any list, survey), 395 (free-elicitation)	Literature review
10	Wine tourists and wine-bloggers of Web 2.0. globally (visitors and non-visitors)	366	NA
11	Winery visitors (wine learners, dining enthusiasts, wine buyers)	671	Unclear. Previous literature?
12	Winery owners or managers and winemakers	23	NA
13	Winery visitors	232	Literature review
14	Winery managers and winery visitors	219 winery managers, 598 visitors	Literature review
15	Winery visitors	314	Literature review
16	Potential tourists from China	378	Literature review
17	Wine tourists (who had visited California within the prior two years)	600	Not discussed
18	Winery visitors (first-time and repeat visitors)	304	NA
19	Flickr photos (filtered with coordinates, keywords etc.)	9228	NA
20	Winery visitors	598	Literature review
21	Winery visitors (Millennials, Gen-Xers, Boomers Plus; wine tourism Specialists and generalists)	513	NA

Summary of characteristics of WTDI studies between 2001 and 2020 (continued) (Source: Author's elaboration)

N	Data collection modes	Scales used in qualitative studies	Method
1	Visual imagery on promotional material (the wine spectator magazine)	A visual imagery was coded using a scale ranging from O=no presence; 1 =a little emphasis; 2=moderate emphasis; 3=considerable emphasis.	Quantitative
2	Free elicitation/open-ended question (purpose-designed questionnaire)	NA	Qualitative
3	Face-to-face questionnaire survey	Multi-item measurement scales, a 7-point Likert scale	Quantitative
4	Questionnaire	5-point Likert scale	Quantitative
5	Email and postal mail survey	Likert scale	Quantitative
6	Free elicitation/open-ended question (purpose-designed questionnaire)	NA	Qualitative
7	Free elicitation/open-ended question (purpose-designed questionnaire)	NA	Qualitative
8	Free elicitation/open-ended question (purpose-designed questionnaire)	NA	Qualitative
9	Self-administered survey, free elicitation	10-point Likert-type scale, a pick-any list	Combined
10	Free elicitation/open-ended questions (Digital questionnaire posted on Facebook and Twitter pages)	NA	Qualitative
11	Self-administered purpose-designed questionnaire	Not discussed	Quantitative
12	Semi-structured interviews	NA	Qualitative
13	Questionnaire	Multi-item measurement scales, 7-point Likert scale	Quantitative
14	Face-to-face questionnaire survey	7-point Likert scale	Quantitative
15	Face-to-face questionnaire survey	5-point Likert scale	Quantitative
16	Paper-and-pencil questionnaire	Not discussed	Quantitative
17	Questionnaire with close-ended and open-ended questions (Amazon M-Turk, an online crowdsourcing marketplace)	Multiple categorical, Likert-type	Combined
18	Self-administered highly structured questionnaire (capturing both quantitative and qualitative data)	NA	Qualitative
19	Photos (related to winescape concept) and their geographical coordinates from Flickr platform	NA	Qualitative
20	Face-to-face questionnaire survey	Multi-item measurement scales, 7-point Likert scale	Quantitative
21	Free elicitation (purpose-designed highly structured self-administered questionnaire)	NA	Qualitative

RESULTS AND DISCUSSION

Journals

Collected articles were published mainly in tourism and hospitality journals (17 articles), but also in wine (2 articles), business (1 article) and general social science (1 article) category journals. The list of the journals and number of publications about WTDI, representing our study sample, are presented in Table 3. The list also integrates journal ranking according to the 2019 Scimago Journal and Country Rank (SCImago (n.d.), n.d.). The papers were either published in Q1- (12 papers) or Q2-ranked (nine papers) journals (SCImago (n.d.), n.d.), indicating high quality of research in this area.

Table 3. List of journals where the sample articles were published (Source: Author's elaboration)

Tourism and hospitality journals	Number of articles	SJR rank	Non-tourism journals	Number of articles	SJR rank
International Journal of Tourism Research	3	Q1	EuroMed Journal of Business	1	Q1
Current Issues in Tourism	3	Q1	Quality and Quantity	1	Q2
Tourism Recreation Research	2	Q2	Wine Economics and Policy	1	Q1
Journal of Travel and Tourism Marketing	2	Q1	International Journal of Wine Business Research	1	Q2
Tourism Analysis	2	Q2			
Tourism Economics	1	Q2			
Tourism Management	1	Q1			
Anatolia An International Journal of Tourism and Hospitality Research	1	Q2			
Journal of Destination Marketing and Management	1	Q1			
Tourism and Hospitality Research	1	Q2			
Total			21		

Publication year

The earliest study from our sample was published in 2001. Figure 2 displays the amount and share of the publications from 2001 to 2020. The first half of our study period (2001-2010) was not as active as the second half (2011-2020). Only 15% of the papers were published in the first decade. The period between 2001 and 2020 was divided into four to better analyze the increase in the popularity of the topic. Comparing each five-year period, the number of publications rise gradually, which confirms a slow but steady growth of interest in the WTDI topic.

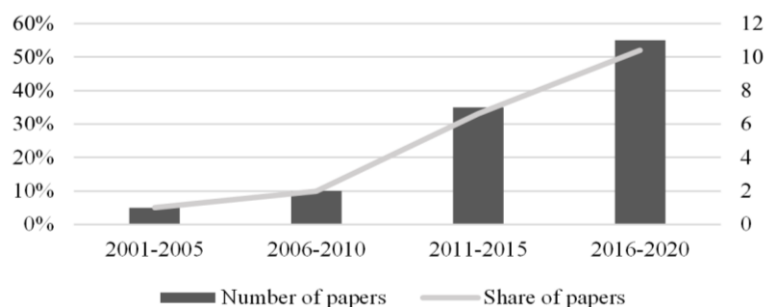


Figure 2. The amount and share of publications between 2001 and 2020 (Source: Author's elaboration)

Table 4. Average number of authors per paper between 2001-2020 (Source: Author's elaboration)

Period	Average number of authors per paper
2001-2005	1
2006-2010	2.5
2011-2015	2.3
2016-2020	3

Authors

We have counted the average number of authors per paper for four 5-years periods between 2001-2020. As Table 4 shows, the average number of authors between 2001-2005 was one, it has increased to 2.5 in the next five years. Between 2011-2015 the number has slightly dropped but noticeably rose to three since 2016. The increase of collaboration and co-authorship means growth in knowledge sharing, which positively affects WTDI research quality (Gómez et al., 2019). Most of the authors (88%) have only published one article. The rest 12% of authors have published more than one study. The most active authors in the field of WTDI are Johan Bruwer (8 papers), Mar Gómez (4 papers), Arturo Molina (4 papers), Marlene A. Pratt (2 papers) and Michael J. Gross (2 papers).

Topic

We have categorized papers based on the studied topics. Six topics emerged. Most of the studies (43%) concentrate on measuring single WTDI or winescape perceptions. Five articles (24%) research links between DI and other concepts. For instance, one of the studies (Sampaio, 2012) examines a conceptual model of wine involvement, DI and tourist satisfaction, another (Pratt and Sparks, 2014) researches relationship between self-congruity, attitude toward wine tourism and DI. Four papers (20%) were grouped under the topic of a DI as a part of the brand equity construct. For example, one of the paper (Gómez, González-Díaz, et al., 2015) studies DI, designation of origin (DO) brand image and brand equity construct. The remaining three papers belong to single-paper topic groups. One of them (Williams, 2001a) researches the projected image using visual imagery on promotional material. In a study by Bauman et al. (2020) "destination image acts as the conceptual lens with which this research aims to explore tourists' perceptions of a destination impacted by natural disaster" (Bauman et al., 2020: 2479). And Sottini et al. (2019) analyze only one attribute of the wine region which is an image of a rural landscape.

Projected and perceived image studies

We classified articles based on the focus on the projected or perceived image. DI is studied from two perspectives: projected and perceived images (Kwek and Lee, 2008). Perceived images are formed by the information that tourists have in mind (Andreu et al., 2000). Binh Nghiê-m-Phú (2014) has collected the definitions of perceived image and summarized that “perceived destination image can be regarded as the knowledge, impressions, prejudices, imaginations, emotional thoughts, beliefs, ideas, conceptions, attitudes, benefits, values, expectations, and interpretations that an individual holds about a destination. Destination image is formed over time from a variety of information sources and consists of both the cognitive/reasoned and affective/emotional aspects” (Nghiê-m-Phú, 2014: 40). Projected image derives from different channels such as destination management bodies and tour operators (Andreu et al., 2000).

“Specialists in marketing and branding proved that a touristic destination becomes more attractive according to the way it is presented and less of the touristic attractions” (Ilieş et al., 2008: 146). Both projected and perceived images are crucial for tourist destination competitiveness (Ahmed, 1991; Andreu et al., 2000). Even though the importance of projected image has been recognized for more than two decades (Chan and Zhang, 2018), perceived image studies dominate the research field (Nghiê-m-Phú, 2014). All the papers from our sample except for one research perceived image. WTDI studies are in accordance with the DI literature review by Binh Nghiê-m-Phú (2014), which also concludes that projected image studies are overlooked. Williams (2001a) is the author of the only study which examined projected image from our sample, this study explored characteristics of wine tourism destination positioning with the help of visual images published in *The Wine Spectator* magazine between 1991 and 1999, these images were classified according to the list of attributes collected from previous literature. The findings showed that wine destination imagery changed its orientation from wine production to aesthetics and experience represented with leisure and touristic activities (Williams, 2001a). Other papers which explore perceived image (Bruwer et al., 2016; Bruwer and Joy, 2017; Bruwer and Lesschaeve, 2012) frequently try to determine winescape characteristics and attributes by surveying winery visitors’ perceptions. Some studies research perceived image by wine consumers (Pratt and Sparks, 2014) or winery managers (Gómez et al., 2015; Gómez and Molina, 2012; Scherrer et al., 2009).

Region / destination

Aleixandre et al. (2016) explain that wine-producing countries belong either to “Old World” or “New World”; “Old World” refers to the ancient wine-producing regions which are in Europe and the Mediterranean; Italy, Austria, Hungary, Spain, Greece, France, Portugal, Romania are some of them; examples of “New World” regions are located in USA, Australia, Canada, New Zealand, Argentina, Chile, South Africa etc. In our research, we aimed to gather information about four variables related to regions/destinations. The papers were classified based on the countries for study, wine-producing regions (“Old World” / “New World”), number and type of destinations of interest. The results show that Spain (24% of papers) and Australia (19% of papers) are the most popular countries for study, followed by Canada, Portugal, and USA (10% of papers each); China, South Africa and Italy being in focus only once (5% of papers each); a country for the study was not applicable in three articles (14%). In other words, these results mean that “New World” (10 papers) is a slightly more popular study area than “Old World” (eight papers).

Figure 3 presents a relationship of a publication year and a region for study. “Old World” was more popular in the first half of the 2011-2020 period, while a number of studies focused on “New World” stroke in the second half.

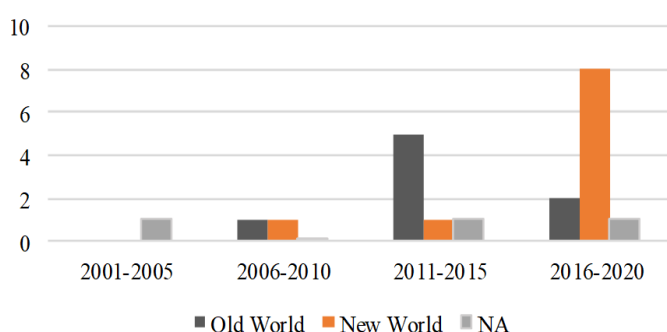


Figure 3. Study area of the papers (Source: Author’s elaboration)

Table 5. Study samples (Source: Author’s elaboration)

Sample	Number of articles studied this sample
Winery visitors	13
Winery managers, owners, and winemakers	3
Visual images	2
Potential tourist	1
Wine tourists and wine-bloggers of Web 2.0. globally (visitors and non-visitors)	1
Wine tourists (who had visited the destination within the prior two years)	1
Wine consumers	1

Most articles (67%) concentrate only on one destination, two articles (10%) analyze five destinations; the variable of the number of destinations was not applicable in three papers; the rest of the articles examine two (5%) and four (5%) destinations. These findings demonstrate that WTDI studies are rather concerned with measuring and assessing one destination’s image than comparing or referring them with competitors. This finding is in parallel with a review of Pike (2002), where over 50% of articles studied the perceptions of only one destination. The reason could be its early stage of development, where researchers yet try to deal with conceptualization and determination of the most appropriate measurement methods for WTDI. Previous DI reviews found that the most common destination types were countries, cities and states (Gallarza et al., 2002; Pike, 2002). As our sample of papers is chosen from wine tourism literature, it is no surprise that the type of destination is more specific. All the articles uniformly focus on wine-producing regions.

Study sample

When researchers know the purpose of the study, who or what will be the subject, and how the study will be operationalized, they need to think about the sample size. In his review, Pike (2002) has observed that most of the articles about DI used subject category of “visitors at destinations” (Pike, 2002: 542), followed by “consumers at their place of residence”, “travel trade/experts”, “student samples”, “Destination Marketing Organisation (DMO) staff”, and “local residents” (Pike, 2002: 542). While Gallarza et al. (2002) detected four samples: residents, tourists, visitors and unspecified. Our research has gathered information about a sample and its size. As presented in Table 5, winery visitors are the most popular sample studied 13 times, followed by the group of winery managers, owners and winemakers referred in three papers. Visual images were studied twice, and the rest of the samples were only investigated in one research. Winery visitors sample could be considered as comparable with the Pike’s (2002) “visitors at destinations” (Pike, 2002: 542), and in both cases it is the most common subject type. In some of the papers which targeted winery visitors, the samples were further specified and are displayed in Table 6. Five articles simply studied winery visitors, another five researched first-time and repeat visitors, two studies explored perceptions of in-state and out-of-state visitors, two papers surveyed wine tourism specialists and generalists; other less frequently researched subjects were Millennials, Gen-Xers, Boomers Plus; wine-tourist and non-wine-tourist; and wine learners, dining enthusiasts and wine buyers. Compared to Pike (2002) and Gallarza et al.’s (2002) reviews, in WTDI papers, the important subject types such as DMOs, travel trade representatives, and residents are not explored yet. While the samples studied in papers were homogenous during 2001-2015, new subjects started to appear in recent years. Scorrano et al. (2018) used a sample of wine tourists and wine-bloggers online (visitors and non-visitors), Wu and Liang (2020) surveyed potential tourists from China, Bauman et al. (2020) questioned wine tourists (who had visited the destination within the prior two years), and Sottini et al. (2019) selected a subject of visual images from Flickr platform. As DI is a complex concept that can refer to imagery projected by DMOs or impressions of residents, tourists, and travel businesses, it is crucial to diversify study subjects that would positively affect research development.

It is difficult to select the appropriate size of a sample both in quantitative and qualitative researches, as it is conditioned by different aspects such as study purpose, size of a population, permissible sampling error and so forth (Israel, 1992). Nowadays, in quantitative research, authors use tools for defining sample size easily based on some factors such as “power, effect size (ES), significance level, and in the case of longitudinal or repeated-measures research, the potential attrition (dropout) rate” (Duffy, 2006: 9).

In qualitative research, academics often use saturation to decide the sample size. Saturation is “the point where the main ideas and variations relevant to the formulation of a theory have been identified” (Weller et al., 2018: 2). However, researches often lack the explanation of how saturation has been estimated (Malterud et al., 2016). On the other hand, “since the goal of research based on qualitative data is not necessarily to collect all or most ideas and themes but to collect the most important ideas and themes, salience may provide a better guide to sample size adequacy than saturation” (Weller et al., 2018: 2). Sample size in qualitative studies might have lower and upper limits (Boddy, 2016). Sometimes a single case study with one research participant can provide significant insight and can be considered as an acceptable size; regarding the upper limits, too large sample sizes frequently will need to be justified; for instance, more than 30 in-depths interviews or 12 focus groups (Boddy, 2016). To sum up, in quantitative and qualitative studies, an appropriateness of the sample size depends on the context and research design of an individual paper (Boddy, 2016).

In our papers, we coded the number of subjects used when measuring a WTDI. In a few studies, sample size was different when assessing various elements of a construct or framework. In such cases, we only coded the sample size applied in the DI measurement process. The Sample size varied from 23, when the study subjects were winery owners or managers and winemakers (Scherrer et al., 2009), to 9228, where the subject was Flickr photos (Sottini et al., 2019). We tried to find out the range of study sample sizes, excluding the lowest and highest extremes which would probably distort the range. Sample size of quantitative studies ranged between 173-696 except a paper by Williams (2001a) applying a content analysis of visual imagery and picked 50 images from a population of 90. The sample size of qualitative studies was between 265-996, except for two articles. One of them interviewing 23 winery owners or managers and winemakers and another analyzing 9228 visual images. A sample size of study with combined methodologies varied between 395-600.

Destination image measurement methods (data collection modes)

Echtner and Ritchie (1991) proposed combining qualitative and quantitative methods to enable studying all aspects of DI during its measurement process. It means using both an attribute-based and a holistic approach. The attribute-based approach captures respondents perceptions about destination in interest commonly using Likert or semantic differential scales (Echtner and Ritchie, 1991; Gallarza et al., 2002; Stepchenkova and Mills, 2010), while the holistic method intends to explore functional holistic, psychological holistic and unique components of DI and generally involves asking open-ended questions similar to the ones used by Echtner and Ritchie (1993):

Table 6. Further classification of the study sample of winery visitors (Source: Author’s elaboration)

Sample	Number of articles studied this sample
Winery visitors	5
Winery visitors (first-time and repeat visitors)	5
Winery visitors (in-state and out-of-state visitors)	2
Winery visitors (wine tourism specialists and generalists)	2
Winery visitors (Millennials, Gen-Xers, Boomers Plus)	1
Winery visitors (wine-tourist and non-wine-tourist)	1
Winery visitors (wine learners, dining enthusiasts, wine buyers)	1

1. What images or characteristics come to mind when you think of XXX as a vacation destination? (functional holistic component)

2. How would you describe the atmosphere or mood that you would expect to experience while visiting XXX? (psychological holistic component)

3. Please list any distinctive or unique tourist attractions that you can think of in XXX. (unique component)” (Echtner and Ritchie, 1993, Development of Open-Ended Questions section).

By combining these two techniques, “those parts of destination image that can be broken down into attributes are captured, as are the total, holistic impressions” (Jenkins, 1999: 5).

Jenkins (1999) overviews the two major methods of DI measurement. The advantages of structured methods are: the ease of administration, coding, and statistical data analysis, as well as possibility to compare destinations; the disadvantages include incapability of measuring holistic image, limiting respondents to evaluate DI through the list of specified attributes, in this method some attributes can be missed and cause the incomplete results (Jenkins, 1999). On the other hand, unstructured methods allow researcher to study holistic compounds of DI, interviewer bias is reduced, and the important aspects of an image are less likely to be missed; but unstructured methods have some disadvantages too: variable level of details provided by interviewees, statistical analysis and comparison between destinations is limited (Jenkins, 1999). To sum up, for the most reliable results, an application of combined methods is highly recommended.

Jenkins (1999) proposes to assess DI with a two-phase model which is widely used in social sciences, it would start with “sound qualitative research that provides the constructs relevant to the market being studied” (Jenkins, 1999: 13), and continue with a quantitative stage where “the research needs to take into account the level of importance of these constructs to different individuals and groups” (Jenkins, 1999: 13). For instance, the qualitative phase could include uncovering the attributes by content analysis, free elicitation, triad elicitation or photo-elicitation, and then quantitative “measurement could involve asking the tourists to rate certain destinations according to the attributes distilled earlier” (Jenkins, 1999: 11). Jenkins (1999) notes that “past research into destination image has often neglected the initial qualitative stage and has favoured structured methods containing categories often based on the researcher's opinions or those found in the literature without testing to see if these are the most relevant to the group being studied” (Jenkins, 1999: 13). Echtner and Ritchie (1991) also recommend rigorous research with consumers (the target audience) in the initial phase of research design to build a complete attribute list for measuring DI as “it is difficult to design a valid and complete set of destination image attributes without such input” (Echtner and Ritchie, 1991: 45), however past researches mainly used literature reviews, brochures or travel expert opinions for designing attribute lists (Echtner and Ritchie, 1991). In our sample of 21 papers, we could not find the research which closely followed the above-mentioned guidelines regarding DI measurement. Ten papers (48%) used quantitative methods to measure DI, nine papers (43%) used qualitative methods, and two papers (10%) used combined methods when collecting main data for analysis.

Among qualitative studies, the data was collected mainly by free elicitation/open-ended question (6 papers). Still none of the open-ended questions, except for the one used by Scorrano et al. (2018), tried to explore or distinguish psychological holistic and unique components of the image. It is understandable as these studies were focused on designing a general scale for future use. Scorrano et al. (2018) used three different questions to find about all the elements of DI formulated by Echtner and Ritchie (1991, 1993). Two combined methodology studies also used free elicitation/open-ended question but with similar drawbacks as the qualitative studies. In Table 7 we display the open-ended questions that were used in articles that applied qualitative and combined data collection modes. Most of the questions are alike, probably because Johan Bruwer is the co-author of six of them. These papers are a significant contribution to the unstructured or holistic methodology that has long been overlooked in tourism DI studies (Bruwer et al., 2016). However, the WTDI lacks research that would involve both qualitative and quantitative methods to fill in the gaps left by either data collection modes during the DI measurement process. In addition, the qualitative data gathered by most open-ended questions in Table 7 neglects psychological holistic and unique components of the tourism DI.

Table 7. Open-ended questions used in papers with qualitative and combined data collection modes (Source: Author's elaboration)

Open-ended question	Data collection mode
1. “What would you (in your own words) say are the Niagara Wine Region's main characteristics or features?” (Bruwer and Lesschaeve, 2012: 618)	Qualitative
2. “What would you (in your own words) say are the Adelaide Hills Wine Region's main characteristics or features?” (Bruwer et al., 2016: 181)	Qualitative
3. “What would you (in your own words) say are the Okanagan Valley Wine Region's main characteristics or features?” (Bruwer and Joy, 2017: 8)	Qualitative
4. “What would you (in your own words) say are the Finger Lakes Wine Region's main characteristics or features?” (Bruwer et al., 2017: 169)	Qualitative
5. “The first layer of analysis technique is primarily qualitative in nature, and asks participants to state in free-text format what they consider to be the study region's main characteristics or features” (Bruwer and Gross, 2017: 501).	Combined
6. Wine tourists were asked to provide answers to the following questions based on the top-of-mind approach: “(1) Images and characteristics: elements that come to the mind of the tourist as he thinks of the destination. (2) Atmosphere or mood: the mood that a precise destination creates in the tourist. It can come from factors that, although concrete, can raise symbolic-emotional and experiential elements. (3) Distinctive or unique tourist attractions: distinctive and/or unique elements that connote the destination and identify it in an univocal way” (Scorrano et al., 2018: 340).	Qualitative
7. “Describe in your own words how the wildfires may impact California's wine industry” (Bauman et al., 2020: 2481).	Combined

One of the qualitative studies (Sottini et al., 2019) used Flickr platform to collect photos related to winescape concept and then analyzed the content. Bruwer and Alant (2009) used a questionnaire to capture both qualitative and quantitative data from winery visitors. Scherrer et al. (2009) interviewed wine industry representatives to explore their perceptions of Canary Island's wine tourism and DI. Regarding the quantitative data collection modes, a questionnaire survey was used as an instrument in 11 papers, while only one paper collected visual imagery from promotional material.

Most of the studies (nine papers) used five- and seven-point Likert scales. It is no surprise, while Likert scale is the most popular answer format for general DI studies too (Dolnicar and Grün, 2013). However, it is worth mentioning that Dolnicar and Grün (2013) compared the validity and performance of different answer format options in DI researches and found that the most dominant and common measurement approaches might not be performing the best. "The measure used most commonly in industry (the pick-any measure) produces misleading results because it allows respondents to evade responding. The most common measure used by academics (the multicategory Likert-type scale) does not perform well on the strict stability measure and takes longer to complete.

It is therefore recommended that researchers make increased use of the forced-choice full binary measure because it performs better than competing approaches in terms of stability and outperforms most other answer formats in terms of speed of completion. Note that the use of the forced-choice full binary answer format does not have any disadvantages with respect to data analysis" (Dolnicar and Grün, 2013: 10).

Attributes used to measure destination image

In quantitative studies of DI, researchers often use attributes to assess the perceptions of tourists. As explained in a section named Destination image measurement methods (data collection modes), attributes can be obtained from different sources, such as literature review, content analysis, free elicitation and so forth. In our sample of articles, literature review is the most common way to elaborate attribute-lists. Nine papers (75%) use literature review. Bauman et al. (2020) and Bruwer et al. (2018) do not provide information about the exact source of attributes. Pratt and Sparks (2014) used literature review and qualitative research, but the details about latter is not discussed. Some studies (Bruwer et al., 2016, 2017; Bruwer and Gross, 2017; Bruwer and Joy, 2017; Bruwer and Lesschaeve, 2012) seem to be designing the scales or attribute-lists with consumer research as recommended by Echtner and Ritchie (1991) and Jenkins (1999).

"Currently there is no widely accepted scale that confirms the existence of the wine region attributes comprising the winescape" (Bruwer and Gross, 2017: 500). It is important to create a valid scale of attributes that could measure WTDI. It would have been useful to use the most accepted attribute-lists from general tourism DI studies but "the nature of the wine tourism product and experience requires that a research approach be developed that differs from the generic approaches used in mainstream TDI studies" (Bruwer et al., 2016: 183). Johan Bruwer and his co-authors have significantly contributed to researching winery visitors and their perceptions of wine regions to design winescape framework or, in other words, the most important characteristics of wine regions. But these winescape scales still need validation in other countries or wine regions (Bruwer and Gross, 2017).

CONCLUSION

Perceived image of a destination affects travelers' decision-making (Jenkins, 1999), and their satisfaction (Ajayi and Tichaawa, 2020), which is why marketers try to project images that are attractive for visitors (Haarhoff and De Klerk, 2019). For being competitive, wine regions need to project attractive and unique images as well as monitor the perceptions and impressions of wine tourists. WTDI studies initiated in 2001 by Williams (2001a), and since it has been gradually gaining attention. Travel DI researches typically have a destination as an object to study and respondents as subjects (Gallarza et al., 2002). WTDI papers consistently study wine regions as the object, but subject is varying. Winery visitors are the most common subject and lately some new samples emerged too. However, WTDI papers lack diversification into samples such as DMOs, travel representatives and residents. Nowadays, in the virtual era, reinforced by Covid-19, realizing the importance of virtual spaces, social media, platforms with user-generated content and blogs where wine tourists themselves can project the images of destination based on their own perceptions, is crucial. It also has a form of electronic word-of-mouth which is as fortified as never before. Future research may seek to explore the effect of the information available virtually on wine tourists' beliefs, and attitudes towards winescapes or wine regions.

In DI studies, the vast majority of authors use quantitative techniques (Echtner and Ritchie, 1991; Nghiêm-Phú, 2014; Pike, 2002), while in WTDI papers we discovered that the share of qualitative (43%) and quantitative (48%) methods are evenly distributed. 10% of papers utilize combined methods. Even though none of the techniques is overlooked, the studies do not operationalize the image measurement process involving both methods together as recommended by some of the most accepted DI studies (Echtner and Ritchie, 1991, 1993). In future authors may propose more research with both qualitative and quantitative techniques complementing each other.

Some WTDI papers use qualitative techniques such as consumer/wine tourist research and free elicitation for designing attribute-lists for further quantitative data collection. However, these scales are not validated yet and neither widely accepted in WTDI area. In future, we might see more studies focusing on validating these attribute-lists.

For now, the attribute-lists do not incorporate all the elements of WTDI. Qualitative studies which ask open-ended questions also fail to collect data about some of the components of WTDI, such as psychological holistic and unique characteristics. It is because these papers aim to design a scale and not exactly to explore the image of a specific destination. It would be necessary to consider in upcoming researches that "a focus on any component of destination image at the exclusion of the other components results in an incomplete measurement" (Echtner and Ritchie, 1991: 46).

It would also be worth to create a valid and all-inclusive attribute-list or scale with proper methods that could be used uniformly in WTDI research. As it is suggested by Dolnicar and Grün (2013), future research could start using forced-choice full binary measure instead of more popular Likert and pick-any answer formats, as it performs better.

Methodological limitation of our study is that the papers were collected and classified by only one researcher. There is a chance of biases as the researcher might have categorized the papers subjectively. In addition, the study has not overviewed the data analysis techniques and software used by each paper. This limitation encourages future research in these directions. Future research may also investigate projected images, as well as accordance between projected and perceived images, which would allow wine regions to plan and execute their promotional activities more effectively. Wine tourism destinations that wish to research their image can use the results of our study.

For studying the image, they should use the valid scales that future academic papers may propose and combine it with qualitative methods to learn deeply about the perceptions of the wine tourists they want to attract. It will guarantee a solid base for the successful promotional activities. To sum up, reviews of literature about WTDI will be necessary in future too to see the existing knowledge of the study field, its development, and characteristics. Reviews can indicate whether there are any methodological issues in the field and will facilitate its progress.

REFERENCES

- Ahmed, Z.U. (1991). The influence of the components of a state's tourist image on product positioning strategy. *Tourism Management*, 12(4), 331–340. [https://doi.org/10.1016/0261-5177\(91\)90045-U](https://doi.org/10.1016/0261-5177(91)90045-U)
- Ajayi, O.O., & Tichaawa, T.M. (2020). Visitors' characteristics and destination image: the case of Nigerian zoos. *GeoJournal of Tourism and Geosites*, 32(4), 1410–1417. <https://doi.org/10.30892/gtg.3>
- Aleixandre, J.L., Aleixandre-Tudó, J.L., Bolaños-Pizarro, M., & Aleixandre-Benavent, R. (2016). Viticulture and oenology scientific research: The Old World versus the New World wine-producing countries. *International Journal of Information Management*, 36(3), 389–396. <https://doi.org/10.1016/j.ijinfomgt.2016.01.003>
- Andreu, L., Bigné, J.E., & Cooper, C. (2000). Projected and perceived image of Spain as a tourist destination for British travellers. *Journal of Travel and Tourism Marketing*, 9(4), 47–67. https://doi.org/10.1300/J073v09n04_03
- Bauman, M.J., Yuan, J., & Williams, H.A. (2020). Developing a measure for assessing tourists' empathy towards natural disasters in the context of wine tourism and the 2017 California wildfires. *Current Issues in Tourism*, 23(19), 2476–2491. <https://doi.org/10.1080/13683500.2019.1681944>
- Boddy, C.R. (2016). Sample size for qualitative research. *Qualitative Market Research*, 19(4), 426–432. <https://doi.org/10.1108/QMR-06-2016-0053>
- Bruwer, J., & Alant, K. (2009). The hedonic nature of wine tourism consumption: an experiential view. *International Journal of Wine Business Research*, 21(3), 235–257. <https://doi.org/10.1108/17511060910985962>
- Bruwer, J., & Gross, M.J. (2017). A multilayered macro approach to conceptualizing the winescape construct for wine tourism. *Tourism Analysis*, 22(4), 497–509. <https://doi.org/10.3727/108354217X15023805452059>
- Bruwer, J., Gross, M.J., & Lee, H.C. (2016). Tourism destination image (TDI) perception within a regional winescape context. *Tourism Analysis*, 21(2), 173–187. <https://doi.org/10.3727/108354216X14559233984692>
- Bruwer, J., & Joy, A. (2017). Tourism destination image (TDI) perception of a Canadian regional winescape: a free-text macro approach. *Tourism Recreation Research*, 42(3), 367–379. <https://doi.org/10.1080/02508281.2017.1318482>
- Bruwer, J., & Lesschaeve, I. (2012). Wine Tourists' Destination Region Brand Image Perception and Antecedents: Conceptualization of a Winescape Framework. *Journal of Travel and Tourism Marketing*, 29(7), 611–628. <https://doi.org/10.1080/10548408.2012.719819>
- Bruwer, J., Pratt, M.A., Saliba, A., & Hirche, M. (2017). Regional destination image perception of tourists within a winescape context. *Current Issues in Tourism*, 20(2), 157–177. <https://doi.org/10.1080/13683500.2014.904846>
- Bruwer, J., Prayag, G., & Disegna, M. (2018). Why wine tourists visit cellar doors: Segmenting motivation and destination image. *International Journal of Tourism Research*, 20(3), 355–366. <https://doi.org/10.1002/jtr.2187>
- Bruwer, J., & Rueger-Muck, E. (2019). Wine tourism and hedonic experience: A motivation-based experiential view. *Tourism and Hospitality Research*, 19(4), 488–502. <https://doi.org/10.1177/1467358418781444>
- Chan, C.S., & Zhang, Y. (2018). Matching projected image with perceived image for geotourism development: a qualitative-quantitative integration. *Asian Geographer*, 35(2), 143–160. <https://doi.org/10.1080/10225706.2018.1527235>
- Chon, K.S. (1990). The role of destination image in tourism: a review and discussion. *The Tourist Review*, 45(2), 2–9. <https://doi.org/10.1108/eb058040>
- Dávid, L., & Bujdosó, Z. (2007). Perspectives of Wine tourism (A borturizmus perspektívái – In Hungarian) . *Borászati Füzetek*, 17(3), 28–29.
- Dolnicar, S., & Grün, B. (2013). Validly Measuring Destination Image in Survey Studies. *Journal of Travel Research*, 52(1), 3–14. <https://doi.org/10.1177/0047287512457267>
- Duffy, M.E. (2006). Resources for determining or evaluating sample size in quantitative research reports. *Clin Nurse Spec.*, 20(1), 9–12. <https://doi.org/10.1097/00002800-200601000-00004>
- Echtner, C.M., & Ritchie, J.R.B. (1991). The meaning and measurement of destination image. *Journal of Tourism Studies*, 14(1), 37–48. <https://doi.org/10.111.1.89.3276>
- Echtner, C.M., & Ritchie, J.R.B. (1993). The measurement of destination image: an empirical assessment. *Journal of Travel Research*, 31(4), 3–13. <https://doi.org/10.1177/004728759303100402>
- Gallarza, M.G., Gil Saura, I., & Calderón García, H. (2002). Destination image towards a conceptual framework. *Annals of Tourism Research*, 29(1), 56–78. [https://doi.org/10.1016/S0160-7383\(01\)00031-7](https://doi.org/10.1016/S0160-7383(01)00031-7)
- Gómez, M., González-Díaz, B., & Molina, A. (2015). Priority maps at wine tourism destinations: An empirical approach in five Spanish wine regions. *Journal of Destination Marketing and Management*, 4(4), 258–267. <https://doi.org/10.1016/j.jdmm.2015.09.003>
- Gómez, M., Lopez, C., & Molina, A. (2015). A model of tourism destination brand equity: The case of wine tourism destinations in Spain. *Tourism Management*, 51, 210–222. <https://doi.org/10.1016/j.tourman.2015.05.019>
- Gómez, M., & Molina, A. (2012). Wine Tourism in Spain: Denomination of Origin Effects on Brand Equity. *International Journal of Tourism Research*, 14(4), 353–368. <https://doi.org/10.1002/jtr.868>
- Gómez, M., Molina, A., & Esteban, Á. (2013). What are the main factors attracting visitors to wineries? A PLS multi-group comparison. *Quality and Quantity*, 47(5), 2637–2657. <https://doi.org/10.1007/s11355-012-9676-5>

- Gómez, M., Pratt, M.A., & Molina, A. (2019). Wine tourism research: a systematic review of 20 vintages from 1995 to 2014. *Current Issues in Tourism*, 22(18), 2211–2249. Routledge. <https://doi.org/10.1080/13683500.2018.1441267>
- Grant, M.J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. In *Health Information and Libraries Journal*, 26(2), 91–108. <https://doi.org/10.1111/j.1471-1842.2009.00848.x>
- Haarhoff, R., & De Klerk, B. (2019). Destination South Africa: Analysis of destination awareness and image by international visitors. *GeoJournal of Tourism and Geosites*, 24(1), 201–211. <https://doi.org/10.30892/gtg.2>
- Hall, C.M., Sharples, L., Cambourne, B., & Macionis, N. (2000). *Wine Tourism Around the World Development, management and markets* (C.M. Hall, ed).
- Ilies, A., Ilies, D.C., Josan, I., Grama, V., & Gozner, M. (2008). Romanian rural tourism between authentic/traditional and modern/contemporary. The case of Crişana and Maramureş areas. *GeoJournal of Tourism and Geosites Year I*, 2(2), 140–148.
- Israel, G.D. (1992). Determining Sample Size [Fact sheet PEOD-6]. *Florida Cooperative Extension Service / Institute of Food and Agricultural Sciences / University of Florida*.
- Jacso, P. (2005). As we may search-Comparison of major features of the Web of Science, Scopus, and Google Scholar citation-based and citation-enhanced databases. *Current Science*, 89(9), 1537–1547.
- Jenkins, O.H. (1999). *Understanding and Measuring Tourist Destination Images*. [https://doi.org/10.1002/\(SICI\)1522-1970\(199901/02\)1:1<1::AID-JTR143>3.0.CO;2-L](https://doi.org/10.1002/(SICI)1522-1970(199901/02)1:1<1::AID-JTR143>3.0.CO;2-L)
- Johnson, R., & Bruwer, J. (2007). Regional brand image and perceived wine quality: The consumer perspective. *International Journal of Wine Business Research*, 19(4), 276–297. <https://doi.org/10.1108/17511060710837427>
- Kwek, A., & Lee, Y.S. (2008). Intra-cultural variance of chinese tourists in destination image project: Case of Queensland, Australia. *Journal of Hospitality and Leisure Marketing*, 16(1–2), 105–135. <https://doi.org/10.1080/10507050802096984>
- Madeira, A., Correia, A., & Filipe, J.A. (2019). Modelling wine tourism experiences. *Anatolia*, 30(4), 513–529. <https://doi.org/10.1080/13032917.2019.1642922>
- Malterud, K., Siersma, V.D., & Guassora, A.D. (2016). Sample Size in Qualitative Interview Studies: Guided by Information Power. *Qualitative Health Research*, 26(13), 1753–1760. <https://doi.org/10.1177/1049732315617444>
- Nemethy, S., Lagerqvist, B., Walas, B., Dinya, L., & Bujdoso, Z. (2016). Oenotourism and conservation: a holistic approach to special interest tourism from a cultural heritage perspective - the Azienda Agricola Model. *Ecocycles*, 2(1). <https://doi.org/10.19040/ecocycles.v2i1.39>
- Nghiêm-Phú, B. (2014). A review of destination image studies from 2008 to 2012. *European Journal of Tourism Research*, 8, 35–65.
- Noruzi, A. (2005). Google Scholar: The new generation of citation indexes. *Libri*, 55(4), 170–180. <https://doi.org/10.1515/LIBR.2005.170>
- Pike, S. (2002). Destination image analysis-a review of 142 papers from 1973 to 2000. *Tourism Management*, 23, 541–549. [https://doi.org/10.1016/S0261-5177\(02\)00005-5](https://doi.org/10.1016/S0261-5177(02)00005-5)
- Pratt, M.A., & Sparks, B. (2014). Predicting Wine Tourism Intention: Destination Image and Self-congruity. *Journal of Travel and Tourism Marketing*, 31(4), 443–460. <https://doi.org/10.1080/10548408.2014.883953>
- Quintal, V.A., Thomas, B., & Phau, I. (2015). Incorporating the winescape into the theory of planned behaviour: Examining “new world” wineries. *Tourism Management*, 46, 596–609. <https://doi.org/10.1016/j.tourman.2014.08.013>
- Sampaio, A. (2012). Wine tourism and visitors’ perceptions: A structural equation modelling approach. *Tourism Economics*, 18(3), 533–553. <https://doi.org/10.5367/te.2012.0132>
- Scherrer, P., Alonso, A., & Sheridan, L. (2009). Expanding the destination image: Wine tourism in the Canary Islands. In *International Journal of Tourism Research*, 11(5), 451–463. <https://doi.org/10.1002/jtr.713>
- Scorrano, P., Fait, M., Iaia, L., & Rosato, P. (2018). The image attributes of a destination: an analysis of the wine tourists’ perception. *EuroMed Journal of Business*, 13(3), 335–350. <https://doi.org/10.1108/EMJB-11-2017-0045>
- Sottini, V.A., Barbierato, E., Bernetti, I., Capecci, I., Fabbrizzi, S., & Menghini, S. (2019). Winescape perception and big data analysis: An assessment through social media photographs in the Chianti Classico region. *Wine Economics and Policy*, 8(2), 127–140. <https://doi.org/10.1016/j.wep.2019.07.001>
- Stepchenkova, S., & Mills, J.E. (2010). Destination image: A meta-analysis of 2000-2007 research. *Journal of Hospitality Marketing and Management*, 19(6), 575–609. <https://doi.org/10.1080/19368623.2010.493071>
- Tasci, A.D.A., Gartner, W.C., & Tamer Cavusgil, S. (2007). Conceptualization and operationalization of destination image. *Journal of Hospitality and Tourism Research*, 31(2), 194–223. <https://doi.org/10.1177/1096348006297290>
- Weller, S.C., Vickers, B., Russell Bernard, H., Blackburn, A.M., Borgatti, S., Gravlee, C.C., & Johnson, J.C. (2018). Open-ended interview questions and saturation. *PLoS ONE*, 13(6). <https://doi.org/10.1371/journal.pone.0198606>
- Williams, P. (2001a). The Evolving Images of Wine Tourism Destinations. *Tourism Recreation Research*, 26(2), 3–10. <https://doi.org/10.1080/02508281.2001.11081338>
- Williams, P. (2001b). Positioning wine tourism destinations: an image analysis. *International Journal of Wine Marketing*, 13(3), 42–58. <https://doi.org/10.1108/eb008726>
- Wu, G., & Liang, L. (2020). Examining the effect of potential tourists’ wine product involvement on wine tourism destination image and travel intention. *Current Issues in Tourism*, (1-15). <https://doi.org/10.1080/13683500.2020.1828310>
- *** SCImago. (n.d.). *SJR — SCImago Journal & Country Rank [Portal]*. Retrieved on 10.01.2021. from <http://www.scimagojr.com>

MEASURING COMPETITIVENESS IN TOURISM ENTERPRISES USING INTEGRAL INDEX

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Abstract: The study aims to develop the methodology of measuring competitiveness in the context of tourism enterprises. The normalization method was used to construct the integral index of competitiveness which was aggregated by 13 sub indicators. In the process of obtaining sub indicators the methods of survey and face to face interviews were used. This study recommends new method of measuring competitiveness in the context of tourism enterprises uniting human resources, service quality competitiveness, market share, and profit benchmark in one integral index. This index can be used by regional tourism destination management bodies to make better decisions regarding sustainable development of tourism destination.

Key words: competitiveness, tourism, index, infrastructure, services, marketshare, system of indicators

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INTRODUCTION

The need for high-quality tourism services today is growing with the rise of living standards, and the development of tourism culture. At the same time, in addition to delivering traditional services to tourists, sharing new experiences, events that will make them return, amazing adventure tours and other creative ideas serve to increase the flow of tourists in tourism destinations. The Covid-19 pandemics has had a deep effect on tourism as a whole. According to Matiza and Slabbert (2021) the pandemics increased physical, psychological and social risk perception on specific tourism activities. In the studies of Wang and Ackerman, 2019 was found out that perceived infection risk was associated with safety concerns and thereby negatively affected group-tourism oriented activity. Although the effect of Covid-19 on competitiveness is huge, Matiza and Slabbert (2021) suggest using product innovations which should be accompanied by government support in implementing integrated crisis communications marketing strategy thereby ensuring the aggregate competitiveness of tourism destination. The competitiveness of the tourism industry can be studied at the macro and micro levels. At the macro level, competitiveness reflects the state of tourism destinations, the conditions created for the organization of tourism business in countries, the economic situation, specific resources, etc., in relation to other competitive destinations (Goffi et al., 2019). The World Economic Forum annually publishes the Tourism Competitiveness Index for 136 countries. The Tourism Competitiveness Index is a more comprehensive indicator, consisting of four main factors and 14 sub-factors.

Questionnaires and statistical data analysis for each factor are performed and evaluated on a scale from 1 to 7. Four main factors: the shaping environment, tourism policy and conditions, infrastructure, and natural cultural resources create opportunities for tourism. The shaping environment means the convenience of the business environment, security, availability of qualified medical services, the number of qualified personnel and the availability of information technology infrastructure, which are the most important for the organization of tourism. The factor of tourism policy and conditions reflects the extent to which tourism is supported by the state, freedom of economic resources, price competitiveness of tourism enterprises and the environmental situation in tourism areas. The infrastructure factor plays a key role in serving tourists. This factor reflects the condition of the airline infrastructure, the conditions of roads in the country, catering services, hotels and others. Another important factor is the unique natural resources of tourism destination, such as waterfalls, mountains, rivers, and cultural resources: historical monuments, mass cultural enlightenment events, holidays, and so on. Through the competitiveness assessment methodology of the World Economic Forum, the overall competitiveness of tourism destinations can be clearly expressed. However, measuring the competitiveness of tourism enterprises (tour firms, tour operators, tour agents, etc.) that are considered value-creating in the field of tourism requires a completely different approach. That is, the system of indicators at the macro level is not useful. Therefore, a separate methodology is required to assess the competitiveness of services in tourism enterprises.

LITERATURE REVIEW

Among many competitiveness indicators, the most widespread was developed by the World Economic Forum (WEF,

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2018) in 2007. This indicator is called as the Travel and Tourism Competitiveness Index (TTCI), which is published regularly and measures the competitiveness of the main tourist destinations worldwide. The goal of the TTCI is to assess factors and policies that make a destination attractive in the eyes of international tourists.

This index is broadly used by many researchers to measure tourism destination competitiveness. For instance, Kendall and Gursoy (2010) explored the relative positioning of eight Mediterranean destinations using a correspondence analysis technique; Gursoy et al., 2009 examined the relative positioning of ten Middle East destinations using a multi-dimensional scaling analysis; Mashika et al., 2021 investigated sustainable development of hotel, restaurant and tourism business's competitiveness in Ukraine; Kayar and Kozak (2007) compared the competitiveness levels of several European countries with those of Turkey using cluster analysis and multidimensional scaling; Leung and Baloglu (2013) used the same method for sixteen Asia Pacific destinations. Other researchers developed new tourism competitiveness indexes. For example, Gooroochurn and Sugiyarto (2005) used data from the competitiveness monitor scale proposed by the World Travel and Tourism Council, which measures TDC through the development of eight key indicators, using confirmatory factor analysis, in order to calculate an aggregate index Croes (2011) developed more accurate TDC index, using the most important factors affecting the competitiveness of island tourism destinations; Croes and Kubickova (2013) suggested an alternative competitiveness index, which they apply to the Central American region. Others authors have focused their attention on analyzing different approaches in tourism competitiveness (Dwyer et al., 2014; Sainaghi et al., 2017). Some researches examined common factors that affect tourism competitiveness (Reisinger et al., 2019; Kozegar et al., 2017), whereas others evaluated the effect of specific factors such as the evolution of tourist inflows (De la Pena et al., 2019); globalization (Ivanov and Webster, 2013); tourism's contribution to economic growth (Webster and Ivanov, 2014); corruption (Das and Dirienzo, 2010); air transportation (Khan et al., 2017); the competitiveness of international hotel firms (Mendieta-Penalver, 2018; Janzakov, 2019); regional systems of innovation (Romão and Nijkamp, 2019; Safarov, 2016) These studies demonstrated the problems of measuring competitiveness with TDC and suggested various ways of improving the competitiveness index in certain contexts.

MATERIALS AND METHODS

The method of normalization was used to integrate various indicators into one integral index. Also, face to face interviews with 15 company managers, and surveys with 150 tourists were conducted from May 2019 to September 2019 in Samarkand city, Uzbekistan. Walesiak (2018) highlighted the use of normalization method in constructing composite indicators. From his research it can be concluded that normalized composite indicators can effectively model the aggregate changes of economic variables. Based on this, we used the method of normalization in constructing integral index of competitiveness. At first, we examined the reviews from tripadvisor.com, and booking.com for 16 hotels in Samarkand. The next step was to analyze the perceptions of tourists. We went to main tourism sites: Registan square, and Gur Emir Mausoleum, and there we randomly surveyed 5-10 people a day. In total, we spend three months conducting surveys. The survey was very short and consisted of following questions:

- 1) In which hotel are you staying now?
- 2) How do you rate service quality in your hotel? Answer options: poor, good, excellent;
- 3) How do you rate prices for services? Answer options: very high, ok, very cheap;
- 4) How do you rate website of the hotel and innovativeness of services? Answer options: poor, good, excellent;
- 5) Please indicate the way you found out about this hotel or tourism company?

Answer options: TV ad, radio, billboard, friend recommendation, internet, other. Having finished surveys, the next step was to evaluate services from supply point of view. We went to 15 largest hotels and tour companies in Samarkand, and interviewed hotel managers and some of their staff. During interviews we asked following questions:

- 1) How long have you been working for this company?
- 2) How long is your experience in tourism industry in months?
- 3) Have you graduated from higher educational institution?
- 4) In what range your monthly salary fall? Answer options: below 100 US dollars, between 100 and 500 US dollars, and above 500 US dollars.
- 5) How often do you have to hire new employees?
- 6) Do you imagine yourself working here after five years?

After finishing with interviews, we aggregated the results and calculated the indices of quality and personnel competitiveness. For indices of market share and financial competitiveness we used data from department of statistics of Samarkand region. In order to calculate the integral competitiveness index the method of normalized aggregation was used.

RESULTS AND DISCUSSION

The competitiveness of tourism services is inextricably linked, first of all, with the level of development of tourism infrastructure. Tourism infrastructure is a variety of equipment, machinery and services used by tourists (Panasiuk, 2007). It consists of the following parts:

- 1) accommodation facilities: hotels, hostels, guest houses, boarding houses, etc;
- 2) catering services: restaurants, cafe, bars, kitchens, etc;
- 3) transport services in the destination;
- 4) recreation and entertainment services: ski resorts, swimming pools, golf clubs, etc;
- 5) retail services;

6) other services: information bureau services, rental of various equipment and vehicles, and other services.

In our analysis of the factors affecting competitiveness, we have assumed that the infrastructure is sufficiently developed to arrange tourism. This approach allows us to measure other important factors that affect competitiveness and to develop an integral competitiveness index based on this. In the process of development of the competitiveness index, we proposed a system of indicators such as the profit benchmark, the quality of services identified as the result of feedback, the company's share in the tourism market and staff competitiveness. Thus, we recommend the use of the following system of indicators to determine the competitiveness of services in tourism enterprises (Table 1).

Table 1. The system of indicators of competitiveness

Financial competitiveness of the enterprise		
Indicator name	Formulas	Description
Net profit of the enterprise	$F = D - X$ (1) (Safarov, 2020, 120-121) D is the total income of the enterprise; X - is total cost.	Represents the amount of money an enterprise can spend
Net profit benchmarking	$K_f = \frac{F_{given}}{F_{max}}$ (2) (Safarov, 2020, 120-121) K_f - Benchmarking of the profit of the tourist enterprise F_{given} - annual profit of the given enterprise; F_{max} - annual profit of the biggest enterprise.	Reflects the change in net profit relative to the profit of the largest enterprise in the market.
Competitiveness of the enterprise on service quality		
The share of customers in the total number of customers who rated the service as good quality	$K_q = \frac{N_q}{N_{eq}}$ (3) (Mirzaev and Janzakov, 2020, 32-34) K_q - coefficient of service quality N_q - the number of tourists who approved the service quality N_{eq} - total number of respondents.	Represents the level of quality of service
The ratio of the quality of services provided to the performance of the largest competitor in the market	$K_{rel} = \frac{K_0^q}{K_1^q}$ (4) (Mirzaev and Janzakov, 2020, 32-34) K_{rel} - The value of the quality of service at the enterprise in relation to a competing enterprise; K_0^q - service quality ratio at the enterprise; K_1^q - coefficient of service quality in the largest competitor.	The quality of service provided by the company reflects its value in relation to the quality of service provided by competitors.
Competitiveness in the service quality	$K_{sr} = v_1 * K_q + v_2 * K_{rel}$ (5) (Mirzaev and Janzakov, 2020, 32-34) v_1 and v_2 are corresponding weights; K_{sr} - service quality competitiveness indicator; K_q - coefficient of service quality; K_{rel} - benchmark indicator of service quality.	Reflects the balance between the market and the quality of service (perceived by tourists) of the enterprise
Market share of the enterprise		
The ratio of the number of tourists served by the enterprise to the total number of tourists served in the area	$K_{serv} = \frac{N_{serv}}{N_{total}}$ (6) (Safarov, 2020, 121-123) N_{serv} - number of tourists served; N_{total} - total number of tourists served arrived in the area; K_{serv} - market share of the enterprise.	Shows the company's current position in the tourism market
The share of the company's cost of innovative technologies in total costs	$K_{innov} = \frac{X_{innov}}{X_{total}}$ (7) (Safarov, 2020, 121-123) X_{innov} - Expenditures of enterprises on innovations X_{total} - total costs of the enterprise K_{innov} - the share of innovation costs in total costs.	The indicator reflects the share of costs for innovation in enterprises
The share of marketing expenses in total expenses	$K_{mr} = \frac{X_{mr}}{X_{total}}$ (8) (Safarov, 2020, 121-123) X_{mr} - expenses on marketing expenses of the enterprise (advertising services, posters, stands, etc.); X_{total} - total costs of the enterprise; K_{mr} - The share of marketing costs in total costs.	Represents the share of marketing expenses in an enterprise.
The market share of the enterprise	$K_{ms} = w_1 * K_{serv} + w_2 * K_{innov} + w_3 * K_{mr}$ (9) (Safarov, 2020, 121-123) K_{ms} - integrated coefficient of the enterprise's market share. w_1, w_2, w_3 - appropriate weights.	Represents the stability of market share.
Personnel competitiveness		
The share of qualified employees in the total number of employees in the enterprise	$K_{qsh} = \frac{N_q}{N_{total}}$ (10) (Mirzaev and Janzakov, 2020, 42-44) N_q - number of qualified employees in the enterprise; N_{total} - total number of employees; K_{qsh} - share of qualified staff.	Reflects the share of qualified staff in total employees.
The ratio of the average salary of employees in an enterprise to the average salary of employees of the largest competing enterprise.	$K_{wage} = \frac{I_{wage}}{I_{wagemax}}$ (11) (Mirzaev and Janzakov, 2020, 42-44) I_{wage} - The average salary of employees at the enterprise; $I_{wagemax}$ - the average salary of employees in the biggest competing enterprise; K_{wage} - reflects the competitiveness of salaries in the enterprise.	Reflects the competition for personnel between enterprises

Personnel turnover ratio	$K_{turnover} = \frac{N_{ls}}{N_{total}} \quad (12) \quad (\text{Mirzaev and Janzakov, 2020, 42-44})$ N_{ls} – the number of employees that left company; N_{total} – the number of employees who have worked and are still working in the company; $K_{turnover}$ – coefficient of staff turnover.	Reflects how quickly staff changes in the company.
Personnel competitiveness ratio	$K_{pc} = u_1 * K_{qsh} + u_2 * K_{wage} + u_3 * K_{turnover} \quad (13) \quad (\text{Mirzaev and Janzakov, 2020, 42-44})$ K_{pc} – personnel competitiveness ratio; K_{qsh} – share of qualified staff; K_{wage} – average wage benchmark; u_1, u_2, u_3 – appropriate weights.	Represent effectiveness of the company's human resources policy.
Integrated Competitiveness Index	$K_{ici} = \sum_{i=1}^n x_i * N_i \quad (14) \quad (\text{Walesiak, 2018})$ x_i – the value of the i th indicator; K_{ici} – integrated competitiveness index; $N_i = \frac{1}{max_i - min_i}$ – standardized normal coefficient of the i th indicator; (Walesiak, 2018) max_i – the maximum value of the indicator i ; min_i – the minimum value of the indicator i .	Reflects the sustainability of the enterprise's competitiveness

We developed an integral competitiveness index consisting of 13 sub-indicators measuring activities of tourism enterprises. Two indicators represent the financial competitiveness of the tourism enterprise, 3 indicators represent competitiveness in quality, 4 indicators show the company's market share, and 4 indicators represent staff competitiveness.

The financial competitiveness reflects the degree of financial stability of the tourism enterprise in the current competitive environment. We suggested that the benchmark of the profit of an enterprise, which can be calculated by dividing the given profit to the profit of the largest competitor, can be a good indicator of financial competitiveness.

The competitiveness of the quality of tourism services is one of the key factors in achieving a competitive advantage for tourism enterprises. Tourism service quality can be roughly assessed by dividing the number of tourists that positively evaluated service to the total number of tourists. Then we divide the quality indicator of the given enterprise to the quality indicator of the largest competitor's. That is, we determine the state of quality of tourism services in the enterprise relative to the market. Then based on expert assessment we assign weights to the benchmark quality indicator and quality indicators given by tourists. Thereby the index for service quality competitiveness can be calculated. So as to get expert assessment, we conducted face to face interviews with 15 managers of various tourism companies.

Table 3. The methodology of calculating the competitiveness index of service quality

Tourism enterprises	The share of tourists that approved tourism service (1)	The ratio of the given approval index to the approval index of the biggest competitor (2)	The competitiveness index of service quality (0.6*(1)+0.4*(2))
LLC "Sogda tur"	0.6	0.67	0.63
Ekspri-Dyutemp	0.65	0.73	0.68
XSICH Shark	0.8	0.90	0.84
uzb. For.yu	0.6	0.67	0.63
Timur	0.7	0.79	0.73
Starlight	0.4	0.45	0.42
Sarbon tour	0.84	0.94	0.88
Orient-Star hotel	0.75	0.84	0.79
Nusratillo	0.65	0.73	0.68
Lejand	0.88	0.99	0.92
Crown	0.56	0.63	0.59
KATIA	0.69	0.78	0.72
Caravan	0.7	0.79	0.73
Jamshed	0.62	0.70	0.65
Darvesh	0.63	0.71	0.66
Barak	0.77	0.87	0.81
Samintur	0.83	0.93	0.87
Mauzo	0.82	0.92	0.86
Samarkand plaza	0.72	0.81	0.76
Sogda tennis ball	0.3	0.34	0.31
Alijon	0.66	0.74	0.69
Grand Samarkand	0.68	0.76	0.71
Salom trevl service	0.74	0.83	0.78
Konstantin	0.89	1.00	0.93
Malika	0.79	0.89	0.83

Table 4. The methodology of calculating market share index

Tourism enterprises	The ratio of number served tourists by the given enterprise to the total number of tourists in the area (1)	The share of expenses on innovation in total cost of an enterprise (2)	The share of marketing expenses to total expenses (3)	The market share index (0.8*(1)+0.1*(2)+0.1*(3))
LLC "Sogda tur"	0.05	0.01	0.11	0.05
Ekspri-Dyutemp	0.03	0.02	0.02	0.02
XSICH Shark	0.03	0.01	0.03	0.03
uzb. For.yu	0.02	0	0.1	0.02
Timur	0.02	0	0	0.02
Starlight	0.03	0	0	0.02
Sarbon tour	0.04	0.05	0.13	0.05
Orient-Star hotel	0.19	0.06	0.11	0.17
Nusratillo	0.01	0	0	0.01
Lejand	0.04	0	0.9	0.12
Crown	0.01	0	0	0.00
KATIA	0.05	0.1	0.15	0.07
Caravan	0.03	0.03	0	0.02
Jamshed	0.02	0	0	0.01
Darvesh	0.02	0	0	0.01
Barak	0.01	0	0	0.01
Samintur	0.02	0	0	0.02
Mauzo	0.02	0.1	0.03	0.03
Samarkand plaza	0.02	0	0.01	0.02
Sogda tennis ball	0.02	0	0	0.01
Alijon	0.03	0.01	0.01	0.03
Grand Samarkand	0.03	0	0	0.02
Salom trevl service	0.01	0	0.5	0.06
Konstantin	0.03	0.05	0.01	0.03
Malika	0.10	0.1	0	0.09

For general perception of service quality we observed the 25 tourism companies in tripadvisor.com and booking.com in Samarkand region. Also, we conducted survey with 150 tourists out of whom, 36 were international tourists and the rest were internal tourists. The results of the survey are given in the Table 3. The market share of the enterprise is an important indicator in the formation and maintenance of competitiveness. We determined it as the weighted sum of the ratio of served tourists to the total number of tourists, innovation expenses on the total cost, and marketing expenses on total cost. Innovation and marketing expenses are usually directed to gain a competitive advantage over other competitor, therefore we included these indicators as the base for integral market-share stability index (Table 4).

Personnel competitiveness has a direct impact on the competitiveness of the tourism enterprise. We determined this indicator as the weighted sum of the ratio of the number of qualified employees to the total number of employees, and the ratio of the average salary of employees to the average salary of employees of the largest competitors, but minus staff turnover coefficients. In the Table 5 the detailed methodology of the calculation process is given.

Table 5. The methodology of calculating the personnel competitiveness index

Tourism enterprises	The share of the number of qualified staff to the total number of staff (1)	The ratio of the average wage of the staff in the given enterprise to the average wage of the staff in the largest competitor (2)	Coefficient of staff turnover (3)	The index of personnel competitiveness (1)*0.7+0.2*(2)-0.1*(3)
LLC "Sogdatur"	0.9	0.7	0.5	0.72
Ekspri-Dyutemp	0.8	0.6	0.6	0.62
XSiChF Shark	0.7	0.9	0.8	0.59
uzb. For.yu	1	1.02	0.3	0.874
Timur	1	1.05	0.6	0.85
Starlight	1	0.85	0.3	0.84
Sarbon tour	0.9	0.8	0.8	0.71
Orient-Star hotel	0.8	1	0.6	0.7
Nusratillo	0.66	0.9	0	0.642
Lejand	0.5	0.8	0.6	0.45
Crown	1	2	0	1.1
KATIA	0.9	0.9	0.3	0.78
Caravan	0.7	1	0	0.69
Jamshed	1	1	0.4	0.86
Darvesh	0.6	0.7	1	0.46
Barak	0.8	0.6	1	0.58
Samintur	0.6	0.8	1	0.48
Mauzo	0.9	0.7	0.6	0.71
Samarkand plaza	0.9	0.9	0.8	0.73
Sogda tennis bal	0.3	1	0.7	0.34
Alijon	0.6	0.8	0.5	0.53
Grand Samarkand	0.5	0.7	0.3	0.46
Salom trevl service	1	0.8	0.9	0.77
Konstantin	0.6	1	0.2	0.6
Malika	0.1	1	0.2	0.25

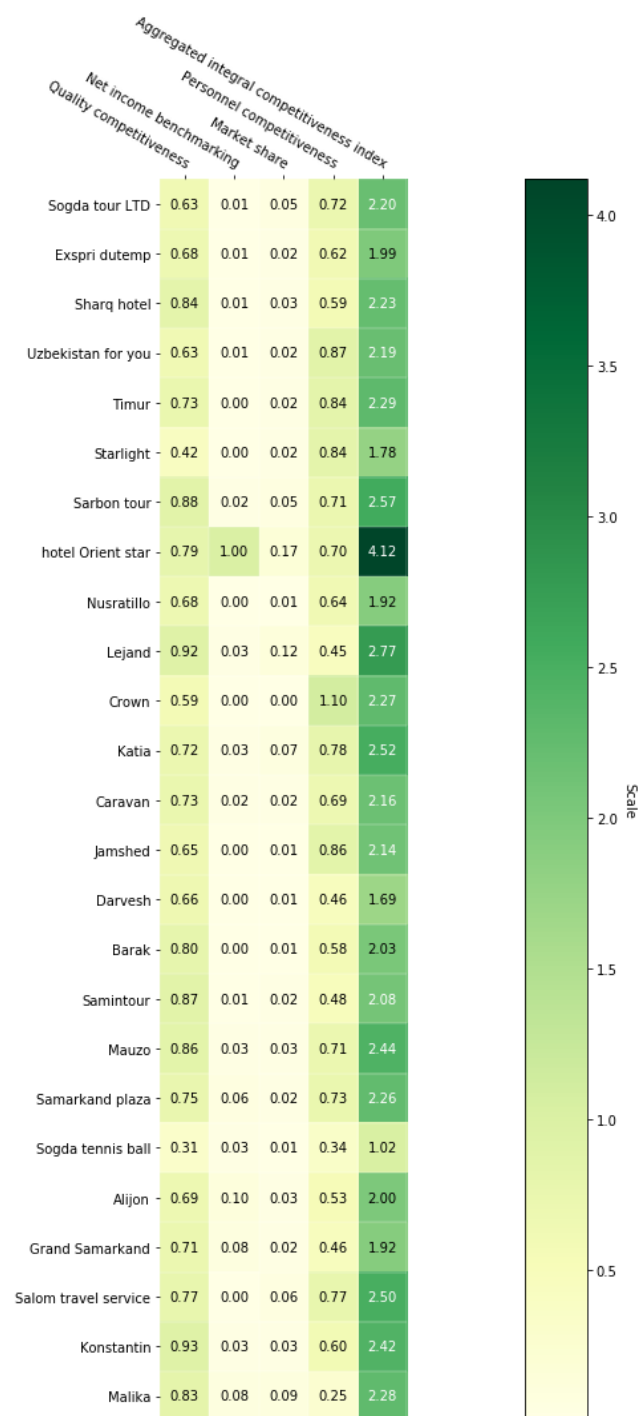


Figure 1. Integrated Competitiveness Index of 25 tourism companies operating in Samarkand region (unit of measurement: standardized z-values) (Source: prepared by authors based on survey data, tripadvisor.com, booking.com reviews, and data of

department of statistics of Samarkand region, Uzbekistan)

After calculating the above-mentioned indicators, the integral competitiveness index of the tourism enterprise is calculated using the formula (14). It should be noted that the integral competitiveness index that we propose allows us to determine the

degree of sustainability of the activities of tourism enterprises in a given period. In addition, it allows one to assess the quality of tourism services, profitability, staff competitiveness, and presence in the market. Using the above indicators, we calculated the integral competitive index for 25 tourism companies and hotels operating in the Samarkand region, Uzbekistan (Figure 1). According to the survey conducted to determine the quality of service in 25 tourism enterprises listed in the figure 1, nine out of ten tourists who visited the hotel confirmed the high-quality of services in the hotel "Konstantin". The lowest rates were recorded by "Sogda Tennis Ball" and "Starlight" tour companies. Only about 30% of the customers they served rated the service positively. If we look at the quality competitiveness indicator, 22 tourism enterprises have a score above 0.5 and the difference between them is not large. This, in turn, means that the quality of tourism services in Samarkand is in the similar level. However, the concept of "quality" is relative, and the evaluations are determined by the tastes of individual tourists.

It should be noted that the integral competitiveness indicator cannot be used at the international level. Because the level of development of infrastructure and technologies that we do not take into account has a strong impact on the quality of service. Therefore, in order to be competitive in terms of quality at the international level, first of all, well-developed infrastructure must be built. If we look at market share index, the fact that tourism enterprises recorded relatively low results in terms of the market share means that the tourism market is very competitive. That is, entering and exiting the market does not require large expenditures. According to this indicator, the "Orient Star Hotel" and the "Lejand" tour companies currently serve the largest number of customers. In terms of staff competitiveness, the tour company "Crown" has the highest record.

It was found that all the employees of this company graduated universities, and have been operating since the establishment of the enterprise. The lowest rate was recorded by "Malika" hotel. This hotel performed relatively low results in terms of staff competitiveness due to high staff turnover. The fact that 19 of the 25 companies in the list scored more than 0.5 may indicate that most of the tour companies in the region are competitive in terms of staffing. The integral competitiveness index consists of the above-mentioned indicators, and the highest rate in the Samarkand region was recorded by the hotel "Orient Star". The lowest score was recorded by the tour company "Sogda Tennis Ball".

CONCLUSION

In conclusion, the integral index competitiveness that we propose can be used by the governing bodies of tourism destinations. This will enable the stakeholders to take timely measures to prevent the emerging or existing issues related to competitiveness in the regional scale.

The essence of this index is that it reflects the availability of sufficient funds, qualified personnel and other resources to compete on an equal footing with other enterprises in various areas of business activity. So, according to our analysis, the most competitive tourism enterprises in Samarkand region are such tour companies as "Orient Star Hotel", "Katia", "Crown", "Sarbon Tour", and "Timur". However, there is still a large gap between the real-world situations and theoretical inferences related to competitiveness. The task of accurately measuring competitiveness may be impossible due to the chaotic character of the processes in markets. Nevertheless, we believe that the proposed methodology of integral competitiveness index will be useful for regional scale management of tourism destinations.

REFERENCES

- Chens, C.Y., Sok, P., & Sok, K. (2008). Evaluating the competitiveness of the tourism industry in Cambodia: Self-assessment from professionals. *Asia Pacific Journal of Tourism Research*, 13, 41–66. <https://doi.org/10.1080/10941660701883367>
- Croes, R. (2011). Measuring and explaining competitiveness in the context of small island destinations. *Journal of Travel Research*, 49(1), 431–442. <https://doi.org/10.1177/0047287510368139>
- Croes, R., & Kubickova, M. (2013). From potential to ability to compete: Towards a performance-based tourism competitiveness index. *Journal of Destination Marketing & Management*, 2, 146–154. <https://doi.org/10.1016/j.jdmm.2013.07.002>
- Das, J., & Dirienzo, C. (2010). Tourism competitiveness and corruption: A cross-country analysis. *Tourism Economics*, 16, 477–492. <https://doi.org/10.5367/000000010792278392>
- De la Peña, M., Núñez-Serrano J.A., Turrión, J., & Velázquez, F.J. (2019). A New Tool for the Analysis of the International Competitiveness of Tourist Destinations Based on Performance. *Journal of Travel Research*, 58, 207–223. <https://doi.org/10.1177/0047287517746012>
- Dwyer, L., Cvelbar, L.K., Mihalic, T., & Koman, M. (2014). Integrated Destination Competitiveness Model: Testing Its Validity and Data Accessibility. *Tourism Analysis*, 19(1), 1–17. <https://doi.org/10.3727/108354214X13927625340073>
- Goffi, G., Cucculelli, M., & Masiero, L. (2019). Fostering tourism destination competitiveness in developing countries: The role of sustainability. *Journal of Cleaner Production*, 209, 101–115. <https://doi.org/10.1016/j.jclepro.2018.10.208>
- Gooroochurn, N., & Sugiyarto, G. (2005). Competitiveness indicators in the travel and tourism industry. *Tourism Economics*, 11, 25–43. <https://doi.org/10.5367/0000000053297130>
- Gursoy, D., Baloglu, S., & Chi, C.G. (2009). *Destination competitiveness of Middle Eastern countries: An examination of relative positioning*. *Anatolia*, 20, 151–163. <https://www.cabdirect.org/cabdirect/abstract/20093169461>
- Ivanov, S., & Webster, C. (2013). Globalisation as a driver of destination competitiveness. *Annals of Tourism Research*, 43, 624–650. <https://doi.org/10.1016/j.annals.2013.07.010>
- Janzakov, B.K. (2019). The impact of hotel location on price offerings in Samarkand city. *Journal of Management Value & Ethics*, 10(2), 174–179. <http://www.jmveindia.com/journal/OCT-DEC%2019%20FINAL.pdf>
- Kayar, C.H., & Kozak, N. (2019). Measuring destination competitiveness: An application of the travel and tourism competitiveness index. *Journal of Hospitality Marketing & Management*, 19, 203–216. <https://doi.org/10.1080/19368621003591319>
- Kendall, K.W., & Gursoy, D. (2007). A managerial approach to positioning and branding: Eponymous or efficient. *Tourism Analysis*, 12, 473–483. <https://doi.org/10.3727/108354207783227920>

- Khan, S.A.R., Qianli, D., SongBo, W., Zaman, K., & Zhang, Y. (2017). Travel and tourism competitiveness index: The impact of air transportation, railways transportation, travel and transport services on international inbound and outbound tourism *Journal of Air Transport Management*, 58, 125–134. <https://doi.org/10.1016/j.jairtraman.2016.10.006>
- Kozegar, L., Hesam, M., & Kazemi, M. (2017). An analysis of influential factors on tourism destinations competitiveness. *Journal of Environmental Management and Tourism*, 8, 393–406. [https://doi.org/10.14505/jemt.9.2\(26\).17](https://doi.org/10.14505/jemt.9.2(26).17)
- Leung, X.Y., & Baloglu, S. (2013). Tourism competitiveness of Asia Pacific destinations. *Tourism Analysis*, 18, 371–384. <https://doi.org/10.3727/108354213X13736372325876>
- Mashika, H., Kudrina, O., Nurgaliyeva, A., Berkova, O., Metil, T., & Novichkov, V. (2021). Competitiveness of hotel, restaurant and tourism business: factors and tools. *GeoJournal of Tourism and Geosites*, 36(2spl), 681–687. <https://doi.org/10.30892/gtg.362spl16-698>
- Matiza, T., & Slabbert, E. (2021). Tourism is too dangerous! Perceived risk and the subjective safety of tourism activity in the era of Covid-19. *GeoJournal of Tourism and Geosites*, 36(2spl), 580–588. <https://doi.org/10.30892/gtg.362spl04-686>
- Mendieta-Peñalver, L.F., Perles-Ribes, J.F., Ramón-Rodríguez, A.B., & Such-Devesa, M.J. (2018). Is hotel efficiency necessary for tourism destination competitiveness? An integrated approach. *Tourism Economics*, 24, 3–26. <https://doi.org/10.5367/te.2016.0555>
- Mirzaev, K., & Janzakov, B. (2020). *The ways of ensuring competitiveness in tourism*, LAP LAMBERT Academic Publishing, ISBN-10: 6202795980, 88. <https://www.amazon.com/WAYS-ENSURING-COMPETITIVENESS-TOURISM/dp/6202795980>
- Panasiuk, A. (2007). Tourism infrastructure as a determinant of regional development. – *Ekonomika ir vadyba: aktualijos ir perspektyvos*. 1 (8), 212–215. ISSN 1648-9098, available at: http://su.lt/bylos/mokslo_leidiniai/ekonomika/7_8/panasiuk.pdf
- Reisinger, Y., Michael, N., & Hayes, J.P. (2019). Destination competitiveness from a tourist perspective: A case of the United Arab Emirates. *International Journal of Tourism Research*, 21, 259–279. <https://doi.org/10.1002/jtr.2259>
- Romão, J., Nijkamp, P. (2019). Impacts of innovation, productivity and specialization on tourism competitiveness—a spatial econometric analysis on European regions. *Current Issues in Tourism*, 22, 1150–1169. <https://doi.org/10.1080/13683500.2017.1366434>
- Safarov, B.S. (2016). The role of innovations and its impact on investment flow into tourism market of Uzbekistan. *Journal of Economy and Business*, 3, 18–22. <https://cyberleninka.ru/article/n/rol-innovatsiy-i-ih-znachenie-v-investitsiyah-na-rynke-turistskih-uslug-v-uzbekistane>
- Safarov, B.S. (2010). The models of prognosis of regional tourism's development. *Perspectives of Innovations, Economics & Business*, 6, 80–83. <https://www.ceeol.com/search/article-detail?id=246600>
- Safarov B.S. (2020). *Moliya va soliqlar*. Textbook for students, Tashkent, Science and technologies, 512, (in Uzbek).
- Sainaghi, R., Phillips, P., & Zavarrone, E. (2017). Performance measurement in tourism firms: A content analytical meta-approach. *Tourism Management*, 59, 36–56. <https://doi.org/10.1016/j.tourman.2016.07.002>
- Wang, I.M., & Ackerman, J.M. (2019). The infectiousness of crowds: Crowding experiences are amplified by pathogen threats. *Personality and Social Psychology Bulletin*, 45(1), 120–132. <https://doi.org/10.1177/0146167218780735>
- Walesiak, M. (2018). The Choice of Normalization method and rankings of the set of objects based on composite indicator value. *Statistics in Transition New Series*, 19, 693–710, <https://doi.org/10.21307/stattrans-2018-036>
- Webster, C., & Ivanov, S. (2014). Transforming competitiveness into economic benefits: Does tourism stimulate economic growth in more competitive destinations? *Tourism Management*, 40, 137–140. <https://doi.org/10.1016/j.tourman.2013.06.003>
- *** World Economic Forum. The Global Competitiveness Report 2018–2019, WEF: Cologny, Switzerland, 2018. <http://www.oceanhealthindex.org/methodology/components/tourism-competitiveness-index-tci>

DOES INTERNATIONAL TOURISM PROMOTE ECONOMIC GROWTH? SOME EVIDENCE FROM INDONESIA

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Abstract: Realizing an increasing contribution of the tourism sector to global economies, this study intends to enrich the existing tourism literature by empirically exploring the short- and long-run dynamic causalities between tourism and economic growth in Indonesia over the period 1995 to 2017. For these purposes, cointegration, Fully Modified Least Squares (FMOLS), and Granger causality techniques are adopted. The study found a cointegration between tourism and economic growth, indicating the existence of a long-run relationship between the tourism sector and economic growth. In the long-run, tourism has contributed to the promotion of economic growth. Finally, both in the short- and long-run, the study found a unidirectional causal relationship running from tourism to economic growth, confirming the tourism-led growth hypothesis. To enhance Indonesia's economic growth, the tourism sector should be further promoted by making it more attractive, supported by advanced IT facilities, warm hospitality, and diversified tourism objects.

Key words: cointegration, dynamic causality, economic growth, tourism-led growth, tourism receipts

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INTRODUCTION

Undeniably, the tourism sector has contributed to the development of global economies. The World Tourism Organization (UNWTO, 2018) reported that, globally, international tourists had reached 1,323 million visits with an annual growth rate of 6.8% in 2017. These figures have been far from only 3.8% predictions of annual tourism growth from 2010 to 2020, which is the highest increase since the 2008 global financial crisis. This increase has reached the level of revenue of USD1.340 billion (4.9%) in 2017 and ranked the top three after the chemicals and fuels sector in the export category, especially in developing countries. Whereas for Indonesia, UNWTO (2018) reported an increase in revenues from international tourism visits from USD11.206 million in 2016 to USD12.520 million in 2017, with a contribution of 3.2% of total international tourism visits to the Asia and Pacific region. To ensure the sustainability of the international tourism market in Indonesia, the Republic of Indonesia's Government has a strong commitment to promoting the tourism sector as one of the mainstay sectors by initiating Government Regulation No. 50 of 2011, concerning the National Tourism Development Master Plan. This regulation contains the vision, mission, goals, objectives, and direction of national tourism development for the 2010-2025 period. Strengthening national tourism destination areas is an important strategy to develop the tourism sector (Kang et al., 2014). In Indonesia's case, the development of destination areas for international markets must be carried out sustainably to promote the economy due to declining oil and gas exports over the past decade.

This is in accordance with the recent study by Hurri et al. (2019) for the island of Sumatra, Indonesia, which found that the contribution of exports from oil and gas has been declining for a decade, and currently, the economy is supported by the non-oil and gas sector, especially tourism sector. Previous studies on the contribution of tourism to the economy have found mixed findings. For example, there has been plenty of empirical evidence supporting the tourism-led growth hypothesis (Narayan, 2010; Eeckels et al., 2012; Kadir et al., 2012; Srinivasan et al., 2012; Hye and Khan, 2013; Tang and Tan, 2015; Govdeli and Direkci, 2017). The results of their investigation showed that tourism influences economic growth, validating the tourism-led growth hypothesis. On the contrary, Oh (2005) found that tourism is affected by economic growth, confirming the growth-led tourism hypothesis. Additionally, there have also been studies

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that suggest a two-way causality between tourism and economic growth (Aslan, 2014; Balcilar et al., 2014; Bilen et al., 2017; and Dogru and Bulut, 2018). This finding indicates a feedback hypothesis between tourism and economic growth. Finally, Arslanturk et al. (2011) found no causality relationship between tourism and economic growth (Arslanturk et al., 2011), showing the independence of tourism from economic growth.

By including Indonesia as one of the investigated countries, Eyuboglu and Eyuboglu (2020) find a causality running from economic growth to tourism in the Indonesian economy, supporting the growth-led tourism hypothesis. Instead, Sokhanvar et al. (2018) also included Indonesia in their investigation and found no significant relationship between tourism and economic growth in Indonesia. Both of these studies found mixed findings, but none of them proved that the tourism-led growth hypothesis is valid for Indonesia's case. The existence of mixed findings of the tourism-economic growth relationships has motivated our present study to provide the latest empirical findings on tourism-economy literature. Which hypothesis is the most relevant to Indonesia's economic growth related to the tourism contribution? Is it a tourism-led hypothesis or growth-led hypothesis or non-causal effect, or bidirectional effect where both tourism and economic growth affect each other? Considering these important questions to be answered, it provides important implications for promoting economic growth through the tourism sector; thus, this study intends to probe these issues.

Table 1. Summary of literature review

Author	Country	Period	Variables	Results
Arslanturk et al. (2011)	Turkey	1963-2006	GDP, tourism receipts	Tourism \neq Growth
Amaghionyeodiwe (2012)	Jamaica	1970-2005	GDP, tourism receipts	Tourism \rightarrow Growth
Antonakakis et al. (2015)	10 European countries	1995-2012	GDP, tourism receipts	Tourism \rightarrow Growth
Antonakakis et al. (2019)	113 countries	1995-2014	GDP, tourism receipts	Tourism \rightarrow Growth
Aratuo and Etienne (2019)	United States	1998-2017	GDP, tourism receipts	Tourism \leftrightarrow Growth
Aslan (2014)	12 Mediterranean countries	1995-2010	GDP, tourism receipts	Tourism \leftrightarrow Growth
Balaguer and Cantavella-Jordá (2002)	Spain	1975:Q1-1997:Q1	GDP, tourism receipts, exchange rate	Tourism \rightarrow Growth
Balcilar et al. (2014)	South Africa	1960-2011	GDP, tourism receipts	Tourism \leftrightarrow Growth
Bilen et al. (2017)	12 Mediterranean countries	1995-2015	GDP, tourism receipts	Tourism \leftrightarrow Growth
Chulaphan and Barahona (2018)	Thailand	2008-2015	GDP, tourism arrivals	Tourism \leftrightarrow Growth
Dogru and Bulut (2018)	7 European Countries	1996-2014	GDP, tourism receipts	Tourism \leftrightarrow Growth
Eeckels et al. (2012)	Greece	1976-2004	GDP, tourism receipts	Tourism \rightarrow Growth
Eyuboglu and Eyuboglu (2020)	9 emerging countries	1995-2016	GDP per capita, tourism receipts	Tourism \rightarrow Growth: Tourism \neq Growth
Govdeli and Direkci (2017)	34 OECD countries	1997-2012	GDP, tourism receipts	Tourism \rightarrow Growth
Hye and Khan (2013)	Pakistan	1971- 2008	GDP, tourism receipts	Tourism \rightarrow Growth
Kadir et al. (2012)	Malaysia	1998-2005	GDP, tourism receipts	Tourism \rightarrow Growth
Khalil et al. (2007)	Pakistan	1960-2005	GDP, tourism receipts	Tourism \leftrightarrow Growth
Liu and Song (2018)	Hong Kong	1974-2016	GDP, tourism receipts	Tourism \leftrightarrow Growth
Oh (2005)	Korean	1975:Q1-2001:Q1	GDP, tourism receipts	Growth \rightarrow Tourism
Manzoor et al. (2019)	Pakistan	1990-015	GDP, tourism receipts	Tourism \rightarrow Growth
Mohapatra (2018)	SAARC countries	1995-2014	GDP, tourism expenditure, tourism receipts	Tourism \rightarrow Growth
Narayan (2010)	4 Pacific islands	1988-2004	GDP, tourism receipts	Tourism \rightarrow Growth
Nunkoo et al. (2020)	545 estimates from 113 studies	1972-2017	GDP, tourism receipts, tourism spending	Tourism \rightarrow Growth
Paramati et al. (2017)	Iran	2005-2014	GDP, tourism receipts	Tourism \rightarrow Growth
Phiri (2016)	South Africa	1995-2014	GDP, tourism expenditure	Tourism \leftrightarrow Growth
Ribeiro and Wang (2020)	Sao Tome	1997-2018	GDP, tourism receipts	Tourism \rightarrow Growth
Risso (2018)	179 countries	1995-2016	GDP, tourism expenditure	Tourism \rightarrow Growth
Roudi et al. (2019)	10 Small Island Developing States (SIDSs)	1995-2014	GDP, tourism expenditure	Tourism \rightarrow Growth
Salawu (2020)	Nigeria	1995- 2017		Tourism \rightarrow Growth Tourism \neq Growth
Seghir et al. (2015)	49 countries	1988-2012	GDP, tourism spending	Tourism \leftrightarrow Growth
Sokhanvar et al. (2018)	16 emerging market economies	1995-2014	GDP, tourism receipts	Tourism \leftrightarrow Growth Tourism \neq Growth
Srinivasan et al. (2012)	Sri Lanka	1969-2009	GDP, tourism receipts	Tourism \rightarrow Growth
Su et al. (2021)	China	2000-2019	GDP, tourism receipts	Tourism \rightarrow Growth
Tang and Tan (2015)	Malaysia	1975-2011	GNP, tourism receipts	Tourism \rightarrow Growth
Tang and Tan (2018)	167 countries	1995-2013	GNP, tourism receipts	Tourism \rightarrow Growth
Ohlan (2017)	India	1960-2014	GDP, tourism expenditure	Tourism \rightarrow Growth
Wu and Wu (2018)	12 western regions, China	1995-2015	GNP, tourism receipts	Tourism \leftrightarrow Growth
Zuo and Huang (2018)	31 provinces in China	1995-2013	GNP, tourism receipts	Tourism \leftrightarrow Growth

Notes: \rightarrow represents unidirectional causality, \leftrightarrow represents bi-directional causality, and \neq represents non-causality

In contrast to previous studies, in this study, the verification of the tourism-led growth hypothesis is tested using combination techniques of cointegration, Fully Modified Ordinary Least Square (FMOLS), and Granger causality provide more convincing empirical findings. This study's results are expected to shed some lights for the government in developing proper strategies to strengthen the tourism sector as the mainstay of the economic driving sector. In addition, the results of this study are also expected to enrich existing empirical evidence on tourism-economic growth nexus from the perspective of developing countries with the largest Muslim population in the world, namely Indonesia.

In the next section, the literature review of previous relevant studies will be provided, followed by the explanation of empirical frameworks consisting of data sources, model specifications, and econometrics methodology in Section 3. Section 4 provides results and discussion, and finally, section 5 concludes the paper.

LITERATURE REVIEW

Balaguer and Cantavella-Jordá (2002) were among the first researchers to investigate the causal relationship between tourism and economic growth in Spain and confirm the tourism-led growth hypothesis. Following this study, many scholars have increasingly been attracted to investigating the tourism-economic growth relationship worldwide. This paper specifically limits the literature review between tourism receipts and economic growth variables without including explanatory or other control variables. This literature review is sorted by country or continent group and is explained based on various methodologies examined in each country. The summary of the literature review is presented in Table 1.

For example, for countries in the Asian Region, Oh (2005) investigates the causality relationship between tourism revenue and economic growth for Korea's case. The study finds a non-causal relationship from tourism to economic growth, but the causality is found running from economic growth to the tourism sector. This confirms the non-validity of the tourism-led growth hypothesis for the Korean economy. In contrast, Khalil et al. (2007) and Manzoor et al. (2019) examine the causality relationship between tourism and economic growth in Pakistan and found a two-way causality between tourism and economic growth. Kadir et al. (2012) examine the relationship between tourism and economic growth in Malaysia using panel data on foreign tourist arrivals from neighbouring ASEAN-5 countries covering the 1998-2005 period. They found that the two variables were cointegrated in the long run. They also document a directional Granger causality, both in the short- and long-term, from international tourism's reception to economic growth. Meanwhile, Ohlan (2017), Paramati et al. (2017), Chulaphan and Barahona (2018), Liu and Song (2018), Ribeiro and Wang (2020), and Su et al. (2021) found a bidirectional causal relationship between tourism and economic growth for the cases of India, Iran, Thailand, Hong Kong, Sao Tome, China, respectively.

Furthermore, Srinivasan et al. (2012) examine the impact of tourism on Sri Lanka's economic growth during the period 1969-2009 using the ARDL-Error Correction Model. They found that tourism has a significant impact on economic growth both in the short- and long-term. Hye and Khan (2013) investigate the tourism-led growth hypothesis in Pakistan for the 1971-2008 period using the Johansen-Juselius cointegration and ARDL approaches based on the long-run causality test. They found that the two variables were cointegrated and had a direct causal relationship running from tourism to economic growth in the long run. Tang and Tan (2015) investigate the tourism-led growth hypothesis in Malaysia for 1975-2011 using the Granger causality method based on VECM. They found that the two variables were cointegrated, confirming the directional causality relationship running from tourism to long-term economic growth. Except for the Korean economy, findings for other Asian countries have confirmed the tourism-led growth hypothesis.

Moreover, previous studies from several European countries also confirm the tourism-led growth hypothesis. For example, Arslanturk et al. (2011) investigate the time-varying relationship between tourism revenue and economic growth and found a non-causal relationship between the two series. However, after the 1983s, there was a direct causality running from tourism revenue to economic growth. Eeckels et al. (2012) examine the relationship between tourism and economic growth in Greece for the period 1976-2004 using the VAR model and found that tourism revenues affected economic growth, a finding confirming the tourism-led growth hypothesis. Roudi et al. (2019) also supported these findings, who found the tourism-led growth hypothesis for the case of 10 Small Island Developing States (SIDSs). Dogru and Bulut (2018) examine the relationship between tourism and economic growth in seven European countries for 1996-2014 using the Dumitrescu and Hurlin (2012)'s causality method. They found a two-way causality between tourism revenue and economic growth for European countries. Other studies also documented a unidirectional causal relationship running from tourism to economic growth (Antonakakis et al., 2015; Tang and Tan, 2018; Risso, 2018; Antonakakis et al., 2019; Nunkoo et al., 2020) for the case of European and developed countries and a bidirectional relationship between tourism and economic growth (Seghir et al., 2015; Aratuo and Etienne, 2019) for the case of developed countries, including the United States. Similarly, for China, Wu and Wu (2018) and Zuo and Huang (2018) found a bidirectional causal relationship between tourism and economic growth.

In a similar vein, studies on the African countries by Balcilar et al. (2014) focused on the time-varying parameters of the relationship between tourism and economic growth in South Africa during the period 1960-2011 using the Granger causality method based on VECM. This study found no Granger causality for the full sample 1960-2011; instead, a two-way causality relationship was documented for the 1985-1990 sample period. The non-causal relationship between tourism and economic growth is also found by Salawu (2020) for the case of Nigeria, and the bidirectional causal relationship between the variables is also documented for the case of South Africa by Phiri (2016). For the Pacific Islands, Narayan (2010) investigates the relationship between tourism and economic growth for the four Pacific island nations. He found a direct causality running from tourism to economic growth; a finding supported the tourism-led growth hypothesis. Finally, Amaghionyeodiwe (2012) investigates the causal relationship between tourism revenue and Jamaica's economic growth for

the period 1970-2005. Using the Johansen cointegration and VECM approach, he found that the two series of variables were co-integrated in the long run and had a unidirectional Granger causal relationship running from tourism to economic growth. Therefore, his findings confirm the tourism-led growth hypothesis for the Jamaican economy.

Furthermore, previous studies found a two-way causality between tourism revenue and economic growth for the cases of the Mediterranean and the OECD countries (Aslan, 2014; Bilen et al., 2017; Govdeli and Direkci, 2017). For example, Aslan (2014) investigate the relationship between tourism and economic growth in 12 Mediterranean countries using the Granger causality panel model for the 1995-2010 period. He found a two-way causality between tourism and economic growth in those countries. Bilen et al. (2017) investigate the relationship between tourism and economic growth in 12 Mediterranean countries for the period 1995–2012 using the Granger panel causality method and found a two-way causality between tourism and economic growth. Govdeli and Direkci (2017) examine the long-term relationship between tourism revenue and economic growth for 34 OECD countries during the 1997-2012 period using the cointegration panel and FMOLS methods. First, they found that the two variables were cointegrated.

Second, they also found that tourism had a positive and significant impact on economic growth in the long run. Finally, for the case of emerging economies, including Indonesia, Sokhanvar et al. (2018) investigate the causal relationship between tourism and economic growth for emerging economies using the Granger causality method during the 1995-2014 period. They found unidirectional causality running from tourism to economic growth for Brazil, Mexico, and the Philippines. In contrast, a unidirectional causality running from economic growth to the tourism sector is documented for the cases of China, India, Indonesia, Malaysia, and Peru. The study found no causal relationship between tourism and economic growth for Croatia, Hungary, Poland, Russia, South Africa, Thailand, and Turkey. Finally, Eyuboglu and Eyuboglu (2020) examine the asymmetrical relationship between tourism and economic growth for nine developing countries during the 1995-2016 period. They found unidirectional causality running from tourism to economic growth for Argentina and Turkey. Conversely, the study documented a non-causal tourism-economic growth nexus for Brazil, Croatia, Indonesia, Mexico, the Philippines, Russia, and South Africa.

The above-reviewed studies on various countries globally show the existence of four possible relationships between tourism and economic growth, namely: (i) a unidirectional relationship running from tourism to economic growth (tourism-led growth hypothesis); (ii) i) a unidirectional relationship running from economic growth to tourism (growth-led tourism hypothesis); (iii) a bidirectional or two-way relationship between tourism and economic growth; and (iv) non-causal relationship between tourism and economic growth. Specifically, for the case of Indonesia, previous studies that use different data periods and methods (Sokhanvar et al., 2018; Eyuboglu and Eyuboglu, 2020) found evidence contradicting the tourism-led growth hypothesis. Motivated by the mixed findings of previous studies on tourism-growth nexus and an increasing contribution of tourism towards the national economy of Indonesia, this study intends to fill the existing gaps in the previous studies by identifying which kinds of nature of tourism-economic growth nexus exist for the case of Indonesia using an updated and longer data period (1995-2017) and combination techniques of cointegration, Fully Modified Ordinary Least Square (FMOLS), and Granger causality to provide more reliable empirical findings.

DATA AND METHODOLOGY

DATA

This study utilizes annual data over the period 1995-2017 sourced from the World Development Indicators (WDI) of the World Bank (2019). The data

measurements, periods and their sources are illustrated in Table 2. All data in this study are transformed into natural logarithmic measurements to ensure the normality of data distribution. This study is conducted to empirically measure and analyze the impact of tourism on economic growth in Indonesia. The variables used in this study consist of changes in Growth Domestic Product (GDP) to measure economic growth as the dependent variable and receipts from Tourist Visits (TR) to measure the tourism sector as an independent variable.

Table 2. Measurements of variables and their sources

Variable	Description	Period	Source
$\ln GDP$	Natural logarithm of Gross Domestic Product (constant price 2010 USD)	1995-2017	WDI, World Bank
$\ln TR$	Natural logarithm of Tourism Receipts (USD)	1995-2017	WDI, World Bank

Econometric models

Following the studies by Kadir et al. (2012) and Tang and Tan (2015), to measure and analyze the relationship between tourism and economic growth, the study proposes the following basic empirical model

$$GDP = f(TR) \quad (1) \quad \text{where } GDP \text{ is the real gross domestic product, and } TR \text{ is the tourism receipts.}$$

Equation (1) shows the GDP as a function of TR .

To measure the long-run relationship between tourism and economic growth in Indonesia, following Tang and Tan (2015), Equation (1) could be further re-written, as follows:

$$\ln GDP_t = \beta_0 + \beta_1 \ln TR_t + \varepsilon_t \quad (2) \quad \text{where } \ln GDP \text{ is the natural logarithm of real gross domestic product, } \ln TR \text{ is the natural logarithm of tourism receipts, } \beta_0 \text{ is the constant term, } \beta_1 \text{ is the estimated regression coefficient, and } \varepsilon \text{ is the error term.}$$

Equation (2) shows the econometric model predicting the long-run GDP - TR relationship. Before estimating a dynamic time series model, the stationarity of the data is tested in the first step. In the time series analysis, data stationarity testing is important to avoid spurious regression. Stationary testing procedures were first introduced by Dickey and Fuller (1979,

1981). To ensure that all variables used for estimation are stationary to the same degree, this study applies a test based on the Augmented Dickey-Fuller (ADF) method. Data from each variable is first tested at an order zero, $I(0)$. If the tested variable is non-stationary at the $I(0)$, the study continues testing the stationarity of the variable in the first-order, $I(1)$ and in the second-order, $I(2)$ (Majid, 2007; Yusof and Majid, 2007; Majid and Kassim, 2015). Data non-stationarity is tested at the probability value greater than the significance level $\alpha > 0.01$; $\alpha > 0.05$; and $\alpha > 0.10$.

In the second step, the existence of the number of cointegration relationships between series is examined. Cointegration is a linear combination of non-stationary variables. Engle and Granger (1987) first introduced the cointegration test, which aims to find out cointegration or long-term balance between two or more variables that are non-stationary. In this study, Johansen (1991, 1995)'s cointegration test is used to investigate the long-term relationship between independent variables and the dependent variable. If there is no cointegration relationship, an unrestricted VAR model can be applied. However, if there is a cointegration relationship between variables, the Vector Error Correction (VECM) model is used.

In the third step, the study investigates the long-term and Granger causal relationship using the VECM. If cointegrated in $I(1)$, one alternative method is to use the FMOLS method developed by Phillips and Hansen (1990). FMOLS is superior to OLS because it provides consistent predictors, control individual effects, and correct endogenous errors.

Finally, to determine whether there is a relationship between series in econometric modelling, the Granger causality test (Granger, 1969) through the VECM framework is performed. In matrix form, the VECM equation to test Granger causality between tourism and economic growth is proposed as follows:

$$\begin{bmatrix} \Delta \ln GDP_t \\ \Delta \ln TR_t \end{bmatrix} = \begin{bmatrix} \beta_1 \\ \beta_2 \end{bmatrix} + \sum_{i=1}^p \begin{bmatrix} \delta_{11} & \delta_{12} \\ \delta_{21} & \delta_{22} \end{bmatrix} \times \begin{bmatrix} \Delta \ln GDP_{t-1} \\ \Delta \ln TR_{t-1} \end{bmatrix} + \begin{bmatrix} \delta_1 \\ \delta_2 \end{bmatrix} ECT_{t-1} + \begin{bmatrix} \varepsilon_{1t} \\ \varepsilon_{2t} \end{bmatrix} \quad (3)$$

where Δ is the lag operator of all variables, β is the lag independent variable's coefficient, δ is the lag of the cointegrated variable, and ε is the error term.

FINDINGS AND DISCUSSION

Descriptive statistics

A summary of statistics to illustrate the characteristics of the data used in this study is presented in Table 3. During the observation period, the value of

Table 3. Summary of statistics

Variable	Mean	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	J-B
GDP	665,2225	1,090.454	428.7594	214.4606	0.5982	2.0109	2.3092
TR	7.3542	14.117	4.255	2.9765	0.8972	2.5129	3.3129

Notes: Std. Dev is the standard deviation, and J-B is the Jarque-Bera value for the normality test

Indonesia's real gross domestic product (GDP) ranged between USD 428.76 billion and USD 1,090.45 billion, with an average value of USD 665.22 billion. Furthermore, the value of tourism receipts is between USD 4.26 billion and USD 14.12 billion, with an average value of USD 7.35 billion.

Results of unit root test

Based on the previous section's research model, the first step that must be performed is to test the stationarity of the data. The stationarity test is essential to identify whether there is a root unit in the time series data used. This test aims to determine the possibility of time-series data used in the study contain unit root or non-stationarity. Non-stationary data imply that it allows good regression results, but is unable to describe the actual state. The test is carried out at the level stage up to the first difference using the lag-length of 4 based on the Schwarz Information Criterion (SIC) criterion. The Augmented Dickey-Fuller (ADF) method is applied to test the unit root level based on the intercept and trend equations. The results of the unit root test are presented in Table 4.

Table 4 shows that all variables are non-stationarity at the level. Therefore, the next step must be done by testing at the first difference level to ensure all variables are stationary. In this stage, the $\ln GDP$ and $\ln TR$ are found to become stationary at the first difference level. Thus, in the next step, the cointegration test could be performed.

Table 4. Augmented Dickey-Fuller (ADF) test

	Constant		Constant and trend	
	Level	First difference	Level	First difference
$\ln GDP$	-0.9225	-3.1796*	-1.0933	-10.5046**
$\ln TR$	0.9457	-5.6363**	-2.1493	-6.1107**

Note: ** and * indicate significance at the 1% and 5% levels, respectively.

The lag order for the ADF test is selected based on the Schwarz Information Criterion (SIC).

Note: *** indicates significance at the 1% level. The trend assumption uses a linear deterministic trend. The lag interval (in first differences) is 1 to 2.

Table 5. Johansen cointegration tests

Unrestricted cointegration rank test (Trace value)					
Hypothesis		Eigenvalue	Trace	Critical Value	Probabilit y
H_0	H_1		Statistic	(0.05)	
$r \leq 0$	$r > 1$	0.9694	75.7184***	15.4947	0.0000
$r \leq 1$	$r > 2$	0.3927	9.4757***	3.8415	0.0021
Unrestricted cointegration rank test (Maximum Eigenvalue)					
Hypothesis		Eigenvalue	Max-Eigen	Critical Value	Probabilit y
H_0	H_1		Statistic	(0.05)	
$r \leq 0$	$r > 1$	0.9694	66.2426***	14.2646	0.0000
$r \leq 1$	$r > 2$	0.3927	9.4757***	3.8415	0.0021

Results of the cointegration test

After ensuring all variables are stationary at the first difference, the long-term relationship between the series of variables is investigated using the Johansen cointegration method. This test is done by comparing the Trace statistics and its critical value. If the trace statistic is greater than the critical value, then the equation is cointegrated. The findings of the cointegration test are reported in Table 5. As illustrated in Table 5, the value of Trace statistic and Maximum Eigenvalue at $r \leq 0$ and $r \leq 1$ is greater than the critical value with a significance level of 1%. This means that the null hypothesis of no

cointegration is rejected, while the alternative hypothesis of cointegration cannot be rejected. Based on Johansen's cointegration test, the two variables contained cointegration at a 1% level of significance. Thus, this indicates stability or a balanced relationship between the GDP and TR in the long run. In other words, in each short-term period, all variables adjust to each other to achieve their long-term equilibrium. This finding also implies that to predict the future movement of economic growth, it could be done by predicting the changes in the tourism sector in Indonesia.

Findings from the FMOLS

After ensuring that the variables of tourism revenue and economic growth are co-integrated, in this section, the study investigates the long-term impact of tourism revenue on economic growth. The findings of the long-term elasticity of the impact of tourism revenue on economic growth using the FMOLS method based on Phillips and Hansen (1990)'s framework is reported in Table 6. Table 6 reports that the cointegration regression estimation with the FMOLS model. The study found the cointegration between tourism revenue and economic growth. First, tourism revenue elasticity is 0.06. Second, statistically, tourism revenue has a positive and significant impact on Indonesia's economic growth in the long run. These findings indicate that a 1% increase in tourism revenue has led to a 0.06% increase in economic growth. In a declining trend of the contribution of the oil and gas sector to the national economy, the government should focus on further promoting the tourism sector, as it has positively contributed to the increase in economic growth. This finding shows the robustness of the long-term relationship between tourism revenue and Indonesia's economic growth for the 1995-2017 period. Our findings are consistent with the study of Govdali and Direkci (2017) for the economy of the OECD countries; Mohapatra (2018) for the economy of the SAARC group of countries; and Narayan (2010) for the Pacific Islands economy.

Table 6. Modified ordinary least square (FMOLS) test

Variable	Coefficient	Standard Error	t-Statistic	Probability
lnTR	0.0635	0.0288**	2.2058	0.0406
Constant	0.0473	0.0048***	9.8039	0.000
R-squared	0.7842	Mean dependent variance		0.0399
Adjusted R-squared	0.7602	S.D. dependent variance		0.0429
S.E. of regression	0.021	Long-run variance		0.0004

Note: *** and ** indicate significance at 1% and 5% levels, respectively. The long-run covariance estimate is based on the Bartlett Kernel (Newey-West) fixed bandwidth = 3.0000.

Table 7. Results of the Granger causality based on the VECM framework

Dependent variable	Short-run		Long-run
	$\Delta \ln GDP$	$\Delta \ln TR$	ECT_{t-1}
$\Delta \ln GDP$	-	10.9572***	-0.0951***
		[18.678]	(-9.1430)
$\Delta \ln TR$	4.5076	-	-0.0588**
	[1.1897]		(-2.3104)

Note: *** and ** indicate significance at the 1% and 5% levels, respectively. Figures in parentheses and square brackets represent t-statistics and F-statistics, respectively.

Results of Granger causality

To confirm the presence of a long-term relationship, a Granger causality test is performed to identify whether the two variables have a direct, reciprocal, and independent relationship or not. In other words, does one variable have a significant causal relationship with other variables because each variable in the study has the opportunity to become an endogenous or exogenous variable? The Granger causality test in this study is conducted based on the VECM Granger causality framework using Wald tests' block exogeneity with a significant level of 1%. The findings of the Granger causal relationship between tourism and economic growth is reported in Table 7. Referring to Table 7, the study could summarize the following findings. First, the findings show that, in the short term, there is a causal relationship between tourism revenue and economic growth. A unidirectional causal relationship running from tourism revenue to economic growth is documented at the significance level of 1%. Second, there is also a causal effect of tourism revenue on economic growth at the 1% level of significance in the long run. These findings confirm the tourism-led growth hypothesis.

These empirical evidences suggest that to promote sustainable economic growth in Indonesia, efforts must be made to enhance its tourism sector. The government should aggressively promote tourism to foreign tourists by strengthening national tourism branding and intensifying various forms of advertising, selling, incentive access, and hot deals. The government must also participate in promoting Indonesia in world tourism exhibition events. Besides, strengthening the tourism sector can also be done by realizing border tourism, tourism hub, and Low-Cost Carrier Terminal (LCCT). Border tourism is intended to attract foreign tourists from neighbouring countries. In contrast, the tourism hub is intended to be a transit area for tourists who fly between countries by cooperating with wholesalers, such as travel agents, by holding tourism exhibitions in malls and digital marketing. Finally, the LCCT must also be realized immediately to make it easier for many budget airlines to fly to Indonesia with foreign tourists. Commonly, people will go on vacation because of two main reasons, namely cheaper flight ticket and short distance. LCCT will make Indonesia a tourist destination that is cheaper and easier to reach by tourists using budget airlines.

The finding of tourism-led growth hypothesis for Indonesia is in line with previous studies such as Balaguer and Cantavella-Jordá (2002) for the Spanish economy, Kadir et al. (2012), Tang and Tan (2015) for the Malaysian economy, and Roudi et al. (2019) for the case of 10 Small Island Developing States (SIDSs). Our finding is also supported by studies on European and developed economies who documented a unidirectional causal relationship running from tourism to economic growth (Antonakakis et al., 2015; Tang and Tan, 2018; Risso, 2018; Antonakakis et al., 2019; Nunkoo et al., 2020). These findings showed that tourism plays an important role in promoting the national economy.

CONCLUSION

This study examined and analyzed the relationship between tourism and economic growth for the Indonesian

economy using various time series techniques during the 1995–2017 period. For this purpose, batteries of time series tests have been conducted. Based on the Johansen cointegration test, the study found a cointegration between tourism revenue and economic growth. Based on the FMOLS, tourism revenue is found to have a positive and statistically significant impact on economic growth. Finally, based on the Granger causality test within the VECM framework, the study found a unidirectional causal relationship running from tourism revenue to economic growth, both in the short and long term, supporting the tourism-led growth hypothesis. This empirical study offers a piece of new evidence for the tourism-led growth hypothesis for Indonesia's case. Besides, this finding can also indicate the importance of promoting the tourism industry to enhance Indonesia's national economy. Realizing the importance of tourism in the economy, it is suggested that the government and the private sector can work together to develop international tourism destinations so that they can truly realize sustainable economic growth driven by tourism in the future. The development of international tourism should not only impact other related sectors, but it should also increase domestic income.

To further enhance the tourism sector's contribution to Indonesia's economy, the government should design proper strategies to attract more foreign tourists, supported by travel agencies and tourism associations nationwide. The government should also enhance national tourism branding through various forms of e-advertising. The national tourism board should regularly promote Indonesia as the world's best tourism destination in world tourism exhibition events. Besides, the national tourist board should provide more attractive and diversified incentive access or tourists. Enhancing border tourism, tourism hub, and Low-Cost Carrier Terminal (LCCT) could also attract foreign tourists from neighbouring countries and make Indonesia a tourism transit area and destination that is easily reached with budget airlines. The future studies on this topic could incorporate more explanatory variables related to tourism into the analysis to provide more comprehensive empirical findings. Comparative studies on this issue between regions of the country based on their per capita income status or other categories could also provide new perspectives for the tourism-led growth hypothesis.

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REFERENCES

- Amaghionyeodiwe, L.A. (2012). Research note: A causality analysis of tourism as a long-run economic growth factor in Jamaica. *Tourism Economics*, 18(5), 1125–1133. <https://doi.org/10.5367%2Fte.2012.0155>
- Antonakakis, N., Dragouni, M., & Filis, G. (2015). How strong is the linkage between tourism and economic growth in Europe?. *Economic Modelling*, 44, 142–155. <https://doi.org/10.1016/j.econmod.2014.10.018>
- Antonakakis, N., Dragouni, M., Eeckels, B., & Filis, G. (2019). The tourism and economic growth enigma: examining an ambiguous relationship through multiple prisms. *Journal of Travel Research*, 58(1), 3–24. <https://doi.org/10.1177/0047287517744671>
- Aratuo, D.N., & Etienne, X.L. (2019). Industry level analysis of tourism-economic growth in the United States. *Tourism Management*, 70, 333–340. <https://doi.org/10.1016/j.tourman.2018.09.004>
- Arslanturk, Y., Balcilar, M., & Ozdemir, Z.A. (2011). Time-varying linkages between tourism receipts and economic growth in a small open economy. *Economic Modelling*, 28(1–2), 664–671. <https://doi.org/10.1016/j.econmod.2010.06.003>
- Aslan, A. (2014). Tourism development and economic growth in the Mediterranean countries: evidence from panel Granger causality tests. *Current Issues in Tourism*, 17(4), 363–372. <https://doi.org/10.1080/13683500.2013.768607>
- Balaguer, J., & Cantavella-Jordá, M. (2002). Tourism as a long-run economic growth factor: the Spanish case. *Applied Economics*, 34(7), 877–884. <https://doi.org/10.1080/00036840110058923>
- Balcilar, M., Van Eyden, R., Inglesi-Lotz, R., & Gupta, R. (2014). Time-varying linkages between tourism receipts and economic growth in South Africa. *Applied Economics*, 46(36), 4381–4398. <https://doi.org/10.1080/00036846.2014.957445>
- Bilen, M., Yilanci, V., & Eryüzü, H. (2017). Tourism development and economic growth: a panel Granger causality analysis in the frequency domain. *Current Issues in Tourism*, 20(1), 27–32. <https://doi.org/10.1080/13683500.2015.1073231>
- Chulaphan, W., & Barahona, J.F. (2018). Contribution of disaggregated tourism on Thailand's economic growth. *Kasetsart Journal of Social Sciences*, 39(3), 401–406. <https://doi.org/10.1016/j.kjss.2017.07.012>
- Dickey, D.A., & Fuller, W.A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association*, 74(366a), 427–431. <https://doi.org/10.1080/01621459.1979.10482531>
- Dickey, D.A., & Fuller, W.A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. *Econometrica*, 49(4), 1057–1072. <https://doi.org/10.2307/1912517>
- Dogru, T., & Bulut, U. (2018). Is tourism an engine for economic recovery? Theory and empirical evidence. *Tourism Management*, 67, 425–434. <https://doi.org/10.1016/j.tourman.2017.06.014>
- Dumitrescu, E.I., & Hurlin, C. (2012). Testing for Granger non-causality in heterogeneous panels. *Economic Modelling*, 29(4), 1450–1460. <https://doi.org/10.1016/j.econmod.2012.02.014>
- Eeckels, B., Filis, G., & Leon, C. (2012). Tourism income and economic growth in Greece: Empirical evidence from their cyclical components. *Tourism Economics*, 18(4), 817–834. <https://doi.org/10.5367%2Fte.2012.0148>
- Eyuboglu, S., & Eyuboglu, K. (2020). Tourism development and economic growth: an asymmetric panel causality test. *Current Issues in Tourism*, 23(6), 659–665. <https://doi.org/10.1080/13683500.2019.1588863>
- Granger, C. W. (1969). Investigating causal relations by econometric models and cross-spectral methods. *Econometrica*, 37(3), 424–438. <https://doi.org/10.2307/1912791>
- Hurri, S., Muhammad, S., Jamal, A., & Majid, M.S.A. (2019). Do exports of oil and gas still matter for regional economic growth of Sumatra, Indonesia? *Regional Science Inquiry*, 11(2), 9–18. http://www.rsijournal.eu/ARTICLES/June_2019/SI/1.pdf
- Hye, Q.M.A., & Khan, R.E.A. (2013). Tourism-led growth hypothesis: A case study of Pakistan. *Asia Pacific Journal of Tourism Research*, 18(4), 303–313. <https://doi.org/10.1080/10941665.2012.658412>

- Johansen, S. (1991). Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. *Econometrica*, 59(6), 1551–1580. <https://doi.org/10.2307/2938278>
- Johansen, S. (1995). *Likelihood-based Inference in Cointegrated Vector Autoregressive Models*. Oxford: Oxford University Press.
- Kadir, N., Zaini, M., & Karim, A. (2012). Tourism and economic growth in Malaysia: Evidence from tourist arrivals from ASEAN-5. *Economic Research*, 25(4), 1089–1100. <https://doi.org/10.1080/1331677X.2012.11517550>
- Kang, S., Kim, J., & Nicholls, S. (2014). National tourism policy and spatial patterns of domestic tourism in South Korea. *Journal of Travel Research*, 1–14. <https://doi.org/10.1177%2F0047287514522875>
- Khalil, S., Kakar, M.K., & Waliullah. (2007). Role of tourism in economic growth: Empirical evidence from Pakistan economy. *Pakistan Development Review*, 46(4), 985–995. <https://www.jstor.org/stable/41261208>
- Liu, H., & Song, H. (2018). New evidence of dynamic links between tourism and economic growth based on mixed-frequency granger causality tests. *Journal of Travel Research*, 57(7), 899–907. <https://doi.org/10.1177/0047287517723531>
- Majid, M.S.A. (2007). Does financial development cause economic growth in the ASEAN-4 countries?. *Savings and Development*, 31(4), 369–398. <https://www.jstor.org/stable/41406460>
- Majid, M.S.A., & Kassim, S.H. (2015). Assessing the contribution of Islamic finance to economic growth: Empirical evidence from Malaysia. *Journal of Islamic Accounting and Business Research*, 6(2), 292–310. <https://doi.org/10.1108/JIABR-07-2012-0050>
- Manzoor, F., Wei, L., & Asif, M. (2019). The contribution of sustainable tourism to economic growth and employment in Pakistan. *International journal of environmental research and public health*, 16(19), 3785. <https://doi.org/10.3390/ijerph16193785>
- Mohapatra, S. (2018). Investigating the tourism and economic growth linkage: a panel causality analysis for the SAARC countries. *Asia Pacific Journal of Tourism Research*, 23(6), 573–583. <https://doi.org/10.1080/10941665.2018.1468345>
- Narayan, P.K. (2010). Tourism and economic growth: a panel data analysis for Pacific Island countries. *Tourism Economics*, 16(1), 169–183. <https://doi.org/10.5367%2F0000000010790872006>
- Nunkoo, R., Seetanah, B., Jaffur, Z.R.K., Moraghen, P.G.W., & Sannasee, R.V. (2020). Tourism and economic growth: A meta-regression analysis. *Journal of Travel Research*, 59(3), 404–423. <https://doi.org/10.1177/0047287519844833>
- Oh, C.O. (2005). The contribution of tourism development to economic growth in the Korean economy. *Tourism Management*, 26(1), 39–44. <https://doi.org/10.1016/j.tourman.2003.09.014>
- Ohlan, R. (2017). The relationship between tourism, financial development and economic growth in India. *Future Business Journal*, 3(1), 9–22. <https://doi.org/10.1016/j.fbj.2017.01.003>
- Paramati, S.R., Alam, M.S., & Chen, C.F. (2017). The effects of tourism on economic growth and CO2 emissions: a comparison between developed and developing economies. *Journal of Travel Research*, 56(6), 712–724. <https://doi.org/10.1016/j.fbj.2018.09.001>
- Phillips, P.C.B., & Hansen, B.E. (1990). Statistical inference in instrumental variables regression with I (1) Processes. *Review of Economic Studies*, 57(1), 99–125. <https://doi.org/10.2307/2297545>
- Phiri, A. (2016). Tourism and Economic Growth in South Africa: Evidence from Linear and Nonlinear Cointegration Frameworks. *International Research Journal*, 14(1), 31–53. http://www.fm-kp.si/zalozba/ISSN/1581-6311/14_1.htm
- Ribeiro, E.D.C., & Wang, B. (2020). Tourism led growth hypothesis: Has the tourism industry an impact on the economic growth of Sao Tome and Principe?. *International Journal of Economics and Financial Issues*, 10(1), 180–185. <https://doi.org/10.32479/ijefi.9105>
- Risso, W.A. (2018). Tourism and economic growth: A worldwide study. *Tourism Analysis*, 23(1), 123–135. <https://doi.org/10.3727/108354218X15143857349828>
- Roudi, S., Arasli, H., & Akadiri, S.S. (2019). New insights into an old issue—examining the influence of tourism on economic growth: evidence from selected small island developing states. *Current Issues in Tourism*, 22(11), 1280–1300. <https://doi.org/10.1080/13683500.2018.1431207>
- Salawu, M.K. (2020). Tourism and Economic Growth in African Largest Economy. *Eurasian Journal of Economics and Finance*, 8(2), 68–84. <https://doi.org/10.15604/ejef.2020.08.02.002>
- Seghir, G.M., Mostéfa, B., Abbes, S.M., & Zakarya, G.Y. (2015). Tourism spending-economic growth causality in 49 countries: A dynamic panel data approach. *Procedia Economics and Finance*, 23, 1613–1623. [https://doi.org/10.1016/S2212-5671\(15\)00402-5](https://doi.org/10.1016/S2212-5671(15)00402-5)
- Sokhanvar, A., Çiftçioglu, S., & Javid, E. (2018). Another look at tourism-economic development nexus. *Tourism Management Perspectives*, 26, 97–106. <https://doi.org/10.1016/j.tmp.2018.03.002>
- Srinivasan, P., Kumar, P.K.S., & Ganesh, L. (2012). Tourism and economic growth in Sri Lanka: An ARDL bounds testing approach. *Environment and Urbanization Asia*, 3(2), 397–405. <https://doi.org/10.1177%2F0975425312473234>
- Su, Y., Cherian, J., Sial, M.S., Badulescu, A., Thu, P.A., Badulescu, D., & Samad, S. (2021). Does tourism affect economic growth of China? A panel Granger causality approach. *Sustainability*, 13(3), 1349. <https://doi.org/10.3390/su13031349>
- Tang, C.F., & Tan, E.C. (2015). Does tourism effectively stimulate Malaysia's economic growth? *Tourism Management*, 46, 158–163. <https://doi.org/10.1016/j.tourman.2014.06.020>
- Tang, C.F., & Tan, E.C. (2018). Tourism-led growth hypothesis: A new global evidence. *Cornell Hospitality Quarterly*, 59(3), 304–311. <https://doi.org/10.1177/1938965517735743>
- Wu, T.P., & Wu, H.C. (2018). The causal nexus between international tourism and economic development. *Tourism Analysis*, 23(1), 17–29. <https://doi.org/10.3727/108354218X15143857349468>
- Yusof, R.M., & Majid, M.S.A. (2007). Macroeconomic variables and stock returns in Malaysia: An application of the ARDL bound testing approach. *Savings and Development*, 31(4), 449–469. <https://www.jstor.org/stable/41406464>
- Zuo, B., & Huang, S. (2018). Revisiting the tourism-led economic growth hypothesis: The case of China. *Journal of Travel Research*, 57(2), 151–163. <https://doi.org/10.1177/0047287516686725>
- ***World Bank. (2019). World Development Indicators. Retrieved December 7, 2019, <https://data.worldbank.org/indicator/ST.INT.RCPT.CD>
- ***World Tourism Organization. (2018). UNWTO Tourism Highlights, 2018 Edition. Madrid: UNWTO. <https://doi.org/10.18111/9789284419876>

TOURISM MANAGEMENT: A PANACEA FOR SUSTAINABILITY OF HOSPITALITY INDUSTRY

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Abstract: The aim of the study is to examine the effect of tourism management as a panacea for sustainability of hospitality industry in Nigeria. The study applied a quantitative method involving a survey design. A questionnaire measurement instrument was constructed and deployed on a sample of 455 respondents in the hotels, packs, tourism destinations and attraction sites included in the study. Exploratory Factor Analysis (EFA) was used to validate the constructs in the measurement instrument. Structural Equation Model (SEM) was used to estimate structural relationship between tourism management dimensions and sustainability of hospitality industry. The analysis was aided by AMOS software version 23. The results showed that destinations management, management of attraction sites, management of tourist transportation system, management of tourism intermediaries and management of security system has significant positive effect on the sustainability of hospitality industry. Therefore, the study concluded that effective tourism management and adoption of workable strategies is vital for the development and growth of the tourism sector and significant towards enhancing the tourism ecosystem and sustainability of hospitality industry.

Key words: tourism management, sustainability, hospitality industry, destinations, attraction sites.

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INTRODUCTION

In an era of global pandemic which affected virtually all sectors of the economy of nations, particularly developing countries, Nigeria inclusive; effective tourism management is significant for the recovery and sustainability of hospitality industry, economic growth and employment generation. While corona virus pandemic affected all industries, its influence on the hospitality industry is evidence due in part to travel restrictions, lockdowns imposed by state and federal agencies and significant postponement of events as well as social distancing restrictions, leading to cancelation of holidays and business trips which cause a steep decline in hospitality firms revenue and as well impeded the hospitality industry in Nigeria, requiring effective tourism management to salvage the menace. Tourism management is the planning, coordination, controlling, and organising several activities in destinations, attraction sites, transportation systems, provisions of hotel accommodations, tours, intermediaries and effective management of security network of the state/region to ensure the safety and security of tourist and others visitors, hotels assets, destinations, the host community and the environment as well as to ensure the sustainability of hospitality industry (Ekundayo et al., 2018). In recent time, tourism management have become one of the cardinal themes of research due to its significance to the sustainability of hospitality industry and communities. The sustainability of hospitality industry has continued to receive global attention by researchers due to its significance in employment generation and economic growth of nations, particularly developing countries. The sustainability of hospitality industry is the capacity of firms in the industry to maintain and operate at a particular rate or level over a long period of time while remaining profitable and sustainable (Todorut and Cîrnu, 2012).

However, poor destination management, lack of infrastructure, transportation system and poor security network has impeded on the growth of tourist destinations and attractions sites in developing countries like Nigeria. A tourist destination is a location which has the required services, infrastructure, security, transportation system, accommodation and other facilities necessary to attract and meet tourist desires and enhance their stay in the destination (Soteriades, 2012). Destination management encompasses the planning, organising and coordination of activities such as attractions, amenities,

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marketing, tours, accommodations and events that enhances tourist and visitor's experience (Timareva et al., 2015). Also poor management and development of attraction sites affect the growth of tourist destination as well as the sustainability of hospitality industry. Attraction sites are major component of tourism destination which are located within the destinations. They are key product of the tourism destination including tourism activities, entertainment, services/leisure, natural/cultural value, local scenery, built beauty, amusement, events and heritage (Barišiu and Mariü, 2012).

Importantly, lack of effective management of transportation systems and good road network to and around tourism destinations affects the sustainability of hospitality industry. Efficient transportation systems and good road network in and around the destination and attraction sites as well as hotels enhances tour of the destinations and attraction sites by tourist and enhances tourist holidaying in the destination which impacts on the profitability and sustainability of the hospitality industry. Further, despite the significance contribution of tourism intermediaries on the sustainability of hospitality firms, tourism intermediaries have continued to face challenges due to poor management of intermediaries activities including tour agents, travel operators, wholesalers, retailers and distributors which impeded on the performance of destinations as well as the hospitality industry (Isidoro and Pilar, 2020). Similarly, the poor management of security networks in tourism destinations, attractions sites, transportation systems and intermediaries activities as well as in tourism location, state or region have continued to impede on the performance of destinations, attraction sites, parks and hotels which affect the overall sustainability of the hospitality industry particularly in developing countries. Effective security system is important for the smooth operation of the hospitality industry and ecotourism activities. Improving security network in a state or region as well as in and around tourism destinations enhances tourist tour, comfort, confidence, loyalty and repeated patronage. Also, effective security management ensures the protection of destinations, attraction sites and hotels asset which enhances the sustainability of the hospitality industry. Despite the significance of destinations management, management of attraction sites, tourist transportation system, tourism intermediaries and security systems in enhancing the sustainability of the hospitality industry, greater attention has not been given to tourism management issues with dire consequences on the sustainability of hospitality industry (Malheiro et al., 2020; Gaetano et al., 2021). Hence, the motivation to examine the five factors/dimensions of tourism management such as destinations management, management of attraction sites, tourist transportation system, tourism intermediaries and security systems on the sustainability of hospitality industry. However, although the concept of tourism management and sustainability has gain prominence as a field of study in management in recent time, little attention has been given by researchers on the influence of tourism management as a catalyst to the sustainability of hospitality industry that deserves a systematic examination. Therefore, this paper aims to bridge this gap by investigating tourism management as a panacea for sustainability of hospitality industry.

LITERATURE REVIEW

Tourism management is significant and plays a vital role in enhancing the sustainability of hospitality industry. It encompasses several activities including planning and organising tours of destinations and attraction sites, travelling arrangement, provision of transportation and accommodation facilities, management of intermediaries and security network in tourism destinations to improve sustainability of the hospitality industry (Brebba and Pineda, 2012). Effective tourism management is important and offers significant impact on the growth and sustainability of hospitality industry. As indicated by Todorut and Cîrnu (2012), tourism is the management of commercial organisation and operation of holidays and visits by tourist and other guest to attraction sites, destinations, hotels, packs and other places of interest. Effective tourism management is significant for the sustainability of hospitality firms and plays a key role in job creation and economic growth. It is important for state agencies and other tourism regulators to ensure effective tourism management and development of tourism destination and attraction sites in order to improve the potentials and sustainability of hospitality industry. This is necessary because the activities of tourism regulators has significant influence on the performance of hospitality firms (Villanueva-Álvaro et al., 2017). Effective management of destinations, attractions sites, transportation systems as well as tourism intermediaries and security network is important in the tourism development and sustainability of hospitality industry. Proper tourism management enhances tourist holidaying and guest stay in a destination and leads to improved patronage and repeat visits to the destination and other attraction sites. Study by Barišiu and Mariü (2012) indicated that effective tourism management relates with performance of hospitality industry and enhances tourism growth and development.

Destinations management

In recent time, destination management have continued to dominate the discussion in the tourism management literature due to its significance to the sustainability of the hospitality industry and the development of the tourism sector, particularly in developing nations. Destination management encompasses the planning, organising and coordination of activities such as attractions, amenities, marketing, tours, accommodations and events targeted at enhancing tourist and visitors experience in the destination (Foris et al., 2020). It involves the development of policies, strategies and programmes that will create awareness on the unique story and attractiveness of the tourist destinations in order to attract tourist and visitors to the destination, and as well enhancing the revenue of the destination and the sustainability of the hospitality industry. A tourism destination is a geographical region or place with attractions and facilities that can enhance tourist experience as well as generate significant revenue from tourism. Effective destination management is germane to the success of tourism sector and the sustainability of hospitality industry (Goffi et al., 2019).

Iwara et al. (2017) indicated that effective destination management improved the provision of modern facilities, accommodations, amenities, security and continuous improvement of services offered in the destination, thereby providing memorable tourist and visitors experience as well as increasing tourist/visitors influx in the destinations which results in

increased revenue generation for the sustainability of the hospitality industry. Paresashvili and Maisuradze (2016) emphasized that ensuring the availability of required technology and internet facilities in the destination enhances tourist experience and enables tourist and visitors to have information/data on the quality of services, amenities and attractions as well as images of the destination which could motivate tourist to visit the destination. Also, such facilities will enable tourist write reviews about their experiences in the destination which could create awareness on the destination; as such reviews may be shared in different social media platforms. Effective destination management enhances the development of the destinations, tourism supply, facilities/infrastructure, improved services and attract repeat visit by tourist and visitors to the destinations (Zemla, 2016; Chia et al., 2021). Study by Timareva et al. (2015) indicated that destination management enhances tourism development and impacts on the performance of hospitality firm.

Management of attractions sites

Attraction sites are important aspect of a destination which enhances tourist and visitors experience. Adequate management of attractions sites contributes to the development of tourism sector in a nation as well as the sustainability of the hospitality industry (Setokoe, 2021). Attraction sites are areas, region or places which have unique features such as exhibited cultural and natural value, historical importance, built beauty, heritage, events or natural environment and other facilities that are of interest and enhance visitors and tourist experience (Leask, 2016). Adequate management of attraction sites enhances the development of destinations as well as the tourism sector and lead to improved revenue generation and sustainability of hospitality firms. Mazilu (2010) indicated that effective management of attractions sites increases the potentials of a destination and enhances tourist and customers' patronage, since well-managed and developed attraction sites grab tourist attention and entice them for a visit, thereby increasing the influx of tourist and visitors in a destination. Proper management of the attraction sites encompasses the planning, coordination and development of facilities/infrastructures in the attraction sites to improve visitors experience as well as developing strategies that could ensure the continuous maintenance of equipment, facilities and improve services in the attraction sites. Barišiu and Mariu (2012) indicated that adequate management of parks and other attraction sites impacts significantly on the development and growth of tourism in a nation. Similarly, study by Richards (2002) revealed that attractions sites relate significantly with the performance of the tourism industry.

Management of tourist transportation systems

Transportation systems are an integral aspect of tourism development and play a vital role in enhancing the viability of destinations and attraction sites. Adequate management of tourist transportation systems enhances accessibility to destination and attraction sites as well as tour experience for both tourist and visitors. Management of transportation system is the planning and coordination of transportation activities and networks including road, sea, rail and air transport to tourist destinations and attraction sites as well as within and outside the location to improve accessibility to the destinations and enhance visitors and tourist comfort (Eden, 2005). Improved management of transportation system increases transportation options for recreational travel to destinations and attraction sites as well as reducing traffic in destinations and attractions sites (Lomhmann and Duval, 2011). However, effective transportation systems are important to tourism development and critical in moving tourist and visitors from one destination to another. Accessibility to tourism destination through modern and improved transportation increases the viability of destinations and attraction sites and leads to increased revenue generation for the sustainability of hospitality industry (Palhares, 2003). Vengesayi et al. (2009) good road network within and outside the tourist destination enhances tour experience within and outside the destinations and attraction sites. It is important to plan strategically for tourist transportation because of its impact on tourist experience and revenue generation capacity of the destination. Alasgarova (2017) indicated that adequate tourist transportation systems impact significantly on the growth of destination and attraction sites as well as the performance of hospitality firms.

Management of tourism intermediaries

Tourism intermediaries plays important role on the growth of tourism industry and in enhancing tourist experience in the destination. Effective management and regulation of tourism intermediaries contributes to the growth of destinations and the tourism sector as well as the sustainability of the hospitality industry. Management of tourism intermediaries involves the planning, coordination and regulations of activities of intermediaries including distribution and travel agents, tour operators, wholesalers, and online travel agencies to ensure efficient services of intermediaries in order to improve the performance of destinations and tourist experience (Paresashvili and Maisuradze, 2016). Mazilu (2010) indicated that effective management of tourism intermediaries enhances performance of destinations and hospitality industry.

Effective management and regulation of the activities of tourism intermediaries enhances the supply of essential goods and services to the tourism destination which increases the efficiency and service delivery of a destination (Kanellou, 2005). Also, the services of tourism intermediaries such as tour agents, wholesalers, and online travel agencies contribute significantly to tourist and visitors experience. Management of tourism intermediaries is vital since their services involve informing potential tourist and marketing tourism products which could encourage tourist visit to the destination as well as increase the revenue of the destination and performance of the hospitality industry (Foris et al., 2020). Richards (2002) indicated that effective management of tourism intermediaries and attractions impact on the performance of destination and the hospitality industry.

Management of security system

Security is important for the success of the tourism industry and plays a vital role in protecting tourism infrastructure. Management of security system increases the safety and security of tourist and visitors to a destination. Improved security

system increases the confidence of tourist and visitors in a destination and encourages repeat visit by tourist. Management of security system involves the planning, organising and coordinating security in tourism destination in order to ensure the protection of tourism infrastructure, facilities, assets, tourist and visitors to tourism destinations (Adora, 2010). Without effective security, tourist cannot successfully explore or visit attraction sites in a destination in order to experience the destinations. The perception of security and safety of a destination by tourist and visitors' influences tourist intention to visit a destination as well as encouraging repeat visit to destinations. It is important to pay particular attention to security management in tourism destinations and attraction sites and develop strategies that will improve the safety and security of tourist and tourism infrastructure in a destination (Vengesai et al., 2009). Tourism security should be consistent and remain on a high level to ensure the safety of tourist and tourism asset. Effective security management ensures access control that only enables authorized persons, tourist and visitors into the destinations and attraction sites in order to maintain security of the destination for improved tourist comfort. Also, adequate security management ensures proper monitoring and surveillance of tourism destination and prevents unauthorized persons from gaining access to the destination (Hamarneh and Jerabek, 2018). Brondoni (2016) indicated that effective security management increases the security and safety of destination and impact significantly on the performance of hospitality industry.

Sustainability of hospitality industry

Sustainability of hospitality industry plays important role in economic growth and development, employment generation and contributes significantly to a nation's GDP as well as economic recovery, particularly in the post Covid-19 era. Sustainability of the hospitality industry is the ability of hospitality firms in the industry to operate in an economically, socially and environmentally acceptable way while preserving the natural, beauty built facilities/infrastructures, heritage and cultural attractions that motivate tourist to visit the destination as well as efficient utilization of resources in a creative and innovative way in order to operate sustainably over a long period (Brebba and Pineda, 2012; Setokoe, 2021). Adequate tourism management is significant to the sustainability of hospitality industry and enhances tourist experience in the destination which encourages repeat visit as well as patronage.

Villanueva-Álvaro et al. (2017) indicated that effective tourism management is vital towards enhancing the sustainability of the hospitality industry. Also, proper destinations management is significant towards enhancing tourist/visitors experience, attract repeat visit and increase the revenue generation potential of the destination as well as sustainability of the hospitality industry (Brebba and Pineda, 2012). Iwara et al. (2017) highlighted that regulators and state tourism management agencies should focus attention on the management and development of tourism attraction sites because of its potentials towards enhancing the sustainability and growth of the hospitality industry. Furthermore, adequate management of tourist transportations systems as well as tourism intermediaries could improve tourist experience, visitors' patronage and sustainability of the hospitality industry. Again, effective management of security system could ensure the safety and security of tourist, visitors and tourism infrastructure/facilities as well as enhancing the sustainability of the hospitality industry (Adora, 2010). Therefore, it becomes important to ensure effective tourism management due to its impact on the sustainability of the hospitality industry and the nation economy in general.

Theoretical background

The theoretical foundation that motivated the selection of the five factors/dimensions of tourism management (destinations management, management of attraction sites, management of tourist transportation systems and management of security system) utilized in the study was based on the dynamic game theory model for tourism supply chains (Keskin and Ucal, 2021). The theory emphasizes the importance of utilizing the component of tourism supply such as destination, intermediaries, attractions, transportation and activities to enhance effective tourism management (Keskin and Ucal, 2021). However, Sanhakot (2021) asserted that effective management of security system plays a vital role in enhancing tourism management as well as tourism development in a nation, particularly developing countries where issues of security is a constant concern. According to World Tourism Organisation (2021), tourism is sustainable when it fully utilizes the tourism supply component in tourism management, thereby enhancing the sustainability of the hospitality industry. Unhasuta et al. (2020) stress the importance of utilizing tourism supply components such as destination, intermediaries, attractions, transportation and activities in tourism management to enhance the eco-tourism sustainability as well as the hospitality industry. Similarly, Tolulope et al. (2021) indicated that proper management of tourism supply is significant to tourism sustainability as well as the hospitality industry. Therefore, it becomes pertinent to examine the five dimensions/factor of tourism supply in enhancing effective tourism management such as (destinations management, management of attraction sites, management of tourist transportation systems and management of security system) on the sustainability of hospitality firms due to their influence on tourism sustainability and the hospitality industry.

The study aim

The aim of the study is to investigate the effect of tourism management as a panacea for the sustainability of hospitality industry in Nigeria. Specifically, the study examines the effect of:

1. Destinations management on the sustainability of hospitality industry;
2. Management of attraction sites on the sustainability of hospitality industry;
3. Management of tourist transportation systems on the sustainability of hospitality industry;
4. Management of tourism intermediaries on the sustainability of hospitality industry and
5. Management of security system on the sustainability of hospitality industry.

Hypotheses development

Based on the literature review, this study proposed the following hypotheses:

H₁: *Destinations management has a significant effect on the sustainability of hospitality industry.*

H₂: *Management of attraction sites has a significant effect on the sustainability of hospitality industry.*

H₃: *Management of tourist transportation systems has a significant effect on the sustainability of hospitality industry.*

H₄: *Management of tourism intermediaries has a significant effect on the sustainability of hospitality industry.*

H₅: *Management of security system has a significant effect on the sustainability of hospitality industry.*

MATERIALS AND METHODS

The study applied a quantitative method involving a survey design to analyse the effect of tourism management as a panacea for the sustainability of hospitality industry in Nigeria. The population of the study was the entire 455 employees from 12 hotels, 3 packs and 10 tourism destinations and attraction sites in Cross River State, Nigeria. The sampling technique adopted for the study was the census method. Since the study adopted the census method, the criteria was to select all the 8 four star and 4 five star hotels, totalling 12 hotels, the entire 3 existing pack and the all the 10 functional tourist destinations currently in operation in the study area. The rationale for this sampling method/criteria for selection was to enable all the 455 employee from the 12 hotels, 3 packs and 10 tourism destinations and attraction sites in the study area full and equal participation in the study since the population of the hotels, packs and destination/attraction sites was manageable and controllable. Based on the survey method employed for the research, questionnaire instrument was developed on the variables of the research and conveniently distributed to the sampled 455 employees in the study area.

The questionnaire instrument was developed to cover the variables of the study; tourism management measured by (destinations management, management of attraction sites, management of tourist transportation systems, management of tourism intermediaries and management of security system) and sustainability of hospitality. The first version of the questionnaire measurement instrument comprised 36 items measuring the six variables: Destinations Management (DM), Management of Attraction Sites (MAS), Management of Tourist Transportation Systems (MTTS), Management of Tourism Intermediaries (MTI), Management of Security System (MSS) and Sustainability of Hospitality Industry (SHI) utilized in the study. In conducting the Confirmatory Factor Analysis (CFA) to test if the measures of the variables are consistent with the aim of the study and to validate the measurement instrument, the Composite Reliability (CR), Standardized Factor Loadings (SFL), Average Variance Extracted (AVE) and Cronbach's alpha coefficients with values of .70 or higher were utilized (Hair et al., 2010). After executing the CFA analysis, ten items were deleted, two each from MTTS, MTI, MSS and MAS variables and one each from DM and SHI variables respectively due to low factor loadings. The remaining 26 items were retained and used in the study. The test of the study hypotheses was performed using SEM analysis to estimate the structural relationship between tourism management (destinations management, management of attraction sites, management of tourist transportation systems, management of tourism intermediaries and management of security system) on Sustainability of Hospitality Industry.

RESULTS

Table 1 presents the summary results of the means, standard deviations (SD), and correlation matrix of the study variables. As indicated in Table 1, the means were well above 2.5 and standard deviation were all below one in (DM, MAS, MTTS, MTI, MSS and SHI) respectively indicating a good response and clustered around the mean. Also, Table 1 indicated a satisfactory and acceptable discriminant validity of the variables since the square root of AVE between any two variables was higher than the variance share between the variables and other constructs as well as their corresponding intercorrelations (Fornell and Larcker, 1981).

Table 1. Summary results of mean, standard deviation and correlation matrix

VARIABLES	Mean	SD	1	2	3	4	5	6
Destinations Management (DM)	4.561	0.552	0.815					
Management of Attraction Sites (MAS)	4.463	0.636	0.401	0.737				
Management of Tourist Transportation System (MTTS)	4.211	0.473	0.376	0.352	0.787			
Management of Tourism Intermediaries (MTI)	4.431	0.512	0.401	0.411	0.431	0.776		
Management of Security System (MSS)	4.363	0.456	0.382	0.331	0.328	0.291	0.861	
Sustainability of Hospitality Industry (SHI)	4.018	0.367	0.360	0.357	0.287	0.397	0.316	0.852

Table 2 presents the results of the CFA analysis. The variables evaluated in the analysis were tourism management (destinations management, management of attraction sites, management of tourist transportation systems, management of tourism intermediaries, and management of security system) and sustainability of hospitality industry. In conducting the CFA analysis, SFL higher than (>.70), AVE (>.50), CR (>.50) and Cronbach Alpha of .70 or higher was used to evaluate the measurement instrument (Hair et al., 2010; Kline, 2015). Furthermore, the results of the CFA in Table 2 showed SFL for the variables in the study, DM variable had SFL range of (0.718-0.880), MAS (0.788-0.854), MTTS (0.817-0.873), MTI (0.801-0.855), MSS (0.731-0.871) and SHI (0.799-0.889) respectively. Similarly, the model showed CR range of (0.821-0.889), AVE (0.687-0.792) and Cronbach Alpha range of (0.779-0.887) in MAS, MTTS, MTI, MSS and SHI respectively which was satisfactory and acceptable (Hair et al., 2010; Kline, 2015).

Also, the goodness of fit indices of the measurement model was examine using RMSEA (<0.08), CMIN/DF (<3), CFI (> 0.9) and GFI (>0.9) (Hair et al., 2010; Kline, 2015). The results in Table 2 showed (RMSEA 0.058; CMIN/DF 2.824;

CFI 0.946 and GFI 0.911) for the study variables (DM, MAS, MTTTS, MTI, MSS and SHI) respectively, which indicated the goodness of fit of the model and was satisfactory and acceptable. In assessing the results of the collinearity statistic, Tolerance value (>0.2) and Variance Inflation Factors ($VIF < 5.0$) was used (Hair et al., 2010). The result in Table 2 showed that the obtained tolerance values range from (.426-.472) and VIF (1.321-1.624), which was satisfactory and acceptable.

Table 2. Summary of CFA results for the measurement instrument

Variables	Items Codes	SFL	AVE	CR	Cronbach Alpha	Collinearity Statistics Tolerance	VIF
Destinations Management (DM)	DM1	0.880					
	DM2	0.831					
	DM3	0.718	0.792	0.881	0.887	.426	1.533
	DM4	0.852					
	DM5	0.844					
Management of Attraction Sites (MAS)	MAS1	0.842					
	MAS2	0.809					
	MAS3	0.788	0.756	0.821	0.799	.472	1.577
	MAS4	0.854					
Management of Tourist Transportation System (MTTS)	MTTS1	0.873					
	MTTS2	0.817					
	MTTS3	0.837	0.697	0.854	0.874	.431	1.478
	MTTS4	0.823					
Management of Tourism Intermediaries (MTI)	MTI1	0.842					
	MTI2	0.855					
	MTI3	0.801	0.687	0.859	0.861	.429	1.321
	MTI4	0.811					
Management of Security System (MSS)	MSS1	0.867					
	MSS2	0.731	0.736	0.851	0.882	.457	1.465
	MSS3	0.864					
	MSS4	0.871					
Sustainability of Hospitality Industry (SHI)	SHI1	0.889					
	SHI2	0.822					
	SHI3	0.806	0.691	0.889	0.876	.445	1.624
	SHI4	0.799					
	SHI5	0.777					
Summary of model fit indexes							
	CMIN/DF	RMSEA	CFI	GFI			
	2.824	0.058	0.946	0.911			

Note: RMSEA=Mean Square Error of Approximation; CMIN/DF=Chi-Square/degree of freedom=CFI; Comparative Fit Index; GFI=Goodness of Fit Index

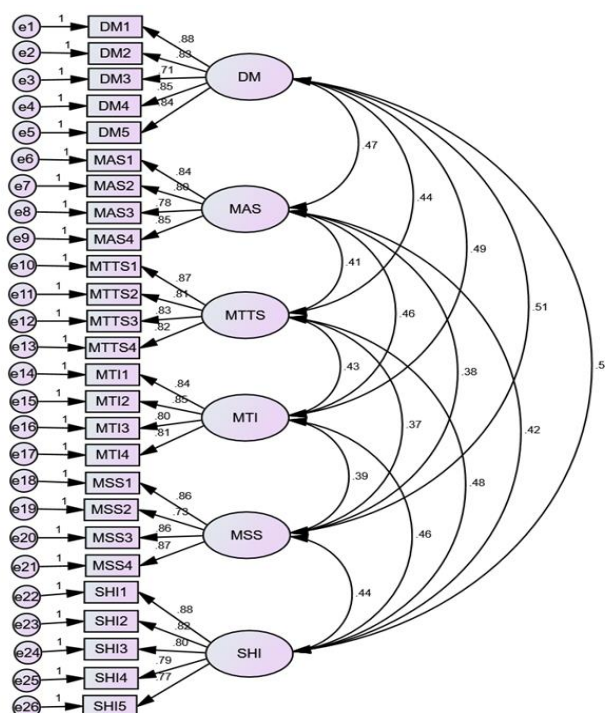


Figure 1. Path analysis results for the questionnaire measurement instrument

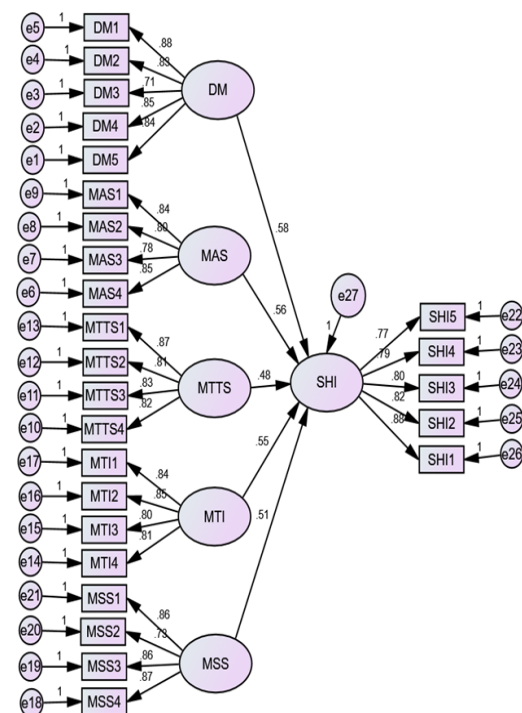


Figure 2. Structural path analysis results for the study model

Table 3 showed summary results for the test of the study hypotheses (H_1 - H_5). The result of H_1 showed that destinations management has a significant positive effect on the sustainability of hospitality industry ($\beta=0.58$; $p=0.00$). Therefore, H_1 was supported, implying that a 1% increase in destinations management will result in a 58% increase on the sustainability of hospitality industry. In examining H_2 , the result showed that management of attraction sites has a significant positive effect on the sustainability of hospitality industry ($\beta=0.56$; $p=0.00$), which supported the initial hypothesis H_2 . This result indicated that a 1% increase in the management of attraction sites will result to a 56% increase on the sustainability of hospitality industry. Furthermore, the result supported H_3 , that management of tourist transportation systems has a significant positive effect on the sustainability of hospitality industry ($\beta=0.48$; $p=0.00$). Consistent with H_3 , the result revealed that when management of tourist transportation systems increase by 1%, sustainability of hospitality industry accordingly increases by 48%. Similarly, the result of H_4 revealed that management of tourism intermediaries has a significant positive effect on the sustainability of hospitality industry ($\beta=0.55$; $p=0.00$). Consequently, H_4 was supported inferring that a 1% increase in management of tourism intermediaries will lead to a 55% increases on the sustainability of hospitality industry.

Finally, H_5 indicated that management of security system has a significant positive effect on the sustainability of hospitality industry ($\beta=0.51$; $p=0.00$). On the basis of this result, when management of security system increases by 1%, it leads to a 51% increase on the sustainability of hospitality industry. Therefore, test of the study hypotheses showed that tourism management has a significant positive effect on the sustainability of hospitality industry.

Table 3. Summary results for the test of hypotheses

Hypotheses	Variables	path	Variables	Standardi-Zed beta (β)	P-Value	Result
H_1	Sustainability of Hospitality industry (SHI)	< ---	Destinations Management (DM)	0.58	0.000	Supported
H_2	Sustainability of Hospitality industry (SHI)	< ---	Management of Attraction (MAS)	0.56	0.000	Supported
H_3	Sustainability of Hospitality industry (SHI)	< ---	Management of Tourist Transportation System (MTTS)	0.48	0.000	Supported
H_4	Sustainability of Hospitality industry (SHI)	< ---	Management of Tourism Intermediaries (MTI)	0.55	0.000	Supported
H_5	Sustainability of Hospitality industry (SHI)	< ---	Management of Security System (MSS)	0.51	0.000	Supported

DISCUSSION

The study results further expounded the implication of tourism management on the sustainability of hospitality industry. After conducting the test of hypotheses, the findings from H_1 showed that destinations management has a significant positive effect on the sustainability of hospitality industry. The finding was established after obtaining a standardized beta value of 0.58 and a significant p-value of 0.00 which supported the initial H_1 that destinations management has a significant effect on the sustainability of hospitality industry. Aligning with this finding Timareva et al. (2015) indicated that destination management enhances tourism development and impact on the performance of hospitality firm. Similarly, Iwara et al. (2017) indicated that effective destination management improved the provision of modern facilities, accommodations, amenities, enhanced security and continuous improvement of services offered in destinations, thereby providing memorable tourist and visitors experience as well as increasing tourist/visitors influx in the destinations which results in increased revenue generation as well as sustainability of the hospitality industry. Furthermore, the study result was supported by Zemla (2016), that effective destination management enhances the development of the destinations, tourism supply, facilities/infrastructure, improve services and attract repeat visit by tourist and visitors to the destination.

Similarly, findings from H_2 revealed that management of attraction sites has a significant positive effect on the sustainability of hospitality industry. The finding confirms the initial H_2 that management of attraction sites has a significant effect on the sustainability of hospitality industry. The finding was reached after obtaining a standardized beta value of 0.56 and a p-value of 0.00. Supporting this finding, Leask (2016) in his study indicated that effective management of attractions sites increases the potentials of a destination and enhances tourist and customers' patronage, since a well-managed and developed attraction sites grab tourist attention and entice them for a visit thereby increasing the influx of tourist and visitors in a destination. Similarly, the result corroborates the study of Mazilu (2010) who indicated that adequate management of parks and other attraction sites impact significantly on the development and growth of tourism in a nation. Similarly, study by Richards (2002) revealed that attractions sites relates significantly with the performance of the tourism industry.

Furthermore, the result supported H_3 , that management of tourist transportation systems has a significant positive effect on the sustainability of hospitality industry. The finding was evidenced by a significant p-value of 0.000 and a standardized beta value of 0.48. However, supporting the finding, prior studies, particularly, Lomhmann and Duval (2011) indicated that improved management of transportation systems increases transportation options for recreational travel to destinations and attraction sites as well as reducing traffic in destinations and attractions sites. Accordingly, Alasgarova (2017) revealed that adequate tourist transportation systems impact significantly on the growth of destinations and attraction sites as well as the performance of hospitality firms. Also, Palhares (2003) indicated that accessibility to tourism destinations through modern and improved transportation systems increase the viability of destinations and attraction sites and lead to increase revenue generation for the sustainability of hospitality industry.

However, the result of H_4 supported the initial hypothesis and revealed that management of tourism intermediaries has a significant positive effect on the sustainability of hospitality industry with a standardized beta value of 0.55 and significant value of 0.00. Corroborating this finding, Mazilu (2010) indicated that effective management of tourism intermediaries enhances performance of destinations and hospitality industry. Also supporting the finding, Foris et al. (2020) asserted that management of tourism intermediaries is vital, since their services impact significantly on potential tourist and marketing of tourism products which could encourage tourist visit to the destination as well as increasing the revenue of the destinations and hospitality industry. Richards (2002) indicated that management of tourism intermediaries impacts on the performance of destinations and hospitality industry.

Finally, H_5 indicated that management of security system has a significant positive effect on the sustainability of hospitality industry. The result was obtained based on a standardized beta value of 0.51 and a p-value of 0.000, which supported the initial hypothesis that management of security system has a significant effect on the sustainability of hospitality industry. Supporting the finding Adora (2010) in his study indicated that without effective security, tourists cannot successfully explore or visit attraction sites or destinations. The perception of security and safety of a destination by tourist and visitors influence tourist intention to visit a destination as well as encouraging repeat visit to a destination. Also, Hamarneh and Jerabek (2018) stressed that effective security management ensure access control that enables only authorized persons, tourist and visitors access to tourism destinations in order to maintain security of the destination for improved tourist comfort. Similarly, Brondoni (2016) highlighted that effective security management increase the security and safety of destination and impact significantly on the performance of hospitality industry.

CONCLUSION

Tourism management has been a crucial feature of the business landscape and plays important role on the sustainability of hospitality industry and economic development of nations, particularly developing countries. However, poor tourism management and neglect of tourism sector in many developing countries impeded the development of tourism ecosystem in many countries for obvious reasons. To this end, this study explored the effect of tourism management as a panacea for sustainability of hospitality industry. Five core variables that act as catalyst to effective tourism management were utilized in the study: destinations management, management of attraction sites, management of tourist transportation systems, management of tourism intermediaries, and management of security system.

The results indicated that five hypotheses examining in the study were all supported and confirmed. Specifically, the results showed that destinations management has a significant positive effect on the sustainability of hospitality industry. Similarly, management of attraction sites has a significant positive effect on the sustainability of hospitality industry. Also, management of tourist transportation systems has a significant positive effect on the sustainability of hospitality industry. Accordingly, management of tourism intermediaries has a significant positive effect on the sustainability of hospitality industry. Lastly, management of security system has a significant positive effect on the sustainability of hospitality industry.

Therefore, it is concluded that effective destinations management, management of attraction sites, tourist transportation systems, tourism intermediaries and security system is vital for the development and growth of the tourism sector and significantly enhance the sustainability of hospitality industry as well as economic growth of nations. In other words, effective tourism management and adoption of workable strategies become germane towards enhancing the tourism ecosystem and sustainability of hospitality industry. Importantly, the results of the study have significant theoretical and practical implications. First the study contributed to the literature on tourism management from a developing country context. From the practitioner's perspective, the results of the study provided a better understanding of the implications of effective tourism management on the sustainability of hospitality industry, particularly in developing countries.

However, the research was geographically limited to the selected hotels, packs and tourism destinations and attraction sites in Cross River State, Nigeria. Also, the study was limited to five variables of tourism management. As such, other components of tourism management not covered in this study posed a limitation to the research. Therefore, future studies should seek to examine other tourism management dimensions not covered in this study to explain the significance on sustainability of hospitality industry. Also, this study should be replicated in different regions and continent with a different cultural background using a longitudinal survey to ascertain the generalizability of the result of the present study.

REFERENCES

- Adora, C.U. (2010). Managing tourism in Nigeria: The security option. *Management Science and Engineering*, 4(1), 14-25. www.cscanada.net
- Alasgarova, F. (2017). The role of tourism transport's development in economic growth. *Annals of Spiru Haret University Economic Series*, 3, 85-92. <https://www.anale.spiruhret.ro/>
- Barišić, P., & Marić, I. (2012). The role of management as a strategic tourism guideline: Case of Croatia. *International Journal of Business and Management Studies*, 1(2), 423-431. <http://universitypublications.net>
- Brebbia, C.A., & Pineda, F.D. (2012). *Sustainable tourism V: With transactions on ecology and the environment (1st Ed)*. Boston: WITPress.
- Brondoni, S.M. (2016). Global tourism and terrorism. Safety and security management, symphony. *Emerging Issues in Management*, 2, 7-16. <https://symphony.unimib.it>
- Chia, S.K., Lo, M., Razak, Z.B., Wang, Y.C., & Mohamad, A.A. (2021). Impact of destination image on tourist satisfaction: The moderating effect of information technology (IT). *GeoJournal of Tourism and Geosites*, 34(1), 88-93. <https://doi.org/10.30892/gtg34112-623>
- Eden, S. (2005). Rethinking the role of transportation in tourism. *Proceedings of the Eastern Asia Society for Transportation Studies*, 5, 1767-1777
- Ekundayo, I.M., Joram, N., & Nokuthula, C. (2018). Events as perceived panacea for sustainable tourism development in Durban, South Africa. *Journal of Good Governance and Sustainable Development in Africa* 4(2), 90-101. <http://www.rcmss.com/index.php/ijpamr>

- Foris, D., Florescu, A., Foris T., & Barabas, S. (2020). Improving the management of tourist destinations: A new approach to strategic management at the DMO level by integrated lean techniques. *Sustainability*, 12, 1-22. <https://doi.org/10.3390/su122310201>
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
- Gaetano, G., Emmanuil, T., Tiziana L., & Silvia F. (2021). Prospective tourist preferences for sustainable tourism development in small island developing states. *Tourism Management*, 82, 104178. <https://doi.org/10.1016/j.tourman.2020.104178>
- Goffi, C., Cucculelli, M., & Masiero, L. (2019). *Fostering tourism competitiveness in developing countries: The role of sustainability*, 209, 101-115. <https://doi.org/10.1016/J.JCLEPRO.2018.10.208>
- Hamarneh, I., & Jerabek, P. (2018). The impact of the security situation on tourism in the countries of the former Yugoslavia. *International Scientific Journal Security and Future*, 3, 111-115.
- Hair, JR, J. F., Black, W. R., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis (7th ed.)*. Upper Saddle River, NJ: Prentice Hall.
- Isidoro, R., & Pilar, T. (2020). Tourism intermediaries and innovation in the hotel industry. *Current Issues in Tourism*, 23(5), 641-653. <https://doi.org/10.1080/13683500.2019.1572717>
- Iwara, E.E., Bassey, A.L., & Iji, M.E. (2017). Assessing private sector as a panacea for destination development: A case study of the hospitality industry in Calabar, Nigeria. *Journal of Tourism and Management*, 2(1), 44-56. <https://doi.org/10.26465/ojtmr.2017219494>
- Kanellou, D. (2005). *The new role of intermediaries in travel and tourism distribution channels*. Brussels: European Commission Joint Research Centre.
- Keskin, K., & Ucal, M.A. (2021). A dynamic game theory of model for tourism supply chains. *Journal of Hospitality and Tourism Research*, 45(2), 304-324. <https://doi.org/10.1177/1096348020913949>
- Kline, R.B. (2015). *Principles and practice of structural equation modelling (4th ed.)*. New York: Guilford Press.
- Leask, A. (2016). Visitor attraction management: A critical review of research 2009-2014. *Tourism Management*, 57, 334-361. <https://doi.org/10.1016/J.tourman.2016.06.015>
- Lomhmann, G., & Duval, D. (2011). *Critical aspects of the tourism-transport relationship*. Contemporary Tourism Review. Oxford: Goodfellow Publishers.
- Malheiro, A., Sousa, B.B., Liberato, D., & Liberator, P. (2020). *Sustainability in tourism and hospitality: Trends and challenges*. A paper presented at the 35th IBIMA Conference, Seville, Spain. 1-2 April, 2020.
- Mazilu, M. (2010). Key elements of a model for sustainable tourism. *International Journal of Energy and Environment*, 2(4), 45-54.
- Palhares, G.L. (2003). The role of transport in tourism development: Nodal Functions and management practices. *International Journal of Tourism Research*, 5, 403-407. <https://doi.org/10.1002/jtr.446>
- Paresashvili, N., & Maisuradze, T. (2016). Destination management role in developing tourism in Georgia. *International Scientific and Practical Conference World Science*, 4(8), 46-50.
- Richards, G. (2002). Tourism attraction systems. *Annals of Tourism Research*, 29(4), 1048-1064. [https://doi.org/10.1016/S0160-7383\(02\)00026-9](https://doi.org/10.1016/S0160-7383(02)00026-9)
- Sanhakot, V. (2021). COVID-19 pandemic: A testing time for tourism and hospitality in Thailand. *ABAC ODI Journal of Vision Action Outcome*, 8(1), 41-53. <http://www.assumptionjournal.au/edu/index.php/odijournal>
- Setokoe, T.J. (2021). Community-based tourism: A panacea for community development in Nqileni village, Eastern Cape, South Africa. *GeoJournal of Tourism and Geosites*, 34(1), 28-32. <https://doi.org/10.30892/gtg.34104-615>
- Soteriades, M. (2012). Tourism destination marketing: Approaches improving effectiveness and efficiency. *Journal of Hospitality and Tourism*, 3(2), 107-120. <https://doi.org/10.1108/17579881211248781>
- Timareva, S., Arabska, E., & Shopova, I. (2015). Role of destination management and marketing organisations in regional development. *Trakia Journal of Sciences*, 13(1), 96-102. <https://doi.org/10.15547/tjs.2015.s.01.016>
- Todorut, A.V., & Cîrnu, D. (2012). The effects of sustainable tourism management for local communities. *Annals of the Constantin Brâncuși University of Târgu Jiu, Economy Series*, 2, 154-160.
- Tolulope, T.O., Olufemi, B.O., Mosab, I.T., Adedoyin, O.A., & Dang, K.T. (2021). The impact of corruption on tourism sector in Nigeria: Empirical insight by using an autoregressive distributed lag bound (ARDL) testing approach. *International Journal of Hospitality and Tourism Administration*, 22(2). <https://doi.org/10.1080/15256480.2021.1905583>
- Unhasuta, S., Sasaki, N., & Kim, S.M., (2021). Impact of tourism development on coastal communities in cha-am beach, the gulf of Thailand, through analysis of local perceptions. *Sustainability*, 13(4423), 1-23. <https://doi.org/10.3390/su13084423>
- Vengesai, S., Mavondo, F., & Reisinger, Y. (2009). Tourism destination attractiveness: Attractions facilities, and people as a predictor. *Tourism Analysis*, 14(5), 621-636. <https://doi.org/10.3727/108354209X1259795935211>
- Villanueva-Álvaro, J., Mondéjar-Jiménez, J., & Sáez-Martínez, F. (2017). Rural tourism: development, management and sustainability in rural establishments. *Sustainability*, 9(818), 1-8. <https://doi.org/10.3390/su9050818>
- World Tourism Organisation (2021). Tourism and rural development. Geneva: WIPO. <https://doi.org/10.18111/9789284422>
- Zemla, M. (2016). Tourism destination: The networking approach. *Moravian Geographical Reports*, 24(4), 2-14. <https://doi.org/10.1515/mgr-2016-0018>

CUSTOMER PERCEPTION ON SERVICE QUALITY TOWARDS TOURISM CUSTOMER SATISFACTION IN MALAYSIAN MARINE TOURISM SECTOR

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Abstract: Marine based tourism has emerged as a subject of concern in the area of ocean and coastal management. Today, demand for marine tourism has increased dramatically and is highlighted as one of the new horizons and fastest-growing sectors in the world's tourism industry. Malaysia is indeed one of the countries with the most beautiful and diversified marine life. The fundamental purpose of this study is to examine the satisfaction of tourists towards the service quality of marine tourism in Malaysia. The development of the research framework is based on the SERVQUAL model. A total of 300 responses were received from the Klang Valley area of Malaysia. For the purpose of processing and analyzing the data, Partial Least Square (PLS-SEM) method was employed. By applying a two-step approach, the study assesses the measurement model and the structural model. Findings from the survey reveal that assurance, tangibility, empathy, reliability, and responsiveness have a significant positive relationship with customer satisfaction thus these factors describe the customer satisfaction adequately. This study would enable policymakers and tourism companies to develop policies to improve customer satisfaction by increasing the quality of service.

Key words: Customer Perception, Marine Tourism, Malaysia, PLS-SEM, Satisfaction, SERVQUAL

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INTRODUCTION

Marine tourism applies to land-based tourism activities like sailing, surfing, sunbathing and other marine leisure activities on coastal regions where the closeness to the sea is a requirement and their facilities (Cao, 2020). Maritime tourism refers to maritime activities such as Surfing, paragliding, snorkelling, scuba diving, boating, yachting, fishing, nautical sports, as well as services and infrastructure based on land (Western Mediterranean Ecoregion, 2019). Nowadays marine tourism is one of the most attractive and sensational domestic and foreign tourism industries that many countries are looking to develop and improve (Rogerson et al., 2018). Therefore, Sea tours, water sports, diving, and other beach and offshore activities are all in marine tourism (Bhuiyan et al., 2020). The number of marine tourists is increasing every year as cruise passengers, and many countries, both small and large, are trying to make the most of their smallest water, sea and coastal capacities to maximize their income by attracting travellers (Hall, 2001).

In addition, maritime tourism sector interrelated and created strong linkages to land-based tourism events such as sailing, sightseeing, sunbathing, and other recreational activities on the beach that include the proximity to the sea, and related services (Bin et al., 2020). Offshore activities such as fishing, sailing, cruising, marine sports and their facilities and land infrastructure improve maritime tourism (Papageorgiou, 2016).

Thus, Malaysian marine tourism is considered one of the greatest extensive tourism industries (Jones and Syura, 2020). Several studies associated with customer satisfaction levels on marine tourism have been conducted over several years (Brown, 2013; Ostheimer, 2012; Wonderful Malaysia, 2014). In present-day argument on the feature of marine tourism services, one of the highest concerns was whether tourists were satisfied with the service quality in Malaysian marine tourism sector, of the delivery process on provided facilities towards tourist's desires (Bin et al., 2020). To develop Malaysian marine tourism, it becomes crucial to deliberate tourist perception so that service quality will satisfy tourist satisfaction with a tourist needs in a regular way (Jones and Syura, 2020). Tourist satisfaction can be gained by the concern

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authorities with their various quality assistance. Aimed at intentional planning determinations of the marine tourism sectors, those benefits can be included as a measurement. Understanding customer's reaction to marine tourism products and services, promising both new and recurrence visitors that defines areas need to improve (Ibrahim and Ahmad, 2008).

In addition, inadequate evidence has been existing on the term of service quality and visitors pleasure points in marine tourism sector of Malaysia (Cao, 2020). Furthermore, the present research considers on service quality as there is no efforts associated to all the possible aspects of the service quality in one shot to inspect potentials and observations of travellers' satisfaction stages that could disclose a substantial hole of facts. Additionally, several of the previous research are obsolete and so fresh research are required in place they could conduct diverse outcomes, witnessing the substantial progress of marine-tourism sector in Malaysia (Rogerson, 2020). For the gap fulfilment, this study scrutinises the opportunities and observations of travellers on service quality and relates to their viewpoint of satisfaction echelons.

Customer satisfaction in the marine tourism segment is based on quite a few aspects, such as strategic improvement, public transportation efficiency, government policies, coastal entertaining facilities, accommodation, information centre, food and beverage services and so on (Hall, 2001). Nevertheless, rendering to (Ibrahim and Ahmad, 2008) the constant growth of marine tourism affects the influences on structural development and good quality facilities to the customers. Besides, any upgrading in the sector must consider a complete tactic since any deficit in any one of the areas could collapse and impair a then delightful involvement for the travellers. Therefore, the facility providing authority should be concerned of attaining and continuing a constant side by side assistance to ensure better service quality, equally in their travel offerings and scheme of services. Therefore, by studying customer satisfaction in marine tourism, management can identify factors that can help improve the services provided to increase customer satisfaction in tourism and thus increase frequent visits (Lam-González et al., 2019). Much of previous research also included service quality on customer satisfaction as well as tourism development (Rogerson, 2020).

The realistic purpose of this article is to help identify the dimensions service providers can consider when designing a marine tourism service quality assessment. Specifically, we will attempt to explain the definition of the SERVQUAL model (Parasuraman et al., 1988) with the factors (i.e. tangibility, reliability, responsiveness, and assurance, empathy) in terms of marine tourism service and its relevance to tourists and to recognize issues related to specific services from various studies. The proposed improved service quality evaluation model can also serve as a useful tool for assessing longstanding interactions with tourists and thereafter growing maritime tourism satisfaction.

LITERATURE REVIEW

Service Quality and Marine Tourism Customer Satisfaction

Quality is characterized as the substance of a commodity or service's functionality and specifications which depend on its capacity to fulfil specific desires (Latif and Imm, 2015). "Endurance in order" is the modern definition of consistency. This definition moves the quality measurement from the service provider to the customer. Furthermore, to be of high-quality service, the marine tourism service provider must be mindful of the views and experiences of the traveller (Jones and Syura, 2020). Likewise, many scholars agreed mostly with contemporary quality definition. According to Owen et al. (1995), quality is described as serving customers' expectations. Oakland (1989) has mentioned quality is represented as the 'simply satisfying' standard. Juran (1979) describes quality as 'a prerequisite for a commodity that responds to the demands of certain community consumers who are actually using it. It is a basic definition of quality.

Quality is the generic phrase for usage satisfaction, and the simple meaning is that quality implies usage satisfaction. The scholars therefore argue that the ultimate objective of quality is to please clients where the quality of their services is an absolutely vital element of the satisfaction of maritime tourism clients (Ibrahim and Ahmad, 2008). Marine quality goods or services should be able to accomplish their customers' expectations or demands through those attributes or criteria. Besides that, certain prerequisites are unique and diverse from each client so that service providers are faced with the difficulty of understanding the needs of true marine tourism customers and of incorporating those requirements into products or services which satisfy such necessities (Zakaria et al., 2010).

For service providers like marine tourism operators, service qualities are significant as the assessment of service quality and the degree of satisfaction that results is intended to decide the probability of revisit and highly affect the underlying operations performance measurement (Iacobucci, 2010). In addition, satisfaction or disappointment can be anticipated in contributing to the satisfaction of the customer and the ability to sustain a long-term relationship with the tourism service provider (Athanassopoulos et al., 2001). For managers to understand what service quality is, and how it can be described to please marine tourists, it is therefore critical that it be measured (Rogerson, 2020). In order to enhance the efficiency, supervision is incredibly useful in a simple understanding of efficiency. It has to be consciously handled in the marine tourism sector to build a facility that could be used as a competitive instrument. In the end, excellently managed standard of service guarantees the satisfaction of clients in marine tourism (Hall, 2001). Moreover, Sureshchandar et al. (2002) argue that 'customer satisfaction can be achieved at various levels both inside and beyond the company,' for instance 'contact person, key facility or the entire organization' (Sureschandar et al. 2002). Extremely good quality of service is however considered to be a significant success factor impacting the productivity of organisations. Furthermore, the quality of the marine tourist service is considered as a key determinant for tourist's perception analysis (Gounaris and Dimitriadis, 2003).

As a result of poor service, many tourism companies have made substantial efforts to ensure that their facilities are of high quality in order to be able to distinguish themselves from their opponents (Ibrahim and Ahmad, 2008). Quality of products or services will draw both frequent visiting and new clients in the maritime tourism industry. Service levels are harder to stabilise as consumers in tourism have become more attentive to quality, according to Augustyn and Ho (1998).

They further establish that the emphasis has changed from recognisable goods to a more versatile approach to a higher quality consumer. Moreover, the issue of evaluating satisfaction of marine tourism can also represent an enormous challenge. Pawitra and Tan (2003) noted that marine tourism is clearly a different activity phenomenon in fishing, sailing, cruising, maritime and coastal entertainment. Tourist satisfaction of a maritime sector is complex, it is inflated by familiarities from numerous regional tourism associated service providers (Zakaria et al., 2010).

In marine tourism sector tangibility encompasses external, inward services, boating, yachting, fishing, nautical sports which are significantly related to marine tourism customer satisfaction (Western Mediterranean Ecoregion, 2019); although, Santos (2002) stated accommodation, technical structures, utilities, facilities, external manpower capacity, contact materials and other physical functionalities in use by companies for the provision and distribution of utilities are visible to marine tourists. Berry et al. (1994) claimed that reliability is an essential component and it has been endorsed that reliability would persist one of main components in tourism segment, despite of the categories of other sectors. Daskalakis and Stathopoulos (2008) described that reliability emphasizes on decreasing traveling duration along with shortening the variance in journey moment because such variance can lead to ambiguity of travel period (Tse and Wilton, 1988). Reliability of maritime tourism was identified to be closely associated towards comfort level and fulfilment rates in additional services (Zhi-Gang and Xiao-Dong, 2013). Reliability could include service provider behaviours and serving mind-set prior to serve in marine tourism sector as a vital component to determine tourist's satisfaction.

Responsiveness has been described by workforce commitment or even capacity information service (Allred and Addams, 2000). Perception of staff tendency to react correctly, and workers 'efficiency and pace for entertaining marine tourism customers could be detected throughout this context (Bartlett and Han, 2007). Compassion of service provider practical responsiveness, providing coastal entertainment service with resources and planning of entertainment schedule are positively related to marine tourism customer satisfaction (Zhi-Gang and Xiao-Dong, 2013).

As for the assurance, it's been described as staff 'expertise and decency in their capacity to inculcate faith and trust to (Parasuraman et al., 1988). Vogel and Pettinari (2002), mentioned that for tourist's satisfaction, travel companies should assure the customers feel of comfortable when patronizing marine tourism facilities, as this will contribute to increase mutual trust in staff and marine travel operators among tourists. Zhi-Gang and Xiao-Dong (2013) described, contact language was considered one of the biggest assurance components, in addition to components such as travel information, existence of security services, minor adjustments and vouchers. Empathy was described as the ability of mental position to oneself in certain condition and problems statement of one another, and the capacity to consider the individual's psychological and personal viewpoint (Varca, 2004). According to Anderson and Fornell (1994), it is claimed that empathy includes the needs and expectations of customers, as well as providing service with personal consideration. This is an inner awareness that will progress towards better ability to identify tourists' intangible positive attributes (Latif and IIM, 2015).

The current discussion mentions and suggests that service quality and customer satisfaction are ambiguous phenomena and are several components associated with marine tourism customer satisfaction. As executives, their key preoccupation is to establish and develop trust within their focused tourists (Latiff and Imm, 2015). It can also be accomplished by enhancing the standard of service being one of the widely common models for analyzing satisfaction in marine tourism sector (Zakaria et al., 2010), SERVQUAL is often utilized within the tourism sector to evaluate the satisfaction of a venue for tourists (Pawitra and Tan, 2003). The SERVQUAL model discussed by (Parasuraman et al., 1988) is indeed a measure of 22 objects, comparing consumer expectations and satisfaction throughout five scales. Even though the SERVQUAL method was severely questioned by certain researchers for few driving factors, due of the capability to estimate service quality in specific sector like marine tourism, the SERVQUAL determinants are commonly used to measure customer satisfaction in tourism sector (Latif and IIM, 2015).

Hypothesis Development

Furthermore, the method is often used as a basis for assessing the quality-of-service performance from the point of view of the customer. Therefore, also we formed the preceding hypotheses to test this:

Table 1. Hypothesis Development

HYPOTHESIS	DESCRIPTION
H ₁	Marine tourism service providers were capable to achieve tangible marine tourism customer satisfaction standard
H ₂	Marine tourism service providers were capable to achieve reliable marine tourism customer satisfaction standard
H ₃	Marine tourism service providers were capable to achieve responsive marine tourism customer satisfaction standard
H ₄	Marine tourism service providers were capable to achieve marine tourism customer satisfaction standard (In terms of assurance)
H ₅	Marine tourism service providers were capable to achieve marine tourism customer satisfaction standard (In terms of empathy)

THEORETICAL FRAMEWORK

Many works of literature are concentrating on the service quality assessment of tourism service providers (Latiff and Imm, 2015; Zakaria et al., 2010; Pawitra and Tan, 2003). There is a deficiency of research concentrating on how to form a perfect service quality assessment framework for marine tourism service providers as marine tourism is becoming popular day by day mainly in developing countries. As a result, through an extensive literature review, we have undertaken present cognitive research of Malaysian marine-tourism service and achieve measurement parameters from the existing SERVQUAL models (Parasuraman et al., 1988) provide a suitable method for quantifying the efficiency of the Marine Tourism services. Service quality including ten dimensions has been proposed in the beginning by Parasuraman et al. (1985), as follows:

Table 2. SERVQUAL dimensions' description (Note: SERVQUAL = service quality)

Tangibility	:	Accommodation, equipment, staff uniforms, toilets, vehicles and so on.
Reliability	:	Employees 'capacity to deliver the expected service with reliability and accuracy.
Competence	:	Employee capacity to support clients in an accommodating, secure and productive manner.
Courtesy	:	The willingness of the individual to conduct the function relates to staff.
Credibility	:	The interest, generosity of spirit and decency of workers towards their customers.
Security	:	The service's capacity to remove uncertainties, financial risks and physiological threat.
Access	:	To provide the customer and the service provider with connectivity.
Communication	:	Willingness of the supplier to efficiently communicate material and the terminology the service provider uses
Understanding Customer	:	The service provider demonstrated an interest in knowing & respecting their consumer.

SERVQUAL New Dimension contained as mentioned below three original and two integrated scales. Such five variables of service quality are the main measures for evaluating marine tourists 'perception and satisfaction of the services rendered by the different tourism firms functioning well into the Klang Valley. The preceding categories and coherent explanations for the five components were proposed by Parasuraman et al. (1988),

RESEARCH METHODOLOGY

Measurement Framework

All the 20 items pertaining to the SERVQUAL dimensions were used in its original forms as proposed by Parasuraman et al. (1988) and 5 more items were used to explain the Malaysian marine tourism customer services. The decision to use the items in its original forms was reached since the main objective of the study is to gauge the general perceptions and expectations of tourists regarding the service quality delivered by the many businesses operating at Klang Valley. In addition, each item of the SERVQUAL dimensions were arranged according to five areas of service offered at marine tourism sector. A total of 8 variables were measured and respondents were asked to answer them based on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). All the items of the questionnaire were designed using English language only.

Tangibility: Physical services, infrastructure, equipment and the workers presence.

Reliability: Quality to conduct the service offered with reliability as well as accuracy.

Responsiveness: Tendency to assist clients and deliver timely support.

Assurance: Employee awareness and hospitality, and their ability to persuade faith and trust.

Empathy: The company provides personalized attention to the clients.

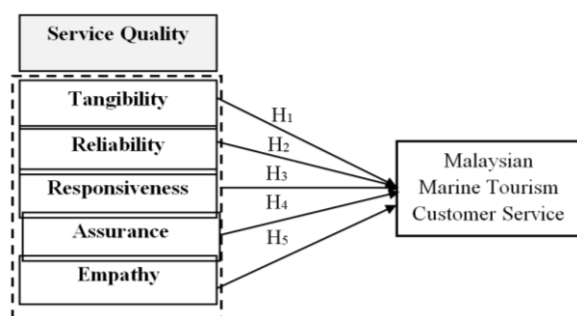


Figure 1. Conceptual Framework

Table 3. Demographic Profile

Measure	Item	Frequency	Percentage
Gender	Male	62	26.6
	Female	171	73.4
Age	15 - 24	4	1.7
	25 - 34	107	45.9
	35 - 44	75	32.2
	45 - 54	39	16.7
	55 and above	8	3.4
Tourist Type	Local	70	30
	Foreigner	163	70
Education	SPM/SSC	116	49.8
	STPM/HSC	24	10.3
	Diploma	69	29.6
	Undergraduate	22	9.4
	Postgraduate	2	.9
Occupation	Student	125	53.6
	Private Service	63	27.0
	Business	17	7.3
	Government Service	7	3.0
	Others	21	9.0

Data Collection

This research is a descriptive study using survey sampling as its main research method to gain information on the service delivery systems of agencies and companies operating and providing services to tourists at Klang valley, Malaysia. The tourists are those who have spent at least 24 hours at Klang Valley. They were selected using sample random sampling. Tourists were given a set of questionnaires that would reveal their expectation before receiving the services provided by the various business establishments (service providers) and their perception of the actual services received from the service providers. Moreover, data were collected using online survey and paper-based questionnaire during the period of January - March 2020. A number of 330 responses were collected from whatsapp and facebook by sending the link of Google form and face-to-face conversation. 300 data were finally selected for analysis. Previous research recommends that a sample size of 100 to 200 is typically a good set up point in carrying out path modelling (Hoyle, 1995). Hence, for this study 300 responses were considered as good number to analyze and test the hypothesis.

DATA ANALYSIS AND FINDINGS

Tools Used

To analyze the demographic profile, SPSS version 24.0 was used; besides this, to validate the measurement and structural model, Smart PLS software version 3.0 was employed.

Demographic Profile

Demographic data in Table 3 illustrates the responses collected from tourists who visited the Klang Valley area. The total distributed questionnaire was 300; however, after removing 32 missing values, a total of 268 data were kept for further analysis. Hence 35 outliers were detected by Mahalanobis Distance (MD); after removing the outliers a total of 233 valid data were used for the final report. The valid responses were 89.33% of the total distributed questionnaires. Table 3 shows that females responded more than males. 171 (73.4%) of the respondents were female, and 62 (26.6%) were male. The majority age was 25 to 34 years old (45.90%), followed by the age of 35 - 44 (32.20%), 45 - 54 years old (16.70%), 55 years above were (3.40%), and lowest age group was 15 - 24 years old (1.70%). Among these respondents, 70% of tourists are foreigners, and the rest are local. Additionally, most of the respondents' educational qualification was SPM/SSC (49.80%), followed by a diploma (29.60%), STPM/HSC (10.30%), Undergraduate (9.40%) and Postgraduates were (.90%). Furthermore, respondents were asked about their occupation, (53.60%) were students followed by private services (27.0%), and Business personnel was (7.30%), and rest is others (9.0%).

Measurement Model

Convergent and Discriminant validity tests were performed to assess the measurement model. To test the convergent validity, each construct's value (CR and α) should be higher than 0.708 (Hair et al., 2016). This study shows that the composite reliability (CR) values are ranging from 0.877 to 0.927 and Cronbach (α) values from 0.877 to 0.926 where rho_A shows 0.881 to 0.928. Scholars have given the rule of thumb for outer loading of each item should be higher than 0.5 as conferred by Hair et al. (2006). Although loading of more than 0.7 reflects more variance. Figure 2 shows the loadings for each indicator are way higher than 0.7, ranging from 0.751 to 0.924 which indicates good loading. The given threshold for the AVE value is equal to or above 0.50, is appropriate (Hair et al., 2013). Thus, AVE for this current study is ranging from 0.678 to 0.760. The test result in the current study shows the good reliability which confirms that the measurement model maintained sufficient convergent validity.

Fornell and Larcker (1981) mentioned, to show discriminat legitimacy, the square root of the AVE of each construct should always be higher than the construct's correlation with other latent variables. Hence, the current study In Table 4, the results are also reported good discriminating validity of the measuring model. Besides, cross-loading of all items has been examined and the result indicated the loadings of each construct represent the higher value of each item within the constructs. The distinctness of the construction is concentrated with discriminating validity of the phenomenon taken by a construct is unique and not the other constructs represented in the framework (Hair et al., 2013).

Discriminatory validity is assessed using Fornel-Larcker and Heterotrait Monotrait Ratio of correlations (HTMT) by assessing the cross-loaded accusing of constructs. Initially, to accomplish discriminant validity, construction loadings shall be high on themselves and low on other constructs (Vinzi et al., 2010). Table 4 shows the good discriminant validity as it illustrates the square AVE of each factor is larger than any of its correlations with the other factors. Thus, the result of this study shows acceptable discriminant validity of each construct.

Tables 4 Construct Reliability and Convergent Validity

Variables	α	rho_A	CR	AVE	AS	CSAT	EMP	RL	RES	TAN
Assurance (AS)	0.926	0.928	0.927	0.760	0.872					
Customer Satisfaction (CSAT)	0.893	0.897	0.893	0.678	0.618	0.823				
Empathy (EMP)	0.893	0.895	0.893	0.736	0.329	0.354	0.858			
Reliability (RL)	0.882	0.889	0.882	0.715	0.559	0.559	0.386	0.846		
Responsiveness (RES)	0.896	0.898	0.896	0.682	0.754	0.595	0.457	0.562	0.826	
Tangibility (TAN)	0.877	0.881	0.877	0.705	0.303	0.589	0.575	0.356	0.280	0.839

Structural Model

The structural model reflects the relationship between the constructs or the latent variables that were hypothesized in this study.

Collinearity issue of structured model: VIF values of all the constructs assess collinearity issues in structured model. According to the scholars Kock (2015), the common method bias (VIF) value should be lower or equal to 5. The VIF values for this study are between 1.958 to 3.924 and none of the vales exceed threshold value.

Coefficient of determination (R^2): R^2 represents the variance in the independent variable by independent constructs (Elliott and Woodward, 2007). Both path coefficients and R^2 score were determined by the structural model analysis. According to Hair et al. (2017), R^2 values of 0.75, 0.50 and 0.25 which describes substantial, moderate, and weak levels of predictive accuracy. The t-value > 1.96 is significant at $p < 0.05$ and t-value > 2.58 is significant at $p < 0.01$ (Hair et al., 2017). So, Figure 2 shows the R^2 value in this model is 62.40% for Customer Satisfaction which indicates moderate level of predictive accuracy.

The Predictive Relevance (Q^2) Effect Sizes: The size of the effect of latent variables was assessed through cross-validated redundancy Q^2 Henseler et al. (2009). The predictive relevance that exists in the model of the value of Q^2 is higher than zero is considered as the existence of predictive relevance in the model Chin (1998). The present study met the rule of thumb (Table 5).

The effect Sizes F^2 : in the present study, all the values of F^2 are higher than 0.02. By following Chin (1998) suggestion, effect size can be calculated as:

$$f^2 = (R^2_{\text{included}} - R^2_{\text{excluded}}) / 2$$

This study met the rule of thumb (Table 5).

Table 5 Structured Model Results

Construct	Common method bias (VIF)	f square (F^2)	Q square (Q^2)	R square (R^2)
			Customer Satisfaction	
Tangibility	1.585	0.412	0.364	0.624
Reliability	1.652	0.051		
Responsiveness	2.774	0.075		
Assurance	2.540	0.052		
Empathy	1.782	0.061		

Model Fit

Though the NFI value is just below the 0.9 but by considering all other threshold including the result of SRMR and Chi-Square it can be reported that the proposed model may consider as fit.

Table 6. Model Fit

Fit Indices	Estimated Model	Ideal Threshold
SRMR	0.044	<0.08
Chi-Square	449.493	Upper is better
NFI	0.883	>0.9

Table 7. Result of Proposed Model

Hypothesis	Path	β	T-Stats	P-Values	Decision
H ₁	Tan ---> CSAT	0.495	5.889	0.000	Accepted
H ₂	RL ---> CSAT	0.178	2.257	0.024	Accepted
H ₃	RES ---> CSAT	0.280	2.545	0.010	Accepted
H ₄	AS ---> CSAT	0.224	2.160	0.034	Accepted
H ₅	EM ---> CSAT	-0.201	2.361	0.017	Accepted

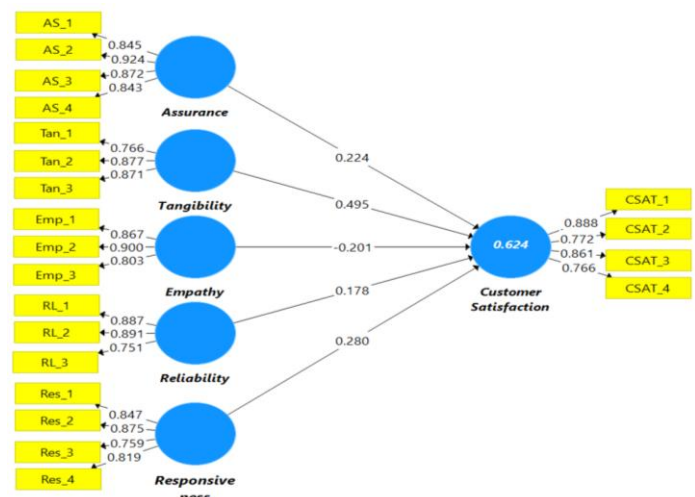


Figure 2. Path analysis, Outer loading, and R square

Hypothesis Testing

Figure 2 and Table 7 illustrates the path coefficient (β), t -statistics and p -value of each hypothesis. Based on the analysis all the hypotheses are found to be significant thus supported. H_1 ($\beta = 0.495$, $t = 5.889$) indicates the path between Tangibility and Marine tourism customer satisfaction, indicating the positive and significant relationship between TAN and CSAT. H_2 ($\beta = 0.178$, $t = 2.257$) shows the path between Reliability and Marine tourism customer satisfaction; and found significant and positive relationship between RL and CSAT. H_3 ($\beta = 0.280$, $t = 2.545$) demonstrates the positive relationship between Responsiveness and Marine tourism customer satisfaction. H_4 ($\beta = 0.224$, $t = 2.160$) explains that Assurance has a positive and significant influence on Marine tourism customer satisfaction. H_5 ($\beta = -0.201$, $t = 2.361$) prescribed the significant and negative relationship between Empathy and Marine tourism customer satisfaction.

Discussion and practical implementations

Based on facts analyses, essential outcomes are obtained for all proportions of service quality, namely, tangible, accurate, reliable, assured, and empathic expectations and impacts on marine tourism customer service. The study also found this to be true for the marine tourism facilities in Malaysia, particularly observation from the Klang Valley respondent. Along with, travel operators should also meet marine tourism standards of all types of amenities previously listed. Moreover, the various types of services demonstrated varying views of marine tourism customer in every determinant of the SERVQUAL dimensions efficiency, as revealed by the ratio of the analysis. These results indicate that the Klang Valley tour operating companies are more focused on developing these sorts of service. In order to ensure the positive experience of visitors, a high level of empathy, care and consideration are necessary. Security and safety are also a concern which needs to be dealt with. For all journeys into Malaysia's several marine tourism destinations, safety laws and guidelines should be followed. This is particularly true for coastal entertainment workers like surfing, paragliding, snorkelling, and diving. Guidelines including the use of life jackets on such water diving should therefore be enforced.

Tourism - related coordination and safety briefing by the service provider on sightseeing trips such as marine sports and entertainment will allow visitors to avoid incidents that might ruin a wonderful moment. These activities build a feeling of assurance and believe for tourists who visit the marine tourist destination. An important outcome has been identified in comparison to the entire satisfaction of tourists in the marine tourism segment. This demonstrates that the degree of tourist satisfaction is a crucial indicator of service quality assessment. To assure that a moderate degree of satisfaction between visitors is retained, and staff training is among the strategies that marine tourism service providers should follow. Certain aspects that can be evaluated in further marine tourism studies, in addition to the component that are significant for safety, Security, policy and communication strategies. Additionally, involvement from marine tourism customers satisfaction should be continuously and regularly assessed since consumer expectations and desires evolve over time.

Conclusion and Future research

This research has extensive experience in designing an expanded service quality model. Mostly on justification of the survey results, the suggestions in this paper would enable the marine tourism service provider to sustain their quality-of-

service programs in order to enhance the tourism sector in Malaysia. In addition, the reviews are hoped to direct other segments of tourism on how to strengthen quality of service especially for tourists. Nevertheless, the analysis including its results of the survey had been frequently checked and given the restricted sample scale and scope. In future research, a wider sample size with social media impact can be investigate. Such key points (e.g., governmental regulations, visitor expectations, etc.) and their degree of customer satisfaction in maritime tourism must be addressed in further research.

REFERENCE

- Athanassopoulos, A., Gounaris, S., & Stathakopoulos, V. (2001). Behavioural responses to customer satisfaction: an empirical study. *European journal of marketing*, 35(5), 687-707. <https://doi.org/10.1108/03090560110388169>
- Allred, A.T., & Addams, H.L. (2000). Service quality at banks and credit unions: what do their customers say? *International Journal of Bank Marketing*, 18(4), 200-207. <https://doi.org/10.1108/09604520010307049>
- Anderson, E., & Fornell, C. (1994). A customer satisfaction research prospectus. In R. T. Rust, & R. L. Oliver (Eds.), *Service quality: New directions in theory and practice*, 241-268. SAGE Publications, Inc. <https://www.doi.org/10.4135/9781452229102.n11>
- Augustyn, M., & Ho, S. K. (1998). Service quality and tourism. *Journal of travel research*, 37(1), 71-75. <https://doi.org/10.1177/004728759803700110>
- Bartlett, J.E., & Han, F. (2007). Analysis of service quality in restaurants in China: An eastern perspective. In *ABR & TLC Conference Proceedings*.
- Berry, L.L., Parasuraman, A., & Zeithaml, V.A. (1994). Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70(3), 201-230. [https://doi.org/10.1016/0022-4359\(94\)90033-7](https://doi.org/10.1016/0022-4359(94)90033-7)
- Bhuiyan, A.H., Darda, A., & Habib, W. (2020). Marine Tourism for Sustainable Development in Cox's Bazar, Bangladesh. <http://hdl.handle.net/11540/12113>
- Bin, L.C., Salleh, N.H.M., & Bin, L.K. (2020). The Evaluation Model for Coral Reef Restoration from Management Perspective for Ensuring Marine Tourism Sustainability. *Journal of Sustainability Science and Management*, 15(1), 93-104.
- Brown, V. (2013). Top 10 Malaysian islands getaways, The Star Online. <http://www.thestar.com.my/News/Nation/2013/11/21/Top-10-Malaysian-island-getaways/>
- Cao, J. (2020). The Development of Marine Tourism based on Resource Market and Product. *Journal of Coastal Research*, 107(SI), 109-112. <https://doi.org/10.2112/JCR-SII07-028.1>
- Chin, W.W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336. <http://doi.org/10.4236/psych.2012.38085>
- Daskalakis, N.G., & Stathopoulos, A. (2008). Users' perceptive evolution of bus arrival time deviations in Stochastic Networks. *Journal of Public Transportation*, 11(4), 25-38. <http://doi.org/10.5038/2375-0901.11.4.2>
- Elliott, A.C., & Woodward, W.A. (2007). *Statistical analysis quick reference guidebook: With SPSS examples*. Sage Publications, 85-93. <https://bit.ly/3fDMq23>
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Gounaris, S., & Dimitriadis, S. (2003). Assessing service quality on the web: evidence from business-to-consumer portals. *Journal of Services Marketing*, 7(5), 529-548. <https://doi.org/10.1108/08876040310486302>
- Hair, Jr.J.F., Sarstedt, M., Ringle, C.M., & Gudergan, S.P. (2017). *Advanced issues in partial least squares structural equation modeling*. Sage Publications, 73-74. <https://bit.ly/3hOON54>
- Hair, B., Babin, A., & Tatham (2006). Multivariate data analysis. Aufl. Upper Saddle River, NJ.
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, 46(1-2), 1-12. <https://doi.org/10.1016/j.lrp.2013.01.001>
- Hall, C. (2001). Trends in ocean and coastal tourism: the end of the last frontier? *Ocean & Coastal Management*, 44(9-10), 601-618. [https://doi.org/10.1016/S0964-5691\(01\)00071-0](https://doi.org/10.1016/S0964-5691(01)00071-0)
- Henseler, J., Ringle, C.M., & Sinkovics, R.R. (2009). The use of partial least squares path modeling in international marketing. In New challenges to international marketing. Emerald Group Publishing Limited. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Hoyle, R.H. (1995). *The structural equation modeling approach: Basic concepts and fundamental issues*. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications*. 1-15. Sage Publications, Inc. <https://cutt.ly/kbISPQM>
- Ibrahim, J.A., & Ahmad, M.Z. (2008). Pelancongan Negeri Kedah Darul Aman: Isudan Cabaran. *Persidangan Kebangsaan Ekonomi Malaysia Ke Iii (Perkem Iii)*, 1, 191-202. <http://repo.uum.edu.my/id/eprint/7111>
- Iacobucci, D. (2010). Structural equations modeling: Fit indices, sample size, and advanced topics. *Journal of consumer psychology*, 20(1), 90-98. <https://doi.org/10.1016/j.jcps.2009.09.003>
- Jones, T.E., & Syura, N.B. (2020). Chapter 5 - Searching for sustainable tourism in Malaysia. In Dolezal, Trupp & Bui (eds.) *Tourism and Development in Southeast Asia*. Routledge, 73-87. <https://bit.ly/3fanmAK>
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (ijec)*, 11(4), 1-10. <https://www.igi-global.com/article/common-method-bias-in-pls-sem/132843>
- Lam-González, Y.E., León, C.J., & León, J.D. (2019). Coopetition in Maritime Tourism: Assessing the Effect of Previous Islands' Choice and Experience in Tourist Satisfaction. *Sustainability*, 11(22), 6334. <https://doi.org/10.3390/su11226334>
- Latif, K., & IIM, N.S. (2015). The Impact of Tourism Service Quality on Satisfaction. *Int. Journal of Economics and Management*, 9(s), 67 - 94. <http://www.econ.upm.edu.my/ijem>
- Ostheimer, S. (2012). 10 best islands for a Malaysia holiday, CNN. <http://travel.cnn.com/explorations/escape/islandhopping-malaysia-334981>
- Owen, B., Malkovich, P., & Malkovich, C. (1995). *Understanding the Value of ISO 9000: A Management Guide to Higher Quality, Productivity, and Sales*. SPC Press.
- Papageorgiou, M. (2016). Coastal and marine tourism: A challenging factor in Marine Spatial Planning. *Ocean & Coastal Management*, 129, 44-48. <https://doi.org/10.1016/j.ocecoaman.2016.05.006>
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41-50. <https://doi.org/10.1177/002224298504900403>

- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A Multiple-item scale for measuring consumer perception of service quality. *Journal of Retailing*, 64, 12-40. <https://bit.ly/3ewIYqU>
- Pawitra, T., & Tan, K. (2003). Tourist satisfaction in Singapore – a perspective from Indonesian tourists. *Managing Service Quality: An International Journal*, 13(5), 399-411. <https://doi.org/10.1108/09604520310495868>
- Rogerson, C.M. (2020). Coastal and Marine Tourism in The Indian Ocean Rim Association States: Overview and Policy Challenges. *GeoJournal of Tourism and Geosites*, 29 (2), 715–731. <https://doi.org/10.30892/gtg.29226-501>
- Rogerson, C.M., Benkenstein, A., & Mwongera, N. (2018). *Coastal Tourism and Economic Inclusion in Indian Ocean Rim Association States*. African Portal: <https://www.africaportal.org/publications/coastal-tourism-and-economic-inclusion-indian-ocean-rim-association-states/>
- Santos, J. (2002). From intangibility to tangibility on service quality perceptions: a comparison study between consumers and service providers in four service industries. *Managing Service Quality*, 12(5), 292-302. <https://doi.org/10.1108/09604520210442083>
- Sureshchandar, G., Rajendran, C., & Kamalanabhan, T. (2002). Customer Perceptions of Service Quality: A Critique. *Total Quality Management*, 12(1), 111-124. <https://doi.org/10.1080/09544120020010138>
- Tse, D.K., & Wilton, P.C. (1988). Models of Consumer Satisfaction Formation: An Extension. *Journal of Marketing Research*, 25(2), 204-212. <https://doi.org/10.1177/002224378802500209>
- Varca, P.E. (2004). Service skills for service workers: emotional intelligence and beyond. *Managing Services Quality: An International Journal*, 14(6), 457-467. <https://doi.org/10.1108/09604520410569793>
- Vinzi, V.E., Trinchera, L., & Amato, S. (2010). PLS Path Modeling: From Foundations to Recent Developments and Open Issues for Model Assessment and Improvement. In: Esposito Vinzi V., Chin W., Henseler J., Wang H. (eds) *Handbook of Partial Least Squares*. Springer Handbooks of Computational Statistics. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-540-32827-8_3
- Vogel, M., & Pettinari, J. (2002). *Personal Safety and Transit: Paths, Environments, Stops and Stations*, Cts 02-05. <https://ntlrepository.blob.core.windows.net/lib/19000/19500/19573/PB2002107962.pdf>
- Western Mediterranean Ecoregion. (2019). *Coastal and Maritime Tourism*. Retrieved from MED Maritime Integrated Projects: http://www.medmaritimeprojects.eu/download/ProjectMediamer/Factsheets/WM_Tourism_factsheet_080415.pdf
- Wonderful Malaysia (2014). 10 best dive locations in Malaysia. Retrieved January 7, 2014, from <http://www.wonderfulmalaysia.com/faq/10-best-dive-locations-in-malaysia.htm>
- Zakaria, Z., Hamid, A.C., Karim, Z.A., & Daud, N.M. (2010). Tourists' Expectations and Perceptions on the Service Quality in Malaysian Tourism Industry. *Global Business and Management Research: An International Journal*, 1(3), 69.
- Zhi-Gang, Y., & Xiao-Dong, D. (2013). Measuring passenger's perceptions of taxi service quality with weighted SERVPERF: A case of Hangzhou, China. *Paper presented at Jinan Conference [Online]*, Shanxi China.

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WINNING TOURISM DIGITALIZATION OPPORTUNITY IN THE INDONESIA CBT BUSINESS

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Abstract: This research aims to examine the opportunities of Information Communication Technologies (ICT) and its use for the rural tourism businesses. The study used purposive random sampling of presence of tourist villages product in the Online Travel Agency (OTA) application in Indonesia. From the OTA, it can be seen the rural tourism destinations product related offerings suggestion. From the recommended destinations, assessment and comparison is made with the village's official website and other online resources. Tourism villages and their market need to be met comprehensively understanding with OTA app developers to get better future business results.

Key words: rural tourism, Community-based tourism (CBT), app developer, Information Communication Technologies (ICT), Online Travel Agency (OTA).

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INTRODUCTION

In the Indonesian National Medium Term Development Plan (RPJMN) 2020-2024, tourism is projected to contribute 5.5% of Indonesia's GDP. The latest data for 2019 before the Covid pandemic hit shows Indonesia getting 16.106 million foreign tourist visits (BPS-Statistics Indonesia, 2020b) and 282,930 million domestic trips (BPS-Statistics Indonesia, 2020a). This tourism business activity is considered to encourage other business sectors, absorb many workforces, and quickly bring in foreign exchange (Yakup, 2019). The government also plans to develop ten new destinations as a priority by copying Bali Island's success as a tourism *paradise island*. Tourism development is frequently initiated, supervised, and concluded by central government agencies, particularly in many Asian countries (Li et al., 2021). The Indonesian government calls it the 10 New Balis project. Apart from the big tourism development project at the grass-root level, the government is also developing community-based tourism (CBT) in rural tourism or village tourism. This tourist village is a business entity managed by the local community with a core service in the form of products related to tourism by bringing local uniqueness. Tourism businesses for the locals can be owners, managers, and employees; this can also be used to increase the area's life standard (Badurina, 2019). In the last few years, social media and extensive internet networks in remote villages have encouraged tourism village actors to use them as well. About ten years ago, in the early days, tourism village actors used blogs and websites to promote and show their business's existence. Furthermore, social media boom started with the presence of Facebook, the platform became the main media for promotion. Instagram and YouTube are the next social media used by tourism village managers together with Facebook. Blogs began to be abandoned, and the website was used as a window to validate a tourist village's existence. To explore the rural CBT during the pandemic and the value for online communities, this work employs a qualitative study of cases of OTAs specialized in selling tourism related activities in Indonesia. In 2017, with the entry of Online Travel Agencies (OTA) such as TripAdvisor, Traveloka, and Booking.com business models in collaboration with large capital tourism players or individual private businesses such as star hotels and airlines again changed the tourism business map in Indonesia instead of CBT. CBT village businesses in the flow of digital trends are in a situation that can be more profitable if a formula is found for the use of this digital trend. The study questions addressed in this paper are: 1) what are the nowadays and potential future digital prospects in the rural tourism CBT travel industry? 2) How will OTA take a model through ICT in terms of business strategies?

LITERATURE REVIEW

CBT

Rural tourism is a business activity in the form of CBT with characteristics that emerge from community development strategies, using tourism activities as an instrument to strengthen the capacity of village community organizations that organize tourism resources with local participation communities (Suansri, 2003). In Indonesia, mostly rural tourism activities are formed as CBT (Priatmoko and Purwoko, 2020) and has popular Indonesian word terminology: "*desa wisata*" (English: rural

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tourism destination). The CBT contribution allow for the community to derive sustainable attributes that can enable development and release the community from dependence on exogenously-based development initiatives (SETOKOE, 2021). The CBT business also encourages local residents to live more harmoniously by utilizing the assets they have and tends to strengthen the family structure (Chen and Kong, 2021). Villagers led by a group of reformers favoring the village head formed a tourism village entity as a collective agreement (Priatmoko et al., 2021). Local identity and location distinctiveness are connected with tangible and intangible heritage, local cultures and customs, narratives and history, landscape, and communities in creative tourist sectors like CBT (Duxbury et al., 2020). It should aim to sustain the culture and characters of host communities and the landscape and environment (Fatimah, 2015). Community empowerment based on local wisdom through community involvement in tourist villages' development is an important element (Vitasurya, 2016). The Increasing ties between communities are important social capital to develop rural areas' tourism activities (Rindrasih, 2018).

Tourism development would sustain when it is planned strategically to achieve goals that have long-term effects (Atun et al., 2019). Changes that continue to occur in the digital world, especially in Information Communication Technologies (ICT), are becoming necessary. It is believed that globalization is the reason for interest and schemes to shift to various tourism. Context-free/ capacity-free tourism is becoming a supposition to meet different global visitors' expectations in which lifestyles are promoted as not simple illustrations (Atun et al., 2019). Furthermore, digitalizing and their relationship became notable and should prepare tourism businesses for the digital transformation (OECD, 2020).

Modern Tourism Industry

Digitalizing in tourism industries will provide accessibility to all tourism stakeholders in Indonesia, starting from the aspects of licensing, tourism business activities, and events and providing accessibility for visitors to find information about destinations for visitors in Indonesia (Putra et al., 2018). Over the last few years, marketing tactics for tourism-related businesses have developed, with many more adopting social media and user-generated reviews as marketing tools (Oltra González et al., 2021). Technology embedded in all tourism organizations and stakeholders, destinations will leverage synergies between ubiquitous sensing technology and its social components to support an enriching visitor experience (Buhalis and Amaranggana, 2013). The use of digital technology is also influenced by the number of young travelers who tend to use digital applications (Talwar et al., 2020a). Sometimes a visitor who is driven and thus willing to spend more effort searching for and making decisions for travel decisions is more likely to familiarize themselves with the websites that provide the most helpful info and comprehend the information accessible (Lu et al., 2016).

Cultural efforts could be effectively linked to online tourism service proposals, performing cooperative actions such as co-marketing activities and cross-selling initiatives, which could be maximized if the marketing strategy takes an omni-channel approach (Quaglione et al., 2020). Tourism ecosystems and territories may take into account digital innovation and include smart tourism perspectives. They are sustainability, circular economy perspective, quality of life enhancement, and social values; they should also aim to enrich the tourism experiences and enhance the competitive benefit of smart tourism destinations (Pencarelli, 2020). The internet has evolved into more than a way of life; it has become a key need in modern society, and it has played a critical role in the flow of information for commercial purposes, including OTA. The notion of OTA can be applied to a wide spectrum of businesses, from small to large (Rosyidi, 2019).

OTA

Online travel bookings can be usually made on a service provider's website, which aggregates the services offered by a number of travel and tourism-related businesses (Talwar et al., 2020b). More ever, the presence of the OTA in the tourism business ecosystem has radically changed the industry into reality on the ground. The travel and tourism industry shows IT's change and its pervasiveness will face other technology waves (Neidhardt and Werthner, 2018).

The influence of the Internet and ICTs on consumers and tourism operators was the focus of the Internet's and ICTs' spread in the tourism sector. The notion was that the introduction of direct online channel opportunities would help enterprises reduce their reliance on traditional middlemen, whose market strength would necessarily have a detrimental impact on both consumer prices and tourism firms' profitability (Quaglione et al., 2020).

The playing field was initially extremely clear: sites maintained by organizations with a commercial stake in the information provided vs sites that did not. Meanwhile, new types of websites have emerged, offering a variety of intermediate services. Some exclusively provide information, while others only provide booking services, but the rest are now mixed (Bronner and de Hoog, 2016). Many traditionally vertically integrated travel companies are now disinvesting in tangible infrastructure to replicate OTAs' more flexible business procedures and non-exclusive virtual partnering model (O'Connor, 2020). In the context of travel, OTAs might be regarded an example of e-commerce or m-commerce. Since 2010, nearly every year, a new booking service agency has emerged, rapidly increasing from 2010 to 2018 (Rosyidi, 2019). They represent a significant departure from the way travel was planned and booked before the internet (Talwar et al., 2020b).

MATERIALS AND METHODS

This paper uses secondary data from online sources relevant to the rural tourism business and CBT studies, using a searching words of tourist villages in Indonesia in their presence in the OTA application. Previous researches have revealed that one of the most popular online activities is looking for travel-related information (Bronner and de Hoog, 2016). The case study approach will be used. Case studies have a lot of usefulness when it comes to researching complex real-life events in depth (Mohd Noor, 2008). In order to address "how" and "why" inquiries about current events, the case study method is also preferred (Yin, 2003). Furthermore, to build on emergent themes and establish a framework based on the

findings from the first study, an inductive approach was used (Wynn and Olayinka, 2021). We made a construction of a generalization based on the examination of a group of particulars, an induction activity (Rothchild, 2006). This makes inductive approach as a generalization method. Obtaining knowledge, understanding phenomena, and developing a new theory or model as new knowledge based on the new understanding are all area of utilizing an inductive approach (Park et al., 2020).

The research design process can be seen on Figure 1 below.

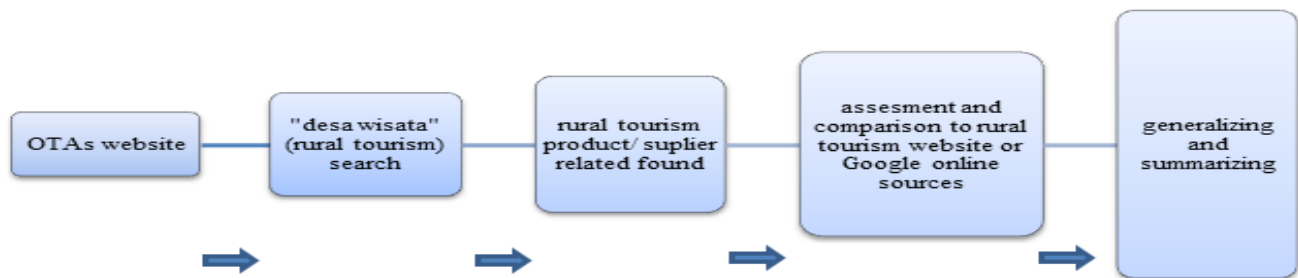


Figure 1. Research Process Flow

Firstly, we are looking for rural tourism destinations in Indonesia through the OTA website. We used “*desa wisata*” words term since it is a popular term in Indonesia to mention rural tourism destination. From the data displayed by OTA, it can be seen the rural tourism destinations name recommendation. Secondly, we then searched for the official village website and/or other online information resource related to its tourism village based on the OTA’s suggested destination. Furthermore, it was then investigated whether the tourism village consciously used OTA to market their goods based on the information gathered from the OTA. We also conduct an assessment of the tourism-related products provided by the tourism village entity or other information found on Google search engine. In this study we examine ten OTAs operated in Indonesia from the results of the DailySocial survey in 2018 (Pusparisa, 2019) and added two popular OTAs in 2020 bringing the total to twelve OTAs. The ten OTAs from the DailySocial survey are: Traveloka.com, Tiket.com, Airy rooms, Agoda, Pegipegi, JD.ID, Zenrooms, RedDoorz, RajaKamar, and GoIndonesia.

From the results of initial observations, it is known that RajaKamar has stopped operating in May 2019 (Syarizka, 2019), Airy rooms stop the operations permanently since May 2020 (Yu, 2020), and GoIndonesia changed its name to myKaha (GoIndonesia.com, n.d.). From existing data, variables related to rural conditions in Indonesian tourism were generalized at a macro level to evaluate the digitalization of the tourism business in Indonesia, especially those considered related to how OTA will impact rural tourism business and the digital environment on the contrary. Literature review and data related to rural conditions in Indonesian tourism were used at a macro level to evaluate the tourism business's digitalization. The results of this analysis will rely on various theories and literature studies to obtain a complete picture of the prospects for Indonesia's digital environment tourism conditions.

RESULTS AND DISCUSSION

Taking advantage of the digital application developers and owners of the OTA will take this opportunity more seriously. OTA is slowly starting to sell various tourist village tourist destinations, instead it is sometimes a gimmick/addition to support their main sale: accommodation. We looked for information on tourist villages displayed in the twelve OTAs in Indonesia with the keyword “*desa wisata* (English: rural/ village tourism) is common terminology for Indonesian traveler and tourism enthusiasts. The findings on the twelve OTA websites can be seen on Table 1 as follows.

From the overall OTA, in general we found several product recommendations for names of rural tourist destinations as seen on Table 1 above. However, the names of the “*desa wisata*” as tourist villages destination refer to hotels, home stays, or properties for rent. Only Traveloka and TripAdvisor offer tour activities with products offered by tour operators. In the next search, we look for the official website or social media belonging to the village that appears on the search page on OTAs In table 1. From the official website or other unofficial sources of information related to the tourist village found on Google, not even a single village sells through OTA. We could not find any OTA shortcut button link on official rural tourism website or on their social media source. The village management sell their product through direct phone, instant messenger, or email. In other words, OTA only uses the name of the village's existence to sell accommodation in the form of a hotel, homestay, or guest house. Although there are business benefits obtained from both parties: the OTA and homestay/guesthouse owners from rooms that have been successfully sold, comprehensive benefit from CBT activities still not found. As we know that CBT is an activity that involves community activities in particular rural areas, not only activities to stay at homestays. It means, the village still not using OTA as a sales distribution channel for all attractions or activities in the tourist village. From the findings of official website information sources or other online sources, tourism villages still prefer direct selling through their personnel rather than through OTA channels. The village CBT management prefer to sell directly as it mentions before and seen on their website or social media channel.

However, certain villages have managed to sell their tourism village products more comprehensively through another OTA platform, as shown in the Tripadvisor.com. They not only sell accommodation but also sell tour packages managed by the villagers. The name of the villages are Nglanggeran and Pentingsari village.

According to BPS data, the number of tourist villages in Indonesia until 2018 is 1,734 villages destination (Reily, 2018). The locations of these tourist villages are scattered in various regions and islands of Indonesia. Domestic trips show a fairly large number from year to year as shown in Figure 2 below.

Table 1. *Desa Wisata* Indonesia's OTA Search Result (Source: own research, 2021)

No	OTA	Search Menu	"Desa Wisata" Result Search	Content	Provider
1	Traveloka.com	"Xperience"	Gumuk Reco, Semarang, Jawa Tengah	tour package	Tour operator
			Rumah Dome Teletubies, Sleman Yogyakarta	tour package	Tour operator
			Rafting Goa Pindul, Yogyakarta	tour package	Tour operator
			Margolangu, Wonosobo, Jawa Tengah	tour package	Tour operator
			Lestari Tlogo, Wonosobo, Jawa Tenga	tour package	Tour operator
			Banana Boat Desa Kumejing, Jawa Tengah	tour package	Tour operator
2	TripAdvisor.com	"Where to"	Sembalun Village	tour package	Tour operator
			Hotel Desa Wisata	hotel	Property owner
			Desa Wisata Nglanggeran	tour package	Tour operator
3	Booking.com	"Where are you going"	Desa Wisata Sukapura, Bromo, East Java	hotel/ homestay	Property owner
			Hotel Desa Wisata, Jakarta, Indonesia	hotel	Property owner
			Desa Wisata Eyang, Lagoi, Riau Arch.	hotel/resort	Property owner
			Homestay Desa Wisata Ngringinan, Bantul	hotel/ homestay	Property owner
			Desa Wisata Sibetan Homestay, Bali	hotel/ homestay	Property owner
4	Tiket.com	"ToDo"	no result		
		"Hotel"	D'Bamboo Kamp Desa Wisata Eyang	hotel	Property owner
			Reddoorz Near Desa Wisata Tambi Dieng	hotel/ homestay	Property owner
			Hotel Desa Wisata Jakarta	hotel	Property owner
			Homestay & Cottage Desa Wisata Kreatif	hotel/ homestay	Property owner
			Desa Wisata Sari Bunihayu	hotel	Property owner
			Reddoorz Plus Near Desa Wisata Kasongan	hotel	Property owner
			Spot on 2828 Desa Wisata Gubugklakah	hotel	Property owner
			Desa Wisata Hotel-Hostel	hotel	Property owner
			Desa Wisata Sukapura	hotel/ homestay	Property owner
			Desa Wisata Sibetan Homestay	hotel/ homestay	Property owner
5	Airryrooms.com	Not Available, permanently closed since May 31, 2020 due to Covid-19 Pandemic			
6	Agoda.com	"Hotels & Home"	Reddoorz near Desa Wisata Tambi Dieng	hotel	Property owner
			Hotel Desa Wisata Jakrat	hotel	Property owner
			Kasongan Travel Village	homestay	Property owner
			Dbamboo Kamp Desa Wisata Eyang, Bintan	hotel/ resort	Property owner
			Homestay Desa Wisata Ngringinan	homestay	Property owner
			Desa Wisata Kreatif Terong, Belitung	hotel/ homestay	Property owner
			Desa Wisata Pentingsari, Yogyakarta	homestay	Property owner
7	Pegipegi.com	"Destination/ hotel name"	Desa Wisata Kungkuk, Malang	hotel	Property owner
			Desa Wisata Sembalun, Lombok	hotel	Property owner
			Desa Wisata Guliang Kangin, Bali	hotel	Property owner
			Desa Wisata Pujon Kidul, Malang	hotel	Property owner
			Desa Wisata Gerabah Kasongan, Jogja	hotel	Property owner
			Desa Wisata Sari Bunihayu	hotel	Property owner
			Desa Wisata Hotel-Hostel Seribu Riam	hotel	Property owner
			Hotel Desa Wisata, Jakarta	hotel	Property owner
			Dbamboo Kamp Desa Wisata Eyang, Bintang	hotel	Property owner
			RedDoorz near Desa Wista Tambi Dieng	hotel	Property owner
			Krisna Oleh-oleh Khas Bali Desa Wisata	hotel	Property owner
			Spot on 2828 Desa Wista Gubugklakah	hotel	Property owner
8	JD.ID	"Hotel"Buy Now Vacation later"	no result		
9	Zenrooms.com	search box	no result		
10	RedDoorz.com	search box	RedDoorz Near Desa Wisata Tambi Dieng	hotel	Property owner
11	RajaKamar.com	Not Available, permanently closed since May 8, 2019			
12	myKaha.com	"Hotel"	Hotel Desa Wisata	hotel	Property owner
			DbambooKamp Desa Wisata Eyang	hotel	Property owner
			RedDooz near Desa Wisata Kasongan	hotel/ homestay	Property owner
			RedDoorz Plus near Desa Wisata Osing	hotel/ homestay	Property owner
			RedDoorz Plus near Desa Wisata Kasongan	hotel/ homestay	Property owner
			SPOT ON 2828Desa Wisata Gubugklakah	hotel	Property owner

With a historic domestic trip number from several previous years and showing a total visit of almost 290 million trips in 2019 for all destinations in Indonesia, of course, rural tourism businesses have the potential to take a percentage share of that number. Despite the main concept of rural tourism is special interest tourism which is different from mass tourism, there will still be demands for many rural CBT destinations. Shifting the type of tourists into small groups or even free individual travelers (FIT) coupled with the post-Covid-19 health protocol will change many things about managing village tourist destinations. Integrating ICT infrastructure, which CBT has long used, will continue to evolve from the blog era to the social media era, and followed to OTA era. Support and collaboration among stakeholders are needed. Community involvement can be used to achieve a power balance and assert local community views over those of developers or local governments (Li et al., 2021). In the future, if the forms of agreement regarding the division of labor and profit-sharing within tourism village actors can be formulated, then the use of applications such as OTA that sell CBT destinations will be even more massive. Indeed, it is not easy to define business agreements within community organizations such as CBT in

rural areas. Talking about money seems to marginalize the meaning of togetherness/ social cohesion for rural communities in Indonesia. Moreover, it will be an obstacle if the context in question is a business that will be related to other party stakeholders who will work together. Thus, enabling capacity building activities and catalyzing connection for knowledge exchanging and partnerships is essential, especially for geographically scattered initiatives (Duxbury et al., 2020). Furthermore, the development of the tourism business should consider the social and cultural capitals held by the community (Rachmawati, 2014). Additionally, this will be both a problem and an opportunity for developers of various ICT applications that will support the meeting of millions of potential visitors and thousands of tourism village business organizations.

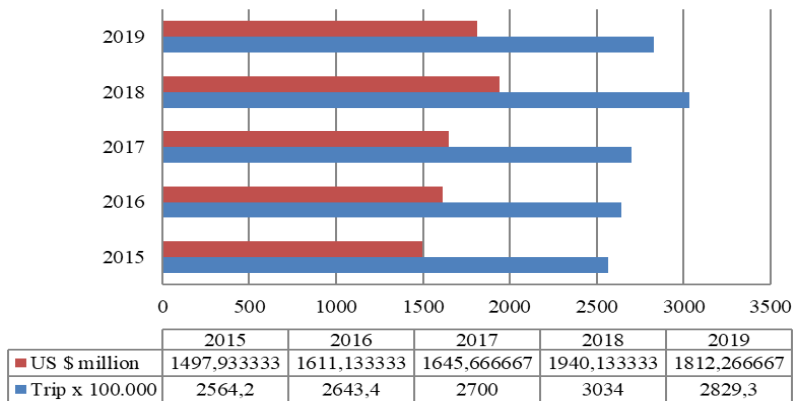


Figure 2. Indonesia Domestic Trip and Revenue (Source: Indonesia Statistics Office-BPS, 2020 (BPS-Statistics Indonesia, 2020a))

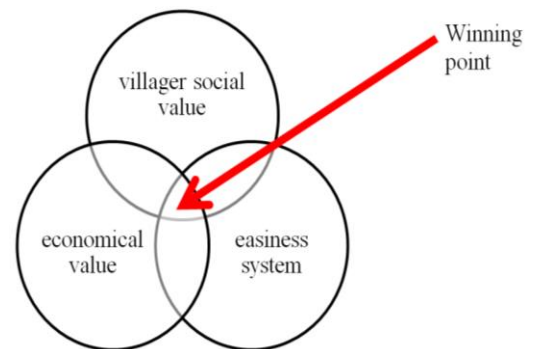


Figure 3. Rural Tourism ICT barriers comply (Source: own research, 2021)

Collaborating with OTA also requires a dynamic pricing strategy understanding. Dynamic pricing refers to a pricing approach in which the price of a product or service changes depending on a variety of criteria. (Malasevska et al., 2020). The strategy for changing and designing dynamic prices for goods and services in tourism village activities needs to be mastered by tourism village actors so that it is easy for third parties such as OTAs to participate in selling the products. The challenges for ICT businesses related to OTA on CBT can be illustrated in figure 3 below. Complying with the village social value barrier, economical barrier, and ease of the business system will make all rural tourism business players winner and give a win-win situation. The above model is almost in line with Li, et al. who stated that barriers to community participation into three groups: constraints at the operational, structural, and cultural levels (Li et al., 2021). As for tourism villages, their future needs related to the ICT function are about selling their products in the form of goods and services while avoiding things that make community cohesion ties loosen. The treatment of digital-based travel businesspeople with business models who are accustomed to solely distributing commissions cannot just be done on CBT. The reason is that there is a tourism village entity formed from the agreement of all village communities. Therefore, the determination of a business model and profit-sharing, and adequate information disclosure between managers is crucial for this digital environment development. With this condition, CBT will be able to respond more quickly to market changes as a result of their greater agility, allowing them to compete more successfully and assure long-term success (O'Connor, 2020).

Many CBT destination locations (more than 1,734 and still counting) and the large number of tourists coupled with tourism as a source of GDP income clearly shows the great need for digitalizing this business. Furthermore, with international travel bans in place, many people mentioned a shift in marketing to local or regional domestic markets (Richards and Morrill, 2021). Thus, rather mature modelling is needed to create an ITC application that can bridge business needs while not destroying the social ties of the village community. The adaptation process in the community is also as the result of a transformation process due to the impact of environmental changes, government policies and people's life patterns on the tourism destination (Marlina et al., 2021). Some ICT applications that bridge in such a way is quite successful in the transportation business are Indonesia's Gojek and Singapore's Grab Company. They can maintain social relations between motorbike taxi drivers while increasing productivity. In early 2021 the company Roatex Zrt. from Hungary, which is engaged in the toll payment system, can also win the tender for all toll road systems in Indonesia digitally with a more advanced navigation system. Transculturation is the process by which disadvantaged or subjugated communities choose from material conveyed to them by dominating urban cultures, sometimes leading to changes in favor of the dominant culture's wishes (Li et al., 2021). Thus, this makes it difficult for the rural community as parties who tend to be in a marginal condition to adjust. Due to low popularity, a lack of e-commerce operating experience, and other factors, it is difficult for small, medium-sized, and even some large tourism companies to run their own direct internet channels independently (Long and Shi, 2017).

In general, the formula used by giant e-commerce is to help partners in marketing strategies and deal with calculating profits openly to both parties. IT-based companies such as Gojek and Grab companies get partners who provide goods and services because they are considered capable of helping marketing compared to conventional marketing (Prapti and Rahoyo, 2018). Grab not only optimizes Small to Medium Enterprises/ SMEs kiosk operations by integrating kiosks into their suppliers, but also diversifying their businesses (Pangestu et al., 2020). According to Long and Shi (2017), an OTA's pricing selections are influenced by commissions on unit sales, remuneration, and service costs (Long and Shi, 2017) so pricing strategy is essential. Furthermore, in this digital era, the CBT company in tourist villages will follow a similar approach and will need to be aware of all the opportunities accessible now and take advantage of them in order to

boost profitability and performance (Stănculescu and Dumitrescu, 2014). Service quality that reflects professionalism is also an assessment for e-commerce partners (Adam et al., 2020). So, with some adjustment it means there is always a formula that can be quantified from a qualitative social phenomenon in a digital system. From the various references and report above, the values that can be approached quantitatively can be seen in Table 2 below.

Table 2. OTA's Quantifying System (Source: own research, 2021)

No.	Qualitative Value	Quantitative Approach
1	money talk difficulty among villager	pricing disclosure
2	marketing ability and capacity	dynamic pricing and promotion
3	capacity building	businesses diversifying
4	quality judgment	quality rating system
5	IT system difficulties	friendly User Interface (UI) design

Furthermore, one specific market that attracted increased attention in 2020 was digital nomads. These independent workers, who previously had been a peripheral element in the youth travel market, suddenly became interested as a new source of demand for destinations and travel industry companies (Richards and Morrill, 2021). A huge number of tourism villages and their market in Indonesia need to be met with a comprehensive understanding from OTA app business developers to better future business results. Finally, OTAs should be encouraged appropriately by their rise (Lv et al., 2020).

CONCLUSION

The tourism business, like other businesses, will experience a cycle of ups and downs depending on macro conditions. Rural tourism can boost business results by combining consumer orientation with the use of ICT as a tool for the value of the bid in the marketplace (Peña and Jamilena, 2011). Community-based tourism businesses in the form of tourist villages in Indonesia require comprehensive digital technology and ICT to encourage business optimization. Transparent and mutually beneficial understandings and agreements between OTA and CBT entities need to be explored so that more comprehensive benefits can be achieved. CBT organization could learn from OTAs to provide better marketing and competitive benefits to their partners (Abou-Shouk, 2018). Moreover, OTA needs to engage in a partnership/network with the community for a better marketing efficiency of the rural tourist destination.

The number of tourist villages in Indonesia and the continued growth and the large popularity of the tourist market are challenges and opportunities for ICT to engage with rural tourism stakeholders in Indonesia. One of the development methods in rural areas with established regional identities is to increase their appeal for nonpolluting investments, particularly in the tourism sector (Ilieş et al., 2008). The use of digital technology for optimization and development of tourism village businesses shall pay attention to several barriers which have attention to sustainability both economically and socially. The collaboration between the destination and the OTA will enable them to respond more rapidly to market changes, allowing them to compete more efficiently and ensure long-term success (O'Connor, 2020).

Implications of the study

This paper's findings offer several standing practical implications to improve the opportunities of existing rural tourism destinations. Findings of possible strategies based on various literature and field observations can provide clues to stakeholders and ICT business players on using their community-based tourism assets to improve the local economy. Quantifying community participation, empowerment, destination linkage, a collaboration between stakeholders, and ICT application as smart tourism implication should be done in future research to bridge understanding with OTA app developers.

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REFERENCES

- Abou-Shouk, M.A. (2018). Destination management organizations and destination marketing: adopting the business model of e-portals in engaging travel agents. *Journal of Travel and Tourism Marketing*, 35(2), 178–188. <https://doi.org/10.1080/10548408.2017.1350254>
- Adam, M., Kee, D.M.H., Junaina, I., Fadhilah, N., Uwais, N., Al Rashidi, F., Al Shammari, H., Quttainah, M.A., Srivastava, A., & Pandey, R. (2020). The Influence of Customer Satisfaction on Grab Services in Malaysia. *International Journal of Tourism and Hospitality in Asia Pacific*, 3(2), 26–37. <https://doi.org/10.32535/ijthap.v3i2.820>
- Atun, R.A., Nafa, H., & Türker, Ö.O. (2019). Envisaging sustainable rural development through 'context-dependent tourism': case of northern Cyprus. *Environment, Development and Sustainability*, 21(4), 1715–1744. <https://doi.org/10.1007/s10668-018-0100-8>
- Badurina, J.Đ. (2019). Teaching Case Study Mon Perin Ltd.: Example of Community-Owned Tourism. *Tourism and Hospitality Management*, 25(2), 421–429.
- Bronner, F., & de Hoog, R. (2016). Travel websites: Changing visits, evaluations and posts. *Annals of Tourism Research*, 57, 94–112. <https://doi.org/10.1016/j.annals.2015.12.012>
- Buhalis, D., & Amaranggana, A. (2013). Smart Tourism Destinations. In Z. Xiang & I. Tussyadiah (Eds.), *Information and Communication Technologies in Tourism 2014*. Springer, Cham. <https://doi.org/10.1007/978-3-319-03973-2>
- Chen, P., & Kong, X. (2021). Tourism-led Commodification of Place and Rural Transformation Development: A Case Study of Xixinan Village, Huangshan, China. *Land*, 10(7), 694. <https://doi.org/10.3390/land10070694>
- Duxbury, N., Bakas, F.E., Vinagre de Castro, T., & Silva, S. (2020). Creative Tourism Development Models towards Sustainable and Regenerative Tourism. *Sustainability*, 13(1), 2. <https://doi.org/10.3390/su13010002>
- Fatimah, T. (2015). The Impacts of Rural Tourism Initiatives on Cultural Landscape Sustainability in Borobudur Area. *Procedia Environmental Sciences*, 28(Sustain 2014), 567–577. <https://doi.org/10.1016/j.proenv.2015.07.067>
- GoIndonesia.com. (n.d.). *GoIndonesia.com*. Retrieved July 12, 2021, from <http://goindonesia.com/>
- Ilieş, A., Ilieş, D.C., Josan, I., Grama, V., & Gozner, M. (2008). Romanian Rural Tourism Between Authentic/Traditional and Modern/Contemporary. The Case of Crişana and Maramureş Areas. *GeoJournal of Tourism and Geosites Year 1*, 2(2), 140–148.
- Li, X., Kim, J.S., & Lee, T.J. (2021). Collaboration for Community-Based Cultural Sustainability in Island Tourism Development: A Case in Korea. *Sustainability*, 13(13), 7306. <https://doi.org/10.3390/su13137306>

- Long, Y., & Shi, P. (2017). Pricing strategies of tour operator and online travel agency based on cooperation to achieve O2O model. *Tourism Management*, 62, 302–311. <https://doi.org/10.1016/j.tourman.2017.05.002>
- Lu, A.C.C., Gursay, D., & Lu, C.Y.R. (2016). Antecedents and outcomes of consumers' confusion in the online tourism domain. *Annals of Tourism Research*, 57(200), 76–93. <https://doi.org/10.1016/j.annals.2015.11.020>
- Ly, X., Li, N., Xu, X., & Yang, Y. (2020). Understanding the emergence and development of online travel agencies: a dynamic evaluation and simulation approach. *Internet Research*, 30(6), 1783–1810. <https://doi.org/10.1108/INTR-11-2019-0464>
- Malasevskaya, I., Haugom, E., Hinterhuber, A., & Lien, G. (2020). Dynamic pricing assuming demand shifting: the alpine skiing industry. *Journal of Travel & Tourism Marketing*, 37(7), 785–803. <https://doi.org/10.1080/10548408.2020.1835787>
- Marlina, Sumarmi, Astina, I.K., & Susilo, S. (2021). Social-Economic Adaptation Strategies of Bajo Mola Fishers in Wakatobi National Park. *Geojournal of Tourism and Geosites*, 34(1), 14–19. <https://doi.org/10.30892/GTG.34102-613>
- Mohd Noor, K.B. (2008). Case Study: A Strategic Research Methodology. *American Journal of Applied Sciences*, 5(11), 1602–1604. <http://www.gslis.utexas.edu/~ssoy/usesusers/1391d1b.htm%5Cnhttp://www.sbs.ox.ac.uk/centres/bt/directory/Documents/CaseStudy42HBQR11PRINT.pdf%5Cnhttp://books.google.com/books?id=FzawIAdilHkC&pgis=1%5Cnhttp://scielo.iics.una.py/pdf/riics/v8n1/v8n1a09.pdf>
- Neidhardt, J., & Werthner, H. (2018). IT and tourism: still a hot topic, but do not forget IT. *Information Technology and Tourism*, 20(1–4), 1–7. <https://doi.org/10.1007/s40558-018-0115-x>
- O'Connor, P. (2020). Online tourism and hospitality distribution: a perspective article. *Tourism Review*, 75(1), 290–293. <https://doi.org/10.1108/TR-06-2019-0216>
- Oltra González, I., Camarero, C., & San José Cabeza, R. (2021). SOS to my followers! The role of marketing communications in reinforcing online travel community value during times of crisis. *Tourism Management Perspectives*, 39, 100843. <https://doi.org/10.1016/j.tmp.2021.100843>
- Pangestu, M.E., Simandjuntak, D., Damuri, Y.R., Fernandes, A., Handoko, I., Rahman, F., Priyadi, L., Kusumawardhani, S., Perkasa, B. T., Yazid, E.K., & Phoe, F. (2020). *Grab and the Gig Economy: Strengthening Economic Resilience 2019 Study* (Issue June).
- Park, D., Bahrudin, F.I., & Han, J. (2020). Circular Reasoning for the Evolution of Research Through a Strategic Construction of Research Methodologies. *International Journal of Quantitative and Qualitative Research Methods*, 8(3), 1–23.
- Peña, A.I.P., & Jamilena, D.M.F. (2011). Market orientation adoption in rural tourism: Impact on business outcomes and the perceived value. *International Review on Public and Nonprofit Marketing*, 8(2), 195–197. <https://doi.org/10.1007/s12208-011-0068-7>
- Pencarelli, T. (2020). The digital revolution in the travel and tourism industry. *Information Technology and Tourism*, 22(3), 455–476. <https://doi.org/10.1007/s40558-019-00160-3>
- Prapti, R.L., & Rahoyo. (2018). Dampak Bisnis Kuliner Melalui go Food Bagi Pertumbuhan Ekonomi Di Kota Semarang. *Dinamika Sosial Budaya*, 20(2), 120–133.
- Priatmoko, S., Kabil, M., Purwoko, Y., & Dávid, L.D. (2021). Rethinking Sustainable Community-Based Tourism: A Villager's Point of View and Case Study in Pampang Village, Indonesia. *Sustainability*, 13(6), 1–15. <https://doi.org/10.3390/su13063245>
- Priatmoko, S., & Purwoko, Y. (2020). Does the Context of MSPDM Analysis Relevant in Rural Tourism?: Case Study of Pentingsari, Nglanggeran, and Penglipuran. *International Conference on Creative Economics, Tourism and Information Management (ICCETIM) 2019*, Vol. 1-978-989-758-451-0, 15–21. <https://doi.org/10.5220/0009857400150021>
- Pusparisa, Y. (2019). *10 Agen Perjalanan Online Terpopuler*. Katadata.Co.Id. <https://databoks.katadata.co.id/datapublish/2019/11/12/10-agensi-perjalanan-online-pilihan-konsumen#>
- Putra, F.K.K., Saepudin, P., Adriansyah, E., & Adrian, I.G.A.W. (2018). Digital Tourism: A Content Analysis of West Java Tourism Websites. *Journal of Indonesian Tourism and Development Studies*, 6(2), 73–84. <https://doi.org/10.21776/ub.jitode.2018.006.02.02>
- Quagliione, D., Crociata, A., Agovino, M., & Iaia, L. (2020). Cultural capital and online purchase of tourism services. *Annals of Tourism Research*, 80 (March 2019), 102797. <https://doi.org/10.1016/j.annals.2019.102797>
- Rachmawati, E. (2014). Host Community's Social and Cultural Capital for Ecotourism Development in Indonesia. *SHS Web of Conferences*, 12, 01035. <https://doi.org/10.1051/shsconf/20141201035>
- Reily, M. (2018). *2018, Potensi Desa Wisata Naik Menjadi 1.734 Unit*. Katadata.Co.Id. <https://katadata.co.id/ekarina/berita/5e9a558d10a92/2018-potensi-desa-wisata-naik-menjadi-1734-unit>
- Richards, G., & Morrill, W. (2021). The Challenge of Covid-19 for Youth Travel. *Anais Brasileiros de Estudos Turísticos - ABET*, 11(Single Issue (2021): Current Topics in Tourism and Thematic Section: "Tourism in times of COVID-19), 1–8. <https://periodicos.ufjf.br/index.php/abet>
- Rindrasih, E. (2018). Under the Volcano: Responses of a Community-Based Tourism Village to the 2010 Eruption of Mount Merapi, Indonesia. *Sustainability (Switzerland)*, 10(5). <https://doi.org/10.3390/su10051620>
- Rosyidi, M.I. (2019). Indonesian Online Travel Agencies: Profiling the services, employment, and users. *Advances in Social Science, Education and Humanities Research*, 259, 211–216.
- Rothchild, I. (2006). Induction, Deduction, and the Scientific Method. In *Society for the Study of Reproduction* (pp. 1–11). http://www.ssr.org/sites/ssr.org/files/uploads/attachments/node/16/rothchild_sciemethod.pdf
- Setokoe, T.J. (2021). Community-based Tourism: A Panacea for Community Development in Nqileni Village, Eastern Cape, South Africa. *Geojournal of Tourism and Geosites*, 34(1), 28–32. <https://doi.org/10.30892/gtg.34104-615>
- Stănculescu, G.C., & Dumitrescu, F. (2014). Optimizing the IT Structures of Tourism SMEs Using Modern Applications and Resources (Cloud). *Procedia Economics and Finance*, 15(14), 1769–1778. [https://doi.org/10.1016/S2212-5671\(14\)00653-4](https://doi.org/10.1016/S2212-5671(14)00653-4)
- Suansri, P. (2003). *Community based tourism handbook*. Responsible Ecological Social Tour-REST.
- Syarizka, D. (2019). *Rajakamar Setop Operasi Karena Kalah Modal?* Bisnis.Com. <https://teknologi.bisnis.com/read/20190510/266/920998/rajakamar-setop-operasi-karena-kalah-modal>
- Talwar, S., Dhir, A., Kaur, P., & Mäntymäki, M. (2020a). Why do people purchase from online travel agencies (OTAs)? A consumption values perspective. *International Journal of Hospitality Management*, 88(May), 102534. <https://doi.org/10.1016/j.ijhm.2020.102534>
- Talwar, S., Dhir, A., Kaur, P., & Mäntymäki, M. (2020b). Barriers toward purchasing from online travel agencies. *International Journal of Hospitality Management*, 89(May), 102593. <https://doi.org/10.1016/j.ijhm.2020.102593>
- Vitasurya, V.R. (2016). Local Wisdom for Sustainable Development of Rural Tourism, Case on Kalibiru and Lopati Village, Province of Daerah Istimewa Yogyakarta. *Procedia - Social and Behavioral Sciences*, 216(October 2015), 97–108. <https://doi.org/10.1016/j.sbspro.2015.12.014>
- Wynn, M., & Olayinka, O. (2021). E-Business Strategy in Developing Countries: A Framework and Checklist for the Small Business Sector. *Sustainability*, 13(13), 7356. <https://doi.org/10.3390/su13137356>
- Yakup, A.P. (2019). *Pengaruh Sektor Pariwisata Terhadap Pertumbuhan Ekonomi Indonesia* [Airlangga]. <http://repository.unair.ac.id/86231/1/TE.05-19YakpABSTRAK.pdf>
- Yin, R.K. (2003). *Case Study Research and Applications: Design and Methods*. SAGE Publications.
- Yu, D. (2020). *Indonesian hospitality startup Airy to permanently shut down amid pandemic*. Technasia. Com. <https://www.technasia.com/airy-cease-operations>
- *** BPS-Statistics Indonesia. (2020a). *Domestic Tourism Statistics 2019*. BPS-Statistics Indonesia.
- *** BPS-Statistics Indonesia. (2020b). Indonesian Economic Report, 2020. In W.P.P. Adi & S. Ayuni (Eds.), *BPS-Statistics Indonesia*. BPS-Statistics Indonesia. www.bi.go.id
- *** OECD. (2020). *OECD Tourism Trends and Policies 2020*. OECD Publishing. <https://doi.org/10.1787/6b47b985-en>

PREDICTING ORGANIZATIONAL CITIZENSHIP BEHAVIOR THROUGH PSYCHOLOGICAL OWNERSHIP AND JOB SATISFACTION IN FOUR-STAR HOTELS

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Abstract: This study examines the relationship between Psychological Ownership (PO) on Job Satisfaction (JS) and Organizational Citizenship behaviour (OCB). Using 240 front-line samples from five-star hotel workers, these studies are quantitatively planned. Empirical data were collected from employees via a questionnaire and analysed using Partial Least Square (PLS). The results indicate that Psychological Ownership and Job Satisfaction enhance the Organizational Citizenship behaviour, but the Psychological Ownership has a stronger impact. This result also provides evidence that there is a disparity in control between the employee's personality and their attitude toward their actions at the workplace. The findings of this article can provide insights to improve the Organizational Citizenship behaviour of employees, and that management must pay attention to personalities of employees, as personality traits of workers appear to influence Organizational Citizenship behaviour. This study examined the attitude effect (JS) and personality traits (PO) against OCB. Theoretically, some previous studies suggest that the predictors of OCB are JS and organizational engagement as indicators of the attitudes of the employees. Thus, this study would investigate JS, PO and OCB at well-known hotels in Bali, Indonesia.

Key words: psychological ownership, job satisfaction, organizational citizenship behaviour

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INTRODUCTION

One of the prominent hospitality industries contributing to national economic growth is the tourism industry, specifically the hotel industry (Tsai and Wu, 2010; Darma et al., 2020; Akter et al., 2020; Rahmawati et al., 2021). Economic growth notwithstanding, the industry has a reputation for inadequate working conditions in the hospitality sector (e.g. Arusteu, 2013; Kamri et al., 2020; Ratnasari et al., 2020), as evidenced by the comparatively limited efforts made by organizations to improve poor working conditions and the quality of human resources (Suharto et al., 2019). Hallin and Marnburg (2008) noted that employees play a significant role in increasing customer satisfaction and loyalty. Therefore, the organisation need the creative employee to create higher creativity of employees in the workplace (Riana et al., 2020). Another study applying descriptive resource-based view theory (Barney, 1991) indicated that human resource management is one of the most precious and scarce of all company assets. Successful organizations often encourage their employees to work beyond their primary tasks (Robbins and Judge, 2015). The work contributions of employees that go beyond their formal job description duties are known as OCB (Podsakoff et al., 2000; Smith et al., 1983). The concept of OCB has become important for research into organizational behaviour (Asha and Jyothi, 2013). OCB is described as a form of work behaviour with various aspects of work attitudes as the key predictors of enhancing work behaviour (Podsakoff et al., 2000; Smith et al., 1983) and greater organizational performance (Podsakoff et al., 2000; Organ and Ryan, 1995; Podsakoff et al., 2009) by hiring the best staff (Podsakoff et al., 2003). There are a number of factors that can form OCB, and one of the main deciding factors is work satisfaction (Zhao et al., 2014). Satisfied workers are more likely to speak favorably about the company (Afaq et al., 2017), support their colleagues, and perform beyond usual standards (Foote and Li-Ping Tang, 2008; Noermijati and Primasari, 2015; Zheng et al., 2014; Riana, 2018).

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They may therefore be more cooperative when duty calls because they want to repeat these positive experiences (Aftab, 2012; Khalid et al., 2011) and demonstrate their good interpersonal skills (Chiaburu et al., 2011). This behavior reflects OCB, a concept that is not mentioned in formal job descriptions but is highly valuable as it increases the efficiency of the organization (Katz, 1964; Sloat, 1999). Moreover, it is crucial for management to satisfy employees by continuously maintaining internal relations, the compensation system and the work itself (Ileri and Soylu, 2012). A number of researchers (Samancioglu et al., 2020; Agrawal and Gautam, 2020; Yoon and Suh, 2003) have shown that JS has a significant impact on OCB. Kumar et al. (2009) point out that there is increasing evidence that OCB is significantly influential and capable of improving individual, team, and organizational performance. Foote and Li-Ping Tang (2008) emphasized that JS contributes significantly to the cultivation of OCB among employees. Many researchers (Choi et al., 2019; Zeinabadi, 2010; Foote and Li Ping Tang, 2008) argue that JS is a dominant factor directly affecting the level of OCB demonstrated by employees. In addition to JS, psychological ownership (PO) is one of the factors that cultivate OCB among employees (Ramos et al., 2014). Employees can develop positive, negative or even mixed feelings about behaviour through PO (Pierce et al., 2001).

Van Dyne and Pierce (2004) stated that PO is an individual psychological condition that generates a possessive attachment to a specific target. Bambale (2013) presents the possibility that psychological possession is one of OCB's primary determinants. Scholars have found that the more severe the organizations' possessive connection, the higher the JS level (Van Dyne and Pierce, 2004; Mustafa et al., 2016; Pierce et al., 2001). Strong PO motivates employees to accept a positive, personal or impersonal feeling towards their properties. As a form of job behaviour, assumptions have been developed in the current study to contribute to the role of a job attitude as a key predictor in the analysis. There are two employment-related attitudes that are predicted to affect OCB of employees, including: PO (Van Dyne and Pierce, 2004; Ramos et al., 2014) and JS (Cohen and Vigoda, 2000; Van Dyne and Pierce, 2004; Cohen and Vigoda, 2000; Yoon and Suh, 2003). Similarly, the aim of this study is to analyse the prediction of OCB through PO and JS in four-star hotels. One recommendation by Van Dyne and Pierce (2004) was to research the effect of PO on employee behaviour in non-Western settings. The current study attempts to fill that gap in extant literature. Additionally, the study builds upon extant literature by examining the concepts of OCB and PO within the realm of service-based business, and more specifically, the hotel industry.

LITERATURE REVIEW

PO is a manifestation of a psychological sense of ownership of the organization (Van Dyne and Pierce, 2004). Psychological feelings of ownership of the object do not depend on whether the subjects consider themselves to be the legal owner of the object; they can be claimed by employees who, even in the form of stock, have no ownership of the company at all, yet feel as though they take a small part of ownership. Such ownership emotions may motivate employees to behave positively, develop self-efficacy and strengthen their sense of obligation towards the organization. Their sense of ownership within the organization, including creating OCB, has a beneficial influence on the organization (Van Dyne and Pierce, 2004; Ramos et al., 2014). Research by Van Dyne and Pierce (2004) shows that PO or feelings of ownership towards the company psychologically motivates workers to do more than the standard job requirements demand as part of their work (Mustafa et al., 2015; Pan et al., 2014). Based on these concepts; we propose the following:

Hypothesis 1: Psychological Ownership has a significant influence on OCB.

The Pay (compensation) element refers to the pay workers earn. It is assumed to be within reasonable levels of fairness and equitability among the organization's colleagues. Regarding the advancement of workers, there is an assumed equal probability that workers will be able to improve their expertise in different fields, thus creating equal opportunity for upward mobility in the organization. The supervisor's position and oversight provide workers the support and technical assistance they need. Eventually, JS also contributes to the co-worker atmosphere (Nurak and Riana, 2017). The collaborators play a role in providing task-related social and technical support. A high level of JS can affect the efficiency and effort of the employees to demonstrate OCB (Cohen and Vigoda, 2000; Van Dyne and Pierce, 2004). Extant research found that JS and OCB influence each other (Asha and Jyothi, 2013; Kim, 2006; Mushtaq et al., 2014; Shokrkon and Naami, 2008). In fact, some studies found that JS affects OCB significantly (Mohammad et al., 2011; Murphy et al., 2002). Asha and Jyothi (2013) found a reciprocal relationship between internal branding activities and OCB. That is, employee satisfaction and commitment to the organization leads to OCB and vice versa. Based on these strong arguments, we propose:

Hypothesis 2: JS has a significant influence on OCB.

Pierce et al. (2001) suggest that PO, manifested by the instinctive sense of ownership, stems from three key human motivators. First is efficacy. The sense of ownership, the desire to possess is an intrinsic condition that is part of every human being. Possession provides for satisfaction and control. Second, individuals establish a sense of self-identity by possessing material and non-material symbols that identify and reflect the self. Third, people need to have a place. This territorial ownership of space facilitates the feeling of home and is a human need. Combined, these three determinants have major implications for behaviour, emotions and psychology. A strong sense of psychological ownership will influence the behaviour of employees to undertake tasks that are not part of their primary tasks and functions. Studies indicate the correlation between PO and JS (Van Dyne and Pierce, 2004; Vandewalle et al., 1995). Ownership feelings have been shown to increase job satisfaction, as well as promote an atmosphere where JS grows (Van Dyne and Pierce, 2004; Klein and Kozlowski, 2000; Pierce et al., 2004). In addition, happy workers appear to take on more than their position demands (Kim, 2006; Murphy et al., 2002; Mushtaq et al., 2014; Shokrkon and Naami, 2008). Therefore, we propose:

Hypothesis 3. Psychological Ownership has a significant influence on JS.

RESEARCH METHODOLOGY

The population of this study is from four-star hotels in Bali. More specifically, the sample includes four-star hotels in Kuta and Legian-Bali. This study is quantitative using data collected through the distribution of questionnaires to staff in the housekeeping and front office departments. There was a total of 350 questionnaires distributed. A total of 255 questionnaires were collected and, after analysis, only 240 were considered valid for analysis. The questionnaire consists of five optional answers with points ranging from 1 to 5, which are strongly disagreed (1), disagreed (2), neutral (3), agreed (4) and strongly agreed (5). The questionnaire contains three variables, namely psychological ownership (PO) adopted by Van Dyne and Pierce (2004), JS adapted from research by Spector (1985), and Hakim and Sutrisno (2018), and OCB adapted from research by Podsakoff et al. (2000) and Organ (1997). These researchers apply Partial Least Square (PLS3) to examine the hypotheses. The profiles of respondents were collected from 240 employees of housekeeping and front office departments. Most of the employees in the front office and housekeeping who responded were men—149 respondents (62.08%)—and 91 respondents (37.92%) were women. The majority of the respondents (118 or 49.16%) were 21–30 years old, and the age range of 31–40 years old (84 respondents or 35%), and for 41–50 years old, there were 38 respondents (15.84%). Educational background showed that the majority of the employees have an Associate degree (D1, D2, and D3)—133 respondents (55.41%); 88 respondents (36.67%) have a high school degree, and 38 respondents (7.92%) have a Bachelor's degree (S1 and D4). In terms of length of work, the majority of the employees had been working for their employer for 3–8 years (155 respondents or 64.58%); 48 respondents (20%) had been there 9–14 years. The remaining 37 respondents (15.42%) had been with their employer for less than 3 years. Based on the department, most of the respondents (165 respondents or 68.75%) were in housekeeping, and the other 75 respondents (31.25%) were in the front office department.

Table 1. The Test of Validity and Reliability

Indicator of Variables	CA	rho_A	CR	AVE
My – feelings of ownership as “I” – (X1)	0.815	0.838	0.892	0.734
Ours – feelings of ownership as “us” – (X2)	0.714	0.712	0.820	0.533
Mine – feelings of ownership in general – (X3)	0.649	0.653	0.811	0.589
The job itself – (Y11)	0.537	1.032	0.774	0.644
Pay – (Y12)	0.802	0.818	0.884	0.717
Supervision – (Y13)	0.870	0.886	0.911	0.718
Co-worker – (Y14)	0.676	0.677	0.821	0.605
Altruism (helping others) – (Y21)	0.795	0.805	0.907	0.829
Conscientiousness – (Y22)	0.746	0.768	0.860	0.678
Sportsmanship – (Y23)	0.773	0.774	0.868	0.687
Courtesy – (Y24)	0.847	0.851	0.908	0.767
Civic virtue – (Y25)	0.674	0.708	0.858	0.751

Table 2. The Outer Loading
Value Indicator of Research Variable

Variable	Indicator	Outer Loading
Psychological ownership (X ₁)	“My” is a feeling of ownership as “I” (X _{1.1})	0.883
	“Ours” is a feeling of ownership as “we” (X _{1.2})	0.866
	“Mine” is a general feeling of ownership (X _{1.3})	0.831
Job satisfaction (Y ₁)	The work itself (Y _{1.1})	0.635
	Pay (Y _{1.2})	0.809
	Supervision (Y _{1.3})	0.919
	Co-Worker (Y _{1.4})	0.771
Organizational citizenship behavior (Y ₂)	Altruism (Y _{1.1})	0.636
	Conscientiousness (Y _{1.2})	0.857
	Sportsmanship (Y _{1.3})	0.886
	Courtesy (Y _{1.4})	0.828
	Civic virtue (Y _{1.5})	0.606

RESULTS

The validity and reliability test required a model feasibility test for every construct used. The analysis results show the validity and reliability test result upon the construct. Table 1 shows that the Cronbach's alpha values range from 0.6–0.70, so the assessment is considered to be reliable. The next assessment of data quality is by examining the rho_A. The variables are considered as reliable if the variance rho_A values are higher than 0.70 (>0.70). This result of the data quality test shows that the variance of rho-A values are above 0.70; thus, they confirm the Cronbach's alpha values, which have already been considered as reliable. The data quality test also examines the values of composite reliability—they are considered reliable if the variance value is a minimum of 0.70 (Chin and Newsted, 1999; Ghazali and Latan, 2012). The result of the composite reliability calculation is higher than 0.70, which means the model has met the composite criteria. Furthermore, the data that has been analyzed must be qualified to the convergent validity. It aims to test the instrument's validity specifically for the reflective indicator. The range of AVE values from 0.50 to 0.60 is considered as adequate (Ghozali and Latan, 2012). Therefore, it can be concluded that these values meet the convergent criteria. The convergent validity test is also measured based on the values of the loading factor (≥ 0.50) from the construct indicator, as presented in Table 2.

The result of the outer model test, which includes the convergent validity, rho_a, discriminant validity, composite reliability, Cronbach's alpha, and outer loading to assess the validity and reliability of the indicator in the outer model evaluation, shows that all those tests have met the criteria. Accordingly, the model qualifies for the several requirements of validity and reliability in the use of SmartPLS analysis; therefore, the model is confirmed to be valid and reliable. This research also uses a number of approaches to evaluate the structural model (inner model), which is the Q Square Predictive Relevance (Q^2) and Goodness of Fit (GoF). The Q^2 predictive relevance test refers to formula is as follows.

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2) \dots 1). \text{ Hair et al. (2006)}$$

Based on the data of R square (R^2) in Table 3, the value of Q^2 predictive relevance can be calculated through the following formula. $Q^2 = 1 - (1 - 0.554)(1 - 0.341)$. $Q^2 = 1 - (0.446)(0.659) = Q^2 = 0.70609$ (Q^2 predictive relevance is good). The calculation resulted in a Q^2 value of 0.70609; therefore, it can be interpreted that the model shows a very good level of prediction. From the result, it can be acknowledged that as much as 70.61% of the relations among analyzed variables in

the model can be explained by the model thoroughly, while the rest, 29.39%, are influenced by other variables that cannot be used in the research model. The GoF is an overall model developed by Ghozali and Latan (2012) and Hair et al. (2006) uses three criteria of GoF, where 0.10 is categorized as small, 0.25 as medium, and 0.36 as large.

Table 3. R² endogenous Variable

Variables	R Square	R Square Adjusted
Job Satisfaction (Y1)	0.554	0.552
Organizational Citizenship Behaviour (Y2)	0.341	0.335

Below is the assessment of GoF. $GoF = \sqrt{\text{average AVE} \times \text{average } R^2} = \sqrt{0.421 \times 0.447} = \sqrt{0.188} = 0.434$. The assessment result of the GoF research model shows the GoF value as 0.434, thoroughly defines the accuracy of the assessment model very well because it falls into the large GoF category (>0.36). The hypothesis test related to the influence among variables using PLS₃ analysis is presented in Table 4 as follows. Table 4 also shows the analysis results of the relationships between variables, showing that all relationships are confirmed to be significant. The analysis results are presented in the following Figure 1.

The hypothesis proves that PO is positive and significant effect toward the OCB, which means that hypothesis 1 (H1) is accepted. The path coefficient of effects shows a value of 0.390, with a t-statistic of 4.574 < 1.96 and a significance level (p-values) of 0.000. This result means that the higher the PO, the higher the OCB would be. The analysis results that JS affects the OCB positively and significantly, which means that hypothesis 2 (H2) is accepted. The test result shows the path coefficient as 0.232, with a t-statistic value of 2.686 > 1.96 (t-critical), and significance level (p-values) of 0.007. Moreover, the analysis results in the positive and significant effect of PO toward JS, which means that hypothesis 3 (H3) is accepted. This result shows that there is a path coefficient of 0.744 with a t-statistic of 19.296 (< 1.96) and a level of significance (p-values) of 0.000. Accordingly, the hypothesis that states that PO positively and significantly affects the JS is supported.

Table 4. The Path Coefficient

Hypothesis	Original Samples	Standard Deviation	t-statistics	P-values
PO → JS	0.744	0.039	19.296	0.000
PO → OCB	0.390	0.085	4.574	0.000
JS → OCB	0.232	0.086	2.686	0.007

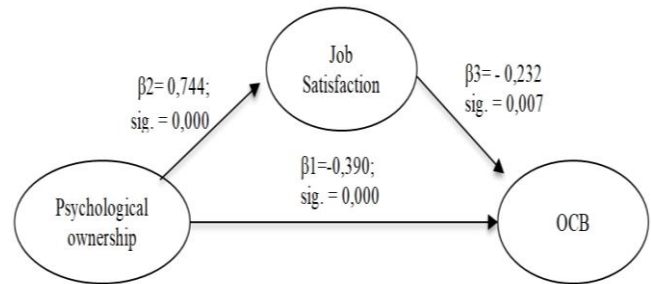


Figure 1. PLS Model

DISCUSSIONS

PO is an individual psychological experience that occurs when an individual develops a sense of possessiveness towards a certain target that later becomes the foundation of the PO (Van Dyne and Pierce, 2004). If an employee perceives an object as theirs, then feelings of ownership of that object will become stronger (Caspi and Blau, 2011). Mann (1991) wrote, "What I own feels like a part of me." Feelings of ownership of such items are significant and have a strong psychological and behavioural impact. The goal is usually tangible, such as toys, homes, property, and others, but may also be intangible, including profits, ideas, and growth. Employees that have a high level of PO appear to be more satisfied with their jobs. The happiness or disappointment felt by workers is the product of a contrast of what they have earned from their jobs with their expectations for the job (O'Connor, 2018; Masum et al., 2016). Hope will be felt if the disparity or distance between the individual expectations is fairly low in comparison to what they really obtain from the job. On the other hand, frustration would be felt if there is a significant difference between their expectations and what they benefit from the work. Having strong PO could increase the JS felt by employees. According to Pierce et al. (2004) PO is a state in which individuals believe that some part belongs to them. The purpose or object of the PO may be materialistic (things, facilities), but it may also be non-materialistic, such as thoughts, creative arts, sounds, etc. (Pierce et al., 2004). Employees who perceive an organization's goal as their own goal appear to experience a higher degree of JS when performing their tasks.

PO represents the interaction between individuals and an entity (material or immaterial) when the objects have a close link with the individuals (Furby, 1978; Furby, 1991). Ownership plays a dominant role in the identity of someone and becomes part of their extended self (Belk, 1988). As Pierce et al. (2001) have pointed out, what has become the possession of individuals (mentally) has also become part of their extended self, in the form of an individual and a psychological sense of ownership. Extended self includes a person, thing or place that has a psychological influence on a part of someone's self (Ramos et al., 2014). PO represents one's own awareness, perception, and confidence in relation to the goal of ownership. This cognitive condition also involves an affective component or emotional sensation. It is said that the feelings of ownership generate happiness, which is also basically imbued with the feelings of competence and success. Moreover, when someone admits that their targets are theirs, or that they belong to a certain group of people, the affective component will be clear.

The findings of the study indicate that the OCB is influenced positively and substantially by PO. The lower the PO, the higher the OCB of the employee. A study conducted by Van Dyne and Pierce (2004) found that PO in an organization psychologically influences the employees in their job description to be willing to do extra work beyond their formal tasks. Ownership feelings towards an object can move a subject to act positively towards anything he/she has, cultivate self-efficacy and increase the sense of responsibility towards the organization. JS is individualistic, and according to current values, levels of satisfaction will vary. Ozturk (2010) notes that JS is a general attitude towards someone's job which considers the difference between the numbers of awards the employee earns and the number they think they should earn. Research shows that JS affects the OCB positively and substantially (Foote and Li-Ping Tang, 2008; Mohammad et al., 2011; Ozturk, 2010). This

suggests that the more the workers are happy with the job and their working environment, the higher the OCB of workers would be (Mushtaq et al., 2014). Agrawal and Gautam (2020) underscore that positive emotional and happy responses to an organization's assessment of the job, salary, promotion, supervision, and co-workers may voluntarily increase positive workplace behaviour. JS of workers also affects their ability to demonstrate OCB (Van Dyne and Pierce, 2004; Foote and Li-Ping Tang, 2008). If the employees are very happy with the aspects of work (e.g. work itself, salary, promotion, supervision, and help for coworkers), then the employees will be willing to do additional work (Hayati and Caniogo, 2012). This study examined the attitude effect (JS) and personality traits (PO) against OCB. Theoretically, some previous studies suggest that the predictors of OCB are JS and organizational engagement as indicators of the attitudes of the employees. Yee, Wong Sek Khin, and Ismail (2018) explain the PO's determinants include some of an employee's personal characteristics, such as feelings of ownership in mind and practice, motivation, good sense of ownership, self-efficacy, belonging and self-identity.

Therefore, personal characteristics have a stronger influence in the cultivation of extra-role behavior (OCB) than attitude (Yee et al., 2018). It also confirms that PO's direct effects in creating OCB are stronger with JS. This finding clarifies that in OCB of workers, the personal construct has a greater impact than the attitude construct. Therefore, when hiring new staff, the hotel management should consider evaluating personality characteristics for appropriate employee job placement. Ivancevich and Hoon (2007) clarify that human resources management needs to have an attitude towards hiring workers according to the organization's needs in order to strengthen the person-organizational match. Recruiting the right staff requires a strategy of choosing the highly skilled and best suited employees for the organization (Belcourt et al., 2008).

CONCLUSION AND LIMITATIONS

A good sense of ownership by employees is a factor that can increase JS. When workers feel satisfied, they may feel more empowered and thus able to maintain emotional feelings of ownership towards the organization. In fact, workers who feel happy with their work appear to exhibit activities that go beyond their job description (Aldrin and Yunanto, 2019; Sendjaya et al., 2019). Moreover, PO plays a central role in increasing OCB, and is the primary determinant. Yee et al. (2018) stressed the PO's determinants include a variety of employee personality traits, including a feeling of belonging in thoughts and acts, a driven feeling, a clear sense of ownership, self-efficacy, belonging and self-identity.

The findings of this study suggest that such personal characteristics (Yee et al., 2018) have a greater impact on attitudes toward extra-role behaviour (OCB). The study results also indicate that PO significantly affects OCB. However, these results clarify that the personality trait (psychological ownership) has a stronger effect on improving OCB of employees than the attitude (job satisfaction) has. This study has limitations in that only four-star hotels were included. In addition, factors of consideration in the hospitality industry continue to shift due to other circumstances. Furthermore, this study is cross-sectional, and longitudinal work is considered necessary to be able to describe the phenomenon in greater detail. There are some recommendations to hotels as well as to future researchers.

Management of a hotel is required to control OCB's primary determinant, which is PO, by attempting to improve feelings of ownership in employees towards the organization. One suggested goal is to foster personal feelings of ownership of workers, so they feel more engaged and form bonds within the company.

Therefore, when helping each other, the hotel management is expected to create some clear rules relating to the primary tasks and responsibilities as a guide for the employees. An integrated model of OCB determinants can be established by analysing the elements of organizational commitment in the model.

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Conflict of interest

We declare no conflicts of interest at a later date and this study is aimed at various parties.

REFERENCES

- Afaq, A.K., Sharif, N., & Ahmad, N. (2017). Factors Influencing Students' Career Choices: Empirical Evidence from Business Students. *Journal of Southeast Asian Research*, 1–15. <https://doi.org/10.5171/2017.718849>
- Aftab, H. (2012). A Study of Job Satisfaction and IT's Impact on the Performance in the Banking Industry of Pakistan. *International Journal of Business and Social Science*, 3(19), 174–180. <https://doi.org/10.30845/ijbss>
- Agrawal, P., & Gautam, O. (2020). The Effects of Leaders' Behavior on Job Satisfaction, Organizational Citizenship Behavior, Deviant Behavior, and Job Performance of Employees. In *Advances in Human Resources Management and Organizational Development* (pp. 100–113). <https://doi.org/10.1177/1523422320927295>
- Aldrin, N., & Yunanto, K.T. (2019). Job Satisfaction as a Mediator for the Influence of Transformational Leadership and Organizational Culture on Organizational Citizenship Behavior. *The Open Psychology Journal*, 12(1), 126–134. <https://doi.org/10.2174/1874350101912010126>
- Akter, M., Alim, M.A., Shabbir, R., Ali, M.B., Teck-Weng, J., & Kasuma, J. (2020). The mediating effects of place satisfaction and support for community: An evaluation of the performance of small and medium tourism enterprises in Bangladesh. *Asian Journal of Business and Accounting*, 13(2), 27–48. <https://doi.org/10.22452/ajba.vol13no2.2>
- Arusteu, C. (2013). Employees' organizational commitment challenges-A hotel industry perspective. *Management Dynamics in the Knowledge Economy*, 1(3), 497–520. URL: <http://www.managementdynamics.ro/index.php/journal/article/view/16>
- Asha, C.S., & Jyothi, P. (2013). Internal Branding: A Determining Element of Organizational Citizenship Behavior. *Journal of Contemporary Management Research*, 7(1), 37–57. <https://doi.org/10.1016/j.sbspro.2014.09.127>

- Bambale, A.J. (2013). *The mediating effect of psychological ownership on the relationship between servant leadership and organizational citizenship behaviors in Kano, Nigeria*. Universiti Utara Malaysia. URL: https://core.ac.uk/display/268139599?utm_source=pdf&utm_medium=banner&utm_campaign=pdf-decoration-v1
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Belcourt, M., Bohlander, G., & Snell, S. (2008). *Managing human resourcesm, 5th Canadian Edition*. Toronto: Nelson.
- Belk, R.W. (1988). Possessions and the Extended Self. *Journal of Consumer Research*, 15(2), 139. <https://doi.org/10.1086/209154>
- Caspi, A., & Blau, I. (2011). Collaboration and psychological ownership: How does the tension between the two influence perceived learning? *Social Psychology of Education*, 14(2), 283–298. <https://doi.org/10.1007/s11218-010-9141-z>
- Chiaburu, D.S., Oh, I.S., Berry, C.M., Li, N., & Gardner, R.G. (2011). The five-factor model of personality traits and organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 96(6), 1140–1166. <https://doi.org/10.1037/a0024004>
- Choi, S., Hwang, C., & Kwon, D. (2019). On the Effect of Dispersed Leadership of Vocational Training Teachers on Job Satisfaction Through Organization Citizenship Behavior and Teacher Empowerment. *Journal of the Korea Society of Digital Industry and Information Management*, 15(1), 109–122. <https://doi.org/10.17662/ksdim.2019.15.1.109>
- Chin, W.W., & Newsted, P.R. (1999). 'Structural Equation Modeling Analysis with Small Sample Using Partial Least Squares'. In *Statistical Strategies for Small Sample Research*, ed. Hoyle, R. H. Sage Publication, Inc., Thousand Oaks - California, pp. 307-341. <https://doi.org/10.1177/0047287515569779>
- Cohen, A., & Vigoda, E. (2000). Do Good Citizens Make Good Organizational Citizens? *Administration & Society*, 32(5), 596–624. <https://doi.org/10.1177/00953990022019597>
- Darma, D.C., Maria, S., Kasuma, J., & Lestari, D. (2020). Factors involved in the number of tourist visits in the Muara Badak, Indonesia. Religación. *Revista De Ciencias Sociales Y Humanidades*, 5(24), 142-151. <https://doi.org/10.46652/rgn.v5i24.623>
- Foote, D.A., & Li-Ping Tang, T. (2008). Job satisfaction and organizational citizenship behavior (OCB). *Management Decision*, 46(6), 933–947. <https://doi.org/10.1108/00251740810882680>
- Furby, L. (1978). Possession In Humans: An Exploratory Study Of Its Meaning And Motivation. *Social Behavior and Personality: An International Journal*, 6(1), 49–65. <https://doi.org/10.2224/sbp.1978.6.1.49>
- Furby, L. (1991). Understanding the psychology of possession and ownership: A personal memoir and an appraisal of our progress. *Journal of Social Behavior and Personality*, 6(6), 457. proquest.com/openview/1819046
- Ghozali, I., & Latan, H. (2012). *Partial Least Square: Konsep, Teknik dan Aplikasi Smart PLS 2.0*. Semarang: Badan Penerbit Universitas Diponegoro.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006). *Multivariate data analysis (Vol. 6)*. Upper Saddle River, N.J: Pearson Prentice Hall.
- Hakim, A.L., & Sutrisno, S. (2018). The Effect of Work Stress on Turnover Intention with Work Satisfaction and Commitment as Intervening Variable (Study at PT. Infomedia Solusi Humanika, Malang). *European Journal of Business and Management*, 10(12), 85–95. <https://www.iiste.org/Journals/index.php/EJBM/article/view/42153>
- Hallin, C.A., & Marnburg, E. (2008). Knowledge management in the hospitality industry: A review of empirical research. *Tourism Management*, 29(2), 366–381. <https://doi.org/10.1016/j.tourman.2007.02.019>
- Hayati, K., & Caniogo, I. (2012). Islamic Work Ethic: The Role of Intrinsic Motivation, Job Satisfaction, Organizational Commitment and Job Performance. *Procedia - Social and Behavioral Sciences*, 65, 1102–1106. <https://doi.org/10.1016/j.sbspro.2014.05.148>
- Ileri, H., & Soyulu, Y. (2012). The Measurement Of The Effect Of Person-Job Fit And Person-Organization Fit On Burnout-A Selcuk University Meram Medical Faculty Hospital Example. *International Journal of Arts & Sciences*, 5(2), 447. proquest.com/docview/6724
- Ivancevich, J.M., & Lee, S.M. (2007). *Human Resource Management in Asia*. McGraw-Hill, Singapore.
- Kamri, T., Kasuma, J., Kutok, J., & Darma, D.C. (2020). Do Tourists Willing to Pay for the Value of Environmental Conservation? A Case of Annah Rais Longhouse and Hot Springs. *Journal of Tourism Management Research*, 7(2), 218-228. <https://doi.org/10.18488/journal.31.2020.72.218.228>
- Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral Science*, 9(2), 131–146. <https://doi.org/10.1002/bs.3830090206>
- Khalid, K., Salim, H.M., & Loke, S.P. (2011). The impact of rewards and motivation on job satisfaction in water utility industry. *International Conference on Financial Management and Economics*, 11(2), 35–41. <http://www.ipeidr.com/vol11/7-R00013.pdf>
- Kim, S. (2006). Public service motivation and organizational citizenship behavior in Korea. *International Journal of Manpower*, 27(8), 722–740. <https://doi.org/10.1108/01437720610713521>
- Klein, K.J., & Kozlowski, S.W.J. (2000). From Micro to Meso: Critical Steps in Conceptualizing and Conducting Multilevel Research. *Organizational Research Methods*, 3(3), 211–236. <https://doi.org/10.1177/109442810033001>
- Kumar, K., Bakhshi, A., & Rani, E. (2009). Linking the Big Five personality domains to Organizational citizenship behavior. *International Journal of Psychological Studies*, 1(2), 73-81. <https://doi.org/10.5539/ijps.v1n2p73>
- Mann, D.W. (1991). Ownership: A pathography of the self. *British Journal of Medical Psychology*, 64(3), 211–223. <https://doi.org/10.1111/j.2044-8341.1991.tb01660.x>
- Masum, A.K., Azad, M.A., Hoque, K.E., Beh, L.S., Wanke, P., & Arslan, Ö. (2016). Job satisfaction and intention to quit: an empirical analysis of nurses in Turkey. *PeerJ*, 4, e1896. <https://doi.org/10.7717/peerj.1896>
- Mohammad, J., Quoquab, Habib, F., & Alias, M.A. (2011). Job Satisfaction and Organisational Citizenship Behaviour: an Empirical Study at Higher Learning Institutions. *Asian Academy of Management Journal*, 16(2), 49–165. http://web.usm.my/aamj/16.2.2011/AAMJ_16.2.7.pdf
- Murphy, G., Athanasou, J., & King, N. (2002). Job satisfaction and organizational citizenship behaviour. *Journal of Managerial Psychology*, 17(4), 287–297. <https://doi.org/10.1108/02683940210428092>
- Mushtaq, K., Ahmed, M., & Warraich, S. (2014). A study on job satisfaction, motivation and organizational citizenship behavior. *International Journal of Management Sciences and Business Research*, 3(11), 1-12. ssrn.com/abstract=2731023
- Mustafa, M., Martin, L., & Hughes, M. (2016). Psychological Ownership, Job Satisfaction, and Middle Manager Entrepreneurial Behavior. *Journal of Leadership & Organizational Studies*, 23(3), 272–287. <https://doi.org/10.1177/1548051815627360>
- Mustafa, M., Ramos, H.M., & Man, T.W.Y. (2015). Linking psychological ownership to employee extra-role behaviours in small overseas Chinese family businesses. *Journal of Entrepreneurship in Emerging Economies*, 7(2), 129–147. <https://doi.org/10.1108/JEEE-11-2014-0041>
- Noermijati, N., & Primasari, D. (2015). The effect of job stress and job motivation on employees' performance through job satisfaction (A study at PT. Jasa Marga (Persero) Tbk. Surabaya - Gempol branch). *Journal of Economics, Business & Accountancy Ventura*, 18(2), 231-240. <https://doi.org/10.14414/jebav.v18i2.450>

- Nurak, L., & Riana, G. (2017). Examine the Effect of Organizational Justice on Job Satisfaction and employee performance. *Journal of Management and Marketing Review*, 2(3), 30-37. [https://doi.org/10.35609/jmmr.2017.2.3\(4\)](https://doi.org/10.35609/jmmr.2017.2.3(4))
- O'Connor, J. (2018). The Impact of Job Satisfaction on the Turnover Intent of Executive Level Central Office Administrators in Texas Public School Districts: A Quantitative Study of Work Related Constructs. *Education Sciences*, 8(2), 69. <https://doi.org/10.3390/educsci8020069>
- Organ, D.W. (1997). Organizational Citizenship Behavior: It's Construct Clean-Up Time. *Human Performance*, 10(2), 85-97. https://doi.org/10.1207/s15327043hup1002_2
- Organ, D.W., Podsakoff, P.M., & MacKenzie, S.B. (2005). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Sage Publications.
- Organ, D.W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, 48(4), 775-802. <https://doi.org/10.1111/j.1744-6570.1995.tb01781.x>
- Ozturk, F. (2010). Determinants of organizational citizenship behavior among knowledge workers: The role of job characteristics, job satisfaction, and organizational commitment. *Graduate Thesis, Master-Degree Program in Business Administration*.
- Pan, X.F., Qin, Q., & Gao, F. (2014). Psychological ownership, organization-based self-esteem and positive organizational behaviors. *Chinese Management Studies*, 8(1), 127-148. <https://doi.org/10.1108/CMS-04-2014-0088>
- Pierce, J.L., Kostova, T., & Dirks, K.T. (2001). Toward a Theory of Psychological Ownership in Organizations. *Academy of Management Review*, 26(2), 298-310. <https://doi.org/10.5465/amr.2001.4378028>
- Pierce, J.L., O'driscoll, M.P., & Coghlan, A. (2004). Work Environment Structure and Psychological Ownership: The Mediating Effects of Control. *The Journal of Social Psychology*, 144(5), 507-534. <https://doi.org/10.3200/SOCP.144.5.507-534>
- Podsakoff, N.P., Whiting, S.W., Podsakoff, P.M., & Blume, B.D. (2009). Individual and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 94(1), 122-141. <https://doi.org/10.1037/a0013079>
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Podsakoff, P.M., MacKenzie, S.B., Paine, J.B., & Bachrach, D.G. (2000). Organizational Citizenship Behaviors: A Critical Review of the Theoretical and Empirical Literature and Suggestions for Future Research. *Journal of Management*, 26(3), 513-563. [https://doi.org/10.1016/S0149-2063\(00\)00047-7](https://doi.org/10.1016/S0149-2063(00)00047-7)
- Rahmawati, R., Oktora, K., Ratnasari, S.L., Ramadania, R., & Darma, D.C. (2021). Is it true that lombok deserves to be a halal tourist destination in the world? A perception of domestic tourists. *GeoJournal of Tourism and Geosites*, 34(1), 94-101. <https://doi.org/10.30892/gtg.34113-624>
- Ramos, H.M., Man, T.W.Y., Mustafa, M., & Ng, Z.Z. (2014). Psychological ownership in small family firms: Family and non-family employees' work attitudes and behaviours. *Journal of Family Business Strategy*, 5(3), 300-311. <https://doi.org/10.1016/j.jfbs.2014.04.001>
- Ratnasari, S., Susanti, E., Ismanto, W., Tanjung, R., Darma, D.C., & Sutjahjo, G. (2020). An Experience of Tourism Development: How is the Strategy?. *Journal of Environmental Management and Tourism*, 11(7), 1877-1886. [https://doi.org/10.14505/jemt.v11.7\(47\).26](https://doi.org/10.14505/jemt.v11.7(47).26)
- Riana, I.G., Aristana, I.N., Rihayana, I.G., Wiagustini, N.L.P., & Abbas, E.W. (2020). High-performance work system in moderating entrepreneurial leadership, employee creativity and knowledge sharing. *Polish Journal of Management Studies*, 21(1), 328-341. <https://doi.org/10.17512/pjms.2020.21.1.24>
- Riana, I.G., Dwijayanti, I., Rihayana, I.G., & Wiagustini, N.L.P. (2018). Managing Work Family Conflict and Work Stress through Job Satisfaction and Its Impact on Employee Performance. *Jurnal Teknik Industri*, 20(2), 127-134. <https://doi.org/10.9744/jti.20.2.127-134>
- Robbins, S.P., & Judge, T.A. (2015). *Perilaku Organisasi (Organizational Behavior 16th edition)*. Jakarta: McGraw Hill Dan Salemba Empat.
- Samancioglu, M., Baglibel, M., & Erwin, B.J. (2020). Effects of Distributed Leadership on Teachers' Job Satisfaction, Organizational Commitment and Organizational Citizenship. *Pedagogical Research*, 5(2), em0052. <https://doi.org/10.29333/pr/6439>
- Sendjaya, S., Pekerti, A.A., Cooper, B.K., & Zhu, C.J. (2019). Fostering Organisational Citizenship Behaviour in Asia: The Mediating Roles of Trust and Job Satisfaction. In *Leading for High Performance in Asia* (pp. 1-18). Springer Singapore.
- Shokrkon, H., & Naami, A. (2008). The relationship of job satisfaction with organizational citizenship behavior and job performance in Ahvaz factory workers. *Journal of Education & Psychology*, 3(2), 39-52. <https://www.sid.ir/en/journal/ViewPaper.aspx?ID=196085>
- Sloat, K.C.M. (1999). Organizational citizenship. *Professional Safety*, 44(4), 20. URL: proquest.com/docview/200332744
- Smith, C.A., Organ, D.W., & Near, J.P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653-663. <https://doi.org/10.1037/0021-9010.68.4.653>
- Spector, P.E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology*, 13(6), 693-713. <https://doi.org/10.1007/BF00929796>
- Suharto, R.B., Roy, J., & Darma, D.C. (2019). Degree of potential and development strategy of tourism objects. *International Journal of Scientific and Technology Research*, 8(9), 2343-2347. <http://www.ijstr.org/final-print/sep2019/Degree-Of-Potential-And-Development-Strategy-Of-Tourism-Objects.pdf>
- Tsai, Y., & Wu, S.W. (2010). The relationships between organisational citizenship behaviour, job satisfaction and turnover intention. *Journal of Clinical Nursing*, 19(23-24), 3564-3574. <https://doi.org/10.1111/j.1365-2702.2010.03375.x>
- Van Dyne, L., & Pierce, J.L. (2004). Psychological ownership and feelings of possession: three field studies predicting employee attitudes and organizational citizenship behavior. *Journal of Organizational Behavior*, 25(4), 439-459. <https://doi.org/10.1002/job.249>
- Vandewalle, D., Van Dyne, L., & Kostova, T. (1995). Psychological Ownership: An Empirical Examination of its Consequences. *Group & Organization Management*, 20(2), 210-226. <https://doi.org/10.1177/2F1059601195202008>
- Yee, C.M., Wong Sek Khin, E., & Ismail, K. (2018). Determinants of employees' psychological ownership on budgetary slack. *Audit Financier*, 16(149), 122-130. <https://doi.org/10.20869/AUDITF/2018/149/004>
- Yoon, M.H., & Suh, J. (2003). Organizational citizenship behaviors and service quality as external effectiveness of contact employees. *Journal of Business Research*, 56(8), 597-611. [https://doi.org/10.1016/S0148-2963\(01\)00290-9](https://doi.org/10.1016/S0148-2963(01)00290-9)
- Zeinabadi, H. (2010). Job satisfaction and organizational commitment as antecedents of Organizational Citizenship Behavior (OCB) of teachers. *Procedia - Social and Behavioral Sciences*, 5, 998-1003. <https://doi.org/10.1016/j.sbspro.2010.07.225>
- Zhao, H., Peng, Z., & Chen, H.K. (2014). Compulsory citizenship behavior and organizational citizenship behavior: The role of organizational identification and perceived interactional justice. *The Journal of Psychology*, 148(2), 177-196. <https://doi.org/10.1080/00223980.2013.768591>
- Zheng, X., Diaz, I., Tang, N., & Tang, K. (2014). Job insecurity and job satisfaction: The interactively moderating effects of optimism and person-supervisor deep-level similarity. *Career Development International*. <https://doi.org/10.1108/CDI-10-2013-0121>

MODELING TOURISTS' SATISFACTION IN THE NATURE-BASED TOURIST DESTINATION USING STRUCTURAL EQUATION MODELING TECHNIQUE

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Abstract: The goal of this study is to show how satisfied tourists is of supreme significance to the tourism industry, particularly as it affects the future of a nature-based destination and explores the relationship among destination image, service quality, perceived value, tourist satisfaction, word-of-mouth, and revisit intentions of tourists. The 292 survey data was obtained via a structured questionnaire from tourists who visited the Haor region, Bangladesh and structural equation modeling (SEM) is used to test the hypothetical paths. Six hypotheses were accepted, and one is rejected. Tourism stakeholders can find important knowledge and they can satisfy tourists, which is likely by improving destination.

Key words: Tourism, Modeling, SEM, Tourist, Satisfaction, Natural-Destination

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INTRODUCTION

In tourism, tourist satisfaction is an important research topic for academics and all stakeholders (Wang et al., 2009). Considering local tourists' satisfaction towards tourist destinations and factors that might affect their satisfaction is essential to know the achieving the best output for tourism development (Yoon et al., 2001). Understanding tourists' satisfaction is of supreme significance to the tourism industry, particularly as it affects the future economy (Hossain et al., 2015). The tourism sector has the potentiality to become the heart of the development of the Bangladeshi economy. WTTC (2020), claimed that the cumulative contribution of travel and tourism to Bangladesh's GDP in 2019 was USD 9,113.2 million which is 3.0 percent of the total economy. On the other hand, contribution towards employment was 1,858.9 JOBS (000's), which is 2.9 percent of entire employment. The world's longest 120 kilometers long sandy beach Cox's Bazar (Hossain, 2013), St. Martin, a small coral island about 10 km (Rahaman, 2009), Sundarban, a UNESCO-designated world heritage site, Haor region, Hill tracts, Sylhet, and Kuakata have all made significant contributions to Bangladesh's tourism sector. Among all tourist destinations, Haors are unique wetlands that have the potential for pulling in sightseers (CEGIS, 2012). For tourism service providers at the destination should consider that the satisfied and happy visitors return to a destination and spread positive word of mouth (Buonincontri et al., 2017). There is a substantial amount of literature published which discusses tourists' satisfaction, destination attributes/ services in the different country context (Kozak, 2001; Viet, 2019; Joppe et al., 2001; Cong, 2016; Le and Dong, 2017).

Constructions and their interrelationships were most frequently borrowed from established literature that was evaluated in Western and European cultures through tourism services and satisfaction surveys. For Least Developed Countries (LDCs) such as Bangladesh, these may be distinct because of their cultural diversification (Hossain, 2013). Furthermore, while researchers have attempted to build models to classify the variables that contribute to tourist satisfaction, minimal work has been done to advance the theoretical formation of Bangladeshi domestic tourists' satisfaction with tourism facilities, revisit, and word-of-mouth intentions in the nature-based destinations. These gaps have created an excellent room for new research into creating an all-encompassing service quality, destination image, perceived value, tourist satisfaction, word of mouth, and revisit intentions model that could enable destination operators to reflect on the essential factors that lead to domestic visitors' satisfaction and increase revisit and word-of-mouth intentions towards the nature-based destination. So, the objective of this research is to see how a destination's image, service quality, and perceived value impact tourists' satisfaction and, as a result, how the behavior of tourists such as word-of-mouth and return visits to a natural-based destination are formed. This study constructs an immersive tourist satisfaction model for a distinct destination that examines the effects of tourists' satisfaction antecedents such as service quality, perceived value, and destination

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image, as well as the consequences on tourists' revisit and word-of-mouth intentions. The structural equation modeling approach is used to validate the model, on which is based the Haor region of Bangladesh, a promising nature-based tourism destination. A Haor is a wetland biological system within the northeastern portion of Bangladesh, which physically is a bowl or saucer formed shallow sadness, know as a back swamp (CEGIS, 2012). During the monsoon, the Haors receive surface rain water from rivers and canals, resulting in large expanses of turbulent water. They turn into endless inland oceans in which towns present themselves as islands. Periodic strong winds amid the blustery season (July to December) create expansive waves within the Haor, which may cause impressive harm to homesteads. In any case, they all but dry up within the post-monsoon period. In the winter, these Haors have become endless extensions of the green world (CEGIS, 2012).

HISTORICAL BACKGROUND AND HYPOTHESES

The foremost reason for this study was to create and test a theoretical model, which spoke about the components contributing to the tourists' intent to return and word of mouth regarding the destination's brand, service quality, perceived value, and satisfaction are all aspects to remember. A brief outline of the interrelationship of constructs and the theoretical model is discussed.

1. Destination Service Quality

Service efficiency has been identified as a critical element in maintaining destination viability in the highly competitive tourism industry (Canny, 2013). Service quality is the result of the assessment handle where buyers compare desires with the administrations' reality, which is felt and acknowledged (Lai and Hitchcock, 2016). Interpretations of quality service in the service sector focus on assembling consumers' demands and requirements, as well as how well the benefit delivered meets customers' expectations (Berry et al., 1983). Service quality can also be recognized as the aspirations of customers who received and saw perceived services from a particular place (Kuo et al., 2009). Many scholars have examined the indirect relationships among service quality, perceived value, satisfaction, and revisit intention. For example, Woodruff (1977) stated that service quality was a significant antecedent to customer satisfaction, perceived value, and repurchase intention. Chang and Wildt (1994) also indicated that perceived quality obligated a robust and positive influence on perceived value. Therefore, we projected the subsequent hypotheses in the setting of a tourist destination:

Hypothesis 1: Destination service quality (SQ) positively affects tourist perceived value (PV)

Hypothesis 2: Destination service quality (SQ) positively affects tourist satisfaction (TS)

2. Destination Image

In general, people's views, emotions, and experiences about a region or area are referred to as destination image (Ilban et al., 2015). Image is moreover an expression of an individual's knowledge, foresight, dreams, and feelings (Baloglu and Brinberg, 1997). Crompton (1979) defines destination image as a human attitudinal concept made up of the convictions, thoughts, and impressions that a traveler holds of any potential destination. Many studies have been carried out regarding destination image, perceived value, and tourists' satisfaction for example Ozturk and Qu (2008) state that destination image has a significant effect on tourists' perceived value and tourists' expectations and eagerly suggest the destination to others. Wang et al. (2009) identified that the destination image worked out the most grounded total effect on tourist satisfaction. Therefore, we projected the subsequent hypotheses in the setting of a destination image:

Hypothesis 4: The destination image (DI) has a favorable effect on perceived value (PV)

Hypothesis 5: The destination image (DI) has a favorable effect on tourist satisfaction (TS)

3. Perceived Value

Perceived value is a component of a relationship which promotes a two-part design: one portion comprises the benefits gotten by the customer, whereas the other piece is composed of the sacrifices made by the customer (Cronin et al., 1997; Cronin et al., 2000). Gregory (1990, p.701) underlined the citation of William James: "part of what we perceive comes through our senses from the object before us; another part always comes out of our head." So, the tourist perception is impacted by the things which encompass him and the things the traveler has in his intellect. Perceived value is defined as "the consumer's overall assessment of the utility of a product or service based on perceptions of what is received and what is given" (Zeithaml, 1988, p.14). Perceived values and satisfaction are precedents for behavioral motivations uncovered by previous scholars through their research studies (Chen and Tsai, 2007; McDougall and Levesque, 2000; Parasuraman and Grewal, 2000; Petrick, 2004; Moral-Cuadra et al., 2019). Different researchers state that perceived value has a direct, positive association with tourist satisfaction (Wang et al., 2009; Eze et al., 2020). Therefore, we projected the subsequent hypotheses in the setting of a tourist perceived value:

Hypothesis 3: The higher the perceived value (PV), the higher the tourist satisfaction (TS)

4. Tourists' Satisfaction

Satisfaction is the feeling to which customer expectations from the product or services matched the prevailing quality (Žabkar et al., 2010). So, when a customer's expectations are felled by the quality of the product or services, the customer is fully satisfied. Besides, better than average benefit quality is not only planning to fulfill the sightseers, but it too progresses the destination image, splits the goal from others, and constructs a steadfast traveler to carry out a meticulous revisit behavior as a return to and positive word of mouth (Canny, 2013).

5. Revisit Intention

The concept of revisiting the plan emerges from behavioral intentions. Several studies have finished realizing the constructive relationship and impact among tourist satisfaction, revisit, and word of mouth intentions (Adinegara, 2018; Padlee et al., 2019; Khuong and Nguyen, 2017; Canny, 2013), and researchers showed that when tourists are satisfied regarding the destination, then they repeat the visit. It is expressed that there's a positive relationship between tourist satisfaction and their aim to revisit the destination (Lee et al., 2011). Besides, the enjoyment of tourists may contribute to the purpose of revisiting or making satisfactory remarks on the destination to other visitors (Chi and Qu, 2008). Dissatisfied travelers could make unfavorable comments about the destination, damaging the customer reputations of the destinations (Reisinger and Turner, 2003a).

6. Word of Mouth

One of the multifaceted markers of behavioral intentions is Word of Mouth. Word of mouth is a casual communication, which is well-thought-out to be non-commercial, individual to an individual interface (Arndt, 1967). Tax et al. (1993) defined two effects of WOM. First, WOM activates a WOM recipient's behavioral purpose and potential actions. Second, a WOM receiver can transmit the data to others and influence their way of making decisions. Therefore, in the sense of tourist satisfaction, revisit intention, and Word of Mouth, we predicted the following hypotheses:

Hypothesis 6: Tourist satisfaction (TS) positively affects tourists' revisit intention (RI)

Hypothesis 7: Tourist satisfaction (TS) positively affects tourists' word of mouth intention (WOM)

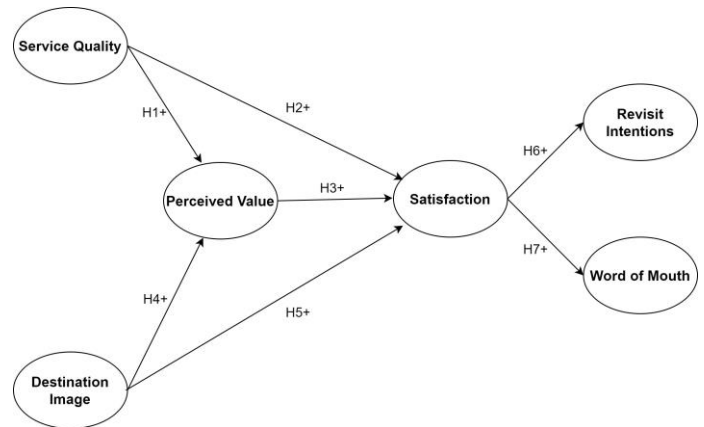


Figure 1. Conceptual model for tourists' satisfaction on the nature-based destination

RESEARCH METHODOLOGY

1. Research Design

To confirm the validity and reliability of the survey instrument, we utilized established measures from past pieces of literature where conceivable. The designated dimension indicators are related to the relevance of this research. Minor alterations were made to the estimation scales to guarantee reasonableness for the setting. Here we considered six latent variables consisting of two exogenous variables, namely service quality, and destination image.

Table 1. Variables name, Constructs, Measurement Items, Squared Multiple Correlation, Mean, Standard Deviation, and sources

Variables	Constructs and Measurement Items		Squared Multiple Correlation	Mean	Standard Deviation
Service Quality (Narayan et al., 2008; Tosun et al., 2015)	SQ1	Tourist information at tourist spot is available	—	4.56	1.635
	SQ2	This place's cleanliness of accommodation suits my needs	.567	4.12	1.613
	SQ3	I feel the cleanliness and hygiene of restaurants is enough	—	3.77	1.614
	SQ4	Overall cleanliness and hygiene at tourist spots is plenty	.652	4.08	1.647
	SQ5	In this place, the hygiene level of food is ok	.449	4.24	1.693
Destination Image (Chi and Qu 2008; Beerli and Martin, 2004; Phillips et al., 2011; Tosun et al., 2015)	DI1	It has a stunning and diverse natural environment	—	6.24	1.036
	DI2	There is more than enough fresh, oxygen-rich air	.560	6.32	.988
	DI3	This place Haor is exciting	.663	6.16	1.100
	DI4	This place Haor is a pleasant tourist destination	.584	5.96	1.109
	DI5	This place is a good place for relaxation	.638	6.15	1.006
Perceived Value (Kim, 2010; Gallarza et al., 2013; Wang et al., 2009)	PV1	I feel It was my right decision to visit Haor	.572	6.07	1.026
	PV2	My spending money is priced in this area	.533	5.85	1.075
	PV3	I think, my spend time valued to visit Haor	.742	5.98	1.029
	PV4	I believe, my effort to visit Haor is valued	.671	5.86	1.045
Satisfaction (Canny, 2013; Gallarza et al., 2013; Wang et al., 2009; Ryu et al., 2012; Marinao, 2018)	Sat1	This place fulfills my expectations	.658	5.62	1.241
	Sat2	I am satisfied with my decision to visit the Haor	.743	5.85	1.140
	Sat3	My decision to visit this place was wise.	—	5.71	1.237
	Sat4	This is the best place I have visited	—	4.97	1.497
	Sat5	This place is exactly what I imagined	.469	5.31	1.339
Revisit Intention (Kim, 2010; Gallarza et al., 2013; Tosun et al., 2015)	RI1	I want to visit back Haor next year	.712	5.14	1.565
	RI2	I would like to revisit Haor shortly	.796	5.30	1.456
	RI3	I would more frequently visit Haor	.531	4.93	1.532
Word of Mouth (Kim, 2010; Canny, 2013)	WOM1	I will highly recommend Haor to others	.711	5.65	1.201
	WOM2	I will tell others great things about Haor	.721	5.93	1.040
	WOM3	I will encourage others who want advice for travel destination about Haor	.674	5.78	1.060
	WOM4	I will tell others something good about my visit to Haor.	.587	5.96	.978

Note: A seven-point Likert scale has been used to evaluate the objects, ranging from strongly disagree (1) to strongly agree (7)

On the other hand, four endogenous variables namely perceived value, satisfaction, word of mouth, and revisit intention. The questionnaire includes the respondents' demographic background and 26 measures for the constructs, five of which projected to measure tourists' feelings of the destination's service quality were derived from tourism literature (Narayan et al., 2008; Tosun et al., 2015). Besides, five of them were associated with destination image taken from (Chi and Qu, 2008; Beerli and Martin, 2004; Phillips et al., 2011; Tosun et al., 2015); perceived value allied constructs were four derived from (Kim, 2010; Gallarza et al., 2013; Wang et al., 2009), tourists' satisfaction linked constructs were five taken from (Canny, 2013; Gallarza et al., 2013; Wang et al., 2009; Ryu et al., 2012; Marinao, 2018). Consequently, four constructs were proposed to measure tourist's revisit intention were derived (Kim, 2010; Gallarza et al., 2013; Tosun et al., 2015), and four constructs were incorporated to measure tourists' word of mouth taken from the literature (Kim, 2010; Canny, 2013). The designated 26 constructs were rated on 7 points Likert scale where 1= strongly disagree (SD), and 7= strongly agree (SA). The constructs can be found in the Table 1. A pilot study with 30 respondents who visited the Haor area was conducted to test the questionnaire items' internal reliability and validity. Cronbach's alpha reliability coefficient was calculated, and as per the result, there was no need to remove any of the questions from the questionnaire. The Cronbach's alpha reliability coefficient of all the seven dimensions determined by the pretest was higher than 0.7, indicated the right scale reliability (Nunnally and Bernstein, 1994). After finishing the pilot study, the final survey was performed and a total of 332 completed samples were collected. After reviewing invalid responses and achieving multivariate normality and considering outliers 40 samples were eliminated, and finally, 292 samples were taken for the study.

2. Sample and data collection:

The empirical research was conducted in one of the nature-based tourist spots Haor areas of Bangladesh. For the research, data has been collected only from domestic tourists through a structured questionnaire. Data were collected between September 2019 and September 2020. However, at times, data collection is hampered by COVID 19 pandemic conditions. So, from September to December 2019, some information has been collected by traveling to the Haor area and some information has been collected through Facebook by creating a questionnaire in Google form.

Applying the convenient sampling technique, a total number of 160 respondent's data were collected on the spot from those tourists who already visited the Haor area. On the other hand, 700 Google form questionnaire links were sent to the tourist through Facebook and 172 responses were received. Respondents were those visitors who have visited the Haor region over the last three years. A total of 332 completed samples were received and finally, 292 samples were taken for the study and this number of samples is adequate for SEM analysis.

3. Profile of Respondents

Table 2 describes 82.5% of respondents as males and 17.5% as females. This presents the fact that it is the male travelers who travel the region the most. Considering the marital status, it was found that 76.6% of the respondents were unmarried and 23.4% were married. On the other hand, the researcher found that 61.9% of respondents were between the ages of 16-25 were young and ages 26-35 were 26.8% and only 1.4% were 56+. Most of the respondents have a graduation degree which is about 62.9%, and a post-graduation degree of 28.2%. How many times have you visited the Haor region? The answer to this question is that 60.5% of the respondents visited for the first time and 20.9% of the respondents visited for the second time.

Table 2. Respondents Profile (Source: Survey results)

No.	Description	Classification	Frequency	%
1.	Gender	Female	51	17.5
		Male	240	82.5
2.	Marital Status	Married	68	23.4
		Single	223	76.6
3.	Age	16-25	180	61.9
		26-35	78	26.8
		36-45	22	7.6
		46-55	7	2.4
		56+	4	1.4
4.	Education	Graduation	183	62.9
		HSC	25	8.6
		Post-Graduation	82	28.2
		SSC	1	.3
5.	Frequency Visit Haor	2 times	60	20.6
		3 times	15	5.2
		For the first time	176	60.5
		More than 3 times	40	13.7

Table 3. CFA for the estimation model as a whole (N=292) (Source: SEM results)

Variables	Items	Factor Loading	T-Value	Cronbach's alpha	Construct Reliability (C.R)	Average Variance Extracted (AVE)
Service Quality	SQ2	.753	10.863	.785	0.789	0.556
	SQ4	.808	Fixed			
	SQ5	.670	10.142			
Destination Image	DI2	.748	13.700	.861	0.863	0.611
	DI3	.814	Fixed			
	DI4	.764	14.073			
	DI5	.799	14.873			
Perceived Value	PV1	.756	15.124	.871	0.871	0.629
	PV2	.730	14.356			
	PV3	.861	Fixed			
	PV4	.819	17.113			
Satisfaction	SAT1	.811	Fixed	.822	0.831	0.623
	SAT2	.862	16.077			
	SAT5	.685	12.200			
Revisit Intention	RI1	.844	Fixed	.859	0.863	0.680
	RI2	.892	16.963			
	RI3	.729	13.663			
Word of Mouth	WoM1	.843	Fixed	.880	0.892	0.673
	WoM2	.849	17.154			
	WoM3	.821	16.371			
	WoM4	.766	12.904			

Empirical Results

1. Assessment of the measurement model

In this research, the unidimensionality of each variable was checked by Confirmatory factor analysis (CFA) (Figure 2). The validity and reliability of indicators are determined through investigators by Unidimensionality. For each factor, Table 3 displays the Factor Loading, T-Value, Cronbach's alpha, Construct Reliability (CR), and Average Variance Extracted (AVE) values. The result of the validity test shows that all variables have greater Kaiser Meyer Olkin (KMO) values than 0.5 (Kaiser and Rice, 1974). From reliability, the test shows that the Cronbach alpha value of each construct is more than the minimum of 0.70 cited (Hair et al., 2010) and for all constructs, Cronbach's alpha values displayed high internal consistency ranging from 0.785 to 0.880. Service quality consists of 5 indicators and after calculating CFA, there are two indicators with a value that is less than 0.5 and eliminated, thus, the remaining three indicators are qualified unidimensionality. On the other hand, the destination image consists of five indicators. After CFA there is one indicator that has a value below 0.5 and eliminated, so the remaining four indicators have eligible unidimensionality.

The perceived value consists of four indicators and after CFA every indicator found eligible unidimensionality. Satisfaction consists of five indicators and after CFA two indicators value found below 0.5 and eliminated. So, the remaining three indicators have eligible unidimensionality. Besides, at $p < 0.01$ significance level, all the t-value metrics associated with each of the critical ratios surpassed the critical value (2.58), ranging from 10.142 to 17.154. The values of construct reliability (CR) were all well above the suggested 0.70 standards (Hair et al., 2014). Besides, the average variance extracted (AVE) exceeded the 0.50 threshold value (Hair et al., 2010). Additionally, Table 4 shows that the squares of the associations between the constructs were all smaller than the AVE values, indicating that discriminant validity was present (Fornell and Larcker, 1981). As a consequence, it is reasonable to believe that all latent constructs achieve sufficient validity and reliability which are appeared in Tables 3 and 4.

Table 4. Discriminant validity

Constructs	Revisit intention	Service quality	Destination image	Perceived value	Satisfaction	Word of mouth
Revisit intention	0.825					
Service quality	0.394	0.746				
Destination image	0.434	0.203	0.782			
Perceived value	0.544	0.312	0.821	0.793		
Satisfaction	0.639	0.472	0.709	0.810	0.790	
Word of mouth	0.560	0.231	0.705	0.743	0.677	0.820

Model fit indices: $\chi^2(173) = 358.930$, GFI = 0.894, AGFI = 0.859, CFI = 0.950, NFI = 0.908, IFI = 0.950, TLI = 0.931, RMSEA = 0.061. Note: The square root of AVEs is defined by bold diagonal values.

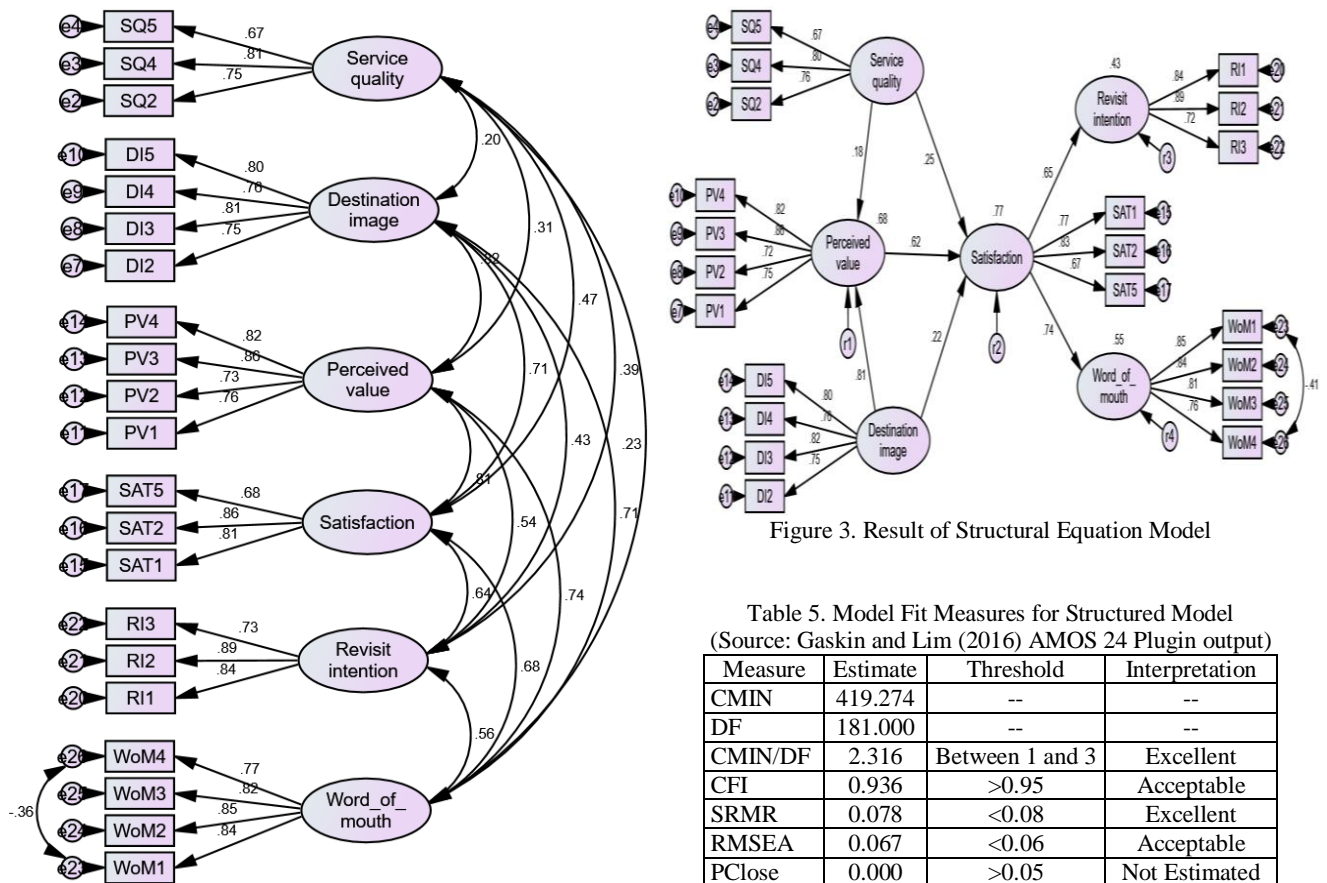


Figure 2. Measurement Model

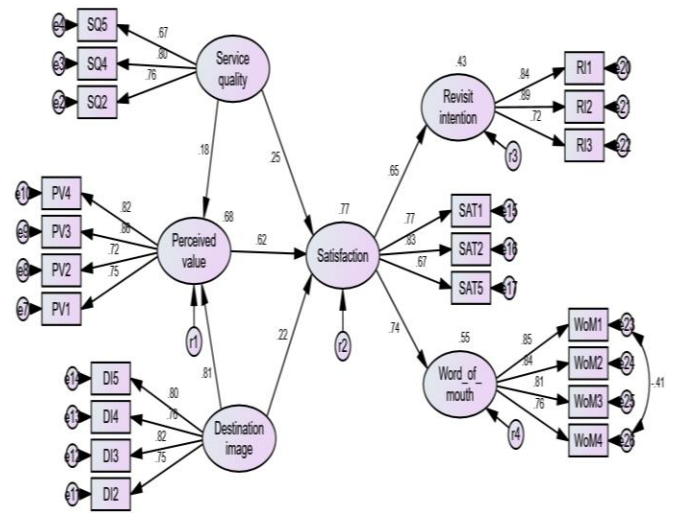


Figure 3. Result of Structural Equation Model

Table 5. Model Fit Measures for Structured Model (Source: Gaskin and Lim (2016) AMOS 24 Plugin output)

Measure	Estimate	Threshold	Interpretation
CMIN	419.274	--	--
DF	181.000	--	--
CMIN/DF	2.316	Between 1 and 3	Excellent
CFI	0.936	>0.95	Acceptable
SRMR	0.078	<0.08	Excellent
RMSEA	0.067	<0.06	Acceptable
PClose	0.000	>0.05	Not Estimated

The overall utility of the measurement model was calculated using the maximum likelihood estimation method. The findings of the confirmatory factor analysis (CFA) indicate that the calculation process has a high degree of model accuracy, as seen in Table 4. The fit indices data: $\chi^2(173) = 358.930$, $p < 0.001$, CMIN/DF, 2.075, Goodness-of-fit index (GFI) = 0.894, Adjusted goodness of fit index (AGFI) = 0.859, Normed-. Fit Index (NFI) = 0.908, Incremental fit index (IFI) = 0.950, Tucker–Lewis index (TLI) = 0.931, Comparative fit index (CFI) = 0.950, Standardized Root Mean Square Residual (SRMR) = 0.045, Root mean- square error of approximation (RMSEA) = 0.061.

2. Assessment of the structural model

Prior to calculating route coefficients for the hypothesized structural model, a structural model with six constructs was calculated utilizing maximum likelihood estimation (Figure 3). Table 5 shows that the SEM model exhibits a good level of model fit: $\chi^2(181) = 419.274$, $p < 0.001$, CMIN/DF, 2.316, Goodness-of-fit index (GFI) = 0.881, Adjusted goodness of fit index (AGFI) = .848, Normed-. Fit Index (NFI) = 0.893, Incremental fit index (IFI) = 0.936, Tucker–Lewis index (TLI) = 0.925, Comparative fit index (CFI) = 0.936, Standardized Root Mean Square Residual (SRMR) = 0.078, Root mean- square error of approximation (RMSEA) = 0.067.

3. Hypothesis examination results

The purpose of this study was to show the tourists' satisfaction in the nature-based tourist destination and explores the relationship among destination image, service quality, perceived value, tourist satisfaction, word of mouth, and revisit intention of domestic tourist. The study showed some specific correlations through SEM analysis using software AMOS version 23 and result of six hypothesis (H1, H2, H3, H4, H6 and H7) are statistically significant (Table 6).

Table 6. Summary of outcomes of hypothesis tests

H	Hypothesis	Relationship	Estimate (β)	Standard error	t-statistics	P	Result
H1	Destination service quality (SQ) positively affects tourist perceived value (PV)	SQ \rightarrow PV	0.103	.030	3.499	***	Supported
H2	Destination service quality (SQ) positively affects tourist satisfaction (TS)	SQ \rightarrow TS	0.176	.037	4.760	***	Supported
H3	The higher the perceived value (PV), the higher the tourist satisfaction (TS)	PV \rightarrow TS	0.757	.130	5.813	***	Supported
H4	Destination image (DI) positively affects perceived value (PV)	DI \rightarrow PV	0.739	.070	10.539	***	Supported
H5	Destination image (DI) positively affects tourist satisfaction (TS)	DI \rightarrow TS	0.242	.107	2.252	.024	Rejected
H6	Tourist satisfaction (TS) positively affects tourist revisit intention (RI)	TS \rightarrow RI	0.910	.094	9.663	***	Supported
H7	Tourist satisfaction (TS) positively affects tourist word of mouth (WOM)	TS \rightarrow WOM	0.794	.071	11.165	***	Supported

Notes: *** $p < 0.001$

In particular, destination service quality positively affects tourist perceived value (H1: $\beta = 0.103$, $t = 3.499$, $p < 0.001$), and destination service quality positively affects tourist satisfaction (H2: $\beta = 0.176$, $t = 4.760$, $p < 0.001$), and the higher the perceived value, the higher the tourist satisfaction (H3: $\beta = 0.757$, $t = 5.813$, $p < 0.001$).

Further, destination image positively affects perceived value (H4: $\beta = 0.739$, $t = 10.539$, $p < 0.001$), and tourist satisfaction positively affects tourist revisit intention (H6: $\beta = 0.910$, $t = 9.663$, $p < 0.001$), and tourist satisfaction positively affects tourist word of mouth intention (H7: $\beta = 0.794$, $t = 11.165$, $p < 0.001$).

However, one of the seven hypotheses was not supported, suggesting that there is no substantial association between destination image and tourist satisfaction (H5: $\beta = 0.242$, $t = 2.252$, p -value = .024).

DISCUSSION

The findings revealed that the domestic tourists' reaction regarding nature-based destination service quality positively affects tourist perceived value (H1) and perceived value strengthens the tourist satisfaction (H3), these findings are close to the research carried out by Chang and Wildt (1994). It entails that domestic tourists' relative satisfaction improved as a result of the better treatment they received at nature-based destinations, and they were happy, resulting in economic gains for residents and businesses. Also, it is found that the destination service quality positively affects tourist satisfaction (H2) which is similar to the study findings of Woodruff (1977). The fourth hypothesis which is destination image positively affects perceived value –supported. According to the results, natural destination images in the mind of tourists directly impact the visitors' important experiences. However, the fifth hypothesis analysis result revealed that destination image didn't positively affect tourist satisfaction which is adverse to the results of Wang et al. (2009) and Chia et al. (2021). This result means proper service quality is needed to satisfy tourists and destination image is not directly connected to the satisfaction of tourists. But previous studies like Wang et al. (2009) and Chia et al. (2021) demonstrates there is a direct relationship between them and further study needed here.

The sixth hypothesis that is tourist satisfaction positively affects tourist revisit intention is supported and which is also revealed by the different researchers (Adinegara, 2018; Padlee et al., 2019; Khuong and Nguyen, 2017; Canny, 2013).

Accordingly, H6 revealed that visitors' satisfaction and revisit intention are directly connected and suggests that local people and entrepreneurs should be concerned about tourists' satisfaction carefully and it ultimately enhance the destination's tourist quantity by ensuring revisit of the tourist. Besides, hypothesis seven – that tourist satisfaction positively affects tourist word of mouth is supported, which confirms the findings of Tax et al. (1993). It means satisfied tourists will talk more positively to others about what they have experienced and it will ultimately generate new tourist for the natural destination. These findings prove that tourists valued Haor travel and made the right decision to choose this nature based destination. Results demonstrate that, service quality and perceived value are considered to have a substantial effect on visitor satisfaction like as the work of Ramseook-Munhurrin et al. (2015). The higher the tourists' satisfaction ratings with the nature-based Haor destination, the more important their travel experiences are perceived to be, affecting their intentions to return and inclination to recommend the Haor destination.

In the sense of nature-based tourism, and tourists' behavioral intentions in relation to word-of-mouth and revisits, this study advances the usage of quality of destination services, image, and tourist satisfaction. This paper addresses the need expressed by many authors to examine in greater depth the forces influencing the formation of an image of a destination, the quality of service, and the perceived value, and to help fill the gap that exists between Bangladeshi domestic tourist and the theoretical development of tourist satisfaction, and revisitation and word-of-mouth intentions. The findings of this research support the use of a conceptual framework and the assessment of popular tourism quality experience of a multilayered and structured methodology such as the models established by several researchers (Wang et al., 2009; Ramseook-Munhurrin et al., 2015; Prayogo and Kusumawardhani, 2016; Adinegara, 2018; Khuong and Nguyen, 2017; Kim, 2010). Measurement model results demonstrate that all measurement methods for calculating experiential efficiency and proportions have a strong match model. Furthermore, the findings of reliability and validity studies show that the measurement units for calculating experiential consistency and measurements suggest satisfactory reliability and validity.

This research offers a conceptual basis for the dynamic links of six major constructs (quality of service, perceived value, image of destination, satisfaction of the tourists, desire to re-visit, and word-of-mouth). Firstly, the quality of service is checked empirically and proven to have an effect on the perceived value and happiness of visitors. The favorable association between service quality and perceived value and service quality and the satisfaction of tourists can be seen as the higher the quality of service perceived by tourists, the greater the perceived value and the satisfaction of tourists. Secondly, in this analysis, destination images are identified as having no positive impact on the happiness of visitors. This can be used as a destination image and is not a precedent of the pleasure of the visitor. Thirdly, the perceived value favorably affects the happiness of tourists and the greater the perceived value, the higher the satisfaction of tourists. Fourthly, the image of the destination affects the perceived value of tourists favorably, the greater the image of the destination, the higher the perceived value of tourists. Finally, visitor happiness positively affects the revisit of visitors and the intentions of word of mouth. The strong association between the revisit of tourists and word-of-mouth intentions can be translated as likely that naturalist tourists will repeat or return to nature after a high level of satisfaction in their minds.

For the tourism industry and public bodies, the findings of this research have real importance. Tour operators must provide positive experiences and emotions for visitors to form deep positive memories that will encourage them to return (Van-Dunem et al., 2021). Tourism industry stakeholders should look at the quality of the services of the destination and the satisfaction of the tourists. Stakeholders can work on the quality of services and collect reviews and, accordingly, they can reshape the services. Stakeholders can develop tourism goods and services in nature-based destinations in the future, thus improving the consistency of tourist experiences. These tourist experiences can be provided by service meetings, like the availability of information at tourist spots, cleanliness and hygiene of accommodation and food, stunning and diverse natural environment, and exciting, pleasant, relaxing environmental facilities and so on. Accumulate quality contributions from locals, businessmen, tourism companies, and government agencies result in proper tourist satisfaction and, eventually, an increase in favorable behavioral revisit and word-of-mouth intentions.

CONCLUSION

In conclusion, this study led to a deeper understanding of nature-based destinations by studying Haor, Bangladesh, and tourists' emotions, opinions, and behavioral intentions, as well as a guide on how to preserve and handle the production of high-quality services. This study has explored the relative contribution to tourist satisfaction and future revisit and word of mouth intentions of quality of service, perceived value and destination image.

The outcome has shown that the quality of service, perceived value and happiness of visitors have a huge bearing on the potential visitor and word-of-mouth intentions. The image of the building destination is different, not important to the relationship between the image of the destination and the happiness of the visitors.

The results show that the standard of service and perceived value is precedent of tourist satisfaction with nature and the behavioral aspirations of potential visitors are positively linked to the satisfactions of tourists. In the design and delivery of the service, perceived value for tourism actors has to be taken into account in accordance with the central and relational standard of services (McDougall and Levesque, 2000). Researchers need to integrate perceived value in models intended to consider the determinants of happiness and revisit of visitors and word of mouth intentions.

1. Limitations and future research

Even though this research may contribute to tourism practitioners and academics, there are some limitations. Here, only domestic tourists are considered as samples, whereas domestic and foreign tourists can be more correlated to measuring tourists' satisfaction. Due to the covid-19 pandemic situation, data collection from respondents through face

to-face interviews has become a challenge. On the other hand, reaching foreign tourists for this purpose becomes impossible in a sense. This was a causal study, but the causal link in the model may be best interpreted by a longitudinal field study. In the future, a cross-sectional analysis of domestic and foreign tourists would be another direction. Furthermore, this research can be expanded to assess the effects of tourist demographics on the proposed model and extrapolated to other tourist and geographical contexts.

REFERENCES

- Adinegara, G.N.J. (2018). Modeling of Tourist Satisfaction in Bali. *Binus Business Review*, 9(3), 261–276. <https://doi.org/10.21512/bbr.v9i3.5019>
- Arndt, J. (1967). Role of Product-Related Conversations in the Diffusion of a New Product. *Journal of Marketing Research*, 4(3), 291–295. <https://doi.org/10.1177/002224376700400308>
- Baloglu, S., & Brinberg, D. (1997). Affective Images of Tourism Destinations. *Journal of Travel Research*, 35(4), 11–15. <https://doi.org/10.1177/004728759703500402>
- Beerli, A., & Martín, J.D. (2004). Factors influencing destination image. *Annals of Tourism Research*, 31(3), 657–681. <https://doi.org/10.1016/j.annals.2004.01.010>
- Berry, L.T., Shostak, L.G., & Upah, G.D. (1983). Emerging Perspectives on Services Marketing. *American Marketing Association*, 99–107.
- Buonincontri, P., Morvillo, A., Okumus, F., & van Niekerk, M. (2017). Managing the experience co-creation process in tourism destinations: Empirical findings from Naples. *Tourism Management*, 62, 264–277. <https://doi.org/10.1016/j.tourman.2017.04.014>
- Canny, I.U. (2013). An empirical investigation of service quality, tourist satisfaction and future behavioral intentions among domestic local tourist at Borobudur Temple. *International Journal of Trade, Economics and Finance*, 4(2), 86–91. <https://doi.org/10.7763/ijtef.2013.v4.265>
- Chang, T.Z., & Wildt, A.R. (1994). Price, product information, and purchase intention: An empirical study. *Journal of the Academy of Marketing Science*, 22, 16–27. <http://doi.org/g7m>
- Chen, C.F., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions? *Tourism Management*, 28(4), 1115–1122. <https://doi.org/10.1016/j.tourman.2006.07.007>
- Chi, C.G.Q., & Qu, H. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tourism Management*, 29(4), 624–636.
- Chia, S.K.S., Lo, M.C., Razak, Z.B., Wang, Y.C., & Mohamad, A.A. (2021). Impact of Destination Image on Tourist Satisfaction: The Moderating Effect of Information Technology (IT). *Geojournal of Tourism and Geosites*, 34(1), 88–93. <https://doi.org/10.30892/Gtg.34112-623>
- Cong, L.C. (2016). A formative model of the relationship between destination quality, tourist satisfaction and intentional loyalty: An empirical test in Vietnam. *Journal of Hospitality and Tourism Management*, 50–62. <https://doi.org/10.1016/j.jhtm.2015.12.002>
- Crompton, J.L. (1979). An Assessment of the Image of Mexico as a Vacation Destination and the Influence of Geographical Location Upon That Image. *Journal of Travel Research*, 17(4), 18–23. <https://doi.org/10.1177/004728759701700404>
- Cronin Jr, J.J., Brady, M.K., & Hult, G.T.M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218. [https://doi.org/10.1016/S0022-4359\(00\)00028-2](https://doi.org/10.1016/S0022-4359(00)00028-2)
- Cronin Jr., J.J., Brady, M.K., Brand, R.R., Hightower Jr., R., & Shemwell, D.J. (1997). A cross-sectional test of the effect and conceptualization of service value. *Journal of Services Marketing*, 11(6), 375–391. <https://doi.org/10.1108/08876049710187482>
- Eze, F.J., Inyang, J.J., & Orji, N.V. (2020). Determinants of Outbound Medical Tourism: Implications for Service Marketing and Development. *Geojournal of Tourism and Geosites*, 33(4), 1507–1512. <https://doi.org/10.30892/gtg.334spl09-600>
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Gallarza, M.G., Gil Saura, I., & Arteaga Moreno, F. (2013). The quality-value-satisfaction-loyalty chain: relationships and impacts. *Tourism Review*, 68(1), 3–20. <https://doi.org/10.1108/16605371311310048>
- Gaskin, J., & Lim, J. (2016). "Model Fit Measures", *AMOS Plugin*. Gaskination'sStatWiki, 1–55.
- Gregory, R.L. (1990). Perceptions of William James—at the Centenary of The Principles of Psychology. *Perception*, 19(6), 701–704. <https://doi.org/10.1068/p190701>
- Hair, J.F. Jr., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage Publications, ISBN: 978-1-4522-1744-4, 307.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis (7th Ed.)*. Upper Saddle River, NJ: Prentice Hall.
- Hossain, E. (2013). *An Investigation on Tourism Consumers' Choice Behavior Towards Tour Destination Loyalty*. PhD's thesis, Curtin Business School, Curtin University, Curtin University. <https://espace.curtin.edu.au/handle/20.500.11937/1026>
- Hossain, M.S., Chowdhury, M., & LIPY, N.S. (2015). Exploratory Analysis of Tourists' Satisfaction Level on Tourism Goods and Services of Kuakata and Sundarbans, Bangladesh. *Journal of Business Research*, Faculty of Business Studies, Begum Rokeya University, Rangpur, Bangladesh, 1(1), 21.
- Ilban, M.O., Kasli, M., & Bezirgan, M. (2015). Effects of destination image and total perceived value on tourists' behavioral intentions: An investigation of domestic festival tourists. *Tourism Analysis*, 20(5), 499–510. <https://doi.org/10.3727/108354215X1441198011370>
- Joppe, M., Martin, D.W., & Waalen, J. (2001). Toronto's image as a destination: A comparative importance-satisfaction analysis by origin of visitor. *Journal of Travel Research*, 39(3), 252–260. <https://doi.org/10.1177/004728750103900302>
- Kaiser, H.F., & Rice, J. (1974). Little Jiffy, Mark IV. *Educational and Psychological Measurement*, 34(1), 111–117. <https://doi.org/10.1177/001316447403400115>
- Khuong, M.N., & Nguyen, P.A. (2017). Factors Affecting Tourist Destination Satisfaction and Return Intention – A Study in Ho Chi Minh City, Vietnam. *Journal of Economics, Business and Management*, 5(2), 95–102. <https://doi.org/10.18178/joebm.2017.5.2.493>
- Kim, S.N. (2010). *Antecedents of destination loyalty*. Doctoral dissertation, University of Florida. <https://ufdc.ufl.edu/UFE0041512/00001>
- Kozak, M. (2001). Comparative assessment of tourist satisfaction with destinations across two nationalities. *Tourism Management*, 22(4), 391–401. [https://doi.org/10.1016/s0261-5177\(00\)00064-9](https://doi.org/10.1016/s0261-5177(00)00064-9)
- Kuo, Y.F., Wu, C.M., & Deng, W.J. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computers in Human Behavior*, 25(4), 887–896. <https://doi.org/10.1016/j.chb.2009.03.003>

- Lai, I.K.W., & Hitchcock, M. (2016). A comparison of service quality attributes for stand-alone and resort-based luxury hotels in Macau: 3-Dimensional importance-performance analysis. *Tourism Management*, 55, 139–159. <https://doi.org/10.1016/j.tourman.2016.01.007>
- Le, C.C., & Dong, D.X. (2017). Factors affecting European tourists' satisfaction in Nha Trang city: perceptions of destination quality. *International Journal of Tourism Cities*, 3(4), 350–362. <https://doi.org/10.1108/IJTC-04-2017-0022>
- Lee, S., Jeon, S., & Kim, D. (2011). The impact of tour quality and tourist satisfaction on tourist loyalty: The case of Chinese tourists in Korea. *Tourism Management*, 32(5), 1115–1124. <https://doi.org/10.1016/j.tourman.2010.09.016>
- Marinao, E. (2018). Determinants of Satisfaction with the Tourist Destination. Mobilities, Tourism and Travel Behavior - Contexts and Boundaries. *Published*. <https://doi.org/10.5772/intechopen.70343>
- Mcdougall, G.H., & Levesque, T. (2000). Customer satisfaction with services: putting perceived value into the equation. *Journal of Services Marketing*, 14(5), 392–410. <https://doi.org/10.1108/08876040010340937>
- Moral-Cuadra, S., Orgaz-Agüera, F., & Cañero-Morales, P.M. (2019). Attitude Towards Border Tourism and Its Relationship With Visitor Satisfaction and Loyalty. *Geojournal of Tourism and Geosites*, 25(2), 609–622. <https://doi.org/10.30892/gtg.25226-384>
- Narayan, B., Rajendran, C., & Sai, L.P. (2008). Scales to measure and benchmark service quality in tourism industry. Benchmarking: An International Journal, 15(4), 469–493. <https://doi.org/10.1108/14635770810887258>
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric Theory*. 3rd ed., McGraw-Hill, New York, NY.
- Ozturk, A.B., & Qu, H. (2008). The Impact of Destination Images on Tourists' Perceived Value, Expectations, and Loyalty. *Journal of Quality Assurance in Hospitality & Tourism*, 9(4), 275–297. <https://doi.org/10.1080/15280080802520552>
- Padlee, S.F., Thaw, C.Y., & Atikah Zulkiffli, S.N. (2019). The relationship between service quality, customer satisfaction and behavioural intentions in the hospitality industry. *Tourism and Hospitality Management*, 25(1), 121–139. <https://doi.org/10.20867/thm.25.1.9>
- Parasuraman, A., & Grewal, D. (2000). The Impact of Technology on the Quality-Value-Loyalty Chain: A Research Agenda. *Journal of the Academy of Marketing Science*, 28(1), 168–174. <https://doi.org/10.1177/0092070300281015>
- Petrick, J.F. (2004). Are loyal visitors desired visitors? *Tourism Management*, 25(4), 463–470. [https://doi.org/10.1016/s0261-5177\(03\)00116-x](https://doi.org/10.1016/s0261-5177(03)00116-x)
- Phillips, W.M.J., Wolfe, K., Hodur, N., & Leistritz, F.L. (2011). Tourist Word of Mouth and Revisit Intentions to Rural Tourism Destinations: a Case of North Dakota, USA. *International Journal of Tourism Research*, 15(1), 93–104. <https://doi.org/10.1002/jtr.879>
- Prayogo, R.R., & Kusumawardhani, A. (2016). Examining Relationships of Destination Image, Service Quality, e-WOM, and Revisit Intention to Sabang Island, Indonesia. *Asia Pacific Management and Business Application*, 5(2), 85–96. <https://doi.org/10.21776/ub.apmba.2016.005.02.3>
- Rahaman, A. (2009). *Development of tourism industry in Bangladesh: Issues and Strategies*. PhD's thesis, University of Dhaka, Department of Marketing University of Dhaka, 133. <http://repository.library.du.ac.bd/xmlui/bitstream/handle/123456789/1379/Eumna%20Bushra.pdf?sequence=1>
- Ramseook-Munhurrin, P., Seebaluck, V.N., & Naidoo, P. (2015). Examining the Structural Relationships of Destination Image, Perceived Value, Tourist Satisfaction and Loyalty: Case of Mauritius. *Procedia - Social and Behavioral Sciences*, 175, 252–259. <https://doi.org/10.1016/j.sbspro.2015.01.1198>
- Reisinger, Y., & Turner, L. (2003a). *Cross-Cultural Behaviour in Tourism: concepts and analysis* (1st ed.). Butterworth-Heinemann.
- Ryu, K., Lee, H.R., & Gon Kim, W. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 200–223. <https://doi.org/10.1108/09596111211206141>
- Tax, S.S., Chandrashekar, M., & Christiansen, T. (1993). Word-of-mouth in consumer decision-making: An agenda for research. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 6(10), 74–80.
- Tosun, C., Dedeoğlu, B.B., & Fyall, A. (2015). Destination service quality, affective image and revisit intention: The moderating role of past experience. *Journal of Destination Marketing and Management*, 4(4), 222–234. <https://doi.org/10.1016/j.jdmm.2015.08.002>
- Van-Dunem, T., Coelho, A., & Bairrada, C. (2021). International Tourist's Perception of the Destination Image: A Study Applied To Luanda, Angola. *Geojournal of Tourism and Geosites*, 35(2), 411–418. <https://doi.org/10.30892/gtg.35220-667>
- Viet, B.N. (2019). The influence of destination image components on tourist satisfaction and loyalty: A case study in Côn Dao Islands, Vietnam. *African Journal of Hospitality, Tourism and Leisure*, 8(4), 1–14.
- Wang, X., Zhang, J., Gu, C., & Zhen, F. (2009). Examining Antecedents and Consequences of Tourist Satisfaction: A Structural Modeling Approach. *Tsinghua Science and Technology*, 14(3), 397–406. [https://doi.org/10.1016/S1007-0214\(09\)70057-4](https://doi.org/10.1016/S1007-0214(09)70057-4)
- Woodruff, R.B. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139–153. <https://doi.org/10.1007/bf02894350>
- Yoon, Y., Gursoy, D., & Chen, J.S. (2001). Validating a tourism development theory with structural equation modeling. *Tourism Management*, 22(4), 363–372. [https://doi.org/10.1016/S0261-5177\(00\)00062-5](https://doi.org/10.1016/S0261-5177(00)00062-5)
- Žabkar, V., Brenčič, M.M., & Dmitrović, T. (2010). Modelling perceived quality, visitor satisfaction and behavioural intentions at the destination level. *Tourism Management*, 31(4), 537–546. <https://doi.org/10.1016/j.tourman.2009.06.005>
- Zeithaml, V.A. (1988). Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52 (July), 2–22.
- *** CEGIS. (2012). *Master plan of haor area*. Ministry of Water Resources, Government of the People's Republic of Bangladesh, I (April 2012), 1–82.
- *** WTTC. (2020). *Global economic impact & trends 2020*. June, 27. <https://wtcc.org/Research/Economic-Impact/moduleId/1445/itemId/91/controller/DownloadRequest/action/QuickDownload>

AUXILIARY ISSUES OF BRANDING TOURISM DESTINATIONS: A CASE OF GAUTENG, SOUTH AFRICA

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Abstract: Studies show very little evidence to support the concept that slogans and logos are not the only issues destination marketing companies should focus on in their branding efforts. Therefore, this study aims to figure out auxiliary critical issues of branding tourism destinations using Gauteng province as the study area. A mono quantitative survey method was used to validate and factor several issues which were identified in literature. A principal component factor analysis with Varimax rotation method was also conducted to identify the factors which were addressed by the destination managing authority. Five critical factors were identified, namely: destination image, market analysis, political stability, interior configuration and investment potentials. The results of this study therefore substantiated the supposition that branding is a useful marketing factor which succeeds if various aspects are taken into consideration. Establishing auxiliary critical issues is therefore vital for Tourism Destination Marketing Organisations (TDMO) as it can contribute knowledge towards the systematic and comprehensive brand implementation. Given that “product” includes a variety of things, among others provinces, towns, countries and organisations, application of the study results to a wide array of merchandises cannot be underplayed.

Key words: Tourism destination, destination branding, critical issues, stakeholders, Gauteng

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INTRODUCTION

Tourism destinations are embroiled in a “spiral of place competition” (Lui, 2008; Metaxas, 2009; Turok, 2009), competing fiercely for tourists’ money (Eghbali et al., 2015). As such, TDMOs are unable to differentiate their offerings with many achieving only “ephemeral difference (Pike, 2009: 857). Most of these destinations are depending on provision of high-quality service so as to differentiate themselves from the rest. However, it is becoming clear that differentiating strategies such as changing slogans and logo are becoming inadequate, if not ineffectual in the battle of customers (Mossberg and Kleppe, 2005). In such unassertive tourism environment, other aspects are becoming crucial intangible value creators for the branding process (Guzman and Montana, 2008). In this milieu, it is important to create strong brands by considering all aspects in the branding process so as to be able to differentiate tourism destinations (Vogt and Kaplanidou, 2010). Gauteng is a province which is regarded as one of the most sort after tourism destinations in the South African context (Gauteng Tourism Annual Report, 2013: 14). The province hosts multifarious atrocity sites (Rogerson and Rogerson, 2014; Ivanovic, 2014) such as Soweto township, Johannesburg, Union Buildings, Voortrekker Monument, Constitutional Hill and Hector Peterson Memorial Museum which emerged as result of the apartheid regime.

The liberation of South Africans from the apartheid regime created a variety of heritage sites which have since been used as “cultural pots” for educating the current generation and future generation. As such, the province stands out to be “visitor magnet” attracting a competitive segment of the heritage market in the country. The province though hosts some of the ‘hottest cultural pots’, authentic cultural and heritage attributes, however, it is perceived as a crime manifested area. Such negative connotations have hindered the progression of tourism in the region.

In an attempt to erase the negative connotations, Gauteng Tourism Authority (GTA), which is the provincial tourism marketing organisation, have tried to brand the province several times to pursue people’s mindset with slogans such as “it starts here”, the “province of gold” and the “gateway to Southern Africa” (Brand, 2014: 164). In the process of branding, the TDMO formulates the identity of a place or region so that visitors build the desire of visiting it (Rijnks and Strijker, 2013; Ruzinskaite, 2015; de Rosa et al., 2017). In branding a destination, indeed slogans and logos have to be changed (Pike, 2009) but can be a superficial way of addressing destination rebranding issues.

This is partly because a slogan is just one element of place branding process (Goi and Goi, 2011: 448). Thus, concentrating on changing slogans, logos and brand names can be said to represent a situation of “changing bottles of the same wine”. In fact, a destination may be facing a host of other challenges which need attention in a branding exercise

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(Hurombo, 2012; Malek and Costa, 2014). Therefore, this article attempts to establish other auxiliary critical issues of branding Gauteng as a tourist destination. Destination branding has become an emerging field of research in its embryonic stage (Leonardo and Rich, 2011) with relatively partial scholarly research (Saraniemi, 2011: 48; Kuseni, 2017: 16). In an attempt to bridge the gap, several implementation models have been proposed by scholars but lack practical application (Jesca, et al., 2014). Some studies by scholars such as Gartner (2007), Jeuring (2016), Bianchi and Stephenson (2013), Zenker and Rutter (2014) have tried to establish axillary critical issues but most tend to focus on single constructs. Considering these studies, literature is silent on coordinating the identified issues and measuring their relevance in an area (Kuseni, 2017). Consequently, there is an incomplete practical picture of the wholesome critical issues to destination like Gauteng province in South Africa. Against such background, the question is not whether destinations can be branded, but rather what needs to be considered to build desirable destination brands in this increasingly competitive market. With this in mind, the objectives of the study are;

- To establish critical issues of branding Gauteng province as tourism destination of choice.
- To identify critical issues addressed by GTA in their past branding exercise.

To answer the objectives, the study specifically focused on the main role players in the tourism industry within the province of Gauteng, which are the GTA employees, members affiliated to the Tourism Business Council of South Africa (TBCSA) and the tourists in Gauteng for they were felt to be appropriate holders of the subject under study.

Table 1. Summary of models and noted issued (Source: Authors own compilation)

AUTHORS	MODEL	ISSUS OUTLINED
Anholt (2016)	Nation brand index	<ul style="list-style-type: none"> • Tourism. • Export. • Governance. • Investment and immigration. • Culture and heritage. • People.
Hankinson (2015)	Five guiding principles of destination branding	<ul style="list-style-type: none"> • Strong and visionary leadership. • Brand-oriented organisational culture, departmental coordination and process alignment. • Consistent communication across a wide range of stakeholders • Strong and compatible partnerships.
Haigh (2013)	Place branding toolkit	<ul style="list-style-type: none"> • Logo and slogan. • Associated visual image. • Market research. • Internal communication. • External public relations. • Advertising.
Rainisto (2011)	Nine success factors of destination branding	<ul style="list-style-type: none"> • Planning group. • Visionary and strategic. • Place identity and image. • Public-private partnership. • Leadership. • Politics • Global marketplace. • Local development. • Coincidences.
Gartner (2011)	Political ideology model	<ul style="list-style-type: none"> • Political ideology.
Morgan, Pritchard and Pride (2009)	Five phases of branding	<ul style="list-style-type: none"> • Market investigation, analysis and strategic recommendation. • Brand identity development. • Brand launch, introduction and Communication of the vision. • Brand implementation. • Monitoring, evaluation and review.
Balakrishnan (2008)	Destination brand model	<ul style="list-style-type: none"> • Vision. • Stakeholders. • Product portfolio. • Target customer. • Image differentiation. • Communication.
Konecnik and Go (2008)	Strategic brand analysis model	<ul style="list-style-type: none"> • Tourist analysis. • Competitor analysis. • Self-analysis.

THEORETICAL FRAMEWORK

The Destination Branding process

Destination branding is the practice of applying branding strategy and other marketing techniques to the economic, political and cultural development of cities, regions, and countries (Ashworth and Kavaratzis, 2009). It is a process which informs, positions and differentiate a place from another (Singh, 2010). Destination branding communicates and assures a memorable experience tourists (Kemp et al., 2011: 122). Destination branding has become a crucial strategy for tourist destination marketers because a brand can identify and differentiate the destination through a positive image that holds tourists to the destination emotionally (Gnoth, 2007). Hankinson (2015) suggests a conceptual framework which underlines the leading role played by the TDMOs. The process starts with the TDMO establishing a clear vision and a strategy for brand building. This enables internal brand identity. Then brand is rolled out to build external brand identity (Baker, 2012). Afterwards, the brand is effectively communicated to multiple stakeholders through consistent brand communication

(Kavaratzis, 2009: 32; Cvijic and Guzijan, 2013: 23). Balakrishnan (2008) is of the opinion that destination branding begins with building a vision considered by all internal and external stakeholders. The vision incorporates natural assets, history, culture, infrastructure and/or facilities (product portfolio). The image is built to encompass the product portfolio to

differentiate the destination. Local people such as residents disseminate positive word-of-mouth which enhances the brand image to prospective customers (Eshuis et al., 2014; Rehmet and Dannie, 2013; Braun et al., 2013).

Auxiliary critical issues in destination branding

According to Pike (2009), brand positioning elements such as the names, symbols and slogans are used by the marketer to cut through the noise of competing and substitute products to stimulate an induced destination image that matches the brand identity. Destination image has an important role about destination selection of tourists (Korkmaz et al., 2014: 7). Bearing this in mind, TDMOs have created logos and slogans for their destinations to differentiate and promote themselves from others (Lee et al., 2011). However, can branding be only a product of changing logos and slogans? With massive competition in the service industry, focusing on changing logos and slogans can be a superficial way of addressing branding challenges (Hurombo, 2012). According to Kuseni (2017), this actuates the need to establish auxiliary critical issues of branding destinations (such as Gauteng province). If stakeholders accept the auxiliary critical issues of branding destination, they would be aware of their implications in branding and can implement sustainable destination brands (Hurombo, 2012; Jesca et al., 2014; Kuseni, 2017; Malek and Costa, 2014). Pike (2009) states that a slogan can indeed be changed but a slogan is just one element of place branding while Goi and Goi (2011: 448) assert that branding is not just about simply changing names. In view of the above statement, different scholars proposed models in relation to branding with different and similar issues. Table 1 represents the different and similar issues in this regard.

Table 2. Destination branding issues and the proposed critical issues (Source: Authors own compilation)

Extracts from the models	Destination branding components	Proposed critical branding issues
Self-analysis	To identify its true position in the market	Self-analysis
Market research		
Market investigation		
Market analysis	To improve destination competitiveness	Competitor analysis
Tourist analysis	To understand the needs of target customers	Target customers
Target customers		
Strategic analysis	To develop a clear and shared vision for the branding process	Shared Vision
Vision		
Culture or heritage	To involve locals in developing and delivering the brand	National culture
Organisation culture		
Public-private partnership		
Compatible partnership	To balanced participation from all stakeholders	Strong compatible partnerships
Coincidences	To provide tourist needs within the destination.	Product portfolio
Tourism		
Portfolio of product		
Stakeholders	To effectively manage stakeholders in branding	Stakeholder management
Compatible partnership		
Strong and visionary leadership	To lead stakeholders so as to attain the vision of the destination branding process	Strong and visionary leadership
Vision and strategic analysis		
Vision		
Image differentiation	To provide the link between the brand identity aspired by TDMO and the actual brand image held in the market	Logo and slogan
Place identity and image		
Brand-oriented organisational culture	To build and extend the brand from the TDMOs to partner organisations	Organisational culture
Culture or heritage		
Political ideology	To improve relations between destination and country	Political ideology
Political unity	To promote unified decision- making.	Political unity
Method used to govern	To promote fairness and trustworthiness in governing a destination	Governance
Governance		
Place identity	To promote unique destination experience through exporting home grown brands	Uniqueness of province
Product portfolio		
Place image	To create a positive destination image and positive publicity	Image of province
Image differentiation		
Investment/ immigration	To enhance the development and improvement of the tourism facilities	Domestic and foreign investment
Local development		
People	To promote brand acceptance and sustainability by locals	People/Host community
Communicating the vision	To promote integration of all stakeholders in brand formulation	Consistent communication
Internal communication		

Evaluation and assimilation of destination branding models

The models reviewed on Table 1 differ in several aspects, as they pinpoint certain suppositions which need to be noted. Gartner (2011) emphasises political ideology as the main issue to be addressed in destination branding. The rest take a broader perspective. Konecnik and Go (2008), and Morgan et al. (2016) somewhat emphasise the importance of market research in destination branding (target customer, competitor and self-analysis) while the importance of a public-private partnership in the planning and implementation of destination branding is highlighted by Rainisto (2011),

Hankinson (2006) and Balakrishnan (2008). The scholars also share sentiments on the element of vision as a critical issue in destination branding. Rainisto (2011) and Anholt (2016) add the importance of political unity and governance. The outlined guidelines, factors and stages in models on Table 1 pave way and necessitates development of suppositions. The article picked and coded the guideline, stages and factors and developed suppositions which were believed to be critical in branding a destination as illustrated in Table 2.

Study supposition

The literature reviewed proposed conceptual assumptions which if intricately addressed, Gauteng province will be effectively branded to become a destination of choice. These are, self-analysis, competitor analysis, target customers, stakeholder management, strong and visionary leadership, shared vision, people/ host community, organisation culture, slogan and logo, strong and compatible partnerships, consistent communication, political ideology, political unity, governance, uniqueness of destination, Image of the destination, foreign and domestic investment, national culture promoting immigration and emigration, iconic attractions, accommodation, accessibility of the destination and ancillary services. However, the suppositions are theoretical without practical validity.

MATERIALS AND METHODS

This study adopted an exploratory deductive longitudinal research design. The target population for the study consisted of three strata in Gauteng. The units of analysis were GTA employees, members affiliated to TBCSA and tourists who were visiting the province. A total of 320 respondents were targeted and the distribution is shown in Table 1.

Research tactic applied was basically mono quantitative survey research based on probability and non-probability sampling designs. Probability method of stratification was adopted on the TBCSA members. 15 strata according to operational category were extrapolated and proportionally sampled. The method is preferred justifiable as it allowed blending of randomisation and categorisation. 136 respondents were sampled in this category. Non-probability methods of convenient, purposive and judgmental techniques were used to sample the tourists in Gauteng with a total of 100 respondents participating in the study while a simple random method was used for GTA employees with all 56 employees participating. A closed-ended questionnaire was used as a measuring instrument. Prior arrangements were made with the responsible authorities so as to conduct the study. Data was analysed using Strata V13 statistical software. Data analysis method were based on descriptive and inferential testing.

Table 3. Distribution of targeted respondents according to stratum

Clusters	Distribution
GTA employees	70
TBCSA members	150
Tourists in Gauteng	100
Aggregate total	320

Table 4. Response rate by cluster

Levels/ cluster	Response rate
GTA employees	80 %
TBCSA members	90.6 %
Tourists in Gauteng	100 %
Aggregate total	91.3 %

RESULTS AND DISCUSSION

Respondent's profile

Interpretation of data plays an important role in research as it is the process that brings meaning to the views of the respondents. The findings of this study were derived from 320 respondents from Gauteng province. The respondents were from three different clusters namely: Gauteng Tourism employees (70), members affiliated to Tourism Business Council of South Africa (150) and tourist in Gauteng (100). The response rate of the respondents varied with clusters as shown in Table 4.

The overall response rate was 91 % which can be rated as more than good. Babbie and Mouton (2004) note that a response of 50% is adequate while one of 60% is good. However, the response rate by levels varied as some questionnaires were emailed to the GTA. Pilot and Beck (2008: 305) note that emailed questionnaire response rate is usually less than 50%. TBCSA members' response rate (91%) recorded the second highest of the three levels. The response rate for GTA employees recorded the lowest (80%) while the tourist in Gauteng recorded the highest (100%).

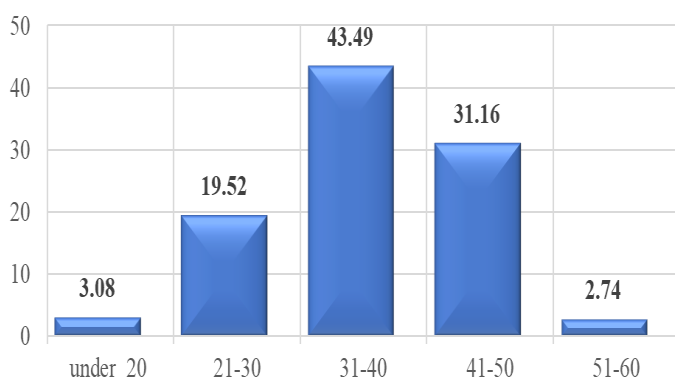


Figure 1. Age distribution of respondents (N=292)

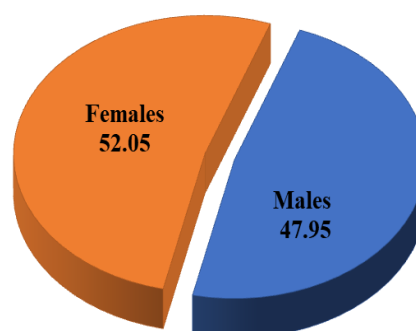


Figure 2. Distribution of respondents by gender (N=292)

Respondents demographic profile

Respondents in the study were profiled based on their demographic characteristics with issues under consideration being age, gender, race, marital status and education levels. This was to ascertain if any of these characteristics can be considered in building a desirable destination brand. The socio-demographic and socio-economic characteristics of the respondents are presented in Figure1, 2, 3, 4, and 5.

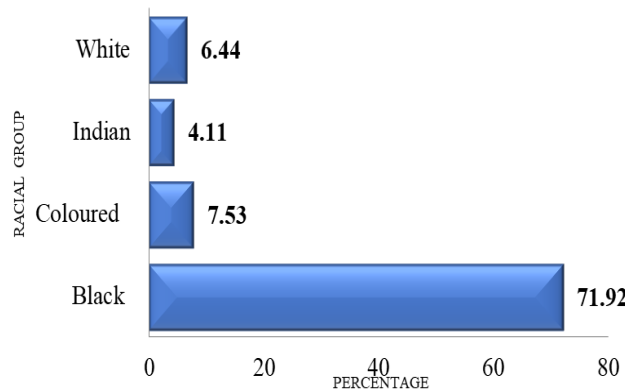


Figure 3. Distribution of respondents by race (N=292)

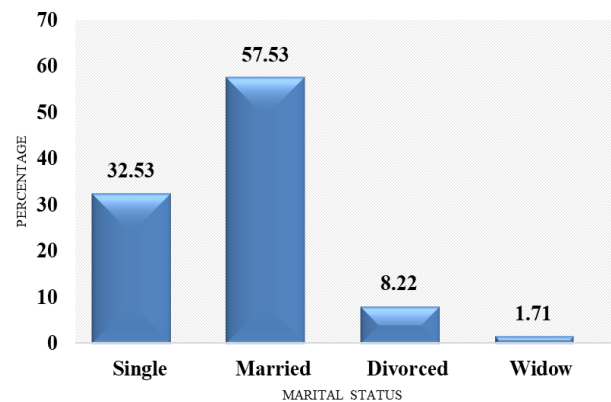


Figure 4. Distribution of respondents by marital status (N=292)

The respondents were predominantly within two age groups, namely 31–40 (43.49%) and 41–50 (31.16%), with the least falling within the age group of 21–30 (2.74%) years. More than four out of ten of the respondents fell in the age group of 31–40 years, while the two extreme age groups (under 20 years and 51–60 years) have less than 1 out of every 10. Gender composition was almost equal in distribution with males (52%) and females (48%).

There respondents were predominantly Africans. 71.95% were Africans, followed by Coloureds at 7.53%, Whites at 6.44% and Indians at 4.11% of the respondents. The results showed that majority of respondents at 57.53% were married, 32.53% were single, followed by 8.22% who were divorced and 1.71% widowed.

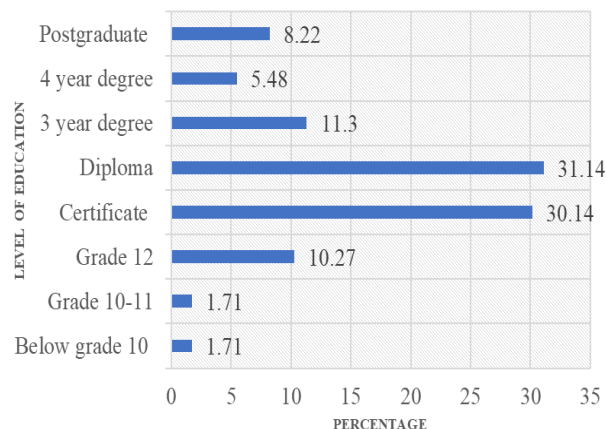


Figure 5. Distribution of respondents by level of education (N=292)

Table 5. Distribution of respondents by brand awareness and source of brand awareness

CATEGORY OF RESPONDENTS		GTA		TBCSA		Tourists in Gauteng		TOTAL	
		N	%	N	%	N	%	N	%
Brand awareness	Aware of the brand	56	100	122	90	87	85	265	90
	Not aware of the brand	0	0	14	10	13	15	27	10
Source of brand awareness	Word-of-mouth	2	4	57	47	37	42	96	36
	Public relation	4	7	11	9	26	30	41	15
	Printed media	8	14	27	22	17	20	52	20
	Website	5	9	19	16	7	8	31	12
	Electronic media	12	21	5	4	0	0	17	6
	Travel expo	3	5	3	2	0	0	6	9
	Roadshows	22	40	0	0	0	0	23	9

The majority of the respondents at 31.14% holds diploma qualifications and with certificate holders at 30.14%. 11.30% of the respondents were qualified with a three-year degree, while 10.27% were matriculants. 8.22% of the respondents were post-graduates and 2.52% of respondents had either reached grade 11 or lower grade. The majority of the respondents were formally employed or self-employed (90.75%).

Responses for brand awareness and source of brand awareness

Table 5 shows statistics of respondent's brand awareness and source of brand awareness over all three clusters which are the employees of both GTA and TBCSA, as well as tourists in the province. The results showed that majority (90%) of the total respondents were aware of the GTA brand awareness programmes. All GTA employees (56) were aware of branding programmes (100%). Of the 136 respondents from the TBCSA respondents, 90% were aware of the branding by GTA while out of the 100 respondents of tourists in Gauteng, 85% were aware of the branding programmes. Considering the overall percentage of 90%, it is clear that the respondents were aware of GTA branding hence the targeted population was conversant in the topic under study. On the source of brand awareness, from the 56 respondents from GTA, 40% heard of the province's tourism brand through roadshows, 21% through electronic media and only 4% of the respondents heard through the word-of-mouth. From the TBCSA (136), 47% of the respondents heard through the word-of-mouth, 22% from printed media and only 2% from roadshows. 42% of the 100 tourists visiting Gauteng heard branding through word-of-mouth, 30% from public relations and 20% from printed media.

Descriptive statistics of GTA branding efforts against other provinces in South Africa

The descriptive statistics of GTA branding efforts against other provinces in South Africa were established based on a scale 1 (very poor) to 5 (very good). Table 6 shows the mean and standard deviations of Gauteng against other provinces.

The Mean Scores from the respondents indicated that the Western Cape (77.86%) and Kwa-Zulu Natal Tourism Authorities (70.86%) were better rebranding formulators than the GTA recording. North West and Northern Cape were poor brand formulators recording the highest percentages on the lower scales, 76.47% and 70.48% respectively.

Descriptive statistics and Factor Analysis of critical issues in branding Gauteng province

A survey of attitudes of GTA employees, TBCSA members and tourists to Gauteng about the importance of 22 elements on branding Gauteng province was conducted in 2016. The 22 constructs identified in the literature were tested on a five-point Likert Scale ranging from *Not at all critical* (1) to *Very critical* (5). The analysis of the results shows that all respondents felt that all elements were very critical scoring above 2.5. A similar trend was also revealed in the other constructs such as destination analysis, competitor analysis, target customer, stakeholder management, strong and visionary leadership, shared vision, host community slogan and logo, strong and compatible partnership, consistent communication, uniqueness of the destination, image of the destination national culture, attractions, accommodation, accessibility and ancillary services. On these variables, the high average scores were given by TBCSA members, followed by GTA employees and the tourists to Gauteng scoring least average. However, on organisational culture, political ideology, political unity and governance higher ratings were scored by the tourists to Gauteng followed by GTA employees while the members of TBCSA had the least average scores. The trend was opposite with regards to political issues where tourists were of the opinion that political issues affected branding exercise more. On the foreign and domestic investment element, GTA employees rated it higher (4.33), followed by TBCSA members (4.18) and tourists to Gauteng (3.98). While all respondents affirmed the critical issues identified on the micro-destination, variations were noted in how different strata rated the constructs. To reduce the multiplicity of the constructs established prior, an exploratory factor analysis was conducted on the 22 constructs.

Table 6. Comparisons of GTA rebranding efforts compared to other provinces in SA (N=292)

Comparisons of GTA rebranding efforts compared to other provinces	Number of respondents	
	Mean (mode)	Std D
Eastern Cape	3.54 (3)	0.85
Free State	3.51 (3)	0.77
Kwa-Zulu-Natal	2.23 (2)	0.94
Limpopo	3.66 (4)	0.93
Mpumalanga	3.37 (3)	0.84
Northern Cape	4.01 (3)	0.95
North West	4.10 (4)	0.96
Western Cape	2.06 (2)	1.06

A principal component factoring analysis with Orthogonal Varimax rotation of 22 variables was performed. The results yielded a five-factor solution structure (factor loadings \Rightarrow 0.40) with acceptable levels of reliability. The consortium includes destination image, interior configuration, destination market analysis, political stability in province and investment potentials. A Bartlett's test of specificity indicated that factors yielded p -values of < 0.001 , hence the correlation structure is valid for a factor analysis. Five factors extracted accounted for 63% of total variance. These are shown in Table 7 below.

The second primary objective of the study was to establish if the GTA has addressed the identified critical issues identified. A survey was conducted with the same respondents and their attitudes were evaluated on Likert scale (1-5) *strongly disagree* (1) to *strongly agree* (5). Most of the elements scored overall mean score below 3.5 which is sufficient evidence that the respondents felt that 19 issues of the 22 critical issues identified in branding Gauteng have not been addressed. Some of the constructs are: stakeholder management (2.46), strong and visionary leadership (2.53), shared vision (2.37), host community (2.46), strong and compatible partnership (2.54) consistent communication (2.48), political ideology (3.22), uniqueness of the destination (2.96), image of the destination (2.54) and national culture (2.59). The constructs that the participants rated the highest, indicating that they have been addressed are: attractions (4.11), accommodation (4.24) and accessibility (4.16). A further analysis of the results also showed variation of scores among the three strata as shown on Table 8.

Table 7. Factor analysis: critical issues in rebranding Gauteng

FACTORS AND VARIABLES	Factor Loading	Mean Value	Reliability Coefficient(alpha)
Factor 1: Destination image		.2546077	0.8889
Slogan and logo	0.5816		
Consistent communication	0.5270		
Uniqueness of a destination	0.7293		
Attractions	0.6579		
Accommodation	0.7505		
Accessibility	0.8650		
Ancillary services	0.6443		
Factor 2: Interior configuration		.2571444	0.8244
Stakeholder management	0.6819		
Strong and visionary leadership	0.7848		
Shared vision	0.7685		
Host community	0.5426		
Slogan and logo	0.5502		
Factor 3: Destination market analysis		0.2807945	0.7623
Destination analysis	0.7498		
Customer analysis	0.8531		
Target customer	0.7459		
Factor 4: Political stability in province		0.3844364	0.7230
Political ideology	0.7733		
Political unity	0.8466		
Governance	0.7654		
Factor 5: Investment potentials		0.2132859	0.6503
Organisational culture	0.6380		
Foreign and domestic investment	0.6125		
National culture	0.6354		

The results on Table 8 show variation among the three strata. On the first table labelled A, the TBCSA members rated the elements: destination analysis, customer analysis, target customer, organisational culture, slogan and logo and accommodation higher as not being addressed by GTA while those under B, the general public rated stakeholder management, host community, strong compatible partnership, consistent communication, uniqueness of the destination, image of the destination, foreign and domestic investment and ancillary services higher than the other constructs.

On table labelled C, GTA employees scored the variables strong and visionary leadership, and shared vision higher than the other strata. On table labelled D, the members of the TBCSA rated political ideology, political unity, governance, attractions, accommodation and accessibility as addressed with higher scores than GTA employees and tourists to Gauteng. The results therefore show that the three groups of respondents though agreed on the opinion of not satisfactory addressed, their opinions were slightly different based on the critical issues.

A factor analysis approach was used on the critical issues addressed for branding Gauteng province. A factor loading matrix using the rotation axis factoring extraction method was used for the analysis how distinct the factors were.

A factor analysis was conducted and four factors were established with a reliability co-efficiency of not less than 0.83. Rather than using the 22 variables, 4 factors namely: destination image, destination market analysis, destination configuration and politics in the province imaged. A Kaiser-Meyer-Olkin measure of sampling adequacy was also undertaken and the variables attained a statistic of 0.88 for identification of the critical issues which is above 0.8 indicating that sampling was adequate as shown on Table 9.

Table 8. Distribution of critical issues addressed (N=292)

A	Variables	STRATA MEAN SCORE			Overall Mean (Median)	Overall Standard Deviation
		GTA	TBCSA	GP		
1	Destination analysis	3.11	3.37	3.14	3.24(3)	0.75
2	Customer analysis	3.16	3.26	3.17	3.21(3)	0.78
3	Target customer	2.95	3.10	3.10	3.07(3)	0.84
8	Organisational culture	3.12	3.25	3.22	3.22(3)	0.81
9	Slogan and logo	3.58	4.21	3.65	3.89(4)	1.03
20	Accommodation	4.35	4.40	3.96	4.24(4)	0.83
B						
4	Stakeholder management	2.53	2.16	2.82	2.46(2)	0.88
7	Host community	2.54	2.11	2.90	2.46(2)	0.96
10	Strong compatible partnership	2.72	2.27	2.81	2.54(2)	0.80
11	Consistent communication	2.56	2.23	2.78	2.48(2)	0.88
15	Uniqueness of the destination	3.02	2.78	3.16	2.96(3)	0.93
16	Image of the destination	2.68	2.15	3.00	2.54(2)	0.98
17	Foreign & domestic investment	2.93	3.41	3.29	3.27(3)	0.91
22	Ancillary services	3.79	3.99	3.85	3.90(4)	0.93
C						
5	Strong and visionary leadership	2.84	2.21	2.78	2.53(2)	0.86
6	Shared vision	2.74	1.99	2.64	2.37(2)	0.89
D						
12	Political ideology	3.14	3.39	3.05	3.22(3)	0.93
13	Political unity	3.18	3.44	3.00	3.24(3)	0.91
14	Governance	3.11	3.32	2.99	3.16(3)	0.92
19	Attractions	4.00	4.27	3.95	4.11(4)	0.88
20	Accommodation	4.35	4.40	3.96	4.24(4)	0.83
21	Accessibility	4.14	4.24	4.07	4.16(4)	0.86

 Table 9. Factor analysis:
critical issues addressed when rebranding Gauteng

FACTORS AND VARIABLES	Factor loading	Mean Value	Reliability Coefficient (alpha)
Factor 1: Destination management		.349389	0.8705
Stakeholder management	0.7288		
Strong and visionary leadership	0.6865		
Shared vision	0.7727		
Host community	0.6826		
Strong and compatible partnership	0.7031		
Consistent communication	0.7386		
Uniqueness of the destination	0.4218		
Image of the destination	0.7805		
National culture	0.5764		
Factor 2: Destination market analysis		.365192	0.8368
Destination analysis	0.8101		
Customer analysis	0.8107		
Target customer	0.7274		
Organisational culture	0.5445		
Slogan and logo	0.6380		
Factor 3: Destination configuration		.402710	0.8426
Foreign and domestic investment	0.4065		
Attractions	0.8075		
Accommodation	0.7698		
Accessibility	0.8373		
Ancillary services	0.8113		
Factor 4: Politics in the province		.582085	0.8689
Political ideology	0.7995		
Political unity	0.8564		
Governance	0.7311		

CONCLUSION

The main purpose of study was to establish the critical issues in branding and finding out if the identified critical issues have been addressed by the TDMO. The study finds out that all the suppositions reviewed in literature are critical in branding the Gauteng province, with some fine variation being noted. Political ideology, political unity and governance were the least critical issues. The 22 critical issues identified were later factored to five critical issues namely: destination image, interior configuration, destination market analysis, political stability in province and investment potentials. In this respect, instead of management considering the 22 critical issues, it is therefore wise for them to consider the five factors.

On critical issues addressed, the study found out that most of the critical issues identified were not addressed save for accommodation, accessibility and attractions. Instead of management trying to master the 22 critical issues not addressed, it is ideal for them to consider the four factors namely: destination management, destination market analysis,

destination configuration and politics in the province. Based on the findings and conclusions of this study, GTA should address destination image variables which are: slogan and logo, consistent communication, uniqueness of a destination, attractions, accommodation, accessibility and ancillary services. GTA should also address the interior configuration variables which are stakeholder management, strong and visionary leadership, shared vision and host community. Destination market analysis variables of destination analysis, customer analysis and target customer should also be considered. The problem of political instability should be addressed by political ideology, political unity and governance. The nature of the variables calls for addressing it at the highest political level of the province.

Concrete efforts should be made by the GTA to render better support services in the province so as to address investment potentials through provision of a good organisational culture, a foreign and domestic investment climate and a national culture. From the above recommendations, one can recommend that the GTA should think outside the box and include all of the identified critical issues in their branding exercise so that Gauteng becomes a destination of choice. The findings of the study are expected to assist practitioners in branding tourism destination and also increasing awareness of brand implementation most specifically to the TDMOs.

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REFERENCES

- Anholt, S. (2016). *Place, identity, image reputation*. Palgrave MacMillan.
- Ashworth, G.J., & Kavaratzis, M. (2009). Beyond the logo: brand management for cities. *Journal of Brand Management*, 6(8), 520-531. <https://doi.org/10.1057/palgrave.bm.2550133>
- Babbie, E. & Mouton, J. (2004). *The practice of social research*. Oxford University Press.
- Baker, B. (2012). *Destination branding for small cities: the essentials for success place branding*. 2nd ed. Portland, Oregon.
- Bianchi, R.V., & Stephenson, M.L. (2013). Deciphering tourism and citizenship in a global world. *Tourism management*, 39, 10-20. <https://doi.org/10.1016/j.tourman.2013.03.006>
- Balakrishnan, M.S. (2008). Dubai - A star in the East: a case study in strategic destination brand. *Journal of place management and development*, 1(1), 1757-8335. <https://doi.org/10.1108/17538330810865345>
- Brand, S.A. (2014). South Africa 20 years of success government and business. In: T.M. Ltd, *South Africa 20 years of success Government and Business*, (pp. 162-180), Cape Town: Topco, ISBN 978-0-61594-5.
- Braun, E., Kavaratzis, M., & Zenger, S. (2013). My city - my brand: the different roles of resident in place branding. *Journal of place and development*, 6(1), 18-28. <https://doi.org/10.1108/17538331311306087>
- Cvijic, J., & Guzijan, J. (2013). Cultural and historical heritage - an asset for city brands. *Sputum international review*, 30, 23-27. <https://doi.org/10.2298/SPAT1330023C>
- De Rosa, A.S., E. Bocci, & Dryjanska, L. (2017). Social representation of the European capitals and destination e-branding via multi-channel web communication. *Journal of Destination Marketing & Management*, Advance online publication. <https://doi.org/10.1016/j.jdmm.2017.05.004>
- Eghbali, N., Kharazmi, O.A., & Rahnama, M.R. (2015). Assessing Effective Factors for the Formation of City Image in Mashhad from the view point of Tourists by Structural Equation Modeling. *Science Journal*, 36(3), 133-148. <https://doi.org/10.50431.profdoc.um.ac.ir.articles.a>
- Eshuis, J. Klijn, E.H., & Braun, E. (2014). Place marketing and participation: branding a strategy to address the emotional dimension of policy making? *International review of administrative sciences*, 80(10), 151-171. <https://doi.org/10.1177/0020852313513872>
- Field, A. (2009). *Discovering statistics using SPSS*. 3rd ed. London, Sage Publications.
- Gartner, D. (2011). Place branding: a dilemma between political ideology and economic pragmatism? *Journal of place branding and public diplomacy*, 3(1), 3-7. <https://doi.org/10.1057/palgrave.pb.6000053>
- Goi, C., & Goi, M. (2011). Unfolding and configuring two decades of research of publications on place marketing and place branding. *Place branding and public diplomacy*, 2(2), 91-106. <https://doi.org/10.1057/PB.2011.7>
- Gnoth, J. (2007). The structure of destination brands: leveraging values. *Tourism Analysis*, 12(6), 345-358. <https://doi.org/10.3727/108354207783227939>
- Guzman, F., & Montana, J. (2008). *Branding and design management: handbook on brand experience*. UK: Edward Elgar publishing Ltd.
- Haigh, G. (2013). From destination brand to location l. *Journal of Brand Management*, 13(4-5), 276-283.
- Hankinson, G. (2015). Rethinking the place branding constructs. *Rethinking place branding*, 13-31. <https://doi.org/10.1007/978-3-319-12424-7>
- Hankinson, G. (2007). The management of destination brands: five guiding principles based on recent developments in corporate branding theory. *Journal of brand management*, 14(3), 240-254. <https://doi.org/10.1057/palgrave.bm.255006>
- Hurombo, B. (2012). *Critical issues in rebranding tourism destination: evidence from Zimbabwe tourism Authority*. Masters' dissertation, University of Zimbabwe. Unpublished.
- Hurombo, B., Kaseke, N., & Muzondo, N. (2014). Critical issues in (re)branding: evidence from Zimbabwe's national tourism organisation. *Business review*, 2(2), 61-76.
- Ivanovic, M. (2014). The Perceived Authenticity of Iconic Heritage Sites in Urban Tourism: the case of Constitutional Hill, Johannesburg, South Africa. *Urban Forum*, 25, 501-515. <https://doi.org/10.1007/s12132-014-9241-5>
- Jesca, C., Kumbirai, M., & Hurombo, B. (2014). Destination rebranding paradigm in Zimbabwe: a stakeholder approach. *Journals of advanced research in management and social science*, 3(1), 1-12.

- Jeuring, J.H.G. (2016). Discursive contradictions in regional tourism marketing strategies: the case of Fryslan, The Netherlands. *Journal of destination marketing and management*, 5(2), 65-75. <https://doi.org/10.1016/j.jdmm.2015.06.002>
- Kavaratzis, M. (2009). Cities and their brands: lessons from corporate branding. *Place Branding and Public Diplomacy*, 5(1), 26-37. <https://doi.org/10.1057/pb.2008.3>
- Kemp, E., Williams, K.H., & Bordelon, B.M. (2011). The impact of marketing on internal stakeholders in destination branding: The case of a musical city. *Journal of Vacation Marketing*, 18(2), 121-133. <https://doi.org/10.1177/1356766712443469>
- Konecnik, M., & Go, F. (2008). Tourism destination: Brand identity, the case of Slovenia. *Journal of brand management*, 15(3), 177-189. <https://doi.org/10.1057/palgrave.bm.2550114>
- Korkmaz, H., Mercan, O., & Atay, L. (2014). The Role of Cittaslow in Destination branding: the case of Seferihisar. *Current Issues of Tourism Research*, 4(1), 5-10.
- Kuseni, M. (2017). *Critical issues in destination branding of Gauteng*. Masters' dissertation; Tshwane University of Technology, South Africa, Unpublished.
- Lee, J., Lee, C., & Choi, Y. (2011). Examining the role of emotional and functional values in festival evaluation. *Journal of Travel Research*, 50(6), 685-696. <https://doi.org/10.1177/0047287510385465>
- Leonardo, A.N.D., & Rich, H. (2011). Affirmation, assimilation and anarchy: critical undercurrents in destination branding. *International journal of culture, tourism and hospitality research*, 5(3), 215-226. <https://doi.org/10.1108/17506181111156916>
- Lui, T. (2008). City-branding without content: Hong Kong's aborted West Kowloon mega project 1998-2006. *International development planning review*, 30(3), 215-226. <http://dx.doi.org/10.3828/idpr.30.3.2>
- Malek, A., & Costa, C. (2014). Integrating communities into tourism planning through social innovation. *Tourism planning and development*, 12(3), 207-230. <https://doi.org/10.1080/21568316.2014.951125>
- Metaxas, T. (2009). Place marketing, strategic planning and competitiveness: the case of Malta. *European planning studies*, 17(9), 1357-1378. <https://doi.org/10.1080/09654310903053539>
- Morgan, N., Pritchard, A., & Pride, R. (2009). *Destination branding: creating unique destination proposition*. Oxford, UK: Elsevier Ltd.
- Mossberg, L., & Kepple, I.A. (2005). Country and destination image- different or similar image concepts? *The service industries journal*, 25(4), 493-503. <https://doi.org/10.1080/02642060500092147>
- Pike, S.D. (2009). Destination brand positions of competitive set near-home destinations. *Journal of tourism management*, 30(3), 857-866. <https://doi.org/10.1016/j.tourman.2008.12.007>
- Polit, D. & Beck, C. (2008). *Nursing research: generating and assessing evidence for nursing practice*. 8th edition. Philadelphia: Lippincott Williams & Wilkins.
- Rainisto, S. (2011). *Success factors of place branding*. Regional magazine, 267(1), 20-22. <https://doi.org/10.1080/13673882.20078628829>
- Rehmet, J., & Dinnie, K. (2013). Citizen brand ambassadors; motivations and perceived effects. *Journal of Destination Marketing AND Management*, 2(1), 31-38. <https://doi.org/10.1016/j.jdmm.2013.02.001>
- Rijnks, R.H., & Strijker, D. (2013). Spatial image on the image and identity of a rural area. *Journal of environmental psychology*, 36, 103-111. <https://doi.org/10.1016/j.jenvp.2013.07.008>
- Rogerson, C.M., & Rogerson, J.M. (2014). Urban tourism destinations in South Africa: divergent trajectories, 2001-2012. *Urban Izziv*, 25, S189-S203. <https://doi.org/10.5379/urbani-izziv-en-2014-25-supplement-014>
- Ruzinskaite, J. (2015). *Place branding: the need for an evaluative framework*. Thesis, University of Huddersfield (Salford).
- Saraniemi, S. (2011). From destination image building to identity-based branding. *International journal of culture, tourism and hospitality research*, 5(3), 247-254. <https://doi.org/10.1108/17506181111156943>
- Singh, K.A. (2010). *Destination branding: an introduction*. Punjagutta: The Icfai University. Ch. 2.
- Turok, I. (2009). The distinctive city: pitfalls in the pursuit of differential advantage. *Environmental and planning A*, 41(1)13-30. <https://doi.org/10.1068/a37379>
- Vogt, C., & Kaplanidou, K. (2003). *Destination branding: concepts and measuring in concepts and measurement: Travel Michigan and Michigan State University*.
- Zenker, S., & Rutter, N. (2014). Is satisfaction the key? The role of citizen's satisfaction, place attachment and brand attitude on positive citizen's behavior. *Cities*, 38, 11-17. <https://doi.org/10.1016/j.cities.2013.12.009>
- *** Gauteng Tourism Authority (GTA) Annual Report 2012-13.
- *** Gauteng Tourism Authority (GTA) Annual Report 2013-14.
- *** Gauteng Tourism Authority (GTA) Annual Report 2017-18.

DOES TOURISM SECTOR MATTER IN REGIONAL ECONOMIC DEVELOPMENT

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Abstract: The regional autonomy policy is expected to promote the government in carrying out fiscal management independently. However, local own-source revenue was the only source of revenue and measurement of independence and it has not been achieved optimally. Many provinces failed to fully support regional needs, even though it has the highest tourism sector revenue contributors. The purpose of this study is to analyze the influence of the tourism sector in terms of supply and demand on regional independence. To analyze the regional income model seen from the contribution of the tourism sector by including the lag variable, this study used a Dynamic Panel method which is also known as Partial Adjusted in Central Java Province, Indonesia from 2013-2018. The result showed that the increase in local own-source revenue from the demand side is more elastic than the supply contribution. The addition of new tourist objects without proper management tends not to have a significant impact on regional income. Also, the attraction of people visiting the tourist in Central Java Province is still high because of a significant positive number of tourist arrivals. The government needs to focus on managerial improvements, development, and innovation of existing tourist objects

Key words: regional growth, tourism, decentralization, local own source revenue.

* * * * *

INTRODUCTION

In recent decades, the rapid growth of the tourism plays an important role by increasing the industrial sectors and regional economies (Dwyer et al., 2003; Eadington and Redman, 1991; Lin et al., 2019; Milne and Ateljevic, 2001; Yang and Fik, 2014). The central government of Indonesia implemented the regional autonomy system on January 1, 2001 to regulate the economy and maximize tourism potential in the regions. Moreover, this regional autonomy system was regulated in Law No. 22 of 1999 and also subjected to Law No. 23 of 2014. Therefore, the enactment of this law makes the local governments to have freedom in government, self-government, and community affairs. These regions are capable of financing and managing their need because of the existence of decentralization. Furthermore, the stipulation of autonomy helps the regional government to maximizes the aid policy because of the full understanding of their territory (Ridwan et al., 2020). However, the regional government are expected to determine the level of dependence on the central government in relation to revenues and expenditures. The total regional revenue that consists of local own source revenue, balancing funds, loans, and other legal revenue is the main revenue for local government.

Regional independence can be measured from the amount of local own-source revenue and balancing funds received. Therefore, the Central Java is one of the provinces that are quite good at encouraging local own-source revenue. This can be seen from the value of local own-source revenue that is greater than the balancing funds received because its share with balanced funds is not consistent. Theoretically, if the local own-source revenue trend is up, then the balancing fund should go down because an increase in local own-source revenue indicates that regional financial independence is also increasing. Table 1 shows the comparison of local own-source revenue and balancing fund for Central Java Province 2012-2019. Table 1 shows that the local own-source revenue of Central Java Province has a good increasing trend even though it is fluctuating. The trend of balance funds received is very volatile and shows no signs of a downward trend. Therefore, the government needs to encourage local own-source revenue most especially through sectors that have the potential of having a high contribution to it. The tourism sector is one of the sources of Local own-source revenue that recently shown a good increase. According to Canh and Thanh (2020); Eric et al. (2020); Lee et al. (2020); Yergeau (2020); Zadeh Bazargani and Kiliç (2021), the tourism sector help in reducing the economic vulnerability. Therefore, the tourism sector has become an interesting topic for researchers and policy makers to evaluate the impact of the sector and understand the drivers of its performance over time and across countries and regions. This has attracted a great deal of interest in empirical investigations of the tourism-driven growth hypothesis,

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such as that of Aktymbayeva et al. (2020); Belloumi (2010); Roudi et al. (2019); Tugcu (2014). The tourism does not necessarily increase income and welfare if it is not capable of implementing policies.

Moreover, Sheng (2011) used the combination of general and partial equilibrium analysis to obtained the result that the combined policy tools are based on tourism taxes and subsidizes non-tourism at a destination and unsuitable for tourist purposes thereby having a negative impact on local welfare. The increase in the growth of the tourism sector yearly brings a development to the economy of Central Java province. The growth in the output of the food and beverage accommodation supply reached 19.4% yearly even though the contribution of the tourism sector to total GDP is stagnant in the range of 3% (Indonesian Central Bureau of Statistics, 2018), Meanwhile, the stretching of tourism in the province of Central Java when viewed from the input side can be seen in the development of the number of hotel buildings by 22.27% from 2016 to 2018, and 7.22% in 2018 to 2019. This data is shown in Table 2.

Table 1. Development of local own-source revenue and Central Java Province Balancing Fund 2012-2019 (Sources: Indonesian Central Bureau of Statistics, 2019)

Year	Local own-source revenue	Balancing Funds	Growth (%)
			Local own-source revenue
2012	6,629,308.01	2,318,806.10	
2013	8,212,800.64	2,467,814.63	23.89%
2014	9,916,358.23	2,542,626.75	20.74%
2015	10,904,882.04	2,257,142.99	9.97%
2016	11,541,029.72	8,017,297.60	5.83%
2017	12,547,513.39	11,067,786.49	8.72%
2018	13,711,732.77	10,933,776.83	9.28%
2019	14,112,159.00	11,787,397.00	2.92%

Table 2. Development of the Number of Hotels and Other Accommodations in Central Java Province 2016 - 2019 (Source: Indonesian Central Bureau of Statistics, 2019)

	2016	2018	2019
Hotel 1 Star	56	60	11
Hotel 2 Star	56	81	52
Hotel 3 Star	84	91	101
Hotel 4 Star	34	48	85
Hotel 5 Star	8	11	63
Other accommodation	1374	1715	1752

The highest increase in the number of hotels was at 5-star, which implies that stretching economic activity and investment in Central Java Province has increased. However, the Central Java Province received the 2019 GOLD Indonesia Attractiveness Award in the Tourism sector because it was considered to have an excellent tourism attractiveness and potential development in the future (Tribun Jateng, 2019). This prompt the government to encourage tourist attraction both nationally and internationally, most especially with the existence of Borobudur as a leading tourism icon in Indonesia.

There is lack of evidence on the role of the tourism sector in terms of its effects in the short and long term on local revenue. Furthermore, the universality and broader application of previous studies was difficult and even impossible thereby leading to biased conclusions and wrong choices about policy measures to develop the tourism sector. This study contributes in identifying the role of the tourism sector on local revenue both in the short- and long-term conditions that was accompanied by control variables. Furthermore, several tourism indicators help in providing a permanent option for increasing local revenue. This study re-examines the role of the tourism sector in contributing to Local own-source revenue in the Central Java Province. The research question to be answered is the amount of elasticity of the tourism needed both in terms of input and output to contribute to local own-source revenue.

Several studies have analyzed the contribution of the tourism sector to local own-source revenue. The study of Mardianis and Syartika (2018), examined the contribution of the tourism sector to local revenue by taking research objects in Kerinci district. The purpose of this study is to examine the tourism sector in Kerinci as the leading one that is expected to have an economic impact on local own-source revenue. This study used the Quotient, Dynamic Location Quotient, and Specialization Index and SWOT method to analyzed the sector development strategies. The results showed that the tourism sector is yet to be leading and the proposed development strategy is focused on increasing the uniqueness of Kerinci as a tourist destination. This is done through the development of tourist areas based on community participation, fostering tourism-conscious people, and diversifying of tourism products that can become regional characteristics compared to other regions. Furthermore, the fostering of a tourism awareness movement "tradition of going home / returning home", help in preserving local culture as unique tourism and increasing promotion and publication.

The study of Wulandari and Ardyana (2018) examined the amount of contribution that can be made by the tourism industry sector of the City of Surabaya to their regional revenue through tourist variables, vehicles parked at tourist attractions, and room occupancy rates. The results of this study indicate the variables that have a positive effect, and they include the number of tourists, the government capable of issuing policies that expand tourism, and occupancy rates in the room and city of Surabaya. The purpose of the study of Uhusna et al. (2017) was to find out the role of the number of tourist objects, number of tourists and the occupancy rate of hotels on the regional revenue of the City of Bukittinggi. Also, Sutrisno (2013) examined how these three variables affect the tourism levies of districts and cities in Central Java. The results showed that the object variables, the number of hotels and the GRDP had a positive and significant effect on retribution revenues. Furthermore, some research discussed the relationship between tourism and regional growth (Garrigós-Simón et al., 2015; Lionetti and Gonzalez, 2012; Budiharseno, 2017; Liu et al., 2017; Surugiu and Surugiu, 2013), also the study of Li et al. (2015), Lau et al. (2017), and Shi et al. (2007) used dynamic method to analyze tourism sector with Regional Origin Revenue.

Previous study has reported contribution tourism to regional growth in various result, however, there are still few studies exploring dynamic panel models in regions that implement regional autonomy. Previous study that analyzed the influence of the tourism sector with local own-source revenue as dependent variable was limited to static models. As goes in Indonesia, there are still a few studies in Indonesia that analyzed it, and using dynamic method, also consider that local own-source revenue is highly dependent on economic conditions at time t .

The government usually take time in implementing policy to set its local own-source revenue achievement and the issue of taking time was ignored by previous study and assumed to be constant. The hypothesis that will be tested in this study conducts to prove the relationship between variables. First, Indonesia has the opportunity to sell its natural scenery and cultural attractions to foreign and domestic tourists who are willing to enjoy them, especially support by geographical conditions. The tourist resorts are one of the areas that are physical and more comfortable having the capacity of attracting tourists, however, the water tourism business help in organizing tourism and water sports that includes the provision of facilities and infrastructure and other services for commercial management in sea, beaches, rivers, lakes and reservoirs (Sánchez-Rivero et al., 2020; Shen et al., 2020). Therefore, the arrival of tourists tends to increase the income of the areas they visit, while the arrival of foreign tourists increases the income of the country's foreign exchange. Then the hypothesis to be tested is:

H1: The object variables (attract) have a positive relationship and significant effect on the local own-source revenue (OLGR) of districts and cities in Central Java Province.

According to Leiper (1990), tourists have a positive economic impact, starting with foreign exchange income, tourism business income, employment, improving the balance of foreign trade, and passing government revenue that must be taxed (Botti et al., 2008). Logically speaking, the more tourists, the longer the stay, and the amount of money to be spent will be determined by ones needs during the trip. The income of the owner of the tourism is affected by a number of consumer activities thereby making taxation and distribution to be increased in the future. However, the taxation and distribution are part of the original income and they include hotels, restaurants, and parking fees etc. Then the hypothesis to be tested:

H2: The variable number of tourists have a positive relationship and significant effect on the local own-source revenue (OLGR) of Districts and Cities in Central Java Province.

Furthermore, the hotel occupancy rates indicate the amount of tourist visits to certain areas and the increase in the hotel occupancy rate gives room for the development of attractiveness of an area. Then the hypothesis to be tested:

H3: Hotel occupancy rates (HOR) have a positive relationship and significant effect on district and local own-source revenue (OLGR) in Central Java Province.

The number of restaurants built and provided help in supporting tourism (Paci and Marrocu, 2014). This is because restaurants provide food and places for the public to eat and charge certain food and service fees. The establishment of restaurants benefit the manager through the profits made from sales and the tourists by meeting their needs (Gajic, 2015). Also, if the number of restaurants increases, income tax will have a positive impact on the development of local income in the tourism industry. Then the hypothesis to be tested is:

H4: The variable number of restaurants (Resto) have a positive relationship and significant effect on local own-source revenue (OLGR) in districts and cities in Central Java province.

The control variables help in preventing a biased calculation results and the one used were GRDB and total population. Furthermore, it helps in complimenting or controlling the causal relationship to make it easy to get a complete and better empirical method. The control variables are used to control the relationship between the independent and dependent variables, because it has an effect on the independent variable and also give room for GRDB to have a partial and significant effect on local own-source revenue. This study explained that GRDB with a positive value assumes that districts and cities in Central Java Province increases by the distribution of trade, hotels, and restaurants. These are the types of business fields that provide the largest contribution to GRDP thereby developing the region economy. Then the hypothesis to be tested:

H5: Variable GRDP (GDP) have a positive relationship and significant effect on the local own-source revenue (OLGR) of Regions and Cities in Central Java Province.

The population of a particular cities and regions also has a relationship with local revenue. Therefore, developing countries such as Indonesia that experience a population explosion will always make a connection between population and economic development. The relationship between the two depends on the nature and population problems faced by each country. Furthermore, each country or region have its own unique population problems, potentials, and challenges. The increase in population will have both a positive and negative effect on local revenue. Then the variables that will be tested are:

H6: Variable Total population (pop) have a positive relationship and significant effect on the local own-source revenue (OLGR) of districts and cities in Central Java Province.

MATERIALS AND METHODS

This study used a deductive method for positivism perspective which explained how researchers begin relationships that are logically derived from causal laws in general theory. Therefore, all these processes lead to empirical testing and legal confirmation (theory) in social life. In general, deductive method are used for positivism perspective thereby helping in developing and asserting a theory that begins with abstract concepts and theoretical relationships which leads to more concrete empirical evidence (Neuman, 2011). This study obtained a panel data from Indonesian Central Bureau of Statistics to cover the districts and cities in the Central Java from 2013-2018. The main focused of this study is Central Java District Culture and Tourism Office and the Ministry of Tourism. Furthermore, this study used a historical

data thereby making a linear regression method to be carried out with the addition of the time variable. This study used a dynamic method which is known as Partial Adjustment to accommodate time lag. Therefore, from the hypotheses that have been compiled above, an empirical method was estimated as follows:

$$ROI = f(attract, hor, resto, tourist, grdb, pop) \quad (eq.1)$$

In which:

OLGR : Regional Original Income
 Attract : Number of Attractions
 HOR : Hotel Occupancy Rate
 Resto : Number of restaurants
 Tourist : Number of Tourists
 GRDB : Gross Regional Domestic Product
 Pop : Total Population

Change to econometrics equation, Eq.1 written as:

$$ROI_{it} = \beta_0 + \beta_1 attract_{it} + \beta_2 hor_{it} + \beta_3 resto_{it} + \beta_4 tourist_{it} + \beta_5 GRDB_{it} + \beta_6 Pop_{it} + \varepsilon_{it} \quad (eq.2)$$

The adaptive expectation model is written as follows:

$$ROI_{it} = \delta ROI_{it}^* + (1 - \delta) ROI_{it-1} \quad (eq.3)$$

Substitute equation 2 to equation 3,

$$ROI_{it} = \delta(\beta_0 + \beta_1 attract_{it} + \beta_2 hor_{it} + \beta_3 resto_{it} + \beta_4 tourist_{it} + \beta_5 GRDB_{it} + \beta_6 Pop_{it} + \varepsilon_{it}) + (1 - \delta) ROI_{it-1} \quad (eq.4)$$

$$ROI_{it} = \delta\beta_0 + \delta\beta_1 attract_{it} + \delta\beta_2 hor_{it} + \delta\beta_3 resto_{it} + \delta\beta_4 tourist_{it} + \delta\beta_5 GRDB_{it} + \delta\beta_6 Pop_{it} + \delta\varepsilon_{it} + (1 - \delta) PAD_{it-1} \quad (eq.5)$$

$$ROI_{it} = \alpha_0 + \alpha_1 attract_{it} + \alpha_2 hor_{it} + \alpha_3 resto_{it} + \alpha_4 tourist_{it} + \alpha_5 GRDB_{it} + \alpha_6 Pop_{it} + \alpha_7 ROI_{it-1} + v_{it} \quad (eq.6)$$

This study used a static and dynamic panel regression method and also used Random Effect Model (REM) to estimate the model. This is because, this study focused on the characteristic of dependent variable in term of analyzing the relationship between determiner to local own-source revenue (OLGR) as dependent variable. Furthermore, the test of Hausman and LM was used to select the best variable between Fixed Effect and Random Effect Model.

RESULTS AND DISCUSSION

Table 3 shows the descriptive statistic of the variable that was used, while Table 4 shows the estimation result for Static panel regression to compare static and dynamic method. The standard deviation of all variables is high, which indicates that the deviation of each variable is relatively high.

Table 3. Result for Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
OLGR	210	2.79E+08	2.11E+08	3.97E+07	1.79E+09
GRDB	210	2.37E+07	2.22E+07	4755092	1.31E+08
Population	210	968233	411692.5	119879	1802829
Attract	210	14.2381	9.14113	2	39
HOR	210	34.27995	10.38396	14.39	73.37
Resto	210	81.84286	104.4661	0	844
Tourist	209	1323694	2645502	28702	2.88E+07
OLGR_lag1	209	2.79E+08	2.11E+08	3.97E+07	1.79E+09

Table 5. Model Selection

	AIC	BIC
Static Panel regression	8414.001	8437.397
Dynamic Panel regression	8072.243	8095.639

Table 6. Selection of panel regression models

Test	Statistic test	Result	Kesimpulan
Hausman test	chi2(4)	1.4	Random Effect
	Prob>chi2	0.8438	
Breusch and Pagan Lagrangian multiplier test for random effects	chibar2(01)	144.04	Random Effect
	Prob > chibar2	0.00000	

Table 4. Estimation result for Static panel regression

	(1)	(2)	(3)
	OLS	Fixed	Random
attract	-993416.3 (1402986.2)	-1178659.8 (2010638.9)	962458.9 (1917747.4)
HOR	3122720.8*** (913384.8)	781286.3 (734275.9)	498787.4 (853794.3)
resto	300782.9*** (95313.5)	23066.8 (75426.9)	173847.4** (87065.2)
tourist	5.181 (3.649)	-6.327*** (2.168)	-5.619** (2.600)
GRDP	6.174*** (0.656)	13.46*** (3.356)	10.01*** (1.153)
pop	37.73 (27.20)	2269.5*** (686.1)	-40.82 (60.14)
_cons	-28387203.6 (42544357.8)	-2.24020e+09*** (589291920.3)	43601795.3 (63266150.7)
N	209	209	209

Standard errors in parentheses * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

The comparison between the AIC and BIC values was used to choose either static or dynamic method as the best. This is shown by the smallest values of Akaike information criterion (AIC) and Bayesian information criterion (BIC). The AIC and BIC values in Table 5 shows that a Dynamic Panel Regression method is better than the Static Panel regression. The calculation was continued by: firstly, conducting the Hausman test to determine whether the Random Effect is better than the Fixed Effect Model. Secondly, conducting the Breusch and Pagan Lagrangian Multiplier test to determine whether Random Effect is better than Common Effect Model. The result is shown in Table 6.

Table 7. Dynamic panel regression output

	(1)	(2)	(3)
	OLS	Fixed	Random
attract	-703065.3 (1253351.2)	-1417820.9 (2012227.2)	151704.7 (1627602.1)
HOR	2761101.7*** (814441.1)	578800.7 (743164.8)	1765253.5*** (870208.6)
resto	275869.0** (85001.5)	4478.8 (76131.7)	260890.1** (88284.6)
tourist	1.956 (3.276)	-6.094*** (2.172)	-3.485 (2.861)
GRDP	4.625*** (0.654)	15.66*** (3.674)	6.307*** (0.872)
pop	46.29* (24.23)	2135.0*** (699.0)	21.02 (36.67)
OLGR_lag1	0.317*** (0.0480)	-0.0543 (0.0335)	0.154*** (0.0419)
_cons	-72428218.8* (38495923.9)	-2.12396e+09*** (596795776.1)	-12576918.3 (47920469.4)
N	208	208	208

Standard errors in parentheses * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

From the Hausman Test, it can be concluded that the P Value (Prob> Chi2) is <Alpha 0.05 thereby making H1 to be rejected. This means that the best model to use is the Random Effect compared to the Fixed Effect. Meanwhile, the test of Breusch and Pagan Lagrangian multiplier concluded that p-value (Prob> Chibar2) is <Alpha 0.05 thereby making H1 to be accepted. This means that the best model to use is Random Effect compared to Common Effect Model. The result on dynamic panel estimation shows that two of the four variables in the tourism sector, which are Hotel Occupancy (HOR) and the number of restaurants (RESTO) has significant effect on local own-source revenue (OLGR). The development of hotel occupancy and the number of restaurants can increase local acceptance. Therefore, hotels and restaurants have a role as drivers of regional development, they need to be developed properly to increase OLGR. Also, hotel is one type of business that provides services for the public and tourists. Hotel occupancy rate is a condition to what extent the number of rooms is sold when compared to the availability and adequate rooms that can be

sold because tourists are not reluctant to visit an area. This

condition makes the tourists to feel safer and more comfortable to stay longer in the tourist area. Therefore, the tourism industry, most especially activities related to lodging tends to get more and more income. The object variables and the number of tourists show that the proxies of the tourism sector have no significant effect. This means that the number of tourist visits does not have a significant effect on local revenue. The number of tourist objects has not been optimal in its management both in terms of facilities and infrastructure. Furthermore, tourist objects fail to affect local revenue because there is lack of development and promotion that are not good. Also, the program for developing tourist objects causes tourists to be less interested in coming to these attractions. The development of the hotel and restaurant trading business tends to lead to an increase in GDP (Gross Regional Domestic Product). However, this in turn increase the local taxes which affect the local government revenue (OLGR) for Regencies and Cities in Central Java Province. The results are consistent with the study of Sutrisno (2013) which states that GRDB has an influence on local Government Revenue (OLGR).

The results prove that the tourism industry has the potential to increase regional income. The cooperation between governments through the tourism and culture with the private sector and the community needs to be well built in developing and maintaining the sustainability of the tourism industry. Therefore, the government together with the private sector and the community needs to continue innovating and providing breakthroughs to increase the attractiveness or potential of the region. The government provides training and assistance to managers and small-medium enterprise of the tourism sector to increase skills and opportunities. Hotels and restaurants were innovated by providing a tour packages to increase the demand for both domestic and foreign tourists. Also, the innovation helps in providing a clear information for tourists thereby leading to the increase in visits and occupancy by tourists which in turn increases regional income.

CONCLUSION

The result showed that gross regional domestic product has a significant positive effect on local revenue. The result demonstrates that changes in the number of hotel occupants and restaurants plays an important role in the tourism industry thereby leading to the increase of local income. Also, to increase local income, it is necessary to consider the control effect of regional GDP on regional economic performance. Therefore, the government must play its role with the support of the private sector and society in managing the tourism to increase public and private revenues.

The increase in gross regional domestic product as an indicator of economic performance measurement help in developing local government revenue through taxes and levies. This also encourages the improvement of local government services to the community which are expected to increase their productivity and economic activity. Meanwhile, the population has not been able to have a significant effect on local revenue. This indicates that there are several residents who have below taxable income to contribute to the increase in local revenue. Further study is suggested to examine other dimensions of tourism such as the level of tourist expenditure with a more complex method that is able to analyze in short and long terms for current dynamic conditions.

REFERENCES

- Aktymbayeva, A., Assipova, Z., Moldagaliyeva, A., Nuruly, Y., & Koshim, A. (2020). Impact of small and medium-sized tourism firms on employment in Kazakhstan. *GeoJournal of Tourism and Geosites*, 32(4), 1238-1243. <https://doi.org/10.30892/gtg.32407-563>
- Belloumi, M. (2010). The relationship between tourism receipts, real effective exchange rate and economic growth in Tunisia. *International Journal of Tourism Research*, 12(5), 550-560. <https://doi.org/10.1002/jtr.774>
- Botti, L., Peypoch, N., & Solonandrasana, B. (2008). Time and tourism attraction. *Tourism Management*, 29(3), 594-596. <https://doi.org/10.1016/j.tourman.2007.02.011>
- Budiharseno, R.S. (2017). Factors affecting online buying behavior on g-market site among international students in Busan: A qualitative research. *Arthatama*, 1(1), 1-5. <https://arthatamajournal.co.id/index.php/home/article/view/4/1>

- Canh, N.P., & Thanh, S.D. (2020). Domestic tourism spending and economic vulnerability. *Annals of Tourism Research*, 85(August), 103063. <https://doi.org/10.1016/j.annals.2020.103063>
- Dwyer, L., Forsyth, P., & Spurr, R. (2003). Inter-industry effects of tourism growth: Implications for destination managers. *Tourism Economics*, 9(2), 117–132. <https://doi.org/10.5367/000000003101298303>
- Eadington, W.R., & Redman, M. (1991). Economics and tourism. *Annals of Tourism Research*, 18(1), 41–56. [https://doi.org/10.1016/0160-7383\(91\)90038-D](https://doi.org/10.1016/0160-7383(91)90038-D)
- Eric, T.N., Semeyutin, A., & Hubbard, N. (2020). Effects of enhanced air connectivity on the Kenyan tourism industry and their likely welfare implications. *Tourism Management*, 78(July 2019), 104033. <https://doi.org/10.1016/j.tourman.2019.104033>
- Gajic, M. (2015). Gastronomic Tourism - a Way of Tourism in Growth. *Quaestus*, 6, 155–166.
- Garrigós- Simón, F.J., Galdón-Salvador, J.L., & Gil-Pechuán, I. (2015). The economic sustainability of tourism growth through leakage calculation. *Tourism Economics*, 21(4), 721–739. <https://doi.org/http://dx.doi.org/10.5367/te.2014.0372>
- Lau, P.L., Koo, T.T., & Dwyer, L. (2017). Metrics to measure the geographic characteristics of tourism markets: An integrated approach based on Gini index decomposition. *Tourism Management*, 59, 171–181. <https://doi.org/10.1016/j.tourman.2016.07.019>
- Lee, Y.J.A., Kim, J., Jang, S., Ash, K., & Yang, E. (2020). Tourism and economic resilience. *Annals of Tourism Research*, July 2019, 103024. <https://doi.org/10.1016/j.annals.2020.103024>
- Li, H., Goh, C., Zhang Qiu, H., & Meng, F. (2015). Effect of tourism on balanced regional development: A dynamic panel data analysis in Coastal and Inland China. *Asia Pacific Journal of Tourism Research*, 20(6), 694–713. <https://doi.org/10.1080/10941665.2014.930055>
- Lin, V.S., Yang, Y., & Li, G. (2019). Where Can Tourism-Led Growth and Economy-Driven Tourism Growth Occur? *Journal of Travel Research*, 58(5), 760–773. <https://doi.org/10.1177/0047287518773919>
- Lionetti, S., & Gonzalez, O. (2012). On the relationship between tourism and growth in Latin America. *Tourism and Hospitality Research*, 12(1), 15–24. <https://doi.org/10.1177/1467358411429635>
- Liu, J., Nijkamp, P., & Lin, D. (2017). Urban-rural imbalance and Tourism-Led Growth in China. *Annals of Tourism Research*, 64, 24–36. <https://doi.org/10.1016/j.annals.2017.02.005>
- Mardianis, M., & Syartika, H. (2018). Kontribusi Sektor Pariwisata terhadap Pendapatan Asli Daerah di Kabupaten Kerinci. *Jurnal Ekonomi & Kebijakan Publik*, 09(1), 53–65. <https://doi.org/10.22212/jekp.v9i1.972>
- Milne, S., & Ateljevic, I. (2001). Tourism, economic development and the global-local nexus: Theory embracing complexity. *Tourism Geographies*, 3(4), 369–393. <https://doi.org/10.1080/146166800110070478>
- Neuman, W.L. (2011). *Social Research Methods: Qualitative and Quantitative Approaches*. USA: Allyn and Bacon
- Paci, R., & Marrocu, E. (2014). Tourism and regional growth in Europe. *Papers in Regional Science*, 93(S1), S25–S50. <https://doi.org/10.1111/pirs.12085>
- Ridwan, R., Rahmat, Y., & Aly, M.N. (2020). Tourism Development Planning In Bantaeng District, South Sulawesi. *International Journal of Psychosocial Rehabilitation*, 24(09), 326–334. <https://doi.org/10.37200/IJPR/V24I9/PR290316>
- Roudi, S., Arasli, H., & Akadiri, S.S. (2019). New insights into an old issue—examining the influence of tourism on economic growth: evidence from selected small island developing states. *Current Issues in Tourism*, 22(11), 1280–1300. <https://doi.org/10.1080/13683500.2018.1431207>
- Sánchez-Rivero, M., Rodríguez-Rangel, M.C., & Fernández-Torres, Y. (2020). The identification of factors determining the probability of practicing Inland water tourism through logistic regression models: The case of Extremadura, Spain. *Water (Switzerland)*, 12(6), 1–22. <https://doi.org/10.3390/W12061664>
- Shen, C.C., Liang, C.F., Hsu, C.H., Chien, J.H., & Lin, H.H. (2020). Research on the impact of tourism development on the sustainable development of reservoir headwater area using china's tingxi reservoir as an example. *Water (Switzerland)*, 12(12), 1–19. <https://doi.org/10.3390/w12123311>
- Sheng, L. (2011). Taxing tourism and subsidizing non-tourism: A welfare-enhancing solution to “Dutch disease”? *Tourism Management*, 32(5), 1223–1228. <https://doi.org/10.1016/j.tourman.2010.09.009>
- Shi, C., Zhang, J., Yang, Y., & Zhou, Z. (2007). Shift-share analysis on international tourism competitiveness—A case of Jiangsu Province. *Chinese Geographical Science*, 17(2), 173–178. <https://doi.org/10.1007/s11769-007-0173-2>
- Surugiu, C., & Surugiu, M.R. (2013). Is the tourism sector supportive of economic growth? Empirical evidence on Romanian tourism. *Tourism Economics*, 19(1), 115–132. <https://doi.org/10.5367/te.2013.0196>
- Sutrisno, D.C. (2013). Pengaruh Jumlah Obyek Wisata, Jumlah Hotel, Dan Pdrb Terhadap Retribusi Pariwisata Kabupaten / Kota Di Jawa Tengah. *Economics Development Analysis Journal*, 2(4), 435–445. <https://doi.org/10.15294/edaj.v2i4.3211>
- Tugcu, C.T. (2014). Tourism and economic growth nexus revisited: A panel causality analysis for the case of the Mediterranean Region. *Tourism Management*, 42, 207–212. <https://doi.org/10.1016/j.tourman.2013.12.007>
- Ulhusna, R., Harlen, & Taryono. (2017). Pengaruh Sub Sektor Pariwisata Terhadap Pendapatan Asli Daerah (PAD) Kota Bukittinggi. *JOM Fekon*, 4(1), 445–459. <https://jom.unri.ac.id/index.php/jomfecon/article/view/12679/12321>
- Wulandari, N.F., & Ardyan, P.S. (2018). Analisis Pengaruh Jumlah Wisatawan, Kendaraan Yang Parkir Di Tempat Wisata Dan Tingkat Hunian Kamar Terhadap Pendapatan Sektor Industri Pariwisata Di Kota Surabaya. *Jurnal Ekonomi & Bisnis*, 3(2), 687–702. <https://doi.org/https://doi.org/10.1234/jeb17.v3i02.2130>
- Yang, Y., & Fik, T. (2014). Spatial effects in regional tourism growth. *Annals of Tourism Research*, 46(October 2017), 144–162. <https://doi.org/10.1016/j.annals.2014.03.007>
- Yergeau, M.E. (2020). Tourism and local welfare: A multilevel analysis in Nepal's protected areas. *World Development*, 127, 104744. <https://doi.org/https://doi.org/10.1016/j.worlddev.2019.104744>
- Zadeh Bazargani, R.H., & Kiliç, H. (2021). Tourism competitiveness and tourism sector performance: Empirical insights from new data. *Journal of Hospitality and Tourism Management*, 46(December 2020), 73–82. <https://doi.org/10.1016/j.jhtm.2020.11.011>

TECHNOLOGIES FOR TRAINING SPECIALISTS IN THE HOTEL AND CATERING INDUSTRY IN UKRAINE IN THE CONTEXT OF LIFELONG LEARNING

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Abstract: This article is relevant, as staff training in the context of lifelong learning increases the value of travel services for customers, providing added value in the hotel and catering industry. The purpose of the paper is to study the technologies of training specialists in the hotel and catering industry in the context of lifelong learning for the formation of the life cycle of an employee in the hospitality industry. The research methodology is based on statistical analysis of indicators for distribution. The results demonstrate that there are differences in the technologies for training specialists in the hospitality industry in terms of such characteristics, as: the provider of educational services, the initial educational level, the position held by the specialist and the status in the society. The practical value of the research lies in the possibility of using the existing methodology of the life cycle of training a specialist in the practice of hotel and catering industry.

Key words: management, hospitality, staff, customer, educational services, work experience, professional skills

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INTRODUCTION

According to the analytical centers of the International Hotel and Restaurant Association, the success of the hotel and catering industry in the XXI century depends on the integration of technologies in order to meet the needs of customers of travel services on their terms (Olsen and Connolly, 2000). This involves taking into account the desires and needs of customers, instant provision of information about services at the request of customers. In addition, highly trained staff in the context of the perfect use of technology will increase the value of travel services for customers, providing added value in the field of hotel and catering industry. In this context, it is advisable to explore effective tools for the training professionals of the hotel and catering industry, taking into account the rapid variability of new technologies. It is the variability that determines the constant systemic need for constant maintenance of staff knowledge, and, therefore, the need for education and lifelong learning. With the intensification of globalization processes, the tourism industry due to rapid growth has become one of the priority areas in the world economy, which affects both the development of individual industries and the socio-economic development of entire countries. According to the International Tourism Organization, the share of tourism in world GDP is 9%, in world exports of services - 30%, the share of world trade - 6%, every 11 employees work in tourism (El-Said et al., 2020). Globalization poses new challenges to education. Thus, the growth of tourist flows in Europe implies the existence of uniform professional qualifications for tourism in all member states of the European Union (Brahmi, 2020). That is knowledge of the language, culture, economy, the legal system of the partner countries, observance of uniform technological and humanitarian norms. Given Ukraine's desire to join the European Union, the content of national vocational tourism education must meet the needs of European countries. This is ensured by

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the corporatism of professional tourism education when in the process of training future corporate connections are formed (technological standards of hotel and tourist chains, franchise relations, licensing and certification standards, etc.).

Today in Ukraine more than 90 higher educational establishments and more than 100 professional establishments of the lower level of accreditation are engaged in the training of specialists in the field of tourism (Osypova, 2020). This contributes to the development of the tourism industry, but the low degree of cooperation between vocational tourism education institutions and enterprises does not allow for the formation of high-quality theoretical and practical aspects of education. Tourism education in Ukraine today acquires special significance. Holding various thematic exhibitions, tourist salons, fairs, signing agreements with regional state administrations on training and retraining of tourism and hospitality professionals for the regions - all this contributed to the promotion of new specialties and involvement of interested young people in tourism (Frash et al., 2010). The realities of the process of training tourism professionals often show that theoretical training in Ukraine is mostly carried out properly and sufficiently covers a variety of necessary disciplines and subjects. But during the internship, a large number of tourism companies do not want to spend their time on internships for students or use their internships as free labour for small assignments, which later has a negative impact on practical training. Basic training of hotel and catering industry's professionals in the context of lifelong learning should be of a high priority for economic entities (Jaswal, 2020); it should develop practical skills of professionals in the context of professional development strategy. "Effective training is especially important for modern restaurants that aim to gain competitive advantage by means of good quality service and performance of their employees" (Ballesteros-Rodríguez et al., 2012: 3226). Therefore, the development of personnel skills in the hospitality industry becomes a challenge for public policy at the national level with a focus on training as a training technology (Baum, 2002). The advantages of specialists in the hotel and catering industry, but also the disadvantages and variability of efficiency are being discussed in the scientific literature (Clarke, 2002; Frash et al., 2010). The low quality of training services due to inappropriate materials is among the disadvantages (Holton et al., 2000). Another problem is the discrepancy between the expectations of professionals and the experience of training or taking courses, which has been revealed in the study of joint training of British programs for the provision of education in tourism sphere (Leslie and Richardson, 2000).

Unstructured internship negatively affects the choice of profession by graduates of the hotel and catering industry. Therefore, the search for a balance between theory and practice within the curriculum in the field of hospitality is performed. The redundancy of using a pragmatic approach in some educational institutions has been revealed; it reduces the level of critical thinking of specialists (Brahami, 2020). The lack of understanding and rejection by teachers of changes in the external environment is among the shortcomings of training technologies; it leads to the lack of balance between theory and practice (Tse, 2012). In the study of King and Qiu (2017), the indications of alternative approaches to "experiential learning" technologies have been suggested, namely: internships in training hotels, aligning students' learning outcomes with experience-based subjects and curriculum. Practice in the hotel and catering industry should be fully integrated into the curriculum (Tse, 2012). "Lifelong learning is more essential than ever before in today's global, high - technology knowledge economy" (Koo et al., 2019: 113). Companies expect development and training from employees, but staff support in this area depends on the value of training that companies see. It is difficult to integrate the concept of lifelong learning in the field of hospitality (Rakicevik et al., 2008). This is due to differences in the training needs of both: interested parties – employers and staff. Another reason for slow integration is the legal framework, which does not address the issue of lifelong learning, especially in developing countries. Herewith, short-term trainings and informal courses are becoming increasingly popular. Financial costs are important; they often do not provide an effect through staff turnover in the hospitality industry (Rakicevik et al., 2008). In the scientific literature, the concept of "a continuous learning culture" and "effective training" has been formed in the hospitality industry, the mediator between which is the practice of human resource management (Ballesteros-Rodríguez et al., 2012). Effective training provides a reduction in staff turnover, forasmuch as employees estimate a higher level of job satisfaction. As a result, professionals better serve customers, ensuring a stable profit for the company. This provides a win-win situation for all interested parties in the hotel company (Kalargyrou and Woods, 2011). Leaders of hotel and catering industry provide staff training (Frash et al., 2010).

With the support of educational and training institutions, the skills of specialists for lifelong learning are being updated. The need for quality customer service is one of the motives for investing in education (Frash et al., 2010; Scerri et al., 2020). Higher educational institutions increase the level of employment of hospitality industry's graduates by integrating theoretical knowledge in the field of hotel and catering industry management and practical skills in this field (Ruhanen, 2006). "Training hotels" are among the institutions providing lifelong learning; they form a specialized environment of common hallmarks of business operations in the hospitality industry and the practice of providing high quality services.

MATERIALS AND METHODS

This research is based on a qualitative and quantitative methodology for the study of technologies for training specialists in the hotel and catering industry in the context of lifelong education in order to form the life cycle of a specialist (Figure 1). Based on data on the distribution of non-formal education and training activities by provider in EU in 2007-2016 and International Standard Classification of Education the distribution of education and training activities by field in EU in 2016 (%), the basic trends in the field of training within EU have been identified. A quantitative analysis has been conducted on the basis of indicators on the number of vacancies posted for the last 30 days and a summary for the last three months. The main criteria for identifying trends in the training of specialists in the hotel and catering industry are as follows: average salary; requirements for the level of remuneration of candidates; position, work experience, knowledge of foreign languages, level of education, professional skills, previous place of work (Osypova, 2020).

In order to identify trends in the technology of training specialists in the field of hospitality, a content analysis of 120 resumes on the level of remuneration and position has been carried out, posted on the job search site Work.ua. The analysis of the resumes was carried out by systematizing the basic categories of staff depending on the level of remuneration, namely: management and top management, middle managers, lower-level specialists. Hotels, managed and owned by educational institutions, have more opportunities to implement training based on a practical approach. The study of King and Tang (2020) proves that hotels define their mission of training and preparing students for practical activities, and the learning process is included in the provision of services. Students' mentoring, participation of practitioners in students' education, various internship programs, research programs are integrated in training hotels (Tse, 2012). These training technologies solve the problems of providing quality education in the field of hospitality, namely: lack of innovation, negative practice of students' internships. Training hotels are also focused on receiving income from the provision of educational services and training (Scerri et al., 2020). This limits the opportunities for trainees to undergo practice at the hotel. Such hotels include international chains and brands. The viability of training hotels depends on a growing number of positive customers' reviews. Technology and social networking provide instant feedback on staff performance. Thus, the approach to the formation of technology for training specialists should take into account both the financial side of the functioning of educational institutions, training hotels, and positive feedback from customers about high standards of service. Learning technologies should take into account the experimental approach to curricula, courses and trainings.

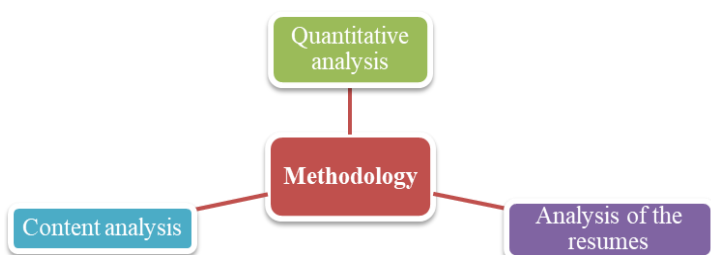


Figure 1. Used methodology for study the technologies of training specialists in the hotel and catering industry (Source: compiled by the author)

Table 2. Distribution of education and training activities by field in EU in 2016, % (Source: Eurostat, 2020b)

Services	Formal education and training	Non-formal education and training	Non-formal education and training – job-related	Non-formal education and training – not job-related
European Union	6.8	22.3	19.5	33.9
The Czech Republic	8.8	23.9	25.0	17.4
Germany	4.5	18.8	17.4	25.4
Spain	7.0	19.0	20.9	11.8
France	8.3	30.0	19.9	57.2
Hungary	9.7	39.8	32.9	58.7
Poland	7.8	10.6	10.4	11.2
Romania	6.2	32.9	22.3	60.8
Slovenia	8.7	19.2	18.7	21.1
Turkey	2.8	35.1	39.5	18.5

Table 1. Distribution of non-formal education and training activities by provider in EU (Source: Eurostat, 2020a)

European Union – 27 countries (from 2020)	2007	2011	2016	Growth, %
Formal education and training institutions	10.3	10.4	7.8	-2.5
Non-formal education and training institutions	17.5	18.1	19.3	1.8
Commercial institutions where education and training is not the main activity (e.g., equipment suppliers)	9.9	11.6	9.6	-0.3
Non-commercial institutions where education and training are not the main activity (e.g., libraries, museums, ministries)	4.8	5.9	3.7	-1.1
Employer	36.8	31.2	33.7	-3.1
Employers' organizations, chambers of commerce	4.8	3.0	4.5	-0.3
Trade unions	1.6	1.1	1.2	-0.4
Non-profit associations (e.g., cultural society, political party)	4.5	6.2	7.2	2.7
Individuals (e.g., students, giving private lessons)	4.2	5.2	5.8	1.6
Other training providers	3.9	5.2	5.1	1.2

RESULTS AND DISCUSSION

The technologies for training specialists in the hotel and catering industry in the context of lifelong learning differ significantly within EU countries. In particular, there are differences in such characteristics, as: the provider of educational services, the initial level of education, the position held by the specialist and the status in society. Employers most often provide staff with training programs and other forms of non-formal education within EU, which is 33,7% (Table 1). Next ones, according to the share of provision of non-formal educational services and trainings, are non-formal educational and training institutions (19.3%), commercial institutions where education and training is not the main activity (e.g., equipment suppliers) (9.6%) and formal education and training institutions (7.8%). Non-profit associations (e.g., cultural society, political party) ensure the provision of 7.2% of non-formal educational services, individuals (e.g., students, giving private lessons) – 5.8%. Within EU, the share of educational and training activities varies significantly from country to country (Table 2). For instance, in EU, the average rate of formal educational activities in the service sector was 6.8%, the rate of non-formal educational activities was 22.3% and the rate of work-related activities was 19.5%, the rate of non-work-related activities was 33.9%. Non-formal education is the main method and form of acquiring new knowledge, which prevails in all EU countries. Herewith, the share of non-formal education prevails in less developed countries, compared to advanced countries (the Czech Republic, Hungary, Romania, and Turkey). Non-formal education that is not related to work in the service sector accounts for the largest share, especially in advanced countries (Germany, France, Poland). However, this trend is observed in

developing countries (Hungary, Romania, Slovenia). Exceptions are the Czech Republic, Spain and Turkey. In Ukraine, students in the hotel and catering industry face the problem of hiring because of the absence of experience.

According to Osypova (2020), in a month 662 offers (vacancies) in this field of activity have been posted throughout Ukraine, accounting for 26.43% of the total number of vacancies (2505). Herewith, 773 vacancies are offered to inexperienced candidates (30.68%). Over the past three months, 26609 resumes have been posted in Ukraine in the category “Hotel and catering industry, tourism”, which means a significant excess of supply over demand and high competition for 1 job place. This increases the requirements for employees, their skills, qualifications and knowledge.

The average salary in the category “Hotel and catering industry, tourism” in Ukraine is 11 thousand UAH, while wages vary depending on the position (Figure 2). For comparison, the average level of wage requirements from candidates significantly exceeds the supply of employers, in particular, in management and leadership positions. Consequently, 6.41% of candidates in the resume indicate a salary of 15 thousand UAH/month, and 7.41% – from 10 thousand UAH/month.

The technologies for training specialists in the hotel and catering industry in Ukraine in the context of lifelong education differ significantly depending on the position, work experience, knowledge of foreign languages, education, professional skills. However, the determining conditions for lifelong learning in this area are the level of education, previous job and experience, position. It is these characteristics that determine the ability to train a specialist throughout life. Among the posted resumes, 6430 candidates possess higher education, 7682 – unfinished higher, 8357 – vocational secondary, 2953 – secondary education. Among the candidates, 6782 have no work experience, 4533 have up to 1 year of experience, 3710 – from 1 to 2 years of experience, 6057 – from 2 to 5 years of experience, 5528 – over 5 years of experience. According to these characteristics, it is advisable to determine the profiles of candidates for specialists in the hotel and catering industry in the context of acquiring additional knowledge and skills, obtaining lifelong learning services.

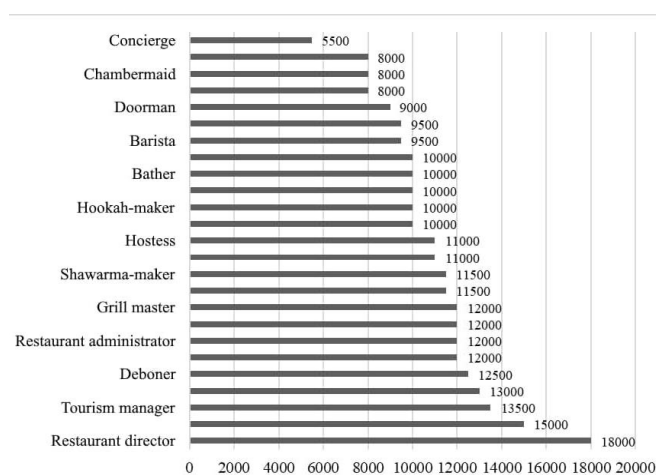


Figure 2. Distribution of wages (UAH) in the hotel and catering industry in Ukraine in 2019 (Source: Work.ua, 2020)

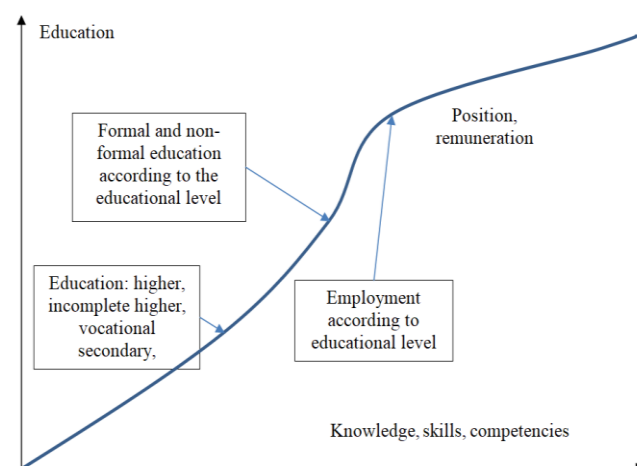


Figure 3. The life cycle of specialists in the hotel and catering industry in the context of lifelong learning (Source: compiled by the author)

Management staff and top management (operations director, restaurant manager) receive additional educational services in various areas of the hotel and catering industry, related to the management of various subsystems of the organization. For instance, heads of establishments of hospitality field receive informal and formal educational services for managing business processes in logistics, sales, marketing, finance, personnel management, security and information support. Top management specialist is a highly qualified specialist with salary requirements in the amount of 100 000 UAH/month, who has received higher education. Top management specialist should always systematically acquire new knowledge. Among the main trainings, seminars, additional training programs, the following ones should be highlighted: personnel management, time management, loyal customer, enterprise management, business economics, seminar of leading specialists of the corporation on catering industry and the art of personnel management; seminars and practical trainings by categories, namely: motivation and teamwork, personnel selection, quality service, planning, customer care, quality management process, organization of the learning process, administration, kitchen workflow organization, cost control, sanitation, warehouse accounting and cash discipline. Additional skills are as follows: professional computer and software skills, Google Adwords, fluency in 2-3 languages (mostly English, Russian). Another additional skills include: understanding business principles; ability to work independently; experience in information and communication management; excellent team building skills; accounting skills; work in a multitasking environment; great attention to detail; exceptional organizational skills; excellent communication skills; knowledge of business etiquette, constructive negotiations with partners and clients; presentation of the company at exhibitions; knowledge of Russian and American standards of service and doing business; project management; integration of international standards. Basic formal higher education in the field of hospitality is usually supplemented by higher education in management, economics and production management.

Middle managers have a lower level of qualifications, skills and work experience, received additional educational services in the field of hospitality compared to top-managers and managers. Middle managers are trained in related fields of knowledge or specialized informal courses, namely: features of national etiquette, “work in conflict conditions”, “hospitality and service standards”, video lectures on psychology. The life cycle of a specialist in the hotel and catering

industry in the context of lifelong learning depends on the initial educational level, skills and competencies formed in the process of employment by profession, received additional educational services, trainings, seminars, courses of formal and informal educational institutions. The considered cases of experts testify to dependence of payment and level of qualification on technology of preparation (Figure 3). In general, the training technology consists of three components, namely: 1) formal educational training based on curricula for the selected level of specialization; 2) formal educational training based on educational programs (curricula) in an additional direction of training (management, enterprise economics, marketing); 3) informal training in the form of courses, seminars, short-term curricula, trainings.

The conducted research reveals another problem in the field of training specialists in the hotel and catering industry in the context of lifelong education: the life cycle of a specialist depends on the level of independence in managing his own development, development of skills and competencies. The need to support qualifications, a higher level of remuneration and the formation of skills in various management subsystems forces specialists to gain additional knowledge in logistics, personnel management, finance and accounting, project and team management, time management, psychology, enterprise management, high-quality service, planning, customer care, quality management process. In the practice of training there are significant differences that depend on the educational and qualification level. Whilst specialists with higher education hold managerial positions, then specialists with specialized education mostly hold the position of a chef, a middle manager. Top management specialist is responsible for the systemic process of lifelong learning for the development of management skills in various subsystems. For comparison, middle management specialist mainly passes one-time seminars (psychological trainings, trainings on stress resistance, specialized courses, certification trainings). Obtaining knowledge in formal education institutions is supplemented by formal/non-formal educational training programs in order to develop professional skills and competencies (Rangus et al., 2020). Workshops and internships are considered by students as an effective experimental approach to learning (LeBruto and Murray, 1994). Along with this, the professional activity of specialists is much less regulated and certified with an inconsistency of training methods and technologies. Lifelong courses are designed to train professionals in “laboratory” conditions (kitchens, restaurants, bars, reception rooms, apartments for living); herewith, technologies and training methods are often questionable (Tsai et al., 2020). At the same time, the research notes another problem – the inconsistency of training programs and practice in the field of hospitality. Training hotels are among the effective technologies and learning environments; however, scientists note the low level of academic orientation of this technology (King and Tang, 2020). This is due to the experimental nature of learning in real business conditions, such as training hotels in regions where educational services in the field of hospitality are expanding.

This research proves that the variability of the external environment in the hospitality industry due to increased competition leads to a constant systemic need for continuous knowledge support from employees and candidates throughout their lives. As a result, the labor market offers highly qualified professionals with additional skills and competencies. Over the last twenty years (since the early 2000s) (Christou and Sigala, 2001) the need for managerial competencies of employees in the hospitality industry, especially top management, has been studied. Research proves the relevance of this issue, forasmuch as managers in the field of hospitality receive additional knowledge throughout the life cycle in various fields in order to effectively manage. The differentiation of training requirements at the request of managers is also actively discussed in the scientific literature (Agut et al., 2003). This study suggests that the differentiation of requirements depends on the position and the problem situations faced by the manager in the hospitality industry. This determines his need for additional courses and seminars, trainings and educational programs in various areas. It also means the dependence of the need for training of the specialist’s personal qualities. Research proves the lack of long-term interested parties’ cooperation in the development of managers of hotel and catering industry (Littlejohn and Watson, 2004), forasmuch as employees are responsible for lifelong learning. In addition, there is no practice of implementing strategies for the professional development of personnel in the hospitality industry. It does not provide internationally regulated development of new learning technologies, distance learning, quality, personnel development, integration of innovative learning styles, and research in this area (Christou and Sigala, 2001). The strategy of professional development is completely individual; it depends on the motivation of the specialist and involves the implementation of only one component: formal and non-formal training after education. For this reason, this strategy does not respond to the challenge that is still relevant for 20 years – the need to develop personnel in one of the “low-skilled” sector of the economy – hospitality industry (Baum, 2002). According to this study, the majority of specialists (over 60%) are low-skilled, without work experience, internship, additional formal or informal training programs. This is due to both the lack of training practice for specialists at the expense of employers, and the low level of participation of specialists in additional educational programs, courses, seminars, trainings. That is why the issue of ensuring the integration of practical, pragmatic approaches to the development of technologies for basic training of professionals in hotel and catering industry in the context of lifelong learning should remain a priority for economic entities (Chalupa and Petricek, 2010); it should develop practical skills.

CONCLUSION

The conducted research makes it possible to draw a number of important conclusions. The technologies for training specialists in the hotel and catering industry in the context of lifelong learning differ significantly within EU countries. In particular, there are differences in such characteristics as the provider of educational services, the initial level of education, the position held by the specialist and the status in the society. Non-formal education is the main way and form of acquiring new knowledge, which prevails in all EU countries. In Ukraine, students in the hotel and catering industry face the problem of hiring because of the absence of experience. The technologies for training specialists in the hotel and catering industry in Ukraine in the context of lifelong education differ significantly depending on the position,

work experience, knowledge of foreign languages, education, professional skills. However, the determining conditions for lifelong learning in this area are the level of education, previous job and experience, as well as the position. It is these characteristics that determine the ability to train a specialist throughout life. In general, the training technology consists of three components, namely: formal educational training based on curricula at the selected level of specialization; formal educational training on the basis of educational programs (curricula) in an additional area of training (management, business economics, marketing); informal training in the form of courses, seminars, short-term training programs, trainings.

REFERENCES

- Agut, S., Grau, R., & Peiró, J.M. (2003). Competency needs among managers from Spanish hotels and restaurants and their training demands. *International Journal of Hospitality Management*, 22(3), 281-295. [https://doi.org/10.1016/S0278-4319\(03\)00045-8](https://doi.org/10.1016/S0278-4319(03)00045-8)
- Ballesteros-Rodríguez, J.L., De Saá-Pérez, P., & Domínguez-Falcón, C. (2012). The role of organizational culture and HRM on training success: evidence from the Canarian restaurant industry. *The International Journal of Human Resource Management*, 23(15), 3225-3242. <https://doi.org/10.1080/09585192.2011.637071>
- Baum, T. (2002). Skills and training for the hospitality sector: a review of issues. *Journal of Vocational Education and Training*, 54(3), 343-364. <https://doi.org/10.1080/13636820200200204>
- Brahmi, M., Adjaine, M., Semaoune, K., & Matta, N. (2020). The influences of knowledge management and customer relationship management to improve hotels performance: a case study in hotel sector. *Information Resources Management Journal*, 33(4), 74-93. <http://dx.doi.org/10.4018/IRMJ.2020100105>
- Chalupa, S., & Petricek, M. (2020). The application of business process management in the hospitality industry: A case study. *IBIMA Business Review*, 1(301930), 1-11. <http://dx.doi.org/10.5171/2020.301930>
- Christou, E., & Sigala, M. (2001). Professional development in hospitality and tourism education: A strategy for the 21st century. *The International Journal of Tourism Research*, 3(4), 328-335. <http://dx.doi.org/10.1002/jtr.317>
- Clarke, N. (2002). Job/work environment factors influencing training transfer within a human service agency. *International Journal of Training and Development*, 6(3), 146-162. <http://dx.doi.org/10.1111/1468-2419.00156>
- El-Said, O.A., Al Hajri, B., & Smith, M. (2020). An empirical examination of the antecedents of training transfer in hotels: the moderating role of supervisor support. *International Journal of Contemporary Hospitality Management*, 32(11), 3391-3417. <http://dx.doi.org/10.1108/IJCHM-04-2020-0262>
- Frash, R., Antun, J., Kline, S., & Almanza, B. (2010). Like it! Learn it! Use it? A field study of hotel training. *Cornell Hospitality Quarterly*, 51(3), 398-414. <http://dx.doi.org/10.1177/1938965510364931>
- Holton, E.F., Bates, R.A., & Ruona, W.E. (2000). Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11(4), 333-360. [http://dx.doi.org/10.1002/1532-1096\(200024\)11:4%3C333::AID-HRDQ2%3E3.0.CO;2-P](http://dx.doi.org/10.1002/1532-1096(200024)11:4%3C333::AID-HRDQ2%3E3.0.CO;2-P)
- Jaswal, H.S. (2020). Changing perception of students towards hotel management course while pursuing the course. *European Journal of Molecular and Clinical Medicine*, 7(7), 2975-2982. https://ejmcm.com/article_5002.html
- LeBruto, S.M., & Murray, K.T. (1994). The educational value of "Captive Hotels". *The Cornell Hotel and Restaurant Administration Quarterly*, 35(4), 72-79. [https://doi.org/10.1016/0010-8804\(94\)90096-5](https://doi.org/10.1016/0010-8804(94)90096-5)
- Leslie, D., & Richardson, A. (2000). Tourism and cooperative education in UK undergraduate courses: are the benefits being realized? *Tourism Management*, 21(5), 489-498. [https://doi.org/10.1016/S0261-5177\(99\)00103-X](https://doi.org/10.1016/S0261-5177(99)00103-X)
- Littlejohn, D., & Watson, S. (2004). Developing graduate managers for hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 16(7), 408-414. <https://doi.org/10.1108/09596110410559096>
- Kalargyrou, V., & Woods, R.H. (2011). Wanted: training competencies for the twenty-first century. *International Journal of Contemporary Hospitality Management*, 23(3), 361-376. <http://dx.doi.org/10.1108/095961111111122532>
- King, B., & Qiu, H. (2017). Experiential tourism and hospitality learning: principles and practice. In: Benckendorff, P., Zehrer, A. (Eds.), *International Handbook of Teaching and Learning in Tourism*. Edward Elgar, Northampton, UK, pp. 207-217.
- King, B., & Tang, C.M.F. (2020). Training hotels in Asia: an exploration of alternative models. *Journal of Hospitality & Tourism Education*, 32(1), 43-54. <https://doi.org/10.1080/10963758.2019.1654883>
- Koo, G., Lee, N., & Kwon, O. (2019). Combining object detection and causality mining for efficient development of augmented reality-based on-the-job training systems in hotel management. *New Review of Hypermedia and Multimedia*, 25(3), 112-136. <https://doi.org/10.1080/13614568.2019.1694594>
- Olsen, M.D., & Connolly, D.J. (2000). Experience-based travel: how technology is changing the hospitality industry. *Cornell Hotel and Restaurant Administration Quarterly*, 41(1), 30-40. [https://doi.org/10.1016/S0010-8804\(00\)88883-7](https://doi.org/10.1016/S0010-8804(00)88883-7)
- Osykova, I.I. (2020). *Labor force of Ukraine 2019. Statistical compilation*. State Statistics Service of Ukraine, Ukraine.
- Rakicevik, G., Miladinoski, S., & Strezoska, J. (2008). Lifelong learning in restaurant business. *Tourism and Hospitality Management*, 14(1), 105-114. <https://hrcak.srce.hr/181052>
- Rangus, M., Radenković-Šošić, B., Milošević, S., Hočevar, J., Škrbić, I., & Knežević, M. (2020). Professional and organisational commitment in the hospitality sector. *Academica Turistica*, 13(2), 179-191. <http://dx.doi.org/10.26493/2335-4194.13.179-191>
- Ruhanen, L. (2006). Bridging the divide between theory and practice: experiential learning approaches for tourism and hospitality management education. *Journal of Teaching in Travel & Tourism*, 5(4), 33-51. https://doi.org/10.1300/J172v05n04_03
- Scerri, M., Presbury, R., & Goh, E. (2020). An application of the mentoring framework to investigate the effectiveness of mentoring programs between industry mentors and student mentees in hospitality. *Journal of Hospitality and Tourism Management*, 45, 143-151. <https://doi.org/10.1016/j.jhtm.2020.08.010>
- Tsai, C.H., Linliu, S.C., Chang, R.C.Y., & Mak, A.H.N. (2020). Disaster prevention management in the hotel industry: hotel disaster prevention literacy. *Journal of Hospitality and Tourism Management*, 45, 444-445. <https://doi.org/10.1016/j.jhtm.2020.09.008>
- Tse, T.S.M. (2012). The experience of creating a teaching hotel: a case study of Hotel Icon in Hong Kong. *Journal of Hospitality & Tourism Education*, 24(1), 17-25. <http://dx.doi.org/10.1080/10963758.2012.10696658>
- *** Eurostat (2020a). *Distribution of non-formal education and training activities by provider*. <https://appsso.eurostat.ec.europa.eu/nui/setupDownloads.do>
- *** Eurostat (2020b). *Distribution of education and training activities by field (ISCED-F 2013)*. <https://data.europa.eu/euodp/en/data/dataset/lm3WJLDvmFwbOQgAdcXVtw>
- *** Work.ua (2020). *Average salary for the category "Hotel and restaurant business, tourism" in Ukraine*. <https://www.work.ua/salary-hotel-restaurant-tourism/?page=2>

TRAVELLING HABITS OF PEOPLE WITH DISABILITIES

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Abstract: Accessible tourism is an under-researched area in Hungary. Based on the results of a questionnaire survey, the aim of the present study is to present several specific features of the travel demand of people with disabilities, the foremost focus being the examination of the most popular tourism products in the demand of people with disabilities. 268 Hungarians responded to the survey in online and face-to-face contexts. In addition to the Hungarian survey, the article also covers small-sample research results from four other countries (Germany, Italy, Spain and Croatia). The results show that members of the target group reject segregation solutions during their travels, and, as opposed to integration, clearly demand inclusion. Their travel frequency is above average of the entire population, with interests as diverse as those without disabilities. The issue of accessible tourism affects 10% of the European population, and thus, besides the significance of the issue from a social and societal point of view, this segment cannot be neglected in terms of its market value either. Understanding the expectations of stakeholders and their specific consumer habits is an essential requirement in the development of appropriate tourism supply and in ensuring equal access to services.

Key words: accessible tourism, travel frequency, motivation, tourism products

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INTRODUCTION

In developed countries, accessibility is gaining significant ground in the organization of tourism supply. This trend is partly the result of empathy, but it is also due to recognizing the significant business potential of accessibility. In most general terms, accessible tourism means tourism equally accessible to all, including people with disabilities, people with temporary mobility problems, the elderly, families with children, and multi-generational families (Eichhorn and Buhalis, 2011). Accordingly, the main areas of equal access studies correspond to that of the supply side of tourism: accommodation services, catering, tourist attractions, transport, and communication (Of these factors, the studies mostly focus on the accessibility of attractions (Biswas et al., 2020). Based on the results of a questionnaire survey, this study examines the most popular tourism products among people with disabilities and the types of supply they require. Defining the target group of accessible tourism is already an issue. Public opinion often does not include those who, by virtue of their life situations, belong to the target group for a shorter or longer period - for example, pregnant women, people with temporary mobility problems during post-surgical recovery, or the elderly. However, the proportion of the latter is continuously increasing within the total population and many forms of accessibility act as essential need from their perspective. With a broader understanding of and a slightly philosophical approach to this subject, one may also interpret accessibility as the constant concern of a human continuously seeking comfort (Farkas and Petykó, 2019, 2020). Thus, many of us live with a permanent or temporary disability, which could create barriers throughout life, and hinder travel. In fact, accessible tourism is a *continuous effort* to make all destinations, tourism products and services accessible to all, regardless of physical barrier, disability or age, and whether it is a private or public tourist destination. Although at the level of declaration the urgency of accessibility is no longer questionable, reality shows a different picture. The results of the research carried out within the framework of the international project *European Peer Counselor Training in Accessible Tourism Cooperation for innovation and the exchange of good practices* support this assumption. When one intends to map the relationship between people with disabilities and tourism, it must always be borne in mind that guests with varying types of disabilities have different special needs. However, accessibility is vital for them, as in many cases, ignoring their specific needs may make it impossible for them to participate actively in tourism. In Hungary, tourism opportunities, such as habits and needs of people with disabilities, vary considerably in some regards compared to the characteristics of the general population.

LITERATURE REVIEW

It is not easy to define the term *disability* as it has many forms. "We can include not only people with reduced mobility, people with visual, hearing, and intellectual impairments, but also those who suffer from other long-term illnesses affecting their quality of life, such as allergies" (Zsarnóczky, 2018:39). According to WHO estimates, one in six people in the world has a disability, and their number is constantly increasing (WHO, 2011). The UN Convention on the Rights of Persons with Disabilities, adopted in 2006 and also published in Hungary, obliges State Parties to ensure accessibility for people with disabilities to sporting, holiday, and tourist venues and services (Act XCII of 2007). Anyone can be affected by this issue at any time. It is enough to think about, for example, the ageing process, but an accident can make someone permanently

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disabled just as well. This is why the current state of ageing societies lends particular gravity to the problem. When reaching a certain age, senior citizens have some special needs, but there could be many other situations that may justify extra needs: for example, those receiving post-traumatic rehabilitation or families with small children (Darcy and Dickson, 2009). The UN World Tourism Organization (UNTWO) is committed to promoting accessible tourism. The World Tourism Day in 2016 was also dedicated to this topic (UNWTO, 2016). Throughout its history, humanity has made strides in the field of accessibility, but only in the second half of the twentieth century did it become a widely recognized social issue. It is now generally accepted that, despite a disability, everyone should be able to enjoy travel in the same way as anyone else, "because enjoying life to the full is a right of all" (Végh, 2005: 31). The European Parliament resolution of 29 October 2015 on new challenges and concepts for the promotion of tourism in Europe emphasizes the importance of developing sustainable, responsible, and accessible tourism; the principle of "tourism for all", and that full accessibility and affordability of tourism are key elements for the sustainability of the sector.

According to the census data of the Hungarian Central Statistical Office, 595,187 disabled persons lived in Hungary in 2011 (Ernszt et al., 2019). However, the number of people affected by accessible tourism can be much higher, as it can be assumed that older people with good general health conditions do not list themselves as disabled, but when using tourism services, they opt to access accessibility features. As tourism becomes a social phenomenon, it is also becoming an important factor in developing the quality of life (Gonda et al., 2019). Fortunately, by now it has become accepted that making travel easier for people with disabilities and providing the necessary physical conditions are not only our human, ethical, moral, and legal duty, but that the tourism of people with disabilities is a key issue in terms of economics too. Even though currently accessibility represents a largely untapped niche in the tourism market, several positive counter examples can also be identified (Buhalis et al., 2012). However, this market segment should not be considered a homogeneous group. They have various special demands on the service, depending on the type and extent of disability. Some obstacles can affect all travelers, while others present an insurmountable problem only to narrower segments (Shaw and Coles, 2004).

The presence of different disabilities creates disparate and specific needs that require unique ideas and solutions. Understanding consumer preferences and attitudes is also necessary for potent supply development for people with disabilities as well (Závodi et al., 2021). Zajadacz presents the needs and creative accessibility solutions designed to meet the demands of people living with disabilities such as blindness and hearing loss (deafness) (Zajadacz, 2015; Zajadacz and Lubarska, 2020). Tourist destinations are at different stages of implementing accessibility: some develop special offers for people with disabilities, while others recognize accessibility as a distinctive feature – recognizing its inherent market potential (Lőrincz et al., 2019). The leading European countries of international tourism place significant emphasis on this issue – such as can be seen in the efforts made by Spain (Vila et al., 2015) and Italy (Agovino et al., 2017) in accessible tourism. As for the former socialist countries, Poland concentrates considerable resources to the research of this subject (Zajadacz, 2014, 2019), and it is also clear that there is a growing interest in research into accessible tourism among Hungarian researchers, too (Gonda and Raffay, 2020a). The implementation of accessible tourism is not equal with physical accessibility. The experience afforded by an accessible destination is much more than that: it is the implementation of the principles of independence, equality, and human dignity within the tourist experience. Experiencing the ethos of the place and discovering the geographical space are as important for disabled people as for anyone else.

Therefore, the geographical aspects of the subject should also be elaborated on when researching this topic. It can be seen from the bibliometric analysis of social geography that neither the journals on urban research nor on social geography place adequate emphasis on accessibility or equal access (Csomós, 2018). Important points can be found in the work of Kitchin on themes such as the interpretation of the place (Kitchin, 2009), the validation of the approach to and values of positive geography (Kitchin, 2015), and the dangers faced by and opportunities open to smart communities (Kitchin and Dodge, 2017). By examining these issues, the question of equal access can be examined in the context of spatial use. It is generally accepted that the pleasure of traveling and taking a holiday strengthens a sense of subjective happiness (Csapó et al., 2018; Gonda et al., 2019). This is particularly true for people with disabilities, for whom tourism often brings the potential breaking out of everyday life full of challenges. In many cases, a journey means a celebration for them, and experience helps them establish relationships and facilitate their integration into society (Gálné Kucsák, 2008; Raffay and Gonda, 2020).

Several empirical studies have shown in Hungary that people with disabilities encounter significant problems during travel and are hampered by their disabilities when implementing their travel plans. This is why many people choose the path of "non-travel" (Csapó and Gonda, 2019; Csapó et al., 2019). Scarcely any Hungarian publications deal with accommodation accessibility and the motivations behind the choice of accommodation made by people with disabilities. About half of the people with reduced mobility were prevented from implementing a tourism program due to their disability; this ratio was 75% in terms of the visually impaired. There is no doubt that a high-quality service provided for guests with disabilities requires empathy and attention from tourism industry participants.

RESEARCH METHODOLOGY

The professional preparation of the questionnaire survey was carried out in Barcelona in December 2018 with all partners' involvement. It was in Barcelona that the decision was made that the project leading Hungarian partner would carry out the basic research on a sample of 200 people, which would then be compared with national characteristics. For this purpose, each partner undertook to complete 30 questionnaires. The questionnaire survey was started in the spring of 2019 and, due to the low level of willingness to participate, it took five months to complete instead of the originally planned two. It was challenging to reach people with disabilities. Fundamentally, the questionnaire was completed via an online survey program, but in some cases, data were collected personally as well. In this respect, the Hungarian partner was

very successful: 89 responses were collected with the help of university students during the Accessible Tourism Day held at Orfű at the beginning of September 2019. In fact, 262 questionnaires were completed in Hungary, which is, as far as we know, one of the largest samples in the research of accessible tourism in Hungary so far. These results were then compared and contrasted with what can be regarded as control groups, the results collected by the four other countries, where the numbers of completed questionnaires varied between 22 and 34. Within the current research framework, cross-correlations and the examination of the existence of a significant relationship across respondents' demographic and disability differences and their responses were not planned. First, the largest (Hungarian) sample was analyzed, with the results calculated in percentages. Given the low number of the non-Hungarian sample groups, percentages were not calculated, instead providing raw numbers. A short summary was created, including the obtained results and a workshop study presenting the overall results of the research (Gonda and Raffay, 2021). In total, 47.8% of Hungarians who completed the questionnaire were male, and 52.2% female (Table 1). The plurality of Hungarian respondents were between 36 and 50 years of age (47.8%), so almost half of them belonged to this group. 20.1% of respondents were aged 18-25, 14.2% between 50 and 65, 12.7% between 26-35, and 5.2% were over 66 (Table 2). The collection of such demographic data was complemented by information on economic activity, living arrangements, educational background, and family status (Gonda and Raffay, 2020b).

Table 1. People with disabilities: respondents' gender
(Source: author's own editing)

Gender / Country	Hungarian	Spanish	Italian	German	Croatian
Female	140	12	13	22	14
Male	128	9	21	11	18

Table 2. People with disabilities: respondents' age (Source: author's own editing)

Age/Country	Hungarian	Spanish	Italian	German	Croatian
18-25 years	54	1	9	8	0
26-35 years	34	0	10	8	12
36-50 years	128	13	11	6	12
50-65 years	38	8	3	8	7
over 66 years	14	0	1	2	2

RESULTS AND DISCUSSION

1. Composition and travel frequency of people with disabilities involved in the research

It was a key aspect of the research to involve people with several types of disabilities. The majority of the respondents' lives are affected by locomotor impairments, as 44% struggle with this type of disability. The second-highest number of responses was given in connection with visual impairment, making everyday life more challenging for 20%. This is followed by hearing and intellectual impairments with a ratio of 12% each, followed by speech disorders (5%), autism, and Asperger syndrome (3%). Four percent of respondents said they had multiple disabilities (It was possible for respondents to indicate several answers under the question). In this respect, all research partners have sought diversity and have succeeded in involving people affected by different types of disabilities in the survey. People with locomotion impairment were the largest group everywhere in terms of their number, except in the Croatian sample, where the most significant number of respondents had intellectual disabilities (Figure 1).

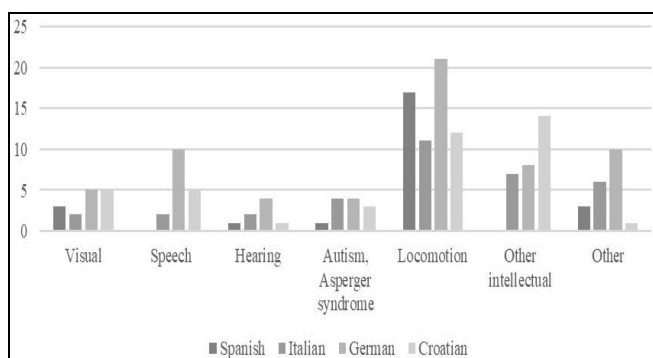


Figure 1. What is the nature of your disability? (Source: Own edit)

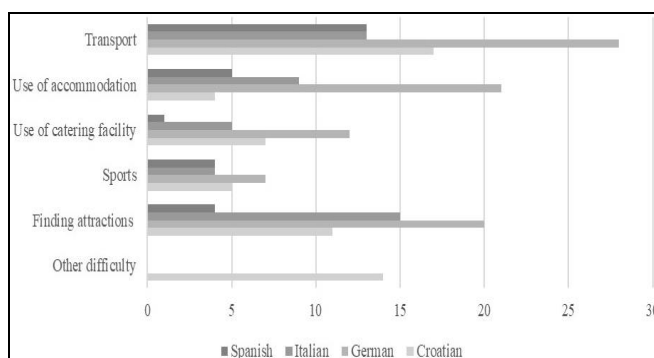


Figure 2. What difficulties do you encounter most often?

Slightly more than two-thirds (68.7%) of Hungarian respondents had congenital disabilities, while slightly less than one-third (31.3%) reported acquired disabilities. Only the Spanish data differ substantially in this regard, where most people were not born with disabilities but acquired them. The main difficulties faced by people with disabilities in Hungary are transport difficulties (30%), difficulties in the catering industry (20%), difficulties in accommodation (18%), difficulties when doing sports (15%), difficulty in finding tourist attractions (12%) and communication difficulties (2%). Only 4% of respondents said they did not encounter any difficulties in their everyday lives. The other four partners received similar results, as most responses were given to transport difficulties. However, the second largest difficulty for people with disabilities was finding attraction, with accommodation and catering industry mentioned last (Figure 2).

The investigation also covered whether respondents usually travelled abroad or preferred domestic tourism. They were asked to indicate whether they had traveled abroad in the previous five years, and, if so, how many times (Figure 3). 36% of Hungarian respondents replied that they had not traveled abroad in that period of time. Looking at those who had traveled, 13% had only traveled once, 21% twice, 6% three times, and 24% more than three times.

The next question was intended to reveal whether respondents had traveled domestically in 2018. 77.1% of respondents did, while 22.9% did not. Considering those who traveled, 29% did so once, 23% twice, 21% three times, and 27% three or

more times. These numbers represent much higher rates than those found in the reports of the Hungarian Central Statistical Office on the travel behavior of the domestic population (KSH 2019) and also than what was previously reported in a representative survey from 2018 (Csapó et al., 2018). In terms of the foreign partners involved in the survey, domestic travel rates were similar. With the following survey item, an attempt was made to discover the reason for non-travelling respondents. The main reason reported was clearly lack of money (25%), followed by lack of companionship assistance (15.7%) and lack of company (10.2%). Respondents were also afraid that the accessibility features provided during travel would not be in line with promises and their needs (9.7%), whereas lack of language skills and the fact that they considered outward and return journey to be cumbersome (9.3 each) were equally dominant factors. Some respondents were afraid of new situations that might come up (7.4%), others decided to stay at home because of lack of time (6%), and some were unable to travel (4.2%) due to their state of health. A small portion of respondents claimed they could obtain travel experience at home using the internet and technology (2.3%), while a few referred to transport difficulties (0.9%). In a same vein, as seen in the data from Hungary, tourists with disabilities in the partner countries also cited lack of money in this item. This was followed by lack of company, lack of time, lack of language skills or a helping person, with many also fearing that accessibility features would meet neither the promises nor their needs.

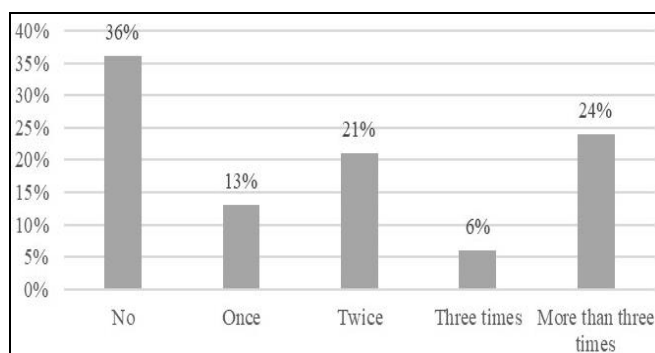


Figure 3. Have you traveled abroad in the last five years? (n=254) (Source: Own edit)

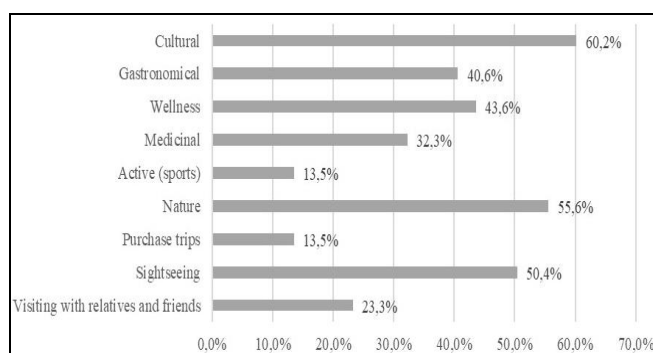


Figure 4. What programs do you prefer while traveling? (n=264) (Source: Own edit)

2. Tourism services preferred by people with disabilities

Another result of the survey was evidence for the importance of making the tourism supply and, by the same token, tourism services, accessible. Only 19.1% of respondents reported preference for programs designed exclusively for people with disabilities, with another small section (19.8%) of respondents preferring integrative programs. Almost two-thirds of responses (61.1%), however, expressed the position valuing inclusivity: instead of preferring programs designed primarily for people with disabilities, they place a premium on programs available to anyone. It is interesting to note that when asked what programs they preferred, none of the Spanish respondents chose those designed for people with disabilities in mind, instead preferring integrative programs or those not primarily aiming for people with disabilities. As for the other three countries, the least popular tourism programs were those designed for people with disabilities, whereas the most popular were those not primarily tailored for them. When investigating supply, a central aim is to discover the type of motivation and type of tourism product that members of a particular target group are associated with. Respondents were invited to mark as many preferred programs as they saw fit. Cultural (60.2%), nature-friendly (55.6%) and sightseeing programs (50.4%) were the most popular (Figure 4). Many chose wellness (43.6%) and gastronomical (40.6%) programs and visiting with relatives and friends (23.3%). In addition, options chosen included purchase trips and active programs (13.5% each). Based on this, we can see that the tourism motivation of people with disabilities is wider ranging than the national average, with a pronounced interest in cultural and natural wealth. Sightseeing, cultural and nature programs were most popular among the Spanish and Germans. As for the Italians, sightseeing and cultural programs were followed by a tie of gastronomical and wellness programs, whereas for Croatians, sightseeing and nature-friendly topped the list, followed by a tie of cultural and gastronomical programs (Figure 5).

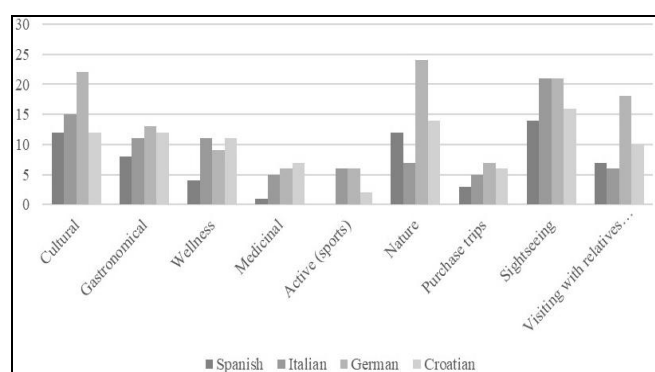


Figure 5. What programs do you prefer while traveling? (Source: Own edit)

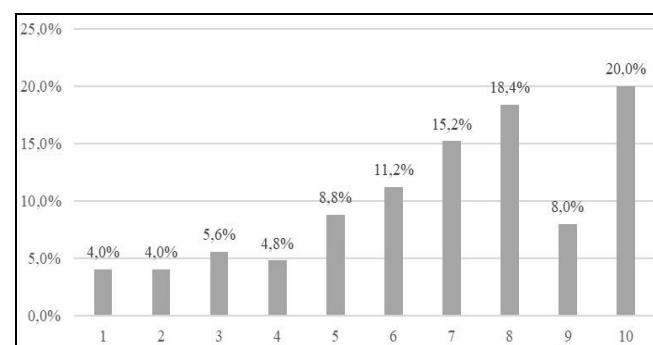


Figure 6. Extreme sports and activities would attract people with disabilities if proper technical support and attendant services were available (n=250) (Source: Own edit)

It was not by accident that respondents were also asked about their interest in extreme sports. Although it may appear to some that pursuing extreme sports and disability are mutually exclusive, with proper technical support and the provision of attendants, trying out such activities would attract people with disabilities to a degree higher than the national average. On a scale of 1 to 10, where 1 meant complete disagreement and 10 complete agreement, the majority chose values representing various levels of agreement, with 20% choosing complete agreement (Figure 6). Responses from the four other countries to the item about extreme sports and activities were similar, with the value of 10 and 7 chosen by many, although each degree of agreement received responses, showing deviation among respondents (Figure 7).

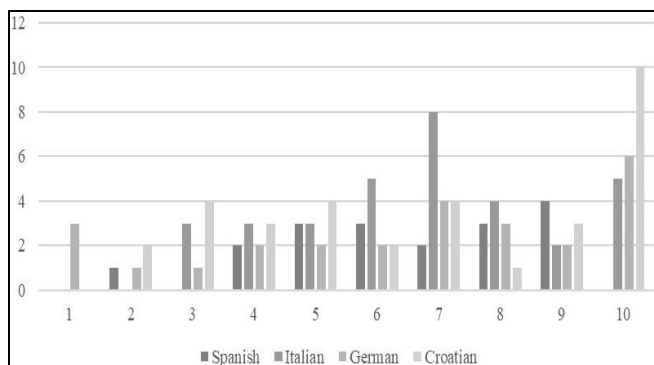


Figure 7. Extreme sports and activities would attract people with disabilities if there was technical and attendant support

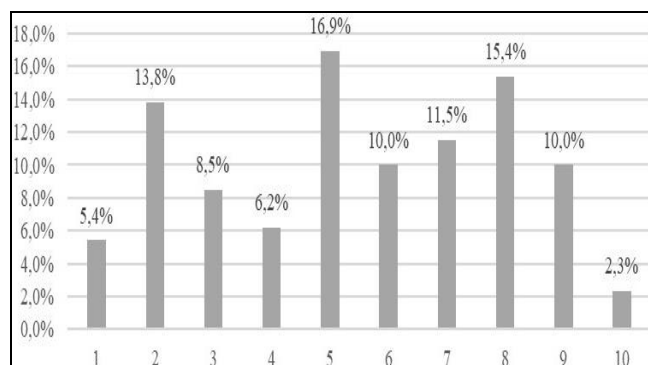


Figure 8. Tourism companies provide guests with disabilities with increased preparedness and openness (n=260) (Source: Own edit)

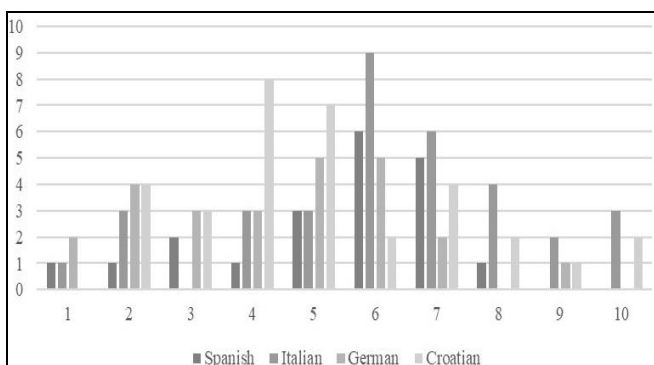


Figure 9. Tourism companies provide guests with disabilities with increased preparedness and openness (Source: Own edit)

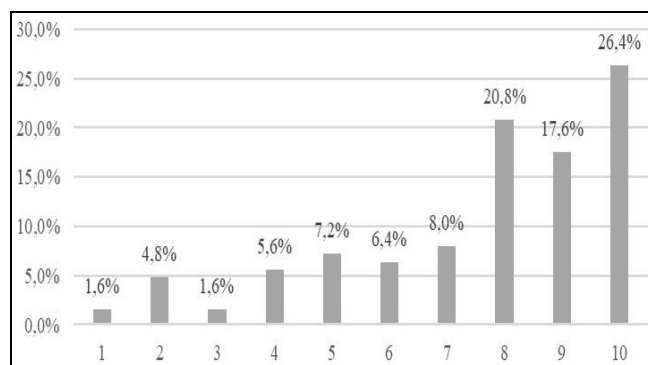


Figure 10. More people in wheelchair would be willing to travel if Hungarian trains and coaches were accessible by wheelchair (n=250) (Source: Own edit)

3. Effects of improving convenience of accessible tourism

Within the attitude analysis, a question was asked about the views target group members held about the state of accessible tourism, inviting respondents to rate their agreements on a scale of 1 to 10 (where 1 indicated complete disagreement and 10 complete agreement). Because tourism service providers are the most important actors who themselves can go a long way toward equal access, the question raised was this: Do tourism companies provide guests with disabilities with increased preparedness and openness? The results appear in Figure 8, which again shows a relatively high degree of deviation across responses, as this item was not met with total agreement. The convenient medium value was chosen by the plurality of respondents (16.9%), followed by the values of 8 (15.4%) and 2 (13.8%). Agreements and disagreements were roughly equally present, with the least responses registered for complete agreement, indicating a need for service providers to improve in terms of preparedness and openness. Figure 9, similarly to results for the previous statement, shows no evidence for agreement: responses had a wide range, as also seen in the Hungarian data. The highest values ranged between 4 and 7. As the relationship between tourism and mobility opportunities afforded by ways of transport is obvious, a specific item was included in the survey about making community transport accessible. The statement was as follows: More people in wheelchairs would be willing to travel if Hungarian community transport were accessible by wheelchair. This item elicited overwhelming agreement, with the majority (nearly two-thirds of respondents) choosing the three highest values (8 to 10). There was a much lower percentage of those disagreeing. As for the other four counties, over 90% of respondents also showed agreement with this statement, with values over the medium range. From all four countries, it was for complete agreement (value 10) that the plurality of choices was registered in the survey. Individual mobility is also stimulated by the presence of accessible tourist trails. Unfortunately, this infrastructure is underdeveloped, although bike lanes, whose development in Hungary is brisk, can be used by people in wheelchairs as well. We have found evidence for such need among people with disabilities in the responses to the item about their views on willingness to hike if at least suburban recreational parks in Hungary had tourist trails accessible by wheelchair. The same way as in the previous item, respondents mostly agreed with the statement as over 60% voted for the three highest values (8 to 10), with the lower values receiving negligible and sporadic support (see Figure 11). We can see a similar spread in the results of the international survey.

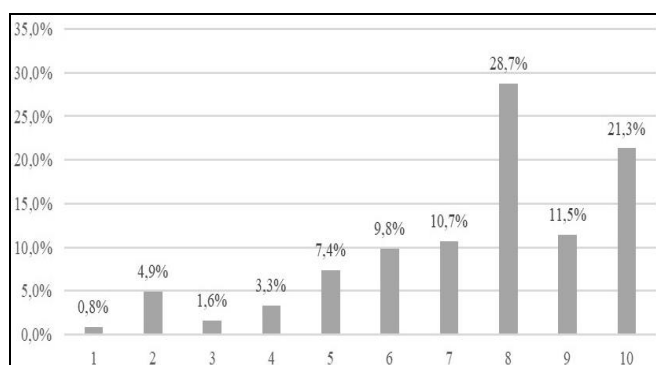


Figure 11. More people in wheelchairs would be willing to hike if at least suburban recreational parks in Hungary had tourist trails accessible by wheelchair (n=244) (Source: Own edit)

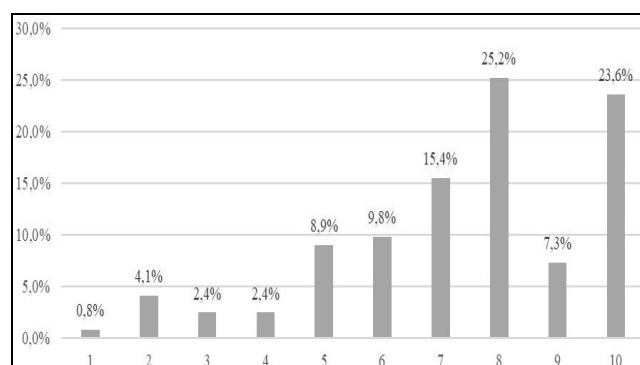


Figure 12. More people would be willing to travel to nature if there was a reliable online database of trips accessible by wheelchair (n=246) (Source: Own edit)

The last item investigated whether a reliable online database of trips accessible by wheelchair would encourage more people to choose a nature travel. The results leave no doubt at all: over half of respondents voted for the top three values, with four-fifths saying more would choose such holidays if there was such a resource. The importance of the internet database was most agreed to by Italians and Croats, who mostly chose the values of 10 and 8 for this item. The responses from the Spanish and German respondents also showed more agreement, but it was not as strong as in the case of the Italians and Croats (Figure 13).

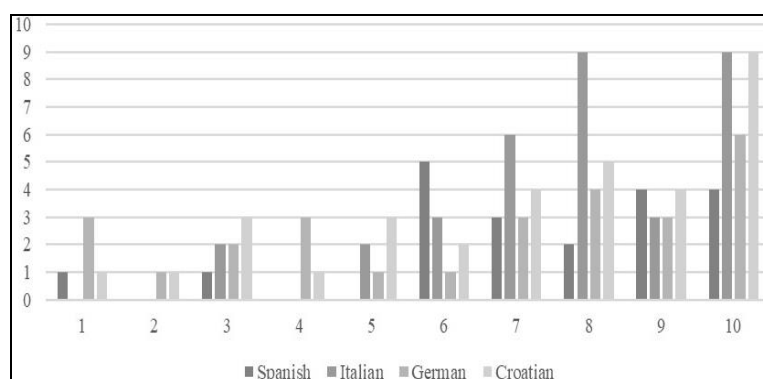


Figure 13. More people would be willing to travel to nature if there was a reliable online collection of trips accessible by wheelchair (Source: Own edit)

CONCLUSION

The number of people living with disabilities acquired at birth or later in life, permanently or temporarily, is in the billions of the world total population, and this group of special situation and needs is growing in both number and proportion in almost every country. In order to be able to live life to the full, like their non-disabled peers, in addition to ensuring the everyday usability of spaces and buildings, it is necessary, among other things, to be able to travel, to take part in what we may call a “happy journey”: in tourism. This is not only an ethical duty of our profession, but also a well-conceived financial interest, because people with disabilities (and often those accompanying them) represent a serious market potential for tourism, which is far from fully exploited.

There are three ways to make travel easier or even more accessible. First, by developing special travel programs and packages for the disabled; by integration within programs designed for people with and without disabilities; and via traditional travel solutions, so that people with disabilities are just as much involved in the travel as their non-disabled counterparts. Unsurprisingly, the latter is by far the most popular among people with disabilities, according to research by *Peer Act*, the five-country EU project. Apart from a need to comply with the accessibility provisions of international conventions and domestic legislation, this requires sensitizing society, changing attitudes towards people with disabilities, as well as sensitizing and training those working in the travel sector and, of course, tourism facilities and services (travel facilities, accommodation, catering establishments, and attractions) to make it accessible to everyone, not just in the physical sense. The current research has also revealed that among the members of the examined target group, the desire to travel and the frequency of travel are higher than the national average. Driven by their motivation and interests, they look for tourist attractions and services that are similar to those sought by the majority. It has also been confirmed that if physical accessibility improved significantly in a number of areas (public transport, access to extreme sports, accessible tourist routes), demand would increase exponentially. Empirical research has yielded useful and gap-filling knowledge about the travel motivations of people with disabilities and the types of tourism products they most care about. As the next vista of the research, it would be useful to explore additional contexts, through which it would also be possible to gauge the scope of the travel habits and motivations of people with different types of disabilities.

REFERENCES

- Agovino, M., Casaccia, M., Garofalo, A., & Marchesano, K. (2017). Tourism and disability in Italy: Limits and opportunities. *Tourism Management Perspectives*, 23, 58-67. <https://doi.org/10.1016/j.tmp.2017.05.001>
- Biswas, C., Omar, H., & Rashid-Radha, J.Z.R.R. (2020). The impact of tourist attractions and accessibility on tourists' satisfaction: The moderating role of tourists' age. *GeoJournal of Tourism and Geosites*, 32(4), 1202-1208. <https://doi.org/10.30892/gtg.32402-558>
- Buhalis, D., Darcy, S., & Ambrose, I. (2012). Best Practice in Accessible Tourism: Inclusion, Disability, Ageing Population and Tourism. *Channel View Publications*, Bristol/Buffalo/Toronto.

- Csapó, J., Gerdesics, V., Gonda, T., Raffay, Z., & Töröcsik, M. (2018). *Turizmus: a magyar lakosság turizmussal kapcsolatos beállítódása generációs szemléletű vizsgálattal – országos reprezentatív személyes (n=2001) és online (n=1085) megkérdezés, fókuszcsoportos viták eredményei.* [Tourism: Investigating the tourism attitudes of the Hungarian population within a generational framework – The results of a national representative survey (n=2001 personal, n=1085 online) and focus group debates.] Pécs, Hungary: PTE KTK (2018), 115.
- Csapó, J., & Gonda, T. (2019). A hazai lakosság utazási motivációinak és szokásainak elemzése az aktív turizmus és a fizikai aktivitás tekintetében. [Tourism motivations and habits of the Hungarian population in terms of active tourism and physical activity.] *Turisztikai és Vidékfejlesztési Tanulmányok*, 4(4), 57-70, 14. <https://doi.org/10.15170/TVT.2019.04.04.06>
- Csapó, J., Töröcsik, M., & Nagy, Á. (2019). Nemturizmus és életstílus összefüggések. [Connections between non-tourism and lifestyle.] *Turisztikai és Vidékfejlesztési Tanulmányok*, 4(2), 5-18, 14. <https://doi.org/10.15170/TVT.2019.04.02.01>
- Csomós, G. (2018). Rendíthetetlen-e az angolszász hegemonia a nemzetközi társadalomföldrajzi és városkutató folyóiratokban: Egy bibliometriai elemzés tanulságai. [Is the Anglo-Saxon hegemony of international social geography and urban research journals unshakable? Results of a bibliometric analysis]. In: *Modern Geográfia*, 2018(1), 1-18.
- Darcy, S., & Dickson, T.J. (2009). A whole-of-life approach to tourism: The case for accessible tourism experiences. *Journal of Hospitality and Tourism Management*, 16, 32-44.
- Eichhorn, V., & Buhalis, D. (2011). Accessibility: A Key objective for the tourism industry. In: Budalis, D., & Darcy, S. (Eds.) *Accessible Tourism: Concepts and Issues*, 46-61. Bristol: Channel View Publications. <https://doi.org/10.21832/9781845411626-006>
- Ernszt, I., Tóth-Kaszás, N., Péter, E., & Keller, K. (2019). „Amikor a vándorbot színe fehér, az utazó kerekesszékekben ül” – Az akadálymentes turizmus egyes kérdéseiről. [When the walking staff is white, the tourist is in a wheelchair: Issues in accessible tourism.] *Turisztikai és Vidékfejlesztési Tanulmányok*, 4(3), 77-91. <https://doi.org/10.15170/TVT.2019.04.03.06>
- Farkas, J., & Petykó, C. (2019). Utazás az akadálymentesség, a fogyatékoság és a fenntarthatóság multidiszciplináris és bölcséleti dimenzióiban. [Traversing the multidisciplinary and philosophical dimensions of accessibility, disability, and sustainability.] *Turizmus Bulletin*, 19(4), 13-22, 10.
- Farkas, J., & Petykó, C. (2020). A fogyatékoság, az akadálymentesség és a mobilitás, mint egzisztenciális alaptulajdonság. [Disability, accessibility, and mobility as foundational existential characteristics]. *Turisztikai és Vidékfejlesztési Tanulmányok*, 5(4), 43-55, 13. <https://10.15170/TVT.2020.05.04.03>
- Gálné Kucsák, K. (2008). A sötétség vándorai: A látássérültek turizmusának helyzete és esélyei Magyarországon. [Wayfarers of the dark: The current state and chances of the tourism of the visually impaired] *Turizmus Bulletin*, 12(2), 53-59.
- Gonda, T., Nagy, D., & Raffay, Z. (2019). The impact of tourism on the quality of life and happiness. *Interdisciplinary Management Research / Interdisziplinäre Managementforschung*, 15, 1790-1803, 14.
- Gonda, T., & Raffay, Z. (2020a). Egyedül nem megy- fogyatékkal élők utazási szokásainak vizsgálata egy nemzetközi felmérés eredményeinek tükrében. [It's not going to work all alone: The results of an international survey of the travel habits of people with disabilities]. In: Csapó, J. – Csóka, L. (Eds.): *Kreativitás, változás, reziliencia. III. Nemzetközi Turizmusmarketing Konferencia: Tanulmánykötet [Creativity, change, and resilience. 3rd International Conference on Tourism Marketing]* Pécs, Hungary: Pécsi Tudományegyetem Közgazdaságtudományi Kar, 154-165, 12.
- Gonda, T., & Raffay, Z. (2020b). Accessible Tourism in some European countries – findings and results of an empirical survey (Peer-Act Project) In: Gonda, Tibor; Schmidchen, Roger (Eds.) *Opportunities and challenges of barrier-free tourism in Hungary: Results and recommendations of a scientific workshop during the conference "European Peer-Counselor Training in Accessible Tourism - Peer-Act"* on September 4, Bonn, Germany: Bundesinstitut für Berufsbildung, 157, 23-52, 30.
- Gonda, T., & Raffay, Z. (2021). *Turisztikai fogyasztási szokások vizsgálata a fogyatékosággal élők körében.* [A study of tourism consumption habits among people with disabilities] UPFBE Working Paper Series, 3.1. PTE KTK.
- Kitchin, R. (2009). Space II. In: *International Encyclopedia of Human Geography*. <https://doi.org/10.1016/B978-008044910-4.01126-3>
- Kitchin, R. (2015). Positivist Geography. In: *Approaches in Human Geography*, 23-34. Publisher: Sage 2015
- Kitchin, R., & Dodge, M. (2017). The (In)Security of Smart Cities: Vulnerabilities, Risks, Mitigation, and Prevention. In: *Journal of Urban Technology*, 1-19. <https://doi.org/10.1080/10630732.2017.1408002>
- Lőrincz, K., Lang, L.A., & Banász, Z. (2019). A Balaton térségi Imázsa a helyi lakosság szemszögéből. [The regional image of Lake Balaton from the perspective of the local population] In: *Modern Geográfia*, 2019(4), 1-14.
- Raffay, Z., & Gonda, T. (2020). Az akadálymentes turizmus innovatív jó gyakorlata. [Best innovative practices in accessible tourism] *Modern Geográfia*, 2020(4), 1-14, 14.
- Shaw, G., & Coles, T. (2004). Disability, holiday making and the tourism industry in the UK: a preliminary survey. *Tourism Management*, 25, 397-403.
- Végh, Z. (2005). A segítséggel élők turisztikai lehetőségei Magyarországon. [Tourism opportunities of people living with assistance in Hungary.] *Turizmus Bulletin*, 4, 26-38.
- Vila, T.D., Darcy, S., & González, E.A. (2015). Competing for the disability tourism market – A comparative exploration of the factors of accessible tourism competitiveness in Spain and Australia. *Tourism Management*, 47, 261-272.
- Zajadacz, A. (2014). Accessibility of Tourism Space from a Geographical Perspective. *Tourism*, 24(1), 45-50.
- Zajadacz, A., & Lubarska, A. (2019). Development of a Catalogue of Criteria for Assessing the Heritage Site. *Studia Periegetica*, 2(26) <https://doi.org/10.26349/st.per.0026.06>
- Zajadacz, A., & Lubarska, A. (2020). Sensory gardens as place for outdoor recreation adapted to the needs of people with visual impairments. *Studia Periegetica*, 2(30) <https://doi.org/10.5604/013001.0014.3170>
- Závodi, B., Szabó, G., & Alpek, L.B. (2021). Survey of the consumer attitude of tourists visiting south. Transdanubia, Hungary. *GeoJournal of Tourism and Geosites*, 34(1), 245-250. <https://doi.org/10.30892/gtg.34133-644>
- Zsarnóczky, M. (2018). The Future Challenge of Accessible Tourism in the European Union. *Vadyba Journal of Management*, 2(33), 39-43.
- ***Az Európai Parlament 2015. október 29-i állásfoglalása az európai turizmus előmozdításának új kihívásairól és elképzeléseiről [European Parliament position paper dated October 29, 2015 on the challenges and conceptions related to the advancement of European tourism] (2014/2241(INI)) www.europarl.europa.eu/doceo/document/TA-8-2015-0391_HU.html?redirect=letöltés:2020.02.10
- *** European Commission (2014). Economic Impact and Travel Patterns of Accessible Tourism in Europe. Final Report.
- *** Központi Statisztikai Hivatal: http://www.ksh.hu/nepszamlalas/tablak_fogyatekosag
- *** UNWTO (2016). Highlights of the 1st UNWTO Conference on Accessible Tourism in Europe (San Marino, 19-20 November 2014)
- *** UNWTO (2013). Recommendations on Accessible Tourism. Madrid
- *** WHO (2011). World Report on Disability. Summary. Malta
- *** 1998. évi XXVI. Törvény [The XXVI Act of 1998]

PENTA HELIX COMMUNICATION MODEL THROUGH COMMUNITY BASED TOURISM (CBT) FOR TOURISM VILLAGE DEVELOPMENT IN KOTO SENTAJO, RIAU, INDONESIA

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Abstract: This study aims to explain the higher education institution's role in developing Koto Sentajo as tourism village and to understand the tourism communication model that synergizes with other stakeholders. This study uses a qualitative approach that emphasizes more on depth. The method describing is done by the reality that occurs by interacting directly with the research subject. The results showed that higher education institutions have an essential role in developing a tourism village development model. This communication model is useful for attracting local governments and other stakeholders to establish the Koto Sentajo tourism village. The penta helix communication model involves five main actors, namely the campus, corporate CSR, the community, the mass media, and the Kuantan Singingi regency's local government, to develop the tourism village. The communication and collaboration between stakeholders in empowering the community can accelerate the Koto Sentajo tourism village's realization as a leading cultural heritage destination.

Key words: tourism communication, community-based tourism, penta helix, tourism village, cultural heritage

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INTRODUCTION

The tourism industry can affect economic and community development (Fan et al., 2018; Strydom et al., 2019). Tourism can also contribute to economic growth and increase community sources of income, both directly and indirectly (Ali, 2018; Nagarjuna, 2015). Even tourism has contributed to fighting economic inequality (Giampiccoli, 2020). Tourism development increases economic growth, reduces poverty, and conserves natural and cultural resources (Tripathi and Munjal, 2014). Therefore, tourism development certainly has a vital role in improving people's welfare. The community is the main stakeholder in the process of achieving sustainable development (Lundberg, 2017). Community supports are significantly affecting sustainability of tourism industry (Carr et al., 2016). Therefore, community involvement is also the main element in reflecting indigenous people democratic rights in tourism development communication (Istiyanto, 2011). This communication also encourages them as actors to have awareness and mutual support of the importance of tourism development. Tourism development based on rural communities can drive small and medium scale industries that can be carried out in a labour-intensive manner and grow rural communities' economy. Micro, Small and Medium Enterprises (MSMEs) play a role in advancing the Indonesian economy because they can absorb labour and reduce unemployment (Bahri and Prasetyo, 2020). Based on this assumption, the government has proclaimed various steps to optimize village communities' empowerment level as the primary stakeholder. One form is the tourism village development program.

Tourism villages can be a driving force for creating economic growth based on the concept of local wisdoms. It can grow independently from within villagers groups and develop rapidly with government supports. The mandate of Law No.10 of 2009 states that tourism development is a national development carried out in a systematic, planned, integrated, sustainable and responsible manner while still protecting religious, cultural values that exist among society, environmental preservation, and national interests (Indonesian Government, 2009). This tourism development is aimed to encourage equal opportunity in running any business and also obtaining benefits derived from the changing of local, national and global live

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challenges. Koto Sentajo is a village located in Kuantan Singingi Regency, Riau Province, Indonesia, that can be developed as a centre for the local culture-based tourism industry. This village has not been well developed and managed by the Kuantan Singingi Regency government. This village has 27 traditional houses known as Rumah Godang. These traditional houses are the custom centre of *Rang Sentajo* (people of Sentajo ethnic groups) and as the place to gathering for the four major ethnic groups in Sentajo, which are including *melayu*, *caniago*, *patopang* and *Peliang* ethnic groups. This area is very unique because its traditionality has still well maintained by indigenous people.

Tourism management and promotion activities in Koto Sentajo Village have not been optimal due to the absence of a simultaneous mentoring program from the local government. Besides, budget constraints, conflicts of interest, and no placement of priority tourism objects have made tourism development less optimal (Chamidah et al., 2020). This paper assumes that the tourism communication approach based on community-based tourism (CBT) in assisting tourism villages positively impacts the local community and the surrounding community. Currently, the tourism market is rapidly growing based on cultural tourism, becoming a new trend for tourists (Martínez et al., 2014). The direction of interest and attention to tourism experiences has changed a lot towards traditional cultural tourism and the natural environment (Santos et al., 2016). However, tourists must have smart criteria and features to be visited by tourists such as leadership, innovation, social capital and ICT infrastructure (Boes et al., 2016). This interest and attention have also concerned by tourism experts regarding the importance of tourism development that is based on local communities and the environment. The activities can be carried out through ecotourism, indigenous cultural tourism, and sustainable tourism. Eco-based tourism has become a concern because of government policies' direct impact on the environment and ecology (Do et al., 2015).

Although previous tourism studies have contributed significantly to explaining how cultural tourism enhances local economic development, in practice, the development, protection and expansion of culture-based tourism also require understanding and empowering local communities. Collaboration among stakeholders has an essential role in community development through CBT to equalize the economy and tourism resources (Giampiccoli, 2020). The tourism development policy is an effort to encourage actors in the tourism sector to improve community welfare. Development based on culture or local wisdom and tourism has seen from two mutually supportive sides. In its development, the community has involved not only as an object but also as a subject of the action. Tourism development is carried out through a whole and integrated systemic approach. Building community awareness of environmental conservation and tourism development is crucial because it directly impacts its development (Garcias, 2012). As the main stakeholders of village development, village residents are essential as the main subject because, without their support, tourism development will not be sustainable (Lundberg, 2017). Based on this, the authors aims to explain the role of higher education institutions in developing Koto Sentajo as a tourism village and to understand the tourism communication model in developing a tourist village.

Literature Review

Many studies have shown that tourism development can create jobs and increase people's income. Tourism is a significant source of income and economic activity in developing countries (Nagarjuna, 2015). Tourism can create a market for local producers and protect people's cultural heritage (Fan et al., 2018; Sinclair-Maragh, 2017). In this case, the local community plays a vital role in tourism development because it can increase trust in the tourism industry. Local communities' involvement is essential because the community's decision-making will encourage a sense of belonging and have the same goals (Nagarjuna, 2015). Even the theory of tourism competitiveness explains that the population's welfare is the primary basis for a destination's success (Perles-Ribes et al., 2020).

In several studies, tourism has a significant relationship with environmental and humanitarian concerns (Pung and Chiappa, 2020). The current growth of environmental awareness directs tourism development to carry out sustainably. Natural and cultural tourism resources are the heritage that must be protected. Protection of natural and cultural resources is the most crucial thing in sustainable development (Muzapu and Sibanda, 2016). The development of a sustainable tourism village requires assistance that is oriented towards empowering the local community as a development subject (Ridlwani et al., 2017). Tourism village development based on community empowerment aims to increase community capacity to identify problems independently, potentials and needs of the community, conduct social, economic and environmental impact studies and manage and market their villages to attract tourists (Noor and Nala, 2020). Community-based tourism (CBT) research addresses empowerment, independence, social justice, welfare and sustainable development (Khamdevi and Bott, 2018; Mtapuri and Giampiccoli, 2020; Sumarmi et al., 2020). CBT has various principles and characteristics, mainly intended to fight, oppose and reduce inequality of control of tourism resources. Community participation and equality in planning, decision making, management, ownership and distribution of benefits belong to the community. CBT is different from tourism managed by neo-colonialists that tend to ignore local communities (Giampiccoli, 2020; Sumarmi et al., 2020). CBT is a means to ensure the tourism industry benefits residents that will improve the community's standard and quality of life. CBT can be considered a means of integrating sustainable development goals, namely minimizing environmental and cultural damage, optimizing visitor satisfaction and maximizing long-term economic growth (Strydom et al., 2019). In other words, sustainable tourism does not drain economic, social/cultural and environmental resources and can even strengthen and make people aware of the culture and the environment.

Several other studies have shown that cultural heritage-based tourism, both culinary and architectural, is very useful in being used as a local economic development strategy (Gumede, 2019; Tripathi and Munjal, 2014; Wang et al., 2009). Heritage tourism contributes significantly to understanding in providing opportunities for cultural, historical, and

community interaction because elements of education and information about heritage sites also become significant motivations for visitors (Wang et al., 2009). Various stakeholders such as the private sector, government, civil society and local communities play an important role in tourism development. The integration of tourism development through the penta helix concept has widely developed in Indonesia's tourism development research (Chamidah et al., 2020). Penta helix is a socio-economic development model that encourages mutually beneficial cooperation through the synergy of the government, academia, society, the business world, and the mass media to realize tourism development (Halibas et al., 2017). The penta helix model focuses on activities that arouse feelings and involve individuals or groups in an activity. This model is essential because social innovation development will not be successful without affecting the community to solve society's problems (Lindberg et al., 2015). In this case, the development of tourist destinations requires all society components, especially local communities' awareness (Yasir et al., 2019).

Therefore, the attitude of citizens towards tourism is an essential concern in tourism development because they are the ones who are directly affected by its development (Sinclair-Maragh, 2017). Local community-based tourism can develop individual economies, residents, and places where tourism has developed (Carr et al., 2016). Community-based sustainable tourism development is not only beneficial for economic growth, but it can also restore social harmony and integration, and preserve cultural heritage, eliminate social conflict and restore peace (Mohanty et al., 2019). At present, mass tourism can indeed harm the natural, social, and cultural environment, even though tourism contributes to economic growth for small businesses and people's lives (Khamdevi and Bott, 2018).

Related studies show a shift that mass-based tourism and large capital owners have been displaced by community-based tourism because it is more sustainable (Mtapuri and Giampiccoli, 2020). This CBT appears to fight against the existence of conventional tourism, which has generally controlled by big investors (Giampiccoli, 2020). This community-based tourism development model is an alternative to conventional or mass tourism. The existence of the CBT facilitates the redistribution of wealth, power and tourism resources. In essence, CBT is the best approach to sustainable tourism development in encouraging local communities to play an active role (Sumarmi et al., 2020).

Community-based research shows that several factors can influence people's perceptions and attitudes towards tourism (Chiappa et al., 2019). Tourism has both positive and negative impacts on local communities (Giampiccoli, 2020). Public attitudes and support for tourism can decrease if they negatively view tourism (Sinclair-Maragh, 2017). Various intrinsic and extrinsic factors can characterize the perspective of the community regarding tourism. Intrinsic factors refer to individual characteristics and aspects of the population, such as socio-demographic characteristics (for example, gender, education level, age, proximity to tourist areas, etc.). The intrinsic factor also refers to their economic dependence on tourism activities, beliefs and feelings generated by the tourism phenomenon. Meanwhile, extrinsic factors refer to a destination's characteristics, such as the tourism development stage, the tourist-guest ratio, the tourism season, and the types of tourists visiting the destination. According to the Tourism Area Life Cycle theory, these factors have considered because there is a relationship between population attitudes and the different phases of the tourism life cycle (i.e. exploration, engagement, development, consolidation, stagnation and decline).

At first, the residents may have a positive attitude towards visitors, but local people start to worry about the tourism phenomenon's impact as their numbers increase. As the number of tourists increases, the population will experience four main stages: euphoria, apathy, irritation and antagonism (Chiappa et al., 2019). In anticipating the problem, sustainable tourism development needs to consider communication that can sustainably foster local communities. Therefore, mentoring is required to identify which communities are active in tourism activities (Nagarjuna, 2015). Communication activities in marketing tourism destinations require effective communication through optimal management (Chamidah et al., 2020). Communication is a social process where individuals use symbols to create and interpret meaning in their environment (West and Turner, 2008). In this sense, social exchange theory argues that if residents believe that tourism development benefits outweigh the costs, they are more likely to support development programs. This community-based tourism has its challenges, constraints and limitations (Giampiccoli, 2020). Hence, it is important to utilize existing communication resources to overcome these obstacles and limitations. The development of an adequate tourism communication channel is significant. Social media such as Facebook, Instagram and YouTube have played an essential role in promoting the destination's image in audio and visual form (Nghiem-Phú and Bagul, 2020). Visual and auditory images presented on social media concerning destinations can influence the formation of cognitive and affective images and tourists' intentions.

MATERIALS AND METHODS

This research used a qualitative research methods using an interactive model design. This model consists of several components that influence and are influenced by each other, namely: goals, conceptual framework, methods, research questions and validity (Maxwell, 2014). This study aims to explain in depth the phenomena related to communication and coordination of tourism village assistance through data collection and to describe as broadly as possible. This research emphasizes on data depth rather than the quantity of data. The descriptive method creates a systematic, factual, and accurate descriptions of facts. Research with qualitative methods describes the reality that occurs by interacting directly with the subject under study (Hrycyk et al., 2020). This research was done in Koto Sentajo Village, Koto Sentajo Raya District, Kuantan Singingi Regency, Riau Province, Indonesia. The study has conducted for more than one year between August 2019 and November 2020. The research informants were the head of the Koto Sentajo village, the head of the Koto Sentajo sub-district, the head of the Kuantan Singingi tourism office, the manager of the Koto Sentajo Tourism Awareness Group (Pokdarwis), traditional leaders (*datuk*) and villagers. The data collected through discussion, interviews, observation, and documentation based on the focus of the problems studied related to communication forms carried out

during the tourism village assistance process by stakeholders. The focus of this study was collected, processed, analyzed and presented in a descriptive form. This research has directly involved community empowerment because it has the power in depth and detail in discussing situations, programs, events, people, interactions, and behaviours observed (Moleong, 2010). Following qualitative research rules, the researchers act as the main instrument or tool during this research. Therefore, the research process is flexible following the development of the study's situation and conditions.

RESULTS AND DISCUSSION

Village development is an effort to improve the quality of life and life for the village community's maximum welfare (Indonesian Government, 2014). This law also stipulates that the empowerment of rural communities is an effort to develop community independence and welfare by increasing knowledge, attitudes, skills, behaviour, abilities, awareness, and utilizing resources through the establishment of policies, programs, activities and assistance following the essence of problems and priority needed by the community. The development of the Koto Sentajo tourism village still lacks attention from the Kuantan Singingi local government. Therefore, through community service programs carried out by their lecturers, universities try to make social innovation. Social innovation in tourism development is significant than what technology-based innovation offers (Lindberg et al., 2015).

The Role of Higher Education in the development of the Tourism Village

Universities, governments and other stakeholders have an essential role in formulating and implementing sustainable tourism development by utilizing existing tourism resources (Muzapu and Sibanda, 2016). Coordinated communication between stakeholders is critical in disseminating knowledge and public awareness regarding local community-based sustainable tourism development (Yasir et al., 2019). In this case, Riau University, through its academics as a stakeholder, has established communication with the community to develop Koto Sentajo Tourism Village. Assistance activities through the university's assisted village program have started since 2018. The support and mentoring of this university can even arouse other stakeholders' awareness of developing tourism villages.

Universities in Indonesia have an essential role in developing, assisting and empowering communities through community service programs. The development of a tourism village is the responsibility of villagers and any related stakeholders, including universities and the local government, through related agencies (Suyanto et al., 2019). The role of academics is vital as a catalyst for science, innovation, and bridging society's interests universally (Chamidah, et al., 2020; Chamidah, et al., 2020). In this case, the central government, through the Indonesia Ministry of Tourism and Creative Industries and the Indonesia Ministry of Villages and Development of Underdeveloped Regions, has created programs in collaboration with some universities to develop several new tourism village projects. Koto Sentajo Village has been chosen by Riau University as a tourism village project because it has various traditions, local wisdoms and community's ability to preserve custom-based environment. The development of community-based sustainable tourism by relying on the beauty of environment culture and nature can maximize tourist satisfaction. It can maintain ecological balance and lead to a restoration of peace among residents (Mohanty et al., 2019).

Developing Koto Sentajo Village as a tourism village based on preserving cultural heritage is very appropriate because a good tourism development must maintain tradition by involving the local community (Ali, 2018; Giampiccoli, 2020; Khamdevi and Bott, 2018). Community-based tourism assistance model delivers community assistances in developing tourism villages, preserve cultural traditions and maintain local wisdom of the community who cares deeply about environmental sustainability. On the other hand, market-oriented development policies are fundamental in the tourism sector because it can increase the existing tourism market's capacity. Due to the nature of intense global market competition, tourist destinations must be developed through communication and more innovative ways so that tourists tend to like them because tourist demand is even more varied when compared to previous years (Genç and Genç, 2017).

Koto Sentajo village is one of the villages that become the capital of Sentajo Sub-district. Previously, this area was known as *Kenegerian Sentajo* which was led by traditional leaders called as *datuk*. It was an indigenous territory that has been existed long ago before Indonesian's independence. *Kenegerian Sentajo* includes a communal area consisting of five villages, namely Pulau Komang, Muaro Sentajo, Koto Sentajo, Kampung Baru Sentajo, and Pulau Kopung. Koto Sentajo is become the center of *Kenegerian Sentajo*, place of *rumah godang* and an old mosque namely *masjid usang raudhatul jannah*. People of Sentajo are strongly tied to this village because it is the place where their *ninik mamak* (older leaders) gathers in *rumah godang*, and also the place in where Sentajo's customs are centered and enforced. The customs in Sentajo region were being preserved time to time. One part of the traditional heritage is the legacy of the *rumah godang* (*godang* house) and the traditions of the Sentajo's daily life. They have rituals, such as herding buffalo and calling them home by using salt liquid, *menyintak* as traditional fishing method using bamboo and nets and only doing by women, farming rice fields, gardening palm and rubber trees, and implementing traditional ceremonies, such as *silek pandeka batuah* (a kind of traditional bare hand martial art), *maelo jalur* (a ritual of cutting down a big tree as raw material for making a traditional boat namely *jalur*), *pacu jalur* (a tradition of boat racing during the commemoration of Indonesian independence day, and *rayo kaduo* (a tradition of gathering and discussing any topics among *datuk*-s, *ninik mamak*-s and villagers at *rumah godang*).

Besides, there were also elements of ecology that support these cultural tourism potents, such as *Kenegerian Sentajo* protected forests, the *Batang Kuantan* (Kuantan river) banks, and the *Kuantan Putuih* lake. There were also traditional culinary delights, such as *rondang paku*, *sambal karambial*, *puluik tungkuhi*, and agarwood leaf tea. All of those elements could be combined as natural tourist attraction packages to attract a lot of visitors. Riau University Assisted Village Program aims to help the community in managing the village based on existing tourism potentials. This community service

activity helps indigenous villagers to create, develop and manage any tourism businesses based on their culture and natural environment. As a tourist destination, Koto Sentajo has to be supported by complementary facilities that need innovation, social capital, human capital and good leadership (Boes et al., 2016). The findings during this research showed that local government has lack of innovation to maintain these tourism resources. However, communication activities through mentoring by academics of Riau University helped them to learn how to explore and manage it well. In hence, the tourism strategy to increase the competitiveness of destinations must optimize economic performance by considering the lowest possible social and environmental impacts to create residents' welfare (Perles-Ribes et al., 2020).

This academic mentoring method was concerned to the activities of Tourism Awareness Groups (*Pokdarwis*), Village-Owned Enterprises (BUMDes), Farmer Groups, and other local stakeholders. It can accelerate the capability of villagers to be able to manage their own tourism resources independently. Village officials and these groups can be jointly responsible for designing and creating a tourist village based on the results and findings during the community service programs done by lecturer and students from Riau University. The orientation of CBT development and community culture is a new trend for tourists (Lundberg, 2017). It was belived to be able to preserve Koto Sentajo's culture, while it was being used as tourist attractions. Tradition and culture were proofing of the harmony and hospitality of the Sentajo villagers. Their local wisdom keeps the custom-forests in this village preserved. *Datuk*-s were the highest customary leaders as the persons to ask and discuss about any problems by nephews and grandchildren regarding routine matters and essential daily activities in *Kenegerian Sentajo*. This tradition is firmly entwined and maintained by the *godang house*'s existence as a place for Sentajo's people to gather, interact and communicate ech other. As the population increases, so does the number of houses. There were 27 *godang* houses and an old mosque as Islamic identity and heritage for Sentajo's peopla. Each unit *godang* house can accommodate around 125 - 150 people. These houses were accommodates four large ethnic groups members of *Peliangs*, *Caniagos*, *Melayus* and *Patopangs*, so as its tribal fractions such as *Peliang Lowe*, *Peliang Soni* and *Patopang Tanjung*. These tribal faction names did not mean that they had different *datuk* and ethnic customs. The existance of four *datuks* was for lead each ethnic group. And the fraction ethnic groups members have to follow their own *datuk*'s regulation. Thus, the name of ethnic group fractions were only to show to where was *rumah godang* they should gather and sit during ethnic groups gathering on *rayo kaduo*.



Figure 1. Old Mosque Masjid Usang Raudatul Janah (Source: Primary Data, 2020)



Figure 2. Patopang's Rumah Godang has been functioned as homestay (Source: Primary Data, 2020)

Koto Sentajo was legaized as a cultural heritage village according to the Decree of Kuantan Singingi Regent No 25 / Kpts / 11 / 2017. This decree stated the Koto Sentajo is registered as a tourist attraction. Even though the local government had designated them as a tourist village, they cannot develop it without any further discussion to the *datuks* and ethnic group members. Therefore, this mentoring program provides several ongoing pieces of training conducted by universities and aims to build tourist villages. Understanding and knowledge of local community groups' attitudes are crucial in sustainable tourism development to help the success of the creation of tourist destinations (Lundberg, 2017).

Higher education has a vital role in opening the community's insights and expertise in managing tourist villages through intensive communication. Communication through open dialogue is essential because it helps understand community communication to build further bonds (Lafever, 2011). Coaching has carried out by forming and fostering *Pokdarwis* to manage Sentajo tourism resources. They were trained and assisted to prepare the tourist village's completeness to handle tourist arrivals. Some of Riau University lecturers trained people to maintain cleanliness and implement the so-called "Sapta Pesona" program, namely Cleanliness, Health, Safety and Environment Sustainability (CHSE). The community has driven to identify their potential tourist attraction and how to adjust to the targeted tourist segmentation. It is vital to continuously monitor changes in the tourist interest market to adapt to most tourists' needs (Santos et al., 2016).

The training and mentoring such as homestay management, tour guide, promoting tourism villages, and forming a Tourism Awareness Group (*Pokdarwis*) have carried out directly by providing examples for several village youths. The form of communication carried out by assistants, lecturers, and students by giving examples is the right step to take advantage of existing media. This communication activity has made the community aware of the importance of promoting

the village through mass media and internet-based media. The information has developed professionally to attract tourists. Collaboration with a network of tourism activists makes Koto Sentajo Tourism Village news easy to spread via Instagram, Facebook, Twitter, and online news channels to be known to the broader community.

The tourism communication model must be carried out in an integrated manner to create an image of a tourist destination (Wang et al., 2009). Local communities, tourism village assistants and local governments become communicators in delivering messages related to the Koto Sentajo tourist village. Communication is vital to create tourist destinations, so activities must involve local communities by synergizing with other stakeholders (Yasir et al., 2019). In Koto Sentajo tourism village assistance, tourism communication channels have established using many communication channels, both interpersonal (person to person), groups, and organizations. Through assistance from the college, the communication activity then raises communication messages made in documentary films by conventional mass media such as television and feature news in printed media. This content is then uploaded to a private or institutional YouTube channel so that the image of Koto Sentajo Tourism Village spreads widely.

Penta helix Communication Model in Tourism Village Development

Communication plays an essential role in the development of a tourist village as a destination. Riau University has bridged communication with other stakeholders. Good collaboration between universities and stakeholders in this village based on an open attitude is essential for developing synergistic interactions between tourism stakeholders (Heslinga et al., 2017). Communication through partnerships is one of the most important things to establish a tourist village. Tourism communication does not merely inform tourism knowledge and messages on preserving culture and natural resources, but it becomes an integral part of developing sustainable communities, businesses and tourism products (Carr et al., 2016). Tourism and village development has many obstacles and limitations. Limited resources and networks in developing a tourism village have concerned in collaboration with various parties.

The tourism communication element by collaborating is the government, academics, private sector/business people, the community and the mass media to synergize or work together (Chamidah et al., 2020). This social innovation is known as the Penta helix model. Tourism communication elements must be able to play their respective roles. In this case, the government is the institution or communication actor most responsible for implementing the tourism village development policy. The government plays a vital role in policy planning, control, and evaluation and plays an essential role in promoting tourism villages (Putra, 2019). The local government bureaucracy of Kuantan Singingi Regency in developing the tourism village has not played a maximum role. The local government, from the bureaucratic side as the main actor in implementing public policies, has not yet fully developed Koto Sentajo Village's potential. The weak implementation of policies is also caused by the legislative function that is not maximal in carrying out legislation, budgeting and controlling related to regional tourism potential.

The local government plays an essential role in sustainably empowering communities. The principle of sustainability will influence rural tourism development's success, which can increase income for the village (Hairunisya et al., 2018). Community development, especially among young people, boosts the community's economic improvement and needs to be developed. Tourism village development must establish corporate CSR, mass media, and local communities for its sustainability. Sustainable government communication and coordination with other stakeholders can overcome the obstacles faced and even help accelerate the national tourism development program's success and improve rural communities' welfare. The next communication actor is higher education. The local community relies on higher education and academics to provide community service and expertise from conducting research and education activities. Higher education plays a role in generating innovation to form a science and knowledge-based society.

Related to this, five fundamental factors facilitate successful creation and its application to the university's social agenda, namely: institutional strategic policy commitment to social innovation; inclusive and institutionalized processes for advancing social innovation; community engagement approach; obligation to apply to license or use free of charge and open for research and innovation transfer processes; mobilization of internal and external resources to support social innovation (Halibas et al., 2017). Universities and academics with the knowledge, innovative skills, active and entrepreneurial innovation are the principal capital in creating smart tourist destinations (Boes et al., 2016). In disseminating information or applying technology, universities must collaborate and partner with other elements: government, community, business, and the mass media.

The involvement of higher education is vital for the progress of the Koto Sentajo tourist village. Lecturers and students' ability to fuse and involve themselves in the community in developing a tourist village is crucial to stimulate young residents to be involved in village development (Sinclair-Maragh, 2017). Tourism development planning should focus on young groups because the internet and social media are

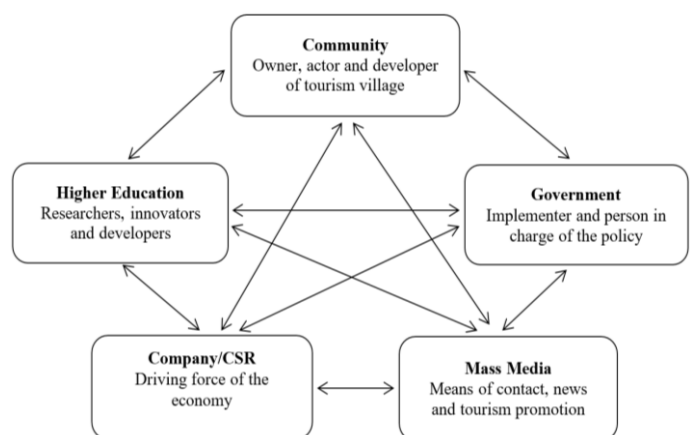


Figure 3. Penta helix Tourism Communication Model in the Development of Koto Sentajo Tourism Village (Source: Analysis of Research Data, 2020)

mostly young people. Their creativity is essential in creating innovative tourism village products such as culinary delights, destination promotion, and the creation of other tourist attraction events. The segmentation of young millennial groups is targeted compared to older ones because they are more familiar with digital technologies looking for new and authentic experiences (Santos et al., 2016). As one of the penta helix elements, business institutions have played an essential role in driving the regional economy directly or indirectly. In Koto Sentajo Tourism Village, the role of companies such as through CSR is still lacking. Companies can use village tourism that already has the right image to enhance its appearance. The CSR program can be developed by establishing good cooperation with other stakeholders, such as creating cultural tourism objects as the main product. Koto Sentajo Village can also collaborate with travel companies, vehicle rentals, tourist business owners, hotels or inns, and other culinary businesses.

Companies, through CSR can get the right image with community empowerment activities because the village already has the right image in the minds of the community. Even CSR activities significantly affect companies' customer loyalty and reputation, such as hotels and travel agents (Hassan et al., 2021). The next actor is the local community. The village community plays a vital role in developing a tourist village because the community represents the products or characteristics of a tourist village (Chamidah, et al., 2020). As the owner of customary rights, the local community can be assisted by other communities such as the Generasi Pesona Indonesia (Genpi) Kuantan Singingi Regency, tourism activists, social media activists, and groups interests or hobbies related to tourism development. Community groups, such as Pokdarwis, are among the main stakeholders in developing and implementing tourism villages (Putra, 2019). The CBT concept explains the vital role of the community in tourism development. As the main development actor, the Koto Sentajo people have traditions and customs to become a means of preserving and maintaining cultural traditions and identity as spiritual aspects, sources of economic life and development of tourist villages. In other words, the development of community-based tourism villages can preserve the environment, social systems and community cultural values.

Mass media is the next important element or actor in tourism development. Mass media is not only a means of disseminating information, socializing and communicating policies, but mass media can be a significant player in the development of a tourist village. Conventional mass media, such as newspapers, radio or television, have been replaced by internet-based media. New media or social media such as Facebook, Instagram, Twitter, YouTube, and others can integrate the existing media's overall characteristics. Social interactions nowadays are straightforward and fast without being hindered by distance and time. Social media currently plays an essential role in marketing tourist destinations (Kakirala and Singh, 2020). Social media's ability to disseminate information on the Koto Sentajo tourist village without being limited by the dimensions of space and time has utilized the development of the Koto Sentajo tourist village, mostly through word of mouth. Information through word of mouth is essential because it can create an image and tourist destinations to increase competitiveness in a competitive market (Fan et al., 2018).

The government and village officials can directly promote the Koto Sentajo tourist attraction through social media. The emergence of accounts both officially managed by the government, community, and individuals has featured and recommended Koto Sentajo village as a tourist destination worth visiting. Social media has a significant influence in helping market products and developing small and medium business innovations (Basri and Siam, 2019).

Table 1. The Role of a Penta Helix Communication Actors (Source: Analysis of Research Data, 2020)

University	Company/CSR	Government	Society	Media
Carrying out research, creating innovations, and developing tourist villages.	Synergize incorporate and village promotion programs	Represented by the head of the village and the Department of Culture and Tourism manages community activities and bureaucratic	Mapping and developing the potential attractions or products of cultural and ecotourism tourism	Inform the tourism potential of the village found and able to be developed
To organizes a variety of education and training for human resources as tourism businesses.	To provide funds or needs in the development of tourism.	Mapping tourism potential, preparing regulations, and allocating funds for tourist villages	As a service user and business actor who contributes to the implementation and development of tourism	Introducing an impressive local cultural heritage to visit and preserve
Collaborating with central and local governments to prepare supporting facilities and infrastructure	Collaborating with government, higher education and society to provide access and amenities	Fostering and training communities, building infrastructure for community economic development and tourism villages	Strengthening Pokdarwis and building relationships with other communities such as Genpi, community activists, etc.	Synergize with stakeholders to promote the development of regional tourism potential
Preparing graduates who are ready to work	Help set up community access	Developing, marketing products and communicating tourist destinations	Develop and market the products of village tourism	Developing a news model that cares about tourism

Through this Pantehelix model of tourism communication, all driving actors: universities, government, society, private companies, and mass media, must explore tourism potential, developing and maintaining cultural values. Communities such as the Genpi in Kuantan Singingi Regency and other tourism activists have a role in developing ideas and creativity, even promoting or providing input to the tourism village developer stakeholders. Each element of this Pantehelix model of tourism communication must carry out its role correctly to develop the tourist destination. Problems often faced in tourism development are weak coordination among stakeholders, low community participation, lack of funds, low awareness, and

poor tourism marketing strategies (Eyassu et al., 2019). In this case, the local government is responsible for implementing tourism development policies in the regions as the leading agent. Therefore, regional governments must build exemplary communication and collaborate with other elements, namely: academics, companies, society and mass media as an inseparable unit because their existence is complementary to one another. In developing tourist villages, the central government, local governments, universities, tourism activists, the mass media, and the community have carried out tourism communication. The government, as the main element of penta helix is expected to be a pioneer capable of embracing all other penta helix aspects to work together collaboratively (Chamidah, et al., 2020). Various communication channels and media have utilized, but social media plays an essential role in spreading messages and shaping Koto Sentajo Village's image as a tourist village. Koto Sentajo, as a tourist village, is currently famous on social media as a cultural heritage tourism village in Riau Province and attaching an image as a traditional village that is still original and sustainable. Today, social media such as Facebook, Instagram and YouTube have established their essential role in promoting the destination's image in the text, audio and visual forms (Nghiem-Phú and Bagul, 2020).

The communication process supporting the development of the Koto Sentajo tourist village still does not involve intensive cooperation between the five existing elements. The development of sustainable tourist destinations requires technological and institutional innovations (Van Wijk et al., 2015). The government and universities must be creative to involve their cooperation with corporate CSR to accelerate village tourism facilities or infrastructure. Also, the communication carried out by the local government is still limited to carrying out routine ceremonial tasks, even though the tertiary institution, through the mentoring program, has tried to foster the Koto Sentajo community in developing a tourist village. This activity is assisted in collaboration with the Ministry of Tourism and Creative Economy to nurture and train tourism village management, namely lecturers, students and tourism village managers. Concerning this tourism village development activity, the local government should have budgeted funds, added staff, proposed regular training and guidance programs for Pokdarwis, BUMDes, and farmer groups. This local government support is essential in accelerating tourist villages' development and controlling tourism village development sustainability.

Local governments are crucial stakeholders in tourism development (Heslinga et al., 2017). Through this local government activity, the village government of Koto Sentajo can manage well to make it a pilot tourism village, not only in Kuantan Singingi Regency but also in Riau Province. Higher education certainly does not always accompany the development of this tourism village. Local government policies must support the sustainability of implementing and evaluating tourism village development activities sustainably. This sustainable development is vital to achieving the desired goal: to become a developed and independent tourism village. This development activity requires creativity and innovation, not only for the local government but also for the community. In essence, the development of tourism in the development of community culture and infrastructure. Tourist destinations equipped with complete facilities can be a vital component in the management and marketing of tourist destinations (Boes et al., 2016). In developing on the heritage tourism village with the penta helix model, it needs to build stakeholder synergy with other supporting elements, such as substantial cooperation among academics, communities, government, business people and the media. There are five elements called penta helix (Lagarense et al., 2018). In the implementation, all parties work together and cannot walk alone and development based on digital innovation. Cooperation and collaboration are crucial in building a tourist village, especially in creating added value to the community's economy, strengthening social ties and increasing environmental awareness (Boes et al., 2016). Cooperation and collaboration are mandated by Law number 10 of 2009 concerning Tourism. Article 4 states that the goal of tourism is to increase economic growth; improve people's welfare; eradicating poverty; overcoming unemployment; conserving nature, environment and resources; promoting culture; lifting the image of the nation; cultivating a love of the country; strengthening national identity and unity, and strengthening friendship between nations. Therefore, it is imperative to develop a tourism village to support national tourism, which should be carried out with the principle of empowering local communities according to the mandate of the law.

CONCLUSION

Higher education has a significant role in empowering the community to develop a tourism village's potential. Academicians carrying out community service and innovation through research and education to grow an independent society. Lecturers and students involved themselves in indigenous people daily life and provoked other stakeholders to create Koto Sentajo Village Tourist hand in hand. Tourism communication for Koto Sentajo tourism village development involved many stakeholders known as the Pantehelix tourism communication model. This model involves five main actors driving tourism: universities, government, society, companies or CSR, and the mass media.

Each of these Pantehelix model tourism communication actors must carry out their roles properly to develop tourist destinations well. In this case, tourism development programs were still lack of coordination among stakeholders, low community participation, lack of funding allocation, low awareness, and inadequate tourism management and also marketing strategies. Communication activities carried out by local governments are still limited to carrying out routine ceremonial tasks. As a result, the communication process supporting the development of the Koto Sentajo tourism village in Kuantan Singingi Regency still does not involve intensive cooperation. Communication implementation was weak due to the low level of continuous coordination among penta helix stakeholders and digital innovation performance in all development programs. The local government was the main element who was responsible for this tourism programs. They were expected to be able to build exemplary communication and collaborate with other actors, including academics, companies, society, and the mass media as an inseparable units. Their existence was complementary to one another. Thus, the collaborations among them have to based on understanding, openness,

common goals, and empathy that can build strong bonds among stakeholders. Besides, the development of sustainable tourist destinations requires social, technological and institutional innovation. The local government should have budgeted funds, added staff, and made routine training programs for Pokdarwis, BUMDes and farmer groups.

This official supports were significant in accelerating tourist villages' development and controlling its sustainability. Hereinafter, lecturers and university should continually synergize in doing village assistance program hand in hand to corporate CSR activities, the mass media, and local communities. It has been expected to carry out a fair problem solvings for both tourism development and conserve the community engagement in form of cultural-based tourism villages. In addition, this research should be developed using an ethnographic communication approach to gain understanding to support the right policies in the field of culture-based tourism. An impact study on the development of tourism village development also needs to be carried out for better management of development of cultural-based tourism village.

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REFERENCES

- Ali, A. (2018). Travel and tourism: Growth potentials and contribution to the GDP of Saudi Arabia. *Problems and Perspectives in Management*, 16(1), 417–427. [https://doi.org/10.21511/ppm.16\(1\).2018.39](https://doi.org/10.21511/ppm.16(1).2018.39)
- Bahri, B., & Prasetyo, W. (2020). Pengentasan kemiskinan melalui pemberdayaan wirausaha dan program life skill untuk meningkatkan produktivitas kelompok UPPKS Kalipakem Baru (Poverty alleviation through entrepreneurial empowerment and life skill programs to increase the productivity of th. *Riau Journal of Empowerment*, 3(1), 27–37. <https://doi.org/10.31258/raje.3.1.27-37>
- Basri, W.S.M., & Siam, M.R.A. (2019). Social media and corporate communication antecedents of SME sustainability performance. *Journal of Economic and Administrative Sciences*. <https://doi.org/10.1108/jeas-01-2018-0011>
- Boes, K., Buhalis, D., & Inversini, A. (2016). Smart tourism destinations: ecosystems for tourism destination competitiveness. *International Journal of Tourism Cities*, 2(2), 108–124. <https://doi.org/10.1108/IJTC-12-2015-0032>
- Carr, A., Ruhanen, L., & Whitford, M. (2016). Indigenous peoples and tourism: the challenges and opportunities for sustainable tourism. *Journal of Sustainable Tourism*, 24(8–9), 1067–1079. <https://doi.org/10.1080/09669582.2016.1206112>
- Chamidah, N., Guntoro, B., & Sulastri, E. (2020). Marketing communication and synergy of pentahelix strategy on satisfaction and sustainable tourism. *Journal of Asian Finance, Economics and Business*, 7(3), 177–190. <https://doi.org/10.13106/jafeb.2020.vol7.no3.177>
- Chamidah, N., Putra, A.H.P.K., Mansur, D.M., & Guntoro, B. (2020). Penta helix Element Synergy as an Effort to Develop Tourism Villages in Indonesia. *Jurnal Manajemen Bisnis*, 8(1), 01–22. <https://doi.org/10.33096/jmb.v8i1.625>
- Chiappa, G. Del, Atzeni, M., Pung, J.M., & Risitano, M. (2019). Residents' views on cruise tourism in naples profiles and insights from a mediterranean home-port destination. *European Journal of Tourism Research*, 23, 71–85.
- Do, Y., Kim, S.B., Kim, J.Y., & Joo, G.J. (2015). Wetland-based tourism in South Korea: who, when, and why. *Wetlands Ecology and Management*, 23(4), 779–787. <https://doi.org/10.1007/s11273-015-9418-2>
- Eyassu, A.W., Chekole, Y.A., & Tadesse, G.T. (2019). Tourism development potentials and challenges in Shonke Village, Ethiopia. *African Journal of Hospitality, Tourism and Leisure*, 8(5), 1–16.
- Fan, S., Chen, Y., Su, X., & Cheng, Q. (2018). A study of effects of ecotourism environment image and word of mouth on tourism intention. *Ekoloji*, 27(106), 599–604.
- Garcias, J.R. (2012). Community strategy for mangrove forest conservation: Conquista Campesina conservation easement. *Field Actions Science Report*, 7(SPL), 0–14.
- Genç, R., & Genç, E.A. (2017). Market-oriented innovations in tourism. *Research in Hospitality Management*, 7(1), 51–57. <https://doi.org/10.1080/22243534.2017.1355606>
- Giampiccoli, A. (2020). A conceptual justification and a strategy to advance community-based tourism development. *European Journal of Tourism Research*, 25(2020), 1–19.
- Gumede, T.K. (2019). Heritage tourism as a strategy for the local economic development in KwaZulu-Natal, South Africa. *African Journal of Hospitality, Tourism and Leisure*, 8(3), 1–15.
- Hairunisya, N., Angraieini, D., & Sri, M.A. (2018). Pemberdayaan di Sektor Pariwisata Sebagai Upaya Meningkatkan Perekonomian Masyarakat (Empowerment in the Tourism Sector as an Effort to Improve the Community's Economy). *Jurnal Pengabdian Kepada Masyarakat*, 1(2), 13–18.
- Halibas, A.S., Ocier Sibayan, R., & Lyn Maata, R. (2017). The Penta Helix Model of Innovation in Oman: An HEI Perspective. *Interdisciplinary Journal of Information, Knowledge, and Management*, 12 May, 159–174. <https://doi.org/10.28945/3735>
- Hassan, T.H., Shehata, H.S., El-Dief, M., & Salem, A.E. (2021). The social responsibility of tourism and hotel establishments and their role in sustainable tourism development in Al-Ahsa, Saudi Arabia. *Geojournal of Tourism and Geosites*, 33(4), 1564–1570. <https://doi.org/10.30892/gtg.334spl18-609>
- Heslinga, J., Groote, P., & Vanclay, F. (2017). Strengthening governance processes to improve benefit-sharing from tourism in protected areas by using stakeholder analysis. *Journal of Sustainable Tourism*, 9582(December), 1–15. <https://doi.org/10.1080/09669582.2017.1408635>
- Hrycyk, H.C.P. de M., Gomes, B.M.A., & Nitsche, L.B. (2020). Voluntary Tourism in Rural Space in Curitiba, Parana Brazil. *Enlightening Tourism. A Pathmaking Journal*, 10(1), 58–77.
- Istiyanto, S.B. (2011). Komunikasi Pemerintah Daerah dalam Program Pembangunan Daerah Wisata Pantai Pascabencana (Regional Government Communication in Post-Disaster Coastal Tourism Area Development Program). *Jurnal Ilmu Komunikasi*, 9(1), 16–27.
- Kakirala, A.K., & Singh, D.P. (2020). The Mediating Role of Social Media in Tourism: An eWOM Approach. *Journal of Asian Finance, Economics and Business*, 7(11), 381–391. <https://doi.org/10.13106/jafeb.2020.vol7.no11.381>
- Khamdevi, M., & Bott, H. (2018). Rethinking tourism: Bali's failure. *IOP Conference Series: Earth and Environmental Science*, 126(1). <https://doi.org/10.1088/1755-1315/126/1/012171>

- Lafever, M. (2011). Empowering native Americans: Communication, planning, and dialogue for eco-tourism in Gallup, New Mexico. *Journal of International and Intercultural Communication*, 4(2), 127–145. <https://doi.org/10.1080/17513057.2011.556829>
- Lagarense, B.E.S., Hidayah, T., & Abdillah, F. (2018). Digital Technology and Pentahelix Role Model for Sport Tourism Event of IVCA 2018 in Bali. *Proceedings - 2018 International Conference on Applied Science and Technology, ICAST 2018*, 263–270. <https://doi.org/10.1109/iCAST1.2018.8751618>
- Lindberg, M., Ericson, Å., Gelter, J., & Karlberg, H. (2015). Social change through place innovation. *Swedish Design Research Journal*, 13 February 2017, 9–13. <https://doi.org/10.3384/svid.2000-964x.1519>
- Lundberg, E. (2017). The importance of tourism impacts for different local resident groups: A case study of a Swedish seaside destination. *Journal of Destination Marketing and Management*, 6(1), 46–55. <https://doi.org/10.1016/j.jdmm.2016.02.002>
- Martínez, R.M., Galván, M.O., & Lafuente, A.M.G. (2014). Public Policies and Tourism Marketing. An Analysis of the Competitiveness on Tourism in Morelia, Mexico and Alcala de Henares, Spain. *Procedia - Social and Behavioral Sciences*, 148, 146–152. <https://doi.org/10.1016/j.sbspro.2014.07.028>
- Maxwell, J. (2014). Designing a Qualitative Study. In *The SAGE Handbook of Applied Social Research Methods* (Issue January 2008, 214–253. <https://doi.org/10.4135/9781483348858.n7>
- Mohanty, P.P., Rout, H.B., & Samal, A. (2019). Community based sustainable tourism development - A tool for fostering and promoting peace: A case study of Odisha, India. *African Journal of Hospitality, Tourism and Leisure*, 8(1), 1–15.
- Moleong, L.J. (2010). *Metode Penelitian Kualitatif*. Remaja Rosdakarya.
- Mtapuri, O., & Giampiccoli, A. (2020). Beyond rural contexts: Community-based tourism in urban areas. *Advances in Hospitality and Tourism Research (AHTR)*, 9100, 419–439. <https://doi.org/10.30519/ahtr.690184>
- Muzapu, R., & Sibanda, M. (2016). Tourism Development Strategies in Zimbabwe. *Management*, 6(3), 55–63. <https://doi.org/10.1109/CICN.2014.251>
- Nagarjuna. (2015). Local Community Involvement in Tourism: A Content Analysis of Websites of Wildlife Resorts. *Atna - Journal of Tourism Studies*, 10(1), 13–21. <https://doi.org/10.12727/ajts.13.2>
- Nghiêm-Phú, B., & Bagul, A.H.B.P. (2020). An extended model of destination image formation: The inclusion of sensory images. *European Journal of Tourism Research*, 24(2020), 1–10.
- Noor, M.F., & Nala, I.W.L. (2020). *Pariwisata dan Pelestarian Ekosistem Sungai; Desa Pela dalam Upaya Konservasi dan Peningkatan Ekonomi Masyarakat (Tourism and River Ecosystem Conservation; Pela Village in Conservation Efforts and Community Economic Improvement)*. Literasi Nusantara.
- Perles-Ribes, J.F., Ramón-Rodríguez, A.B., Moreno-Izquierdo, L., & Such-Devesa, M.J. (2020). Tourism competitiveness and the well-being of residents: A debate on registered and non-registered accommodation establishments. *European Journal of Tourism Research*, 24, 1–16.
- Pung, J.M., & Chiappa, G.D. (2020). An exploratory and qualitative study on the meaning of transformative tourism and its facilitators and inhibitors. *European Journal of Tourism Research*, 24(2020), 1–21.
- Putra, T. (2019). A Review on Penta Helix Actors in Village Tourism Development and Management. *Journal of Business on Hospitality and Tourism*, 5(1), 63. <https://doi.org/10.22334/jbhost.v5i1.150>
- Ridlwani, M.A., Muchsin, S., & Hayat, H. (2017). Model Pengembangan Ekowisata dalam Upaya Pemberdayaan Masyarakat Lokal. *Politik Indonesia: Indonesian Political Science Review*, 2(2), 141. <https://doi.org/10.15294/jpi.v2i2.9933>
- Santos, M.C., Veiga, C., & Águas, P. (2016). Tourism services: facing the challenge of new tourist profiles. *Worldwide Hospitality and Tourism Themes*, 8(6), 654–669. <https://doi.org/10.1108/WHATT-09-2016-0048>
- Sinclair-Maragh, G. (2017). Demographic analysis of residents' support for tourism development in Jamaica. *Journal of Destination Marketing and Management*, 6(1), 5–12. <https://doi.org/10.1016/j.jdmm.2016.03.005>
- Strydom, A.J., Mangope, D., & Henama, U.S. (2019). Making community-based tourism sustainable: Evidence from the Free State province, South Africa. *GeoJournal of Tourism and Geosites*, 24(1), 7–18. <https://doi.org/10.30892/gtg.24101-338>
- Sumarmi, Kurniawati, E., & Aliman, M. (2020). Community based tourism (cbt) to establish blue economy and improve public welfare for fishing tourism development in klatak beach, tulungagung, indonesia. *GeoJournal of Tourism and Geosites*, 31(3), 979–986. <https://doi.org/10.30892/gtg.31307-530>
- Suyanto, E., Lestari, S., Wardiyono, F., Wuryaningsih, T., & Widyastuti, T.R. (2019). *Community Participation Model in Formulating Cross-Potential Mangrove Ecotourism Policies Supporting Kampung Laut Sustainable Tourism Village*. 13(8), 1–9. <https://doi.org/10.9790/2402-1308010109>
- Tripathi, G., & Munjal, S. (2014). Heritage communication and sustainable tourism. *Managing Sustainability in the Hospitality and Tourism Industry: Paradigms and Directions for the Future*, 273–302. <https://doi.org/10.1201/b16789>
- Van Wijk, J., Van der Duim, R., Lamers, M., & Sumba, D. (2015). The emergence of institutional innovations in tourism: the evolution of the African Wildlife Foundation's tourism conservation enterprises. *Journal of Sustainable Tourism*, 23(1), 104–125. <https://doi.org/10.1080/09669582.2014.927878>
- Wang, Y.J., Wu, C., & Yuan, J. (2009). The role of integrated marketing communications (IMC) on heritage destination visitations. *Journal of Quality Assurance in Hospitality and Tourism*, 10(3), 218–231. <https://doi.org/10.1080/15280080902988048>
- West, R., & Turner, L.H. (2008). *Pengantar Teori Komunikasi; Analisis dan Aplikasi*. Salemba Humanika.
- Yasir, Nurjanah, Salam, N.E., & Yohana, N. (2019). Kebijakan komunikasi dalam membangun destinasi dan masyarakat sadar wisata di kabupaten bengkalis (Communication policies in building destinations and tourism-aware communities in Bengkalis district). *Jurnal Studi Komunikasi (Indonesian Journal of Communications Studies)*, 3(November), 424–443. <https://doi.org/10.25139/jsk.3i3.1548>
- *** Indonesian Government. (2014). *Undang-Undang Nomor 6 Tahun 2014 Tentang Desa (Law Number 6 of 2014 concerning Villages)*. Jakarta, Indonesia.
- *** Indonesian Government. (2009). *Undang-Undang Nomor 10 Tahun 2009 Tentang Kepariwisata (Law Number 10 of 2009 concerning Tourism)*.

EXPLORING THE RELATIONSHIPS BETWEEN SATISFACTION, PLACE ATTACHMENT AND LOYALTY IN NIGERIAN ZOOS

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Abstract: Surveys exploring satisfaction, place attachment and loyalty in a zoo context are scarce despite the prevalence of such studies vis a vis other tourism destinations, and their valued importance in understanding travel behaviour and contributions to destinations' success. This study explores the relationships between visitors' satisfaction, place attachment (place identity, place dependence, place affect and place social bonding) and loyalty in one of Nigeria's prominent zoos. This study adopted a quantitative research approach, with data obtained from a sample of 395 visitors through a structured questionnaire. Using structural equation modeling, we found that the most important causal factor of loyalty is satisfaction, either directly or indirectly through some dimensions of place attachment. In addition, it was revealed that place social bonding can act as either a predictor or an outcome of visitors' satisfaction. Satisfaction was found to be a significant and positive mediator between place attachment (place identity and place social bonding) while place attachment was found not to mediate the relationship between satisfaction and loyalty. The findings were discussed and practical applications were drawn, particularly aimed at optimizing and providing satisfying experiences which enhances place attachment as well as loyalty.

Key words: Loyalty, place attachment, satisfaction, travel behaviour, zoo

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INTRODUCTION

Optimizing place attachment, satisfaction and loyalty has become a crucial objective of any tourism destination, and is vital in destination marketing. These behavioural constructs are key to understanding the psychology of visitors' behaviour, and ultimately ensuring the success of a destination. Visiting zoos has remained a popular nature-based tourism activity (WAZA, 2005; Ajayi, 2015; Ajayi and Tichaawa, 2020) that is geared towards the experience of seeing wild animals at close ranges. The goals of zoo keeping have evolved from exclusively serving an amusement and entertainment purpose to accommodating education, recreation, conservation and research purposes (Patrick et al., 2007; Stephanie, 2013). As a result, visitor types have also evolved in order to accommodate individuals who are inclined towards learning, participating in conservation activities, and enjoying outdoor recreation in a sustainable manner. This consequently provides a new dimension to zoo management and marketing practices and introduces a need to ensure visitors' satisfaction, and ultimately place attachment and loyalty. These visitors can only be retained if their needs are met and if their positive experiences are relayed to others (Kotler et al., 2010). Stedman (2002) defined visitor satisfaction as a multifaceted evaluation of a place's felt worth, the level of satisfaction determined by the perception of the physical and social characteristics of an area. When a visitor's experience leads to feelings of fulfilment, the visitor is thus satisfied; when a visitor is displeased with his/her experience, it leads to dissatisfaction (Chen and Chen, 2010). Place attachment in tourism denotes the emotional ties a visitor shares with a tourism destination. This brings about the sense of actually being and feeling 'in place' or 'at home' (Yuksel et al., 2010) - a feeling of conviction and safety (Tsai, 2012). Place attachment has four sub-constructs (Rolero and De Piccoli, 2010; Scannell and Gifford, 2010) namely place dependence (attachment to the functional attributes of place), place identity (attachment to place that affirms and enables one's identity), place social bonding (ties to places that encourages social bonding) and place affect (the love for the essence of a place). A common measure of loyalty in this context is the intention for repeat visits by tourists and the likelihood that a travel destination will be recommended to other people (Yoon and Uysal, 2005; Neuts et al., 2013).

Visitors' satisfaction, place attachment and loyalty have been researched extensively as individual variables and have also been assessed in relation to other constructs such as attitudes, perception, image, motivation, emotional solidarity and destination attractiveness. Linkages have often been established between two of the variables such as place attachment and satisfaction (Yuksel et al., 2010; Lee et al., 2012; Prayag and Ryan, 2012; Ramkissoon et al., 2014), place attachment and loyalty (Alshemeili, 2014), and satisfaction and loyalty (Oom et al., 2006; Valle et al., 2006; Hui et al., 2007; Neuts et al., 2013).

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Fewer researches have focused on the interconnectedness of all three variables. Two studies which have, for example, considered all three variables are Yuksel et al. (2010) and Lee et al. (2012) which, using place attachment as a mediating variable, examined these three constructs in a holiday destination and in festival hosting destinations respectively and in so doing, they both established positive associations. The external validity of these findings and applicability to other destination types however has been questioned. In addition, two dimensions of place attachment (place identity and place dependence) were analysed as compared to the four sub-constructs that make up place attachment. Place social bonding and place affect are generally under-researched in place attachment studies (Ramkissoon et al., 2012) while most emphasis has been attributed to place identity and place dependence (Kyle et al., 2004). Using the setting of a zoological garden, for which there exists a dearth of research, this study is focused on determining the extent to which visitors' satisfaction contributes to place attachment (using the four sub-constructs) and vice versa while loyalty serves as the overall outcome variable.

LITERATURE REVIEW

Visitors' satisfaction

Visitors' satisfaction, as defined by Thaiothampitak and Weerakit (2014), are visitors after-the-act evaluations of the overall service experience. Oliver (1997: 13) defined satisfaction as "a judgment that a product, or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfilment". Stedman (2002) provides an additional summary of visitor satisfaction as a multifaceted evaluation of a place's felt worth, the level of satisfaction determined by the perception of the physical and social characteristics of an area. When a visitor's experience leads to feelings of fulfilment, then the visitor is satisfied; when they are displeased with their experience, it leads to dissatisfaction (Chen and Chen, 2010). The success of a tourism destination is validated based on the ability to create and sustain visitors' satisfaction (Bosque and Martin, 2008). In tourism literature, there are various approaches to examining satisfaction. One is the expectancy-disconfirmation approach which is a very widespread paradigm (see Yuksel and Yuksel, 2007; Millán and Esteban, 2002) which evaluates satisfaction through a comparative analysis of customers' expectations of a product and service prior to and after consumption (Oliver, 1980). There exists a midpoint referred to as confirmation where the product or service meets expectations. This midpoint is strengthened by disconfirmation where the good or service is evaluated as either beyond (positive disconfirmation) or below expectation (negative disconfirmation).

Another dimension is the perceived actual performance of a good or service (Tse and Wilton, 1998) which is considered an important tool when measuring satisfaction, especially when the customer has little or no prior knowledge of the experience to form prior-expectations, which is usually the case for tourism products (Yoon and Uysal, 2005). The study of Lee and Beeler (2007) provides empirical evidence that projects the performance measure to be stronger than the expectation-disconfirmation approach. Research (see Ajayi, 2019; Kozak, 2001; Yu and Goulden, 2006) has also evolved to include the assessment of the individual performances of tangible and intangible elements of a destination via the satisfaction of the customers with the elements. The performance-only approach has also been used in assessing the overall visitors' satisfaction with a destination. This connotes the sum of the feelings that visitors have about their tourism experience (Tian-Cole et al., 2002) and can be seen in studies of Ajayi (2019), Kozak (2001), Qu and Ping (1999), and Yu and Goulden (2006). This study employs the perceived actual performance approach.

Satisfaction has been largely examined as an outcome linked to service quality, expectation, perceptions, motivations (Mellina and Aballe, 2013; Thaiothampitak and Weerakit, 2014; Alarape et al., 2015; Philemon, 2015) and as a determinant of loyalty (Bigne et al., 2005; Lee et al., 2011; Ajayi, 2019). It is common thinking that the satisfaction of visitors is a viable determinant of two key aspects: their future intentions, such as with their consumption of tourism products and choice of destination (Lee et al., 2012); and of their societal and political support (Tonge et al., 2011). Most significantly, a satisfying experience usually leads to loyalty, and in a few studies, it has been assessed as a predictor of behavioural constructs such as place attachment (Ramkissoon et al., 2012; Sivalioğlu and Berköz, 2012).

Place Attachment

First used within the discourse of geography, place attachment connotes the affinity people have for their socio-temporal spaces like the home, communities and societies. This construct was then later studied in environmental psychology, architecture and has over time been adapted to recreation studies, and applied most especially to outdoor events like hiking (Kyle et al., 2003) and rafting (Bricker and Kerstetter, 2000). The scope of the term has increased to accommodate adults' social interactions, other social settings and places (Morgan, 2010; Wiles et al., 2009), and in this case, tourism destinations. Place attachment is multifaceted and is comprised of four sub-constructs, namely place dependence, place identity, place affect and place social bonding. In tourism studies, the first two are the most prominent and sometimes projected as the most important dimensions. This study explores all four of the dimensions of place attachment. Place dependence refers to the functional ties to a place's physical and unique attributes, which contributes to the visitation goal of the visitors (Scannell and Gifford 2010). Yuksel et al. (2010) suggested that people usually assess places against available alternatives in response to the satisfaction of a need. In a zoo setting, the physical attributes could include the diversity of animals, the presence of mega-vertebrates, visitors centre, tour guides, landscape, etc. Place affect is one of the most under-researched components of place attachment. Place affect describes the affective feeling an individual develops with a place (Rolero and De Piccoli, 2010) which brings about a sense of psychological well-being for the individual (Brown et al., 2003) and generates sentiments about the place (Kyle et al., 2004). Places that provide recreational experiences to people (such as zoos) aids the psychological well being of the visitors, and as such, possibly increases positive feelings and ties with such places (Hinds and Sparks, 2008).

Place identity occurs when an individual connects their values to that which is projected by a place. Budruk et al. (2009) defined it as the connection between an individual's personal identity and a place - the place enables the person to both affirm and express their identity. For example, zoos that are actively involved in education and conservation practices, may attract and retain conservation-minded visitors. Visitors who demonstrate great place identity typically exhibit place protective behaviours (Stedman, 2002). Place social bonding, another under-researched construct in tourism studies, refers to the ties that an individual develops with places that encourage and foster interpersonal and group engagements (Hammit et al., 2006; Scannell and Gifford, 2010). The social bonding opportunities that such places provide is equally if not more valuable than their physical characteristics (Cooper-Marcus, 1992) and can thus serve as a key attraction factor for such areas (Kyle et al., 2004). This is the case with zoos since they offer avenues for social gatherings and interactions - it has often been observed that visitors to zoos generally come in tour groups, as families (parents with children), as a group of friends etc (Ajayi, 2019). In literature, place attachment has been treated as an outcome in itself which is predicted by other constructs such as images, attitudes and motivation (Lime and Costen, 2011; Gross and Brown, 2008; Ajayi, 2019); a predictor of other outcomes such as satisfaction and responsible behaviour (Ramkissoon et al., 2012; Cheng et al., 2013; Ramkissoon et al., 2014; Woosnam et al., 2016) and as a mediator between variables such as attitudes, expectations, image, destination attractiveness, satisfaction and loyalty (Yuksel et al., 2010; Lee et al., 2011; Qiu, 2014). The dimensions of place attachment have been demonstrated to influence behavioral outcomes such as loyalty in differing ways, and that this also varies across various destinations, consumer characteristics, activity involvement and more (see Kyle et al., 2004, 2005; Lee et al., 2011).

Loyalty

Loyalty, as described by Oliver (1997), is a deep obligation to patronise or buy a much liked service or product continuously, hence resulting in having a constant trademark, in spite of situations and circumstances and defiling market factors that can influence a change. A common definition for loyalty is the intention for repeat visits by tourists and the likelihood of recommendation to friends or family (Yoon and Uysal, 2005; Neuts et al., 2013).

Similarly, Lovelock (2011:11) defined it as "willingness to continue patronizing a business over a long term, purchasing and using its goods and services on a repeated and preferably exclusive basis and voluntarily recommending the firm's products to friends and associates". Studies have shown that loyalty is multidimensional and there continues to be a debate on the most important dimensions. Three dimensions of loyalty have been identified: the attitudinal approach, the behavioural approach and the composite approach (the least common approach of the three) (Zhang et al., 2014; Afthanorhan et al., 2019). The attitudinal approach is based on customers' intentions to buy a product or on brand preferences (Yoon and Uysal, 2005). It is a psychological commitment to purchase a good or service (Iwasaki and Havitz, 1998). Hence, tourists may exhibit a good disposition towards visiting a destination (Bastic and Gojcic, 2011). The attitudinal approach provides a way to understand the reasons why customers purchase a product or service, with the goal of understanding their preferences and attitudes over time (Lee et al., 2012). The attitudinal approach is the most evaluated approach to loyalty in tourism literature, and it is the approach adopted in this study.

The behavioural approach is the sequence of purchase and patronage made by the customer (Backman and Crompton, 1991). It focuses on the actual repeat purchases made rather than the reasons which underlie the purchase (Lee et al., 2012). Some of the measures of behavioural loyalty include: the rate of purchase of a particular product or service to the total purchase of products in the same group; history of use or purchase; time devoted to purchasing the product daily, weekly, monthly or yearly, and number of purchase, use or participation (Iwasaki and Havitz, 1998). According to Oppermann (2000), the ease of obtaining information on consumers repeat purchase history makes it a common measure. Its applicability in the tourism context has been questioned however, as the determination of a time frame for re-patronage of tourists' products and services are largely undefined (Michels and Bowen, 2005; Oppermann, 2000). The composite approach is the combination of both attitudinal and behavioural approaches (Backman and Crompton, 1991).

Satisfaction and place attachment

While satisfaction and place attachment has been employed in wide range of management issues, few empirical pieces of evidence on the relationship between the two exist (Lee et al., 2012). More so, the reports of these studies vary greatly. For example, the studies of Mesch and Manor (1998), and Lee and Allen (1999) established no relationship between the two constructs. Mesch and Manor (1998) particularly noted that a person may be satisfied with their homes or communities without developing a certain attachment to them. Conversely, some studies (Brocato, 2006; George and George, 2004; Petrick et al., 1999) have established that satisfaction with a particular setting brings about an emotional affinity which illustrates that satisfaction is a predictor of place attachment.

In seeking to understand the relationship between satisfaction and place attachment, some studies treat place attachment as a first order construct, while others consider it as a second order construct. Halphenny (2010), for example, considered place attachment as a first order construct and reported a significant relationship between satisfaction and place attachment. As a second order construct, Alexandris et al. (2006) observed that, in a ski resort in Greece, "personal interaction quality" was a stronger predictor of place identity than was "physical environmental quality," whereas the effect of "physical environmental quality" on place dependence was stronger than that of personal interaction quality. The study of Lee et al. (2012) revealed that festival satisfaction was a significant predictor of place identity/social bonding as well as place dependence. The variance explained was however higher for place dependence than for place identity, making satisfaction a better predictor of place dependence. Other studies that have outlined that satisfaction is a predictor of place attachment

include Yuksel et al. (2010), Prayag and Ryan (2012), Tsai (2012), Chen and Phou (2013), Sivaloğlu and Berköz (2016) however all of these studies were conducted outside of the zoo context. Based on this, it is therefore hypothesized that visitors' satisfaction will positively influence the four dimensions of place attachment, as well as overall place attachment.

- H₀1: Visitors satisfaction contributes significantly to place attachment
- H₀1a: Visitors satisfaction contributes significantly to place dependence
- H₀1b: Visitors satisfaction contributes significantly to place identity
- H₀1c: Visitors satisfaction contributes significantly to place affect
- H₀1d: Visitors satisfaction contributes significantly to place social bonding

Studies such as Hwang et al. (2005), and Prayag and Ryan (2012) indicated that place attachment could in fact predict satisfaction. This was affirmed for place dependence, place affect and place social bonding by Ramkissoon et al. (2013) in an Australian national park. Similarly, Campon-Cerro et al. (2015) in their study in rural tourism destinations revealed that place identity and dependence predicts satisfaction, with the latter having more influence. Based on the foregoing, the earlier hypotheses were reversed so as to establish the specific pattern of relationship between place attachment and satisfaction as follows:

- H₀2: Place attachment contributes significantly to visitors' satisfaction
- H₀2a: Place dependence contributes significantly to visitors' satisfaction
- H₀2b: Place identity contributes significantly to visitors' satisfaction
- H₀2c: Place affect contributes significantly to visitors' satisfaction
- H₀2d: Place social bonding contributes significantly to visitors' satisfaction

Satisfaction and loyalty

The relationship between satisfaction and loyalty has been explored widely in the available literature with various results across different settings. On the other hand, in an international tourism context, Oppermann (1999) opined that there might not be a relationship between the two constructs. This was additionally argued by Michels and Bowen (2005) that while visitors may be satisfied with the destination visited and the various activities in which they participated, repeat visitation may be unforeseeable especially given constraints of travel expenses, time available for leisure, and the presence of other alternative destinations within the host region. Putting this in perspective, some visitors go to certain destinations when they visit family and friends or attend conferences and other events therefore such visits may not be regular given its location outside the original state or region of the visitor, and as such, visitors who may have been satisfied with their visit may have no opportunities to demonstrate behavioural loyalty, even if attitudinal loyalty is assured. On the other hand, several studies have indeed found a relationship between satisfaction and loyalty (See Neuts et al., 2013; Huang et al., 2015; Petrick, 2004; Lee et al., 2007; Lee et al., 2014; Campon-Cerro et al., 2015; Wang and Hsu, 2010; Chen and Tsai, 2007; Prayag and Ryan, 2012; Nasir et al., 2020; Butler, 2016). Despite the fact that all of these studies were researched outside of the zoo context, based on their findings, we posit that:

- H₀3: Satisfaction contributes significantly to visitors' loyalty

Place attachment and loyalty

Place attachment was demonstrated as an antecedent of loyalty by Yuksel et al. (2010). It was reported that three sub-constructs of place attachment (place dependence, place identity and place affect) directly influenced loyalty. In addition, Lee et al. (2012) observed that place identity/social bonding was a positive predictor of revisit intentions, while place dependence was a negative predictor. Similarly, in their study of rural tourism destinations, Campon-Cerro et al. (2015) found that place identity and dependence predicts satisfaction, with the latter having more influence.

Patwardhan et al. (2020), in a religious tourism context, reported place dependence as a stronger predictor of satisfaction than place identity. When evaluating the relationship between place attachment and return visits to a heritage site and treating three aspects of place attachment (place identity, place dependence and emotional affinity/place affect) as a composite, Alshemeili (2014) found a positive and significant relationship between the two. Isa et al. (2020), in their study of the effect of place attachment on revisit intentions to an Island in Indonesia, established a significant association. The most important dimension of place attachment in predicting revisit intention was place social bonding. Other studies have also been carried out by Nasir et al. (2020), Alexandris et al. (2006), Loureiro (2014), Tsai (2016), Xu and Zhang (2016), Liu et al. (2017) and Butler (2016). Based on this research, we, therefore, hypothesize that:

- H₀4: Overall place attachment significantly influences visitors' loyalty
- H₀4a: Place dependence contributes significantly to visitors' loyalty
- H₀4b: Place identity contributes significantly to visitors' loyalty
- H₀4c: Place affect contributes significantly to visitors' loyalty
- H₀4d: Place social bonding contributes significantly to visitors' loyalty

Satisfaction, place attachment and loyalty

Recently, place attachment has been suggested to be a product of satisfactory place experiences which hitherto positively influence loyalty (Halpenny, 2010; Lee et al., 2007). However, very few empirical studies have been carried out examining the relationship between these three behavioural constructs. Lee et al. (2012) in a festival setting

examined the mediating effect of place attachment on the relationship between satisfaction and loyalty. It was reported that satisfied visitors had a moderate level of emotional attachment to the destination, and as such, developed loyalty, thus establishing the mediating effect of place attachment on satisfaction and loyalty. With respect to the dimensions, a positive indirect effect was recorded for place identity/social bonding while a negative one was documented for place dependence. In addition, Yuksel et al. (2010) reported that three sub-constructs of place attachment (place dependence, place identity and place affect) influenced loyalty directly and indirectly through satisfaction. The study by Campon-Cerro et al. (2015) revealed that destination identity and dependence mediates the relationship between overall satisfaction and loyalty to rural tourism destinations, but that destination dependence has a greater influence.

H₀₅: Place attachment mediates the relationship between satisfaction and loyalty

H_{05a}: Place dependence mediates the relationship between satisfaction and loyalty

H_{05b}: Place identity mediates the relationship between satisfaction and loyalty

H_{05c}: Place affect mediates the relationship between satisfaction and loyalty

H_{05d}: Place social bonding mediates the relationship between satisfaction and loyalty

Yuksel et al. (2010) and Prayag and Ryan (2012) however also verified the mediating effect of overall satisfaction between place attachment and loyalty/behavioural intention, measured through re-visitation and recommendations. Accordingly, it is hypothesized that visitors' functional, emblematic, affective and social attachments to zoo settings arise from satisfactory experiences, which ultimately leads to their loyalty towards the destination.

H₀₆: Visitors satisfaction mediates the relationship between place attachment and loyalty

H_{06a}: Satisfaction mediates the relationship between place dependence and loyalty

H_{06b}: Satisfaction mediates the relationship between place identity and loyalty

H_{06c}: Satisfaction mediates the relationship between place affect and loyalty

H_{06d}: Satisfaction mediates the relationship between place social bonding and loyalty

METHODOLOGY

Visitors to the University of Ibadan Zoological Garden, one of the most prominent zoos in the southwest region of Nigeria, were surveyed. The zoo is located within Nigeria's premier University along the Department of Zoology, and is managed by the institution for recreation, educational and research purposes. The zoo attracts thousands of visitors annually who experience its diverse collection of animals in a serene environment. It has basic recreational facilities for adults and children. This study employs a quantitative research approach. Data was collected between June and December 2018 at the three resting points within the zoo (the central point opposite the ostrich enclosure; the resting point opposite the primates' enclosure and the entry/exit collection point opposite the small birds' enclosures). Data was collected on both weekdays and weekends in order to reach a diverse range of respondents, as it was observed that lone visitors, school groups (excursions), and few friends group visit during weekdays while family and friends across various age groups visited mostly on the weekends. Most visitors surveyed were approached after they had completed the zoo tour, and were more relaxed, which was assumed to increase their willingness to participate. The researcher also served as a tour guide to some visitors, which enabled them to be more relaxed and enhanced their willingness to participate in the study. The aim of the study was explained to all the visitors. Purposively, visitors of at least 18 years of age were surveyed. In total, 395 visitors were sampled which was determined using Yamane formula for sample size determination from a known population. Data was collected through the use of a structured questionnaire in order to elicit information on visitors' place attachment, satisfaction and loyalty. The place attachment scale was adapted from the studies of Kyle et al. (2004), Gross and Brown (2008) and Scannell and Gifford (2010). Satisfaction and loyalty scales were modified from Oliver (1997) and Huh (2002). These scales were scored on a five point likert scale of strongly disagree (1) to strongly agree (5). All analyses were carried out using Smart PIs version 3.0 software using Structural Equation Modeling.

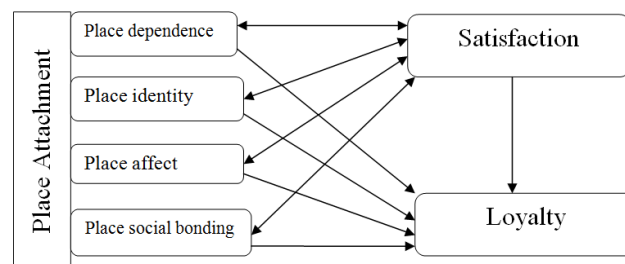


Figure 1. The Study's Conceptual Model

RESULTS

Descriptive results

The visitors displayed high levels of satisfaction (4.43) and loyalty (4.41). Among the place attachment scales, place social bonding had the highest score (3.62). The scores of place affect, place identity and place dependence were 3.03, 2.87 and 2.77 respectively. This is presented in Table 1.

Measurement model

Individual factor analysis

As illustrated in Table 1, factor loadings of most of the items (ranging from 0.528 to 0.965) were above the 0.50 threshold recommended by Bagozzi and Yi (1988) and Cabrera-Nguyen (2010) and were also significant at $p < 0.05$ except for items PA5, PA12, PA14, PA15. These exceptional items were excluded from further analysis.

Table 1. Confirmatory factor analysis of dimensions and items

	Factors	Mean	Factor loading	Cronbach alpha	Composite reliability	Average variance extracted
	Place attachment	3.07		0.806	0.820	
	Place identity	2.87		0.901	0.918	0.739
PA1	I feel this zoo is part of me	2.84	0.924			
PA2	I identify strongly with this zoo	2.79	0.921			
PA3	I have a strong sense of belonging to this zoo	2.90	0.875			
PA4	Visiting this zoo says a lot about who I am	2.97	0.698			
	Place dependence	2.77		0.818	0.831	0.629
PA5	For what I like to do, I could not imagine anything better than the settings and facilities provided by this zoo	2.77	0.109*			
PA6	For the activities I enjoy the most, the settings and facilities provided by this zoo are the best	2.75	0.575			
PA7	I enjoy visiting this zoo more than any other zoo / nature attractions	2.57	0.827			
PA8	No other place can substitute for the attractions of this zoo	2.98	0.789			
	Place Affect	3.03		0.872	0.873	0.699
PA9	I am very attached to this zoo	2.99	0.787			
PA10	I feel a strong sense of belonging to this zoo and its settings/facilities	3.11	0.664			
PA11	This zoo means a lot to me	2.91	0.965			
PA12	I have a special connection to the people who visit here.	3.18	0.493*			
	Place Social Bonding	3.62		0.771	0.672	0.525
PA13	Many of my friends/family prefer this zoo over many other wildlife attractions	3.88	0.528			
PA14	If I were to stop visiting this zoo, I would lose contact with a number of friends	2.80	0.317*			
PA15	My friends/family would be disappointed if I were to start visiting other settings and facilities	3.69	0.229*			
PA16	I prefer to visit this attraction with people who are important to me	4.11	0.867			
	Satisfaction	4.43		0.852	0.910	0.771
SAT1	I believe I did the right thing when I chose to visit this zoo	4.45	0.894			
SAT2	The overall sight and impression of the zoo inspired me	4.38	0.882			
SAT3	I am satisfied with my experience in this zoo	4.29	0.859			
	Loyalty	4.40		0.803	0.910	0.835
LOY1	I will recommend this zoo to others	4.41	0.917			
LOY2	I will visit this zoo again	4.39	0.911			

Test of reliability and validity

The test of reliability was first evaluated using the Cronbach alpha (α). As shown in Table 1, the α of the behavioural constructs measured (ranging from 0.711 to 0.901) was above 0.70, thus indicating that there were internal consistencies and that the factors could adequately measure the latent variable (Hair et al., 1998, 2010).

In addition, composite validity for all the constructs was greater than 0.60, which is an indicator of good reliability of the constructs (Fornell and Larcker, 1981). The validity of the scales was first measured using the average variance extracted (AVE), and it was found that all values were above 0.5. This depicts convergent validity, according to Fornell and Larcker (1981) and Anderson and Gerbing (1988). Given these findings, the convergent validity of the scales was established. Furthermore, discriminant validity was evaluated by comparing the square roots of the AVEs for each construct with correlations across the factors. As presented in Table 2, the figures were lower than the square root of the AVEs, thus representing that the constructs are independent of each other.

Table 2. Inter-construct correlations for discriminant validity

	Loyalty	Place affect	Place dependence	Place identity	Place social bonding	Satisfaction
Loyalty	0.914					
Place affect	0.101	0.836				
Place dependence	0.092	0.583	0.793			
Place identity	-0.167	0.633	0.414	0.859		
Place social bonding	0.230	0.286	0.307	0.159	0.724	
Satisfaction	0.795	0.098	0.140	-0.088	0.270	0.878

Results of Hypothesis 2

As indicated in Table 3, two dimensions of place attachment significantly influenced visitors' satisfaction, place identity ($\beta = -0.269$, $t = 2.435$, $p = 0.015$) and place social bonding ($\beta = 0.240$, $t = 4.712$, $p = 0.000$), and accounted for

Structural model

Results of Hypothesis 1

As indicated in Table 3, visitors' satisfaction significantly influenced only one dimension of place attachment, place social bonding ($\beta = 0.255$, $t = 5.054$, $p = 0.000$), and accounted for 7.5% of the variance. Place identity, place dependence and place affect were found to not be significantly influenced by satisfaction at $p > 0.05$. Overall place attachment to the zoo was additionally insignificantly influenced by satisfaction at $p > 0.05$.

1.0% and 7.6% variance respectively. While the prior exerts a negative influence, in which an increase in visitors place identity will correspond to low visitors satisfaction, the latter projects a positive influence where an increase in place social bonding values of the visitors translates to higher visitors satisfaction. Place dependence and place affect, despite having positive estimates, did not significantly influence satisfaction at $p > 0.05$. Overall, visitors' satisfaction with zoo experience was not significantly influenced by place attachment at $p > 0.05$.

Results of Hypothesis 3

The results in Table 3 reveal that visitors satisfaction significantly predicts loyalty ($\beta = -0.773$, $t = 25.449$, $p = 0.000$). This result shows that the path of visitors' satisfaction in the zoo to loyalty was direct and positive, accounting for 65.5% variance. Thus, an increase in their satisfaction translates to a stronger level of loyalty to the zoo.

Results of Hypothesis 4

As shown in Table 3, the loyalty of visitors to the zoo was significantly influenced by place identity ($\beta = -0.188$, $t = 3.101$, $p = 0.002$) explaining only 3.1% of variance and place social bonding ($\beta = 0.134$, $t = 2.264$, $p = 0.027$) accounting for 5.5% variance. Other dimensions and overall place attachment had no significant contributions at $p > 0.05$.

Test of Hypotheses 5 and 6

The test of mediating place attachment in the relationship between visitors' satisfaction and loyalty revealed that none of the dimensions of place attachment was a significant mediator between satisfaction and loyalty at $p > 0.05$ (Table 4). Therefore, hypothesis 5 was not supported. On the other hand, place identity ($\beta = -0.214$, $t = 2.406$, $p = 0.016$) and place social bonding ($\beta = 0.191$, $t = 4.692$, $p = 0.000$) were found to significantly

mediate the relationship between satisfaction and loyalty. While the effect of the prior is negative, that of the latter is positive (Table 5). Overall, it was also found that satisfaction is a significant and positive mediator between place attachment and loyalty ($\beta = 0.031$, $t = 2.368$, $p = 0.018$). Thus, hypothesis 6 is supported.

DISCUSSION

This study examined the relationships among satisfaction, place attachment and loyalty in one of the foremost zoos in Nigeria. Six key findings were reported. Firstly, this study found that, out of the four sub-constructs of place attachment examined, visitors' satisfaction contributed significantly to only place social bonding. Zoos are spaces for social gathering and interaction (Chris and Jan, 2004; Smith et al., 2012; Ajayi, 2019) and foster family and friends' wildlife experiences in a close-up environment. It was observed that visitors to the zoo came, learned, toured and entertained themselves in groups, while lone visitors sought out interactions with other people. This study projects satisfaction as an antecedent of place social bonding. This was also reported by Lee et al. (2012) and Ramkissoon et al. (2014) who found positive associations between place social bonding and satisfaction amongst festival attendees and national park visitors, respectively. The better and more satisfying the social experiences of these visitors in the zoo, the higher their attachment to the zoo for social bonding. Arguably, the highest-ranked factor on the place social bonding scale was the factor 'I prefer to visit this attraction with people who are important to me'. Other sub-constructs; place

Table 3. Path analysis results for hypotheses 1, 2, 3 and 4

Hypothesis	Path relationship	Estimate (β)	t value	P	R ²	Decision
H ₀₁	SAT \rightarrow OPA	0.333	1.362	0.174	0.111	Not supported
H ₀₁ (a)	SAT \rightarrow PI	-0.078	1.402	0.162	0.008	Not supported
H ₀₁ (b)	SAT \rightarrow PD	0.142	1.576	0.116	0.019	Not supported
H ₀₁ (c)	SAT \rightarrow PAF	0.121	1.089	0.277	0.013	Not supported
H ₀₁ (d)	SAT \rightarrow PSB	0.255	5.054	0.000*	0.075	Supported
H ₀₂	OPA \rightarrow SAT	0.333	1.248	0.213	0.108	Not supported
H ₀₂ (a)	PI \rightarrow SAT	-0.269	2.435	0.015*	0.010	Supported
H ₀₂ (b)	PD \rightarrow SAT	0.086	1.374	0.170	0.021	Not supported
H ₀₂ (c)	PAF \rightarrow SAT	0.165	1.332	0.183	0.019	Not supported
H ₀₂ (d)	PSB \rightarrow SAT	0.240	4.712	0.000*	0.076	Supported
H ₀₃	SAT \rightarrow LOY	0.773	25.449	0.000*	0.655	Supported
H ₀₄	OPA \rightarrow LOY	0.094	1.061	0.289	0.135	Not supported
H ₀₄ (a)	PI \rightarrow LOY	-0.188	3.101	0.002*	0.031	Supported
H ₀₄ (b)	PD \rightarrow LOY	-0.023	0.581	0.562	0.021	Not supported
H ₀₄ (c)	PAF \rightarrow LOY	0.126	1.826	0.068	0.011	Not supported
H ₀₄ (d)	PSB \rightarrow LOY	0.134	2.264	0.027*	0.055	Supported

(SAT = Satisfaction, LOY = Loyalty, PA = Overall Place Attachment, PI = Place Identity, PD = Place Dependence, PAF = Place Affect, PSB = Place Social Bonding, * = Significant)

Table 4. Mediating effect of place attachment in the relationship between satisfaction and loyalty

Hypothesis	Path relationship	Estimate (β)	t value	P	Decision
H ₀₅	SAT \rightarrow OPA \rightarrow LOY	0.255	1.242	0.215	Not supported
H ₀₅ (a)	SAT \rightarrow PI \rightarrow LOY	0.015	1.671	0.095	Not supported
H ₀₅ (b)	SAT \rightarrow PD \rightarrow LOY	-0.003	0.478	0.633	Not supported
H ₀₅ (c)	AT \rightarrow PAF \rightarrow LOY	0.015	1.405	0.160	Not supported
H ₀₅ (d)	SAT \rightarrow PSB \rightarrow LOY	0.009	1.205	0.228	Not supported

Table 5. Mediating effect of satisfaction in the relationship between place attachment and loyalty

Hypothesis	Path relationship	Estimate (β)	t value	P	Decision
H ₀₆	OPA \rightarrow SAT \rightarrow LOY	0.031	2.368	0.018*	Supported
H ₀₆ (a)	PI \rightarrow SAT \rightarrow LOY	-0.214	2.406	0.016*	Supported
H ₀₆ (b)	PD \rightarrow SAT \rightarrow LOY	0.069	1.368	0.172	Not supported
H ₀₆ (c)	PAF \rightarrow SAT \rightarrow LOY	0.132	1.332	0.184	Not supported
H ₀₆ (d)	PSB \rightarrow SAT \rightarrow LOY	0.191	4.692	0.000*	Supported

identity, place dependence and place affect were not significantly influenced by satisfaction, neither was this significant with respect to overall place attachment. This suggests that place attachment is better measured through its sub-constructs in order to determine the contributions of each rather than as a unidimensional construct.

Secondly, two dimensions of place attachment were found to significantly influence visitors' satisfaction: place identity and place social bonding. Whereas place identity was found to exert a negative influence, in which an increase in visitors' place identity did not correspond to improved visitors satisfaction, place social bonding projects a positive influence. This result could suggest that individuals who find a connection between their personal identity and a place, in this case a zoo, do not depict their satisfaction; rather their satisfaction may be enhanced by other factors, or that their purpose of visit was not for identification with the place visited. This finding contradicts Campon-Cerro et al. (2015) who documented place identity as a significant and positive predictor of satisfaction in a rural tourism destination context. With respect to place social bonding, the findings suggest that visitors experience greater satisfaction when they are able to establish social bonding values or find the zoo as that which fosters kinship interactions. This is in line with the study of Ramkissoon et al. (2013) in a national park setting and serves to reiterate the fact that most zoo visits are group visits, and as such, visitors seek social interactions in such environment.

With respect to overall place attachment, there was no significant association found. Hitherto, the findings are consistent with Yuksel et al. (2010) and Prayag and Ryan (2012) in that place attachment, through its dimensions, can predict visitors' satisfaction.

Thirdly, it was revealed that the higher the satisfaction of visitors, the greater, better and more positive their loyalty will be. This points to the fact that the management of the destination should continually seek to provide genuine and satisfying experiences for their visitors as this will ultimately bring about loyalty. Loyalty in this study was examined based on two key variables: the likelihood of re-visitation to the destination in the nearest future; and the word of mouth recommendation of the zoo to other people. These are indices of patronage, which promote the destination and increase levels of visitation. This finding supports satisfaction as an antecedent and strong predictor of loyalty in a captive wildlife environment and as such, correlates with many previous studies in various settings such as Ajayi et al. (2017), Butler (2016), Campon-Cerro et al. (2015), Chen and Tsai (2007), Huang et al. (2015), Lee et al. (2012), Nasir et al. (2020), Neuts et al. (2013), Petrick (2004), Prayag and Ryan (2012), Sivalioglu and Berköz (2012) and Wang and Hsu (2010). Fourthly, in line with Campon-Cerro et al. (2015); Lee et al. (2012) and Yuksel et al. (2010), visitors' loyalty was predicted by two place attachment

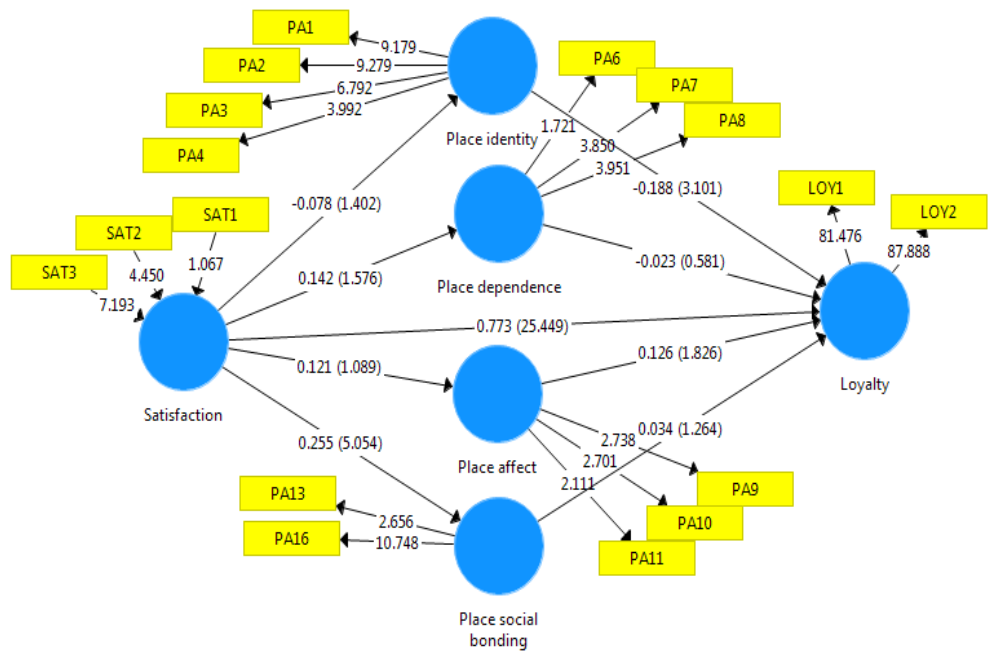


Figure 2. Structural model for Satisfaction — place attachment --Loyalty model

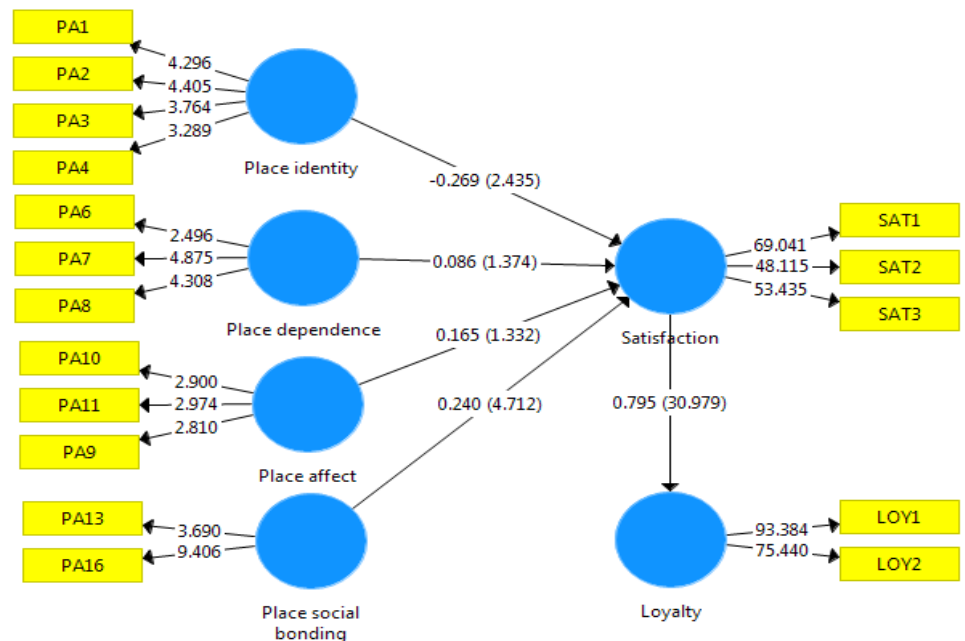


Figure 3. Structural model for place attachment – Satisfaction – Loyalty model

sub-constructs: place identity and place social bonding. Place identity was found to have a direct negative effect while place social bonding had a direct positive effect. The negative effect on place identity contradicts that which has been found in previous studies. This finding suggests that for visitors who are able to identify with the zoo or who see the zoo as projecting their values, their re-visitation and/or word of mouth promotion is not guaranteed.

Therefore, the more visitors are able to identify with the zoo, the lower their loyalty while the more they are able to place values on the social interactions enabled therein, the greater their loyalty. Visitors are more willing to come for a re-experience of such meaningful interactions and to spread positive word of mouth recommendations to other people for this reason. Lee et al. (2012) similarly recorded this in their study for place identity/social bonding in a national park. Isa et al. (2020) also identified that the most important dimension of place attachment in predicting revisit intention is place social bonding. Place dependence and place affect had no significant contributions.

In most studies (see Campon-Cerro et al., 2015, Lee et al., 2012, Patwardhan et al., 2020), place dependence has been on the frontline of the predictor of satisfaction or loyalty, followed by place identity in various contexts, however, this study projects place social bonding as the most important place attachment construct in a zoo setting. Finally, place attachment was found to be an insignificant mediator of satisfaction and loyalty. This contradicts Lee et al. (2012) who documented place attachment as a significant mediator of both constructs. Rather, in the study, satisfaction was found to be a significant and positive mediator between place attachment (place identity and place social bonding) and loyalty. Place social bonding was a better and stronger mediator than place identity.

This finding reveals that satisfaction with zoo experiences not only directly enhances the loyalty of the visitors to the zoo but also indirectly enhance loyalty through place attachment, especially through its social bonding dimension. The findings of this study also revealed that place attachment is better measured as a second order construct, consisting of its sub-constructs, rather than as a unidimensional variable which concurs with Ramkissoon et al. (2014).

CONCLUSION

This study sought to understand the relationships that exist between satisfaction, place attachment and loyalty. The key findings of this study are as follows: (a) the most important causal factor of loyalty is satisfaction, either directly or indirectly through place attachment, especially place social bonding; (b) place social bonding is important in zoo settings, and can act as either a predictor or an outcome of visitors' satisfaction, thus the greater the satisfaction of the visitors, the greater their social bonding to the zoo; and that the more visitors consider the destination as an avenue for social interactions, the greater their satisfaction; (c) place social bonding was the only positive predictor of loyalty, hence, the greater the attachment of visitors to the zoo, vis a vis social bonding, the greater their revisit intentions and willingness to recommend the destination to others; (d) visitors identification with zoos' values does not necessarily correspond to satisfaction or loyalty, and finally, (e) satisfaction was a significant and positive mediator between place attachment (place identity and place social bonding) and loyalty, with place social bonding being a better and stronger mediator than place identity, and place attachment did not mediate the relationship between satisfaction and loyalty.

The SEM model explored highlights the importance of visitors' satisfaction in mediating place attachment and loyalty. It is paramount therefore that managers of the zoo and other destinations should pay attention to increasing and sustaining resources and facilities that provide visitors with a genuinely satisfying experience. The development of increased place attachment and loyalty should also be targeted, especially harbouring on enhancing better place social bonding. According to findings, the real need of visitors seems to be centred on social interactions in an educational and recreational space, hence the provision and investment in facilities and services that encourage this is pertinent for sustained loyalty. The marketing activities of the zoo and other similar destinations should also be centred on attracting this visitors' niche, and discounts and other incentives can be offered in order to encourage frequent and group visitations. The findings are also deemed to be valuable to tourism practitioners, management and regulatory bodies, through reflections on the maintenance of existing facilities as well as the development of innovative product and service designs that facilitate social interactions, and can trigger a social bonding revisit effect. This study makes a significant contribution to literature for the following reasons: it provides empirical evidence on satisfaction, place attachment and loyalty and their inter-relationships in the much scarce zoo-tourism context; it generates two dimensional models by which satisfaction and place attachment are presented as mediators of loyalty while measuring the direct and indirect effects to understand the most profound direction and comparative outlook; it treats place attachment as a second order construct as well as a one-dimensional construct, and it examines four sub-constructs of place attachment rather than just the two that are common in extant studies.

Through these approaches taken in this study, the findings of various other studies, especially with regards to travel behaviour, are also advanced. While this study provides invaluable insights into the relationships between the three constructs, especially to zoos, some limitations should be considered when contextualizing the results. This research was conducted using one zoo as a case study area and additional researches are thus needed in other zoos and ex-situ conservation destinations to allow for generalization across the destinations. Additionally, it may be pertinent in future studies, that satisfaction is explored based on various characteristics of the zoo in order to know emphatically the resources and attributes that can better facilitate visitors place attachment and loyalty. More studies are also needed in order to understand the inverse relationship between place identity and satisfaction, as well as with loyalty in the contexts of zoos.

REFERENCES

- Afthanorhan, A., Awang, Z., Rashid, N., Foziah, H., & Ghazali, P. (2019). Assessing the effects of service quality on customer satisfaction. *Management Science Letters*, 9(1), 13-24. 10.5267/j.msl.2018.11.004

- Ajayi, O.O. (2015). *Ecotourism and environmental management: Case study of Okomu National Park and Ogba Zoo & Nature Park*. Masters thesis, University of Ibadan, Nigeria. pp 157.
- Ajayi, O.O. (2019). *Environmental attitudes, motivation and place attachment of visitors to federal institutionalized zoological gardens in the South-west, Nigeria*. PhD thesis, University of Ibadan, Nigeria. pp 385
- Ajayi, O.O., Bello Y.O., & Ayodele, I.A. (2017). Zoo-tourism in Nigeria: Ogba Zoo and Nature Park in perspective. *International Journal of Tourism and Hospitality Management*, 1(2), 93-109.
- Ajayi, O.O., & Tichaawa, T.M. (2020). Visitors' characteristics and destination image: The case of Nigerian zoos. *GeoJournal of Tourism and Geosites*, 32(4), 1410-1417. <https://doi.org/10.30892/gtg.32432-588>
- Alarape, A.A., Yager, G.O., & Salman, K.K. (2015). Assessment of tourists satisfaction and perception in Makurdi Zoological Garden, Benue State, Nigeria. *Journal of Research in Forestry, Wildlife and Environment*, 7(1), 1-12.
- Alexandris, K., Kouthouris, C., & Meligdis, A. (2006). Increasing customers' loyalty in a skiing resort: The contribution of place attachment and service quality. *International Journal of Contemporary Hospitality Management*, 18(5), 414-425. <https://doi.org/10.1108/09596110610673547>
- Alshemeili, A. (2014). *The relationship between place attachment and return visits to heritage sites: A case study of Ras Al Khaimah*. Doctoral Thesis, Edith Cowan University.
- Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-23. <https://doi.org/10.1037/0033-2909.103.3.411>
- Backman, S.J., & Crompton, J.L. (1991). The usefulness of selected variables for predicting activity loyalty. *Leisure Science*, 13, 205-220. <https://doi.org/10.1080/01490409109513138>
- Bagozzi, R.P., & Yi, Y. (1988). On the evaluation of structure equation models. *Academy of Marketing Science*, 16(1), 76-94. <https://doi.org/10.1007/BF02723327>
- Basic, M., & Gojcic, S. (2011). The ecological motivation of tourists as a determinant of the tourists loyalty. *Croatian Operational Research Review*, 2, 14-22. <https://hrcak.srce.hr/96604>
- Bigne, J.E., Andreu, L., & Gnoth, J. (2005). The Theme Park experience: An analysis of pleasure, arousal and satisfaction. *Tourism Management*, 26(6), 833-844. <https://doi.org/10.1016/j.tourman.2004.05.006>
- Bosque, I., & Martin, H. (2008). Tourist satisfaction: A cognitive-affective model. *Annals of Tourism Research*, 35(2), 551-573. <https://doi.org/10.1016/j.annals.2008.02.006>
- Bricker, K.S., & Kerstetter, D.L. (2000). Level of specialization and place attachment: An exploratory study of whitewater recreationists. *Leisure Sciences*, 22, 233-257. <https://doi.org/10.1080/01490409950202285>
- Brocato, E. (2006). *Place attachment: An investigation of environments and outcomes in service context*. Doctoral thesis, The University of Texas at Arlington, Texas, USA.
- Brown, B., Perkins, D.D., & Brown, G. (2003). Place attachment in a revitalizing neighbourhood: Individual and block levels of analysis. *Journal of Environmental Psychology*, 23(3), 259-271. [https://doi.org/10.1016/S0272-4944\(02\)00117-2](https://doi.org/10.1016/S0272-4944(02)00117-2)
- Budruk, M., Thomas, H., & Tyrrell, T. (2009). Urban green spaces: A study of place attachment and environmental attitudes in India. *Society and Natural Resources*, 22(9), 824-839. <https://doi.org/10.1080/08941920802628515>
- Butler, J.E. (2016). *Predicting loyalty in clubs through motivation, perceived value, satisfaction, and place attachment*. Doctoral Dissertation, Iowa State University, USA.
- Cabrera-Nguyen, P. (2010). Author guidelines for reporting scale development and validation results. *Journal of the Society for Social Work and Research*, 1(2), 99-103.
- Campon-Cerro, A.M., Alves, H.M.B., & Hernandez-Mogollon, J.M. (2015). Attachment as a factor generating satisfaction with, and loyalty to, rural tourism destinations. *Tourism Management*, 11(1), 70-76.
- Chen, C., & Chen, F. (2010). Experience quality, perceived value, satisfaction and behavioural intentions for heritage tourists. *Tourism Management*, 31(1), 29-35. <https://doi.org/10.1016/j.tourman.2009.02.008>
- Chen, C., & Phou, S. (2013). A closer look at destination: Image, personality, relationship and loyalty. *Tourism Management*, 36, 269-278. <https://doi.org/10.1016/j.tourman.2012.11.015>
- Chen, C., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions. *Tourism Management*, 28(4), 1115-1122. <https://doi.org/10.1016/j.tourman.2006.07.007>
- Cheng, T.M., Wu, H.C., & Hunag, L.M. (2013). The influence of place attachment on the relationship between destination attractiveness and environmentally responsible behaviour for island tourism in Penghu, Taiwan. *Journal of Sustainable Tourism*, 21(8), 1166-1187. <https://doi.org/10.1080/09669582.2012.750329>
- Chris, R., & Jan, S. (2004). The zoo as ecotourism attraction - visitor reactions, perceptions and management implications: The case of Hamilton Zoo, New Zealand. *Journal of Sustainable Tourism Publication*, 12(3), 245-267. <https://doi.org/10.1080/09669580408667236>
- Cooper-Marcus, C. (1992). Environmental memories. In I. Altman and S. Low (Eds.), *Place attachment*, 87-112, Plenum Press, New York.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable and measurement error. *Journal of Marketing Research*, 18(3), 39-50. <https://doi.org/10.1177/002224378101800104>
- George, B.P., & George, B.P. (2004). Past visit and the intention to revisit a destination: Place attachment as a mediator and novelty seeking as the moderator. *Journal of Tourism Studies*, 15(2), 51-66.
- Gross, M., & Brown, G. (2008). An empirical structural model of tourists and places: Progressing involvement and place attachment into tourism. *Tourism Management*, 29(6), 1141-1151. <https://doi.org/10.1016/j.tourman.2008.02.009>
- Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate data analysis*. Prentice Hall, London, UK.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Pearson International, London, UK.
- Halpenny, E. (2010). Pro-environmental behaviors and park visitors: The effect of place attachment. *Journal of Environmental Psychology*, 30(4), 409-421. <https://doi.org/10.1016/j.jenvp.2010.04.006>
- Hammitt, W.E., Backlund, E.A., & Bixler, R.D. (2006). Place bonding for recreational places: Conceptual and empirical development. *Leisure Studies*, 25(1), 17-41. <https://doi.org/10.1080/02614360500098100>
- Hinds, J., & Sparks, P. (2008). Engaging with the natural environment: The role of affective connection and identity. *Journal of Environmental Psychology*, 28, 109-120. <https://doi.org/10.1016/j.jenvp.2007.11.001>
- Huang, S., Shen, Y., & Choi, C. (2015). The effects of motivation, satisfaction and perceived value on tourist recommendation. *Tourism Travel and Research Association: Advancing Tourism Research Globally*. Paper 5. http://scholarworks.umass.edu/tra/tra2015/Student_Colloquium/5

- Huh, J. (2002). Tourist satisfaction with cultural/heritage site: The Virginia Triangle, M.Sc. Thesis presented to the faculty of Virginia polytechnic Institute and State University :<http://www.scholar.lib.vt.edu/thesis/available/etd-0154002-1710/unrestricted/thesis.pdf>.
- Hui, T., Wan, D., & Ho, A. (2007). Tourists' satisfaction, recommendation and revisiting Singapore. *Tourism Management*, 28, 965-975. <https://doi.org/10.1016/j.tourman.2006.08.008>
- Hwang, S.N., Lee, C., & Chen, H.J. (2005). The relationship among tourists' involvement, place attachment and interpretation satisfaction in Taiwan's national parks. *Tourism Management*, 26, 143-156. <https://doi.org/10.1016/j.tourman.2003.11.006>
- Isa, S.M., Ariyanto, H.H., & Kiumarsi, S. (2019). The effect of place attachment on visitors' revisit intentions: Evidence from Batan. *Tourism Geographies*, 22(1), 51-82. <https://doi.org/10.1080/14616688.2019.1618902>
- Iwasaki, Y., & Havitz, M.E. (1998). A path analytic model of the relationships between involvement, psychological commitment, and loyalty. *Journal of Leisure Research*, 30(2), 256-280. <https://doi.org/10.1080/00222216.1998.11949829>
- Kotler, P., Bowen, J.T., & Makens, J.C. (2010). *Marketing for Hospitality and Tourism* (5th ed.). Pearson Education, Upper Saddle River, NJ.
- Kozak, M. (2001). Repeaters' Behavior at Two Distinct Destinations. *Annals of Tourism Research*, 28(3), 785-808. [https://doi.org/10.1016/S0160-7383\(00\)00078-5](https://doi.org/10.1016/S0160-7383(00)00078-5)
- Kyle, G., Bricker, K.S., Graefe, A., & Wickham, T. (2004). An examination of recreationists' relationships with activities and settings. *Leisure Sciences*, 26(2), 123-142. <https://doi.org/10.1080/01490400490432019>
- Kyle, G., Graefe, A., Manning, R., & Bacon, J. (2003). An examination of the relationships between leisure activity involvement and place attachment among hikers along the Appalachian Trail. *Journal of Leisure Research*, 35(3), 249-273. <https://doi.org/10.1080/00222216.2003.11949993>
- Lee, C., & Allen, L. (1999). Understanding individuals' attachment to selected destinations: An application of place attachment. *Tourism Analysis*, 4(3/4), 173-185.
- Lee, J., & Beeler, C. (2007). The relationships among quality, satisfaction, and future intentions for first-time and repeat visitors in a festival setting. *Event Management*, 10, 197-208. [10.3727/152599507783948684](https://doi.org/10.3727/152599507783948684)
- Lee, J., Graefe, A.R., & Burns, R.C. (2007). Examining the antecedents of destination loyalty in a forest setting. *Leisure Studies*, 29, 463-481. <https://doi.org/10.1080/01490400701544634>
- Lee, S., Jeon, S., & Kim, D. (2011). The impact of tour quality and tourist satisfaction on tourist loyalty: The case of Chinese tourists in Korea. *Tourism Management*, 32, 1115-1124. <https://doi.org/10.1016/j.tourman.2010.09.016>
- Lee, J., Kyle, G., & Scott, D. (2012). The mediating effect of place attachment on the relationship between festival satisfaction and loyalty to the festival hosting destination. *Journal of Travel Research*, 51(6), 754-767. <https://doi.org/10.1177/0047287512437859>
- Lime, N., & Costen, W. (2011). Environmental attitudes, motivation, and attachment: Toward a model of nature-based tourism. *International CHRIE Conference-Refereed Track*. Event 5 http://scholarworks.umass.edu/refereed/ICHRIE_2011/Wednesday/5
- Liu, X., Li, J., & Kim, W.G. (2017). The role of travel experience in the structural relationships among tourists' perceived image, satisfaction, and behavioral intentions. *Tourism and Hospitality Research*, 17(2), 135-146. <https://doi.org/10.1177/1467358415610371>
- Loureiro, S.M.C. (2014). The role of the rural tourism experience economy in place attachment and behavioral intentions. *International Journal of Hospitality Management*, 40, 1-9. <https://doi.org/10.1016/j.ijhm.2014.02.010>
- Lovelock, C. (2011). *Service Marketing: People, Technology, Strategy* (4th ed.). Prentice Hall, Upper Saddle River, NJ.
- Mellina, F.K.M., & Abale, A.F.A. (2013). Satisfaction on tourists destinations in Davao del Sur. *International Journal of Accounting and Business Management*, 1(2), 7-17.
- Mesch, G.S., & Manor, O. (1998). Social ties, environmental perception and local attachment. *Environment and Behavior*, 30(4), 504-519. <https://doi.org/10.1177/001391659803000405>
- Michels, N., & Bowen, J. (2005). The relevance of retail loyalty strategy and practice for leisure/tourism. *Journal of Vacation Marketing*, 11(1), 5-19. <https://doi.org/10.1177/1356766705050839>
- Millán, Á., & Esteban, A. (2004). Development of a multiple- item scale for measuring customer satisfaction in travel agencies services. *Tourism Management*, 25(5), 533-546. <https://doi.org/10.1016/j.tourman.2003.07.002>
- Morgan, P. (2010). Towards a developmental theory of place attachment. *Journal of Environmental Psychology*, 30, 11-22. <https://doi.org/10.1016/j.jenvp.2009.07.001>
- Nasir, M.N.M., Mohamad, M., Ghani, N.I.A., & Afthanorhan, A. (2020). Testing mediation roles of place attachment and tourist satisfaction on destination attractiveness and destination loyalty relationship using phantom approach. *Management Science Letters*, 10, 443-454. <https://doi.org/10.5267/j.msl.2019.8.026>
- Neuts, B., Romao J., van Leeuwen E., & Nijkamp, P. (2013). Describing the relationships between tourist satisfaction and destination loyalty in a segmented and digitalized market. TI 2013-164/III Tinbergen Institute Discussion Paper. <http://www.tinbergen.nl>
- Oliver, R.L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469. <https://doi.org/10.2307/3150499>
- Oliver, R.L. (1997). *Satisfaction: A behavioral perspective on the consumer*. Irwin/McGraw- Hill, New York, USA.
- Oom, P., Silva, J., Mendes, J., & Guerreiro, M. (2006). Tourist satisfaction and destination loyalty intention: A structural and categorical analysis. *International Journal of Business Science and Applied Management*, 1(1), 26-44. <https://doi.org/10.1201/b12231-7>
- Oppermann, M. (1999). Destination threshold potential and the law of repeat visitation. *Journal of Travel Research*, 37(2), 131-137. <https://doi.org/10.1177/004728759803700204>
- Oppermann, M. (2000). Tourism destination loyalty. *Journal of Travel Research*, 39(1), 78-84. <https://doi.org/10.1177/004728750003900110>
- Patrick, P.G., Matthew, C.E., Ayers, D.F., & Tunnicliffe, S.D. (2007). Conservation and education: Prominent themes in zoo mission statements. *The Journal of Environmental Education*, 38(3), 53-60. <https://doi.org/10.3200/JOEE.38.3.53-60>
- Patwardhan, V., Ribeiro, M.A., Payini, V., Woosnam, K.M., Mallya, J., & Gopalakrishnan, P. (2020). Visitors place attachment and destination loyalty: Examining the roles of emotional solidarity and perceived safety. *Journal of Travel Research*, 59(1), 3-21. <https://doi.org/10.1177/0047287518824157>
- Petrack, J. (2004). The roles of quality, value, and satisfaction in predicting cruise passengers' behavioural intentions. *Journal of Travel Research*, 42(4), 397-407. <https://doi.org/10.1177/0047287504263037>
- Petrack, J., Backman, S., & Bixler, R. (1999). An investigation of selected factors' impact on golfers' impact on golfer satisfaction and perceived value. *Journal of Park and Recreation Administration*, 17(1), 40-59.
- Philemon, J.R.M. (2015). Assessment of tourists perception and satisfaction of Tanzania destination. *European Scientific Journal*, 11(13), 7-15.

- Prayag, G., & Ryan, C. (2012). Antecedents of tourists' loyalty to Mauritius: The role and influence of destination image, place attachment, personal involvement and satisfaction. *Journal of Travel Research*, 51(3), 342-356. <https://doi.org/10.1177/0047287511410321>
- Qiu, H.L. (2014). Impact of tourist destination image on place attachment and tourist loyalty. *Computer Modelling & New Technologies*, 18(11), 651-656.
- Qu, H., & Ping, E. (1999). A service performance model of Hong Kong cruise travelers' motivation factors and satisfaction. *Tourism Management*, 20(2), 237-244. [https://doi.org/10.1016/S0261-5177\(98\)00073-9](https://doi.org/10.1016/S0261-5177(98)00073-9)
- Ramkissoon, H., Smith, L., & Kneebone, S. (2014). Visitor satisfaction and place attachment in National Parks. *Tourism Analysis*, 19, 287-300. <https://doi.org/10.3727/108354214X14029467968402>
- Ramkissoon, H., Weiler, B., & Graham, L.D. (2012). Place attachment and pro-environmental behaviour in national parks: The development of a conceptual framework. *Journal of Sustainable Tourism*, 20(2), 257-276. <https://doi.org/10.1080/09669582.2011.602194>
- Ramkissoon, H., Weiler, B., & Smith, L. (2013). Place attachment, place satisfaction and proenvironmental behaviour: A comparative assessment of multiple regression and structural equation modelling. *Journal of Policy Research in Tourism, Leisure & Events*, 5(3), 215-232. <https://doi.org/10.1080/19407963.2013.776371>
- Rolero, C., & De Piccoli, N. (2010). Place attachment, identification and environment perception: An empirical study. *Journal of Environmental Psychology*, 30, 198-205. <https://doi.org/10.1016/j.jenvp.2009.12.003>
- Scannell, L., & Gifford, R. (2010). Defining place attachment: A tripartite organizing framework. *Journal of Environmental Psychology*, 30(1), 1-10. <https://doi.org/10.1016/j.jenvp.2009.09.006>
- Sivalioğlu, P., & Berkoz, L. (2012). Perceptual evaluation of the national park users. *Procedia - Social and Behavioral Sciences*, 50, 928-940. <https://doi.org/10.1016/j.sbspro.2012.08.094>
- Sivalioğlu, P., & Berkoz, L. (2016). Relationship between place attachment and user satisfaction at some national parks in Turkey. *ITU A/Z*, 13(1), 171-181. <https://doi.org/10.5505/ituajf.2016.03522>
- Smith, L., Weiler, B., Smith, A., & van Dijk, P. (2012). Applying visitor preference criteria to choose pro-wildlife behaviors to ask of zoo visitors. *Curator*, 55, 453-466. <https://doi.org/10.1111/j.2151-6952.2012.00168.x>
- Stedman, R.C. (2002). Toward a social psychology of place: Predicting behavior from place-based cognitions, attitudes, and identity. *Environment and Behavior*, 34(5), 561-581. <https://doi.org/10.1177/0013916502034005001>
- Stephanie, M. (2013). *The evolution of zoos*. <https://ladyofthezoos.com/2013/06/15/the-evolution-of-zoo/> [Accessed 17 January, 2017].
- Thaothampitak, W., & Weerakit, N. (2014). *Tourist motivation and satisfaction: The case study of Trang Province, Thailand*. Prince of Songkla University, Thailand.
- Tian-Cole, S., Crompton, J.L., & Willson, V.L. (2002). An empirical investigation of the relationships between service quality, satisfaction and behavioral intentions among visitors to a wildlife refuge. *Journal of Leisure Research*, 34(1), 1-24. <https://doi.org/10.1080/00222216.2002.11949957>
- Tonge, J., Moore, S.A., & Taplin, R. (2011). Visitor satisfaction analysis as a tool for parkmanagers: A review and case study. *Annals of Leisure Research*, 14(4), 289-303. <https://doi.org/10.1080/11745398.2011.639339>
- Tsai, C.T. (2016). Memorable tourist experiences and place attachment when consuming local food. *International Journal of Tourism Research*, 18(6), 536-548. <https://doi.org/10.1002/jtr.2070>
- Tsai, S.P. (2012). Place attachment and tourism marketing: Investigating international tourists in Singapore. *International Journal of Tourism Research*, 14, 139-152. <https://doi.org/10.1002/jtr.842>
- Tse, D.K., & Wilton, P.C. (1988). Models of consumer satisfaction: An extension. *Journal of Marketing Research*, 25(2), 204-212. <https://doi.org/10.2307/3172652>
- Valle, O.D., Silva, S.A., Mendu, J., & Guerreco, M. (2006). Tourist satisfaction and destination loyalty intention: Structural and categorical analysis. *International Journal of Business Science and Applied Management*, 1(1), 25-44.
- Wang, C.Y., & Hsu, M.K. (2010). The relationships of destination image, satisfaction, and behavioral intentions: An integrated model. *Journal of Travel & Tourism Marketing*, 27(8), 829-843. <https://doi.org/10.1080/10548408.2010.527249>
- Wiles, J.L., Allen, R.E.S., Palmer, A.J., Hayman, K.J., Keeling, S., & Kerse, N. (2009). Older people and their social spaces: A study of well-being and attachment to place in Aotearoa New Zealand. *Social Science and Medicine*, 78, 664-671. <https://doi.org/10.1016/j.socscimed.2008.11.030>
- Woosnam, K.M., Aleshinloye, K.D., Strzelecka, M., & Erul, E. (2016). The role of place attachment in developing emotional solidarity with residents. *Journal of Hospitality & Tourism Research*, 42(7), 1058-1066. <https://doi.org/10.1177/1096348016671396>
- Xu, Z., & Zhang, J. (2016). Antecedents and consequences of place attachment: A comparison of Chinese and Western urban tourists in Hangzhou, China. *Journal of Destination Marketing & Management*, 5(2), 86-96. <https://doi.org/10.1016/j.jdmm.2015.11.003>
- Yoon, Y., & Uysal, M. (2005). An Examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tourism Management*, 26(1), 45-56. <https://doi.org/10.1016/j.tourman.2003.08.016>
- Yu, L., & Goulden, M. (2006). A comparative analysis of international tourists' satisfaction in Mongolia. *Tourism Management*, 27(6), 1331-1342. <https://doi.org/10.1016/j.tourman.2005.06.003>
- Yuksel, A., & Yuksel, F. (2007). Shopping risk perceptions: Effects on tourists' emotions, satisfaction and expressed loyalty intentions. *Tourism Management*, 28(3), 703-713. <https://doi.org/10.1016/j.tourman.2006.04.025>
- Yuksel, A., Yuksel, F., & Bilim, Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and connative loyalty. *Tourism Management*, 31(2), 274-284. <https://doi.org/10.1016/j.tourman.2009.03.007>
- Zhang, H., Fu, X., Cai, L.A., & Lu, L. (2014). Destination image and tourist loyalty: A meta-analysis. *Tourism Management*, 40, 213-223. <https://doi.org/10.1016/j.tourman.2013.06.006>
- *** WAZA (2005). *Building a Future for Wildlife – The World Zoo and Aquarium Strategy*. World Association of Zoos and Aquariums, Bern, Switzerland.

GEOINFORMATION SUPPORT OF TOURIST AND RECREATION DEVELOPMENT OF CULTURAL LANDSCAPE OF THE REPUBLIC OF MORDOVIA (RUSSIA)

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Abstract: Study is aimed at solving the problem of developing a strategy for the formation and arrangement of cultural landscapes in the Republic of Mordovia on the basis of geoinformation support for the tourist and recreational development of the cultural landscape. The study of the formation of cultural landscapes of the region was carried out through the use of databases of spatio-temporal organization of geosystems and cartographic modeling of the patterns of economic development of geosystems. The regional GIS "Mordovia" and geoportal "Natural and Historical Heritage of the Republic of Mordovia" developed by the authors contain an interactive system of thematic maps and databases that reveal the peculiarities of nature, population, economy, cultural heritage, and the development of environmental situations of the region. The article shows that the cultural landscapes of Mordovia were formed in the process of centuries-old economic development of geosystems, and include high landscape diversity, cultural objects of peoples with unique development paths as the most important components.

Key words: cultural landscape, geoinformation support, geosystems, GIS, tourism

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INTRODUCTION

A distinctive feature of the tourism industry development is a great need for a variety of geographical information about the territory that reveals the features of the main tourist sites and their surroundings accessible to travelers through the route system. World practice shows that the promotion of tourist products is currently largely determined through the design and development of regional geoportals, the information resources of which are formed in compliance with the genetic, historical and structural principles (Terkenli, 2001; Dunets, 2019). Geographical analysis of the territory economic development over centuries and identification of changes in the state of cultural landscapes are the most important direction in the study of ethnic groups' life support systems, the regularities of geosystems transformation, identifying the features of natural and historical heritage formation, forecasting the development of ecological, socio-economic processes (Hall and Page, 2014). The results of the study form a holistic view of the region significantly refine the assessment of tourist and recreational potential (Gordon, 2018). The cultural landscape is continuous, but there are central, nodal, peripheral and border elements. One of the most important of them is the settlement - a consciously altered natural landscape to create an environment of rational, efficient and healthy life. In the process of economic development, settlements form settlement systems (Ringer, 2013). The content of this concept is very capacious. It includes settlement as a process of territorial distribution of the population and because of this process – settlement in the form of areas of settlement, characterized by the number, size, population, density, functional types of ethnic groups' settlements, united by a network of various inter-settlement connections.

The natural landscape, the settlement system and the accompanying man-made elements that provide the life support system are formed in the process of territory's economic development. V.L. Kagansky writes "Any terrestrial space, the living environment of a sufficiently large (self-preserving) group of people is a cultural landscape, if this space is both integral and differentiated, and the group has mastered this space utilitarianly, semantically and symbolically" (Kagansky, 2001, p. 24). For different social groups, there is the scale of the cultural landscape – the comprehension of the territory

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perceived visually or speculatively. Dominant scales are associated with the lifestyle of groups or individuals. "The multi-scale nature of the landscape corresponds to the multi-scale nature of the groups of people living in it. Different groups base their life understanding and behavior on the interpretation and semantic use of different scales" [ibid., p. 33].

While analyzing cultural landscape, the prerequisites are set for a critical assessment of the conditions for the ecological, socio-economic development of regions and making adequate management decisions to optimize them. The processes of economic development are selective, and therefore the formation of cultural landscapes is metachronous, which is determined by the peculiarities of the geographical location, the nature of the surrounding natural landscape, its resource potential, transport infrastructure, material and spiritual culture of the population (Yamashkin, 2008). These factors work differently at the regional and local levels and as a result, their hierarchical systems are formed. The older they are, the more sharply the peculiarities of the interaction of environmental, economic and demographic processes are manifested (Adhika and Putra, 2020). This study is aimed at solving the problem of developing a strategy for the formation and arrangement of cultural landscapes in the Republic of Mordovia on the basis of geoinformation support for the tourist and recreational development of the cultural landscape, based on the use of geographical information about the territory, systematized on the basis of the doctrine of cultural landscapes. The solution to this problem is based on the development of digital maps and databases spatio-temporal organization of geosystems as a basis for livelihood and development of cultural landscapes.

MATERIALS AND METHODS

The study of cultural landscapes formation is a set of measures to collect, accumulate, analyze and systematize data on the development and state of life support systems (Vos and Meekes, 1999). This problem is effectively solved by means of using digital infrastructures of spatial data, providing the following directions of research development:

- 1) development of digital maps systems and databases of spatio-temporal organization of geosystems as the basis for the population's life support;
- 2) cartographic modeling of patterns of geosystems economic development and the identification of limiting factors in the development and change of cultural landscapes.

Regional GIS and geosystems digital map as a base to study the cultural landscape evolution

The regional GIS "Mordovia" and the integrated geoportal "Natural and Historical Heritage of the Republic of Mordovia" (<https://tourismportal.net/>) contain an interactive reference system of thematic maps and databases that reveal the peculiarities of nature, population, economy, cultural heritage, and the development of environmental situations (Yamashkin et al., 2020). The work of Begovatkin (2017) was used to reconstruct the early stages of economic development of the region. The central element of GIS is a synthetic map of geosystems (Sochava, 1978), among the advantages of which is the ability to synthesize different levels of information about interaction nature of natural, social and economic processes. Its use expands the possibilities to optimize the development of analytical maps of interaction peculiarities between nature and society. The synthetic map is focused on the allocation of geosystems hierarchy according to the classification of V.A. Nikolaev (2000):

- **systems (subsystems)** – distinguished by macroclimate features (arctic, subarctic, boreal, etc.), defining features of the structure development, geosystems' dynamics, functioning and development and the processes of territory's economic development;
- **geosystems' classes (subclasses)** – macroforms of the relief caused by tectonics that determine the manifestation of altitudinal zonality and latitudinal zonality;
- **geosystems' groups (subgroups)** - determining the development of radial and lateral water exchange, such as water-geochemical regime;
- **geosystems' types (subtypes)** - detected by soil types characteristics and classes of plant formations;
- **geosystems' genera (subgenera)** – reflecting spatial laws of exogeodynamic processes development and morphological forms of relief;

The structure features, formation, development and dynamics of the cultural landscapes of Mordovia reflect the metachronous nature of geosystems' development and interaction processes between nature and the processes of the central part of the Russian Plain economic development.

Climate dynamics and the effects of geosystems self-development determined changes in the states of landscape systems in the holocen. Studies of paleogeographers (Galaasen et al., 2014) show that 10-12 thousand years ago there was a radical climatic change which determines the end of the last ice age and the beginning of the current interglacial period. Climate change is accompanied by a wide range of interrelated changes in global and regional geosystems: the weakening of the periglacial regime and the strengthening of the western air masses transport, an increase in the total amount of precipitation, the degradation of permafrost, the activation of thermokarst and solifluction processes; the formation of high floods on rivers, an increase in the proportion of lakes and marshlands, changes in the structure of vegetation, the formation of the anthropogenic factor of ecosystem regulation and the number of animals. Many features of landscape dynamics for the center of the Russian Plain are revealed in the works (Novenko et al., 2009; Isachenko, 2009; Makeev et al., 2021).

RESULTS AND DISCUSSION

Using the data of paleogeographers (Novenko et al., 2018), Table 1 shows the general nature of changes in the states of geosystems in the territory of Mordovia. The data analysis data shows that the current type of geo-systems functioning begins to be calculated from the middle holocen.

Geosystems classes

The high landscape diversity of the region is determined by the geographical proximity of the stratum-tiered Volga upland

and the stratum Oka-Don lowland, which invades the marginal part of the upland along the right bank of the Moksha River and the left banks of the Alatyr and the Sura rivers with relatively narrow ancient hollows of glacial water flow.

Table 1. Diagram of the dynamics of the Mordovia Republic geosystems in the holocene (Novenko et al., 2018)

Absolute chronology	Period	Chrono zone	Trends in changes in the state of geosystem types
1 000	Late holocen	Sub-Atlantic	Modern structure of geosystems; reduction of the forest-forming role of broad-leaved species, increase of secondary forests and monocultural pine stands; anthropogenic transformation of geosystem
2 500	Middle holocen	Subboreal	Medium-podzolic, turfy-carbonate (podsolized), gray forest, typical chernozems, carbonate, chernozem-meadow. Reduction of the forest-forming role of broad-leaved species and older trees, but strengthening of the role of pine; significant drying of swamps. Flora is enriched with species peculiar to the meadow steppes. Depending on the lithogenic basis, the geosystems of coniferous-broad-leaved, broad-leaved forests and meadow steppes are isolated.
4 500		Atlantic	Medium-podzolic, turfy-carbonate (podsolized), gley forest gray, hydromorphic and semi hydromorphic analogues of chernozems, swampy soils of meadow raw; migration of broad-leaved species to the watershed spaces of the Volga upland; increase in the diversity of pine-birch forests, formation of mixed forests, oak forests on water-glacial plains of the Oka-Don lowland; wide distribution of hydromorphic geosystems with alder trees in the river valleys.
8 000	Early holocen	Boreal	High proportion of lakes and marshlands, weakly podzolic, turfy-carbonate (podzolized and leached), swampy soils of meadow row, carbonated chernozem; distribution of rare-coniferous pine-birch forests. Reduction of tundra geosystems; formation of forest geosystems.
9 500	Ancient holocen	Pre-boreal	High proportion of lakes and marshlands; geosystems with hidden podzolic, turfy-carbonate, meadow and swamp soils under sparse pine-birch forests, tundra steppes.
10 300	Late Pleistocene	Late Dryas	Cryohyperzonal geosystems, intensive development of aeolian and cryogenic processes; skryptopodzolic, turfy-carbonate, meadow and swamp soils; tundra steppe with xerophytic herbaceous groupings and pine-birch open woods on water-glacial and ancient alluvial plains.
11 000 12 000		Alleroed	Cryohyperzonal geosystems under conditions of permafrost degradation: tundrosteppes adjacent to pine-birch open woods.

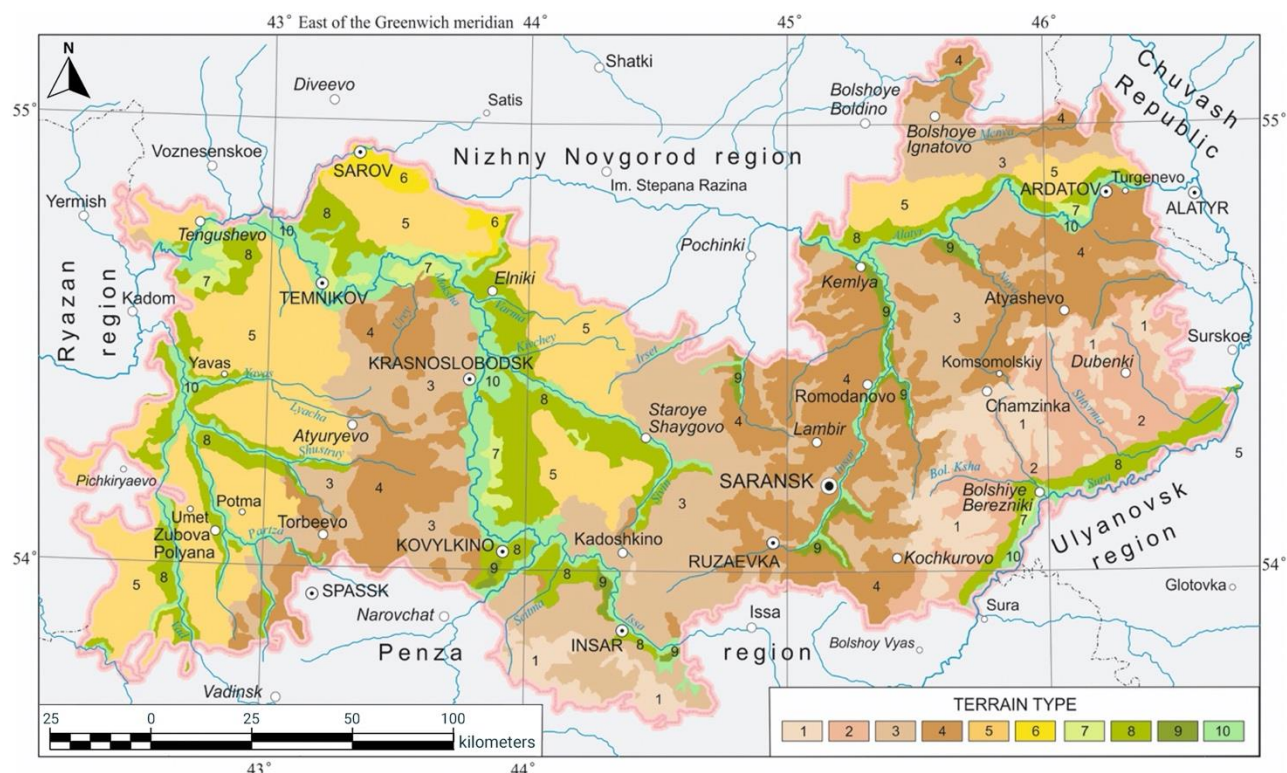


Figure 1. Modern types of geosystems (Yamashkin et al., 2012). Forest-steppe of the Volga upland: 1 – steppe upland oak forests with gray forest gravelly soils, selectively plowed; 2 – oak forests and shrub steppes with gray forest and black earth soils, selectively plowed; 3 – broad-leaved forests with gray forest soils, selectively plowed; 4 – mixed-herbs grass steppes with chernozem, highly developed. Forest geosystems of the Oka-Don lowland and ancient hollows of glacial water flow: 5 – coniferous and mixed forests with turfy-podzolic soils, limited plowed; 6 – coniferous and mixed forests with taiga elements with podzolic soils, limited plowed. Valley geosystems: 7 – coniferous and mixed forests with podzolic, turfy-podzolic and poorly developed sandy soils, limited plowed; 8 – broad-leaved forests with gray forest soils and podzolic chernozem, selectively plowed; 9 – meadow and shrub steppes with chernozem, highly developed; 10 – floodplain complexes

Geosystems class of the Volga upland forest-steppe

The features of the landscape structure are determined by the distribution of siliceous-carbonate, carbonate and terrigenous sand-clay rocks of Meso-Cenozoic age. The development of slope paragenetic geosystems determined the natural change of forest types of landscapes on the remnant-watershed massifs to mixed-herbs grass steppes with chernozem on the lower near-

valley areas of the slopes. Geosystems class of the forest province of the Oka-Don lowland was formed in ancient hollows of glacial water runoff that penetrate into the area of the Volga Upland with sandy lowlands. The wide distribution of sand deposits provides good filtration of precipitation. The heterogeneous composition of glacial sediments determines a large mosaic in the degree of hydromorphic geosystems. Their structure is dominated by coniferous and coniferous-deciduous forests with turfy-podzolic and gray forest soils (Figure 1). The most important waterways of the region are the Moksha and the Sura, which belong to the Volga basin, which served as a transcontinental route connecting the regions of Europe and Asia since ancient times. The ethnic groups settled along the rivers, and economic and cultural ties of the peoples were carried out.

Economic development, changes in life support systems and changes in the types of cultural landscapes of the region are developed in the context of global climate transformations in the holocene that affect the state of regional and local geosystems.

The stage of the appropriating economy

In the Early Holocene (Boreal and Pre-Boreal periods – 10-8 thousand years ago), tundra geosystems and sagebrush-haze steppes began to transform into pine-birch forest complexes because of climate warming. The sites belonging to the Paleolithic and Mesolithic are located on the dune-like elevations of the sandy ancient alluvial plains of the river Moksha valley and its tributaries, characteristic features of which in the places of ancient people residence were a high landscape diversity.

The stage of residual forms of appropriating economy and the Neolithic revolution

The Atlantic period (7.5-5.5 thousand years ago) is denoted by paleo geographers as the phase of the holocene climatic optimum – the development of geosystems under conditions of further climate warming provided by moisture. On the Russian Plain, landscape differentiation is becoming more complex, and the modern structure of geosystems is being formed. As part of the forest – steppe geosystems of the Volga Upland, broad-leaved forests-oak, linden, elm – begin to dominate in the watershed spaces, which are replaced by mixed herbs grass steppes in the lower parts of the slopes; coniferous and mixed forests dominate on the water-glacial plains. Mesolithic and Neolithic monuments are usually located on sandy ancient alluvial terraces, riverine dunes rising above floodplain meadows and lakes. During the Subboreal period (4.5-2.5 thousand years ago), the climate becomes moderately warm and dry (Brown et al., 2017). Xerothermic conditions caused a reduction in swamp geosystems and an increase in the area of park oak forests and pine-birch forests. The Volosov and the Imerk cultures represent the eneolithic archaeological sites. They tend to be geosystems of mixed forests of sandy water-glacial and ancient alluvial plains. Features of material culture indicate the interaction of the Finno-Ugric tribes with the tribes of the Fatyanovo culture (the Indo-European branch of the ancient Balts). Features of ethnic groups' material culture represent their active employment in hunting, fishing, cattle breeding and agriculture.

Evolution stage the pastoral-agricultural economic-cultural type of landscape development

At the beginning of the sub-Atlantic period, the processes of climate cooling are manifested. The developing forest-steppe geosystems of the Volga Upland represented good pastures. Numerous archaeological sites testify their active development by the tribes of the Srubnaya, Andronovskaya, and Abashevskaya cultures. The sites are located in a wider range of landscapes than in the previous period, from forest to meadow-steppe. This is determined by the fact that the economic development of landscapes involves peoples whose culture has formed in different types of geosystems. Under their influence, the strengthening of the culture of the Bronze Age is noted. In the middle of the second millennium BC, the cultural landscape was enriched by the interaction of the local Finno-Ugric peoples with the tribes of the Srubnaya, Fatyanovo, Abashevo, and Balanov cultures that affected the development of agriculture and animal husbandry, and the creation of long-term settlements in all types of geosystems (Yamashkin et al., 2020). From the first millennium BC on the territory of modern Mordovia, the Finno-Ugric tribes of the Gorodets culture of early iron (culture of ancient settlements of matting ceramics) began to prevail. Their settlements are located on the main sides of river valleys and gullies. Such fortified settlements are numerous in the valleys of the Moksha and its tributaries, near Tengushevo, Narovatovo, Kargashino, Samozleika, Paevo villages, etc. At the same time with the settlements, there were big and small villages that did not have defensive structures. All zones of active economic development are characterized by high landscape heterogeneity. The highest density of settlements is typical for the areas of the confluence of rivers, contrasting landscape borders.

The early stage of the Mordovian ethnos formation

The climate of the center of the Russian plain from the IX–XI centuries is characterized by short-term climate fluctuations. The evolution of the ancient Mordva people material culture took place it was in the context of the development of contacts with the Slavs, Bulgars, Polovtsians, Khazars and other peoples. Interethnic contacts and self-development of local Finno-Ugric tribes led to the formation of the Mordovian ethnos and the development of its sub-ethnic groups - Erzya and Moksha.

The formation of cultural landscapes during the period from the XVII to the middle of the XIX century

The climate of the Russian plain center was characterized by relatively mild winters and cool summers. Paleo geographers (Büntgen et al., 2016) refer to this period as the "Little Ice Age". The defense lines that were built to protect the Moscow state became a characteristic element of the cultural landscape. At the intersections of fortifications with important roads, rivers or open spaces of meadow steppes, fortresses were built, many of which later became the cores of the developing settlement system, centers of trade, handicraft, religion, for example, Temnikov, Saransk, Insar, etc. Agricultural development of landscapes was accompanied by the development of rural settlements – big and small villages. To denote them the Mordva used the word

"vele". The analysis shows that the formation of Mordovian settlements was determined both by the level of socio-economic development and the features of the settlement of patronymic groups, as well as by the nature of the surrounding landscape, the size and the topographic location of settlements in the area (Figure 2). When choosing a particular planning solution, the builders skillfully used various planning elements of the surrounding landscape – rough terrain, rivers, roads, etc. Rural architects, skillfully adapting to local conditions, developed stable traditional methods of architectural and planning composition of squares. It is noteworthy that closed areas in the settlements of Mordovia are very rare. The percentage of semi-closed areas is also small, but semi-open and uncovered areas predominate everywhere. Their composition uses an organic connection with the surrounding natural landscape, which is beneficial for the settlement. Orthodox churches and Muslim mosques are becoming important elements of residential landscapes. The Makarovsky, Sanaksar and Sarov monasteries are very famous.

The modern cultural landscape largely depends on the properties of geosystems and geographically inherits the centuries-old processes of economic development. Settlements, combining the place of residence, work, recreation and communication of the population, form a socio-territorial meso-environment for the development of ethno-cultural processes. The main parameters of the rural socio-settlement environment of interethnic interactions include: the number, population, density and functional types of settlements; types and forms of on-farm settlement; forms and ethno geographic structures of settlement areas, etc.

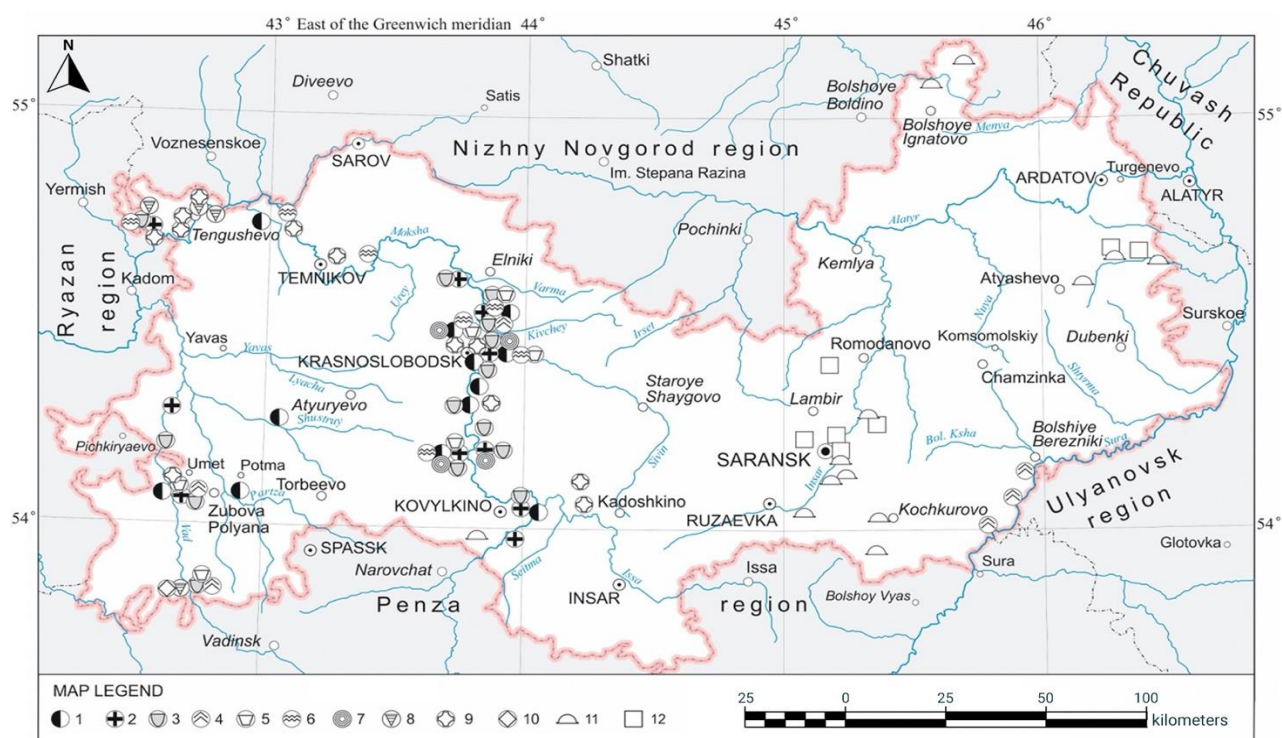


Figure 2. Monuments of archeology of the Republic of Mordovia (Yamashkin et al., 2012): 1 – Mesolithic; 2 – early Neolithic; 3 – cultures of Matting Ceramics; 4 – early Eneolithic; 5 – Volosovsky; 6 – Imerk culture; 7 – Catacomb culture; 8 – Fatyanovo-Balanovo culture; 9 – Moksha culture; 10 – Abashevskaya culture; 11 – Mounds of the Srubnaya culture; 12 – Settlements of the Srubnaya culture

The number and density of rural settlements

At present, there are 1,261 settlements in the Republic of Mordovia, including 7 cities - 3 republican and 4 of regional subordination, 19 workers' settlements. The patterns of settlement distribution are consistent with the nature of landscape subordination. The density of settlement distribution increases from the geosystems of steppe upland oak forests with gray forest rubble soils of varying degrees to meadow-steppe landscapes with fertile chernozem from 0.012 to 0.070 units/km². If in the settled upland oak forests, a significant share is made up of sparsely populated settlements, then in the meadow-steppe geosystems large settlements are more widespread (Table 2). The features of the most ancient periods of the development of the region are manifested in the settlement of ethnic groups: settlements with Moksha-Mordovian populations prevail in the Moksha River basin, and Erzya-Mordovian settlements dominate in the Sura basin. Settlements of Tatars gravitate towards meadow-steppe landscapes. Russian-dominated settlements are widespread. The geographical proximity of settlements of different ethnic composition influences the ethno-cultural processes, enriches the landscape appearance of the cultural landscape.

This is especially true for the areas adjacent to Moksha River and the central part of the Insar River basin. Residential landscapes form the economic (support) framework of the region, including a set of centers (cores of concentration) and edges (communications), which, on the one hand, integrates production functions, demonstrating the value of concentration, and on the other – defines the network of settlement, the core of the cultural landscape, ensuring the integration of natural and socio-economic potential of the republic. The central link in the economic framework and cultural landscape of the Republic of Mordovia is Saransk, where about 30% of the population is concentrated. The administrative centers of districts, villages, and villages form a wide range of zones of interethnic interaction, and provide specific conditions for functioning of the ethnic culture component. It is also obvious that the more important the social-production and service functions performed by

settlements, the more significant their role in the settlement system, the more intense ethno cultural processes in them. Ethnic groups in the republic live in close proximity, which is facilitated by the presence of compact forms of settlement areas. In some cases, various ethnic groups, compactly settled in areas, but functionally not united into agricultural enterprises, nevertheless are in close inter-settlement ties, which creates favorable conditions for their ethnic contacts. Therefore, it is important to take into account this type of interethnic interaction. The lifestyle of the rural population, to a greater extent than the lifestyle of the townspeople, reflects the specific features of the settlement environment. It is quite natural that the presence of small settlements and scattered settlements, among other things, limits the possibility of systematic interethnic communication. District centers unite the network of settlements into a territorial whole through a system of functional relationships, the strength and saturation of which depend on their status: the higher it is, the more attractive they have. Possessing multifunctionality, they are the place of the most intensive interethnic contacts, differentiated depending on the history of development, the state of the transport infrastructure and forms of settlement areas of ethnic groups. In the process of landscapes economic development, a wide range of objects of natural and historical heritage was formed, including more than 2100 monuments of nature, history and culture (Figure 3), 953 of them are protected by the state: nature reserve, natural monuments, ethnographic centers, places associated with the development of folk arts and crafts, the life of outstanding historical personalities.

Table 2. Distribution of settlements by types of geosystems (2020) (Yamashkin et al., 2020)

Grouping geosystems	Number of settlements, units	Settlements share from their number in the region %	Population density, units/km ²	Percentage of settlements with different population levels, %							
				less than 26	26–50	51–100	101–200	201–500	501–1000	1001–2000	more than 2 000
Geosystems of the Volga upland forest-steppe											
Steppe upland oak forests	19	1.51	0.012	47.37	5.26	5.26	5.26	21.05	15.79	0.00	0.00
Broad-leaved forests	141	11.18	0.041	39.01	9.93	9.22	9.93	23.40	4.96	0.00	3.55
Oak forests and shrub steppes	352	27.91	0.053	33.52	6.25	12.22	12.78	23.86	7.67	1.42	2.27
Mixed herbs grass steppes	509	40.36	0.070	29.47	10.81	9.23	15.72	19.84	8.25	3.14	3.54
Geosystems of the Oka-Don lowland forest province											
Coniferous and mixed forests	240	19.03	0.032	42.92	10.00	10.83	11.67	14.17	3.75	1.67	5.00

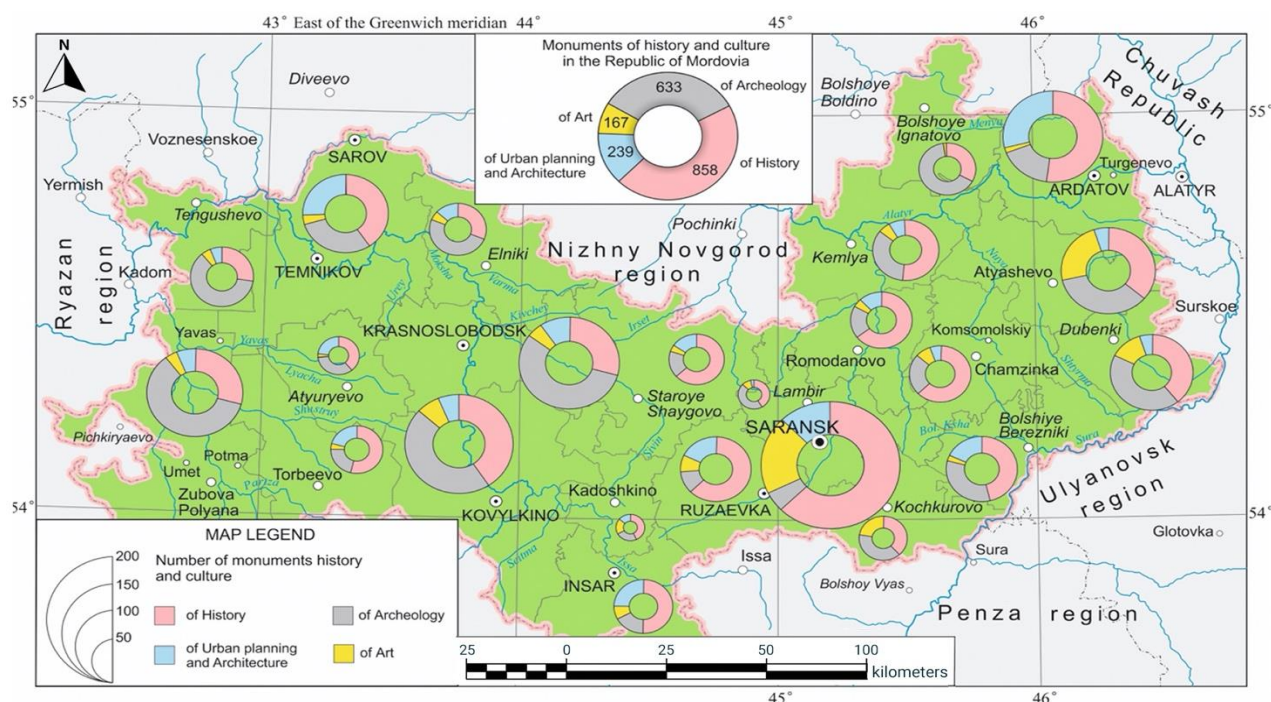


Figure 3. Historical monuments in the cultural landscape (Yamashkin et al., 2012)

CONCLUSIONS

The introduction of digital technologies in the field of Earth sciences is an actively developing scientific direction focused on solving problems of optimizing the interaction of nature and society. GIS technologies in the field of tourism and recreation activities, business structures, and the daily life of the general population makes it possible to increase the efficiency of solving the problems of planning sustainable landscapes. The study of cultural landscapes formation can be done successfully by means of using digital infrastructures of spatial data, providing the following directions of research development: development of databases of spatio-temporal organization of geosystems as the basis for the population's life support and cartographic modeling of patterns of geosystems economic development.

The regional GIS "Mordovia" and geoportal "Natural and Historical Heritage of the Republic of Mordovia" (<https://tourismportal.net/>) contain an interactive system of thematic maps and databases that reveal the peculiarities of nature, population, economy, cultural heritage, and the development of environmental situations of the region: a wide range of objects of natural and historical heritage, including more than 2100 monuments of nature, history and culture, more than 900 of them are protected by the state: nature reserve and monuments, ethnographic centers.

Cultural landscapes of Mordovia were formed in the process of centuries-old economic development of geosystems. As the most important components, they include high landscape diversity, cultural objects of peoples with unique development paths. The cohabitation of Mordovians, Russians, Tatars, and representatives of other ethnic groups on the same territory naturally affects the mutual enrichment of cultural traditions, forms a single cultural landscape. The latter is differentiated into local ecological, socio-economic systems that differ in the ecological conditions of population's life support and contain objects of natural and historical heritage. The development of comprehensive geographical assessment of natural and cultural heritage objects, the creation of a methodology for systematization, geoinformation mapping and the effective use of diverse information about the region to ensure the active development of tourist and recreational activities should be carried out in compliance with the genetic, historical and systemic principles in the study of the region. Together, they provide the creation of a concept of scientific, educational, environmental and health tourism development.

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REFERENCES

- Adhika, I.M., & Putra, I.D. (2020). Reinvigorating Cultural Landscapes for Planning Cultural Tourism in Bali. *GeoJournal of Tourism and Geosites*, 33(4spl), 1462–1469. <https://doi.org/10.30892/gtg.334spl03-594>
- Begovatkin, A.A. (2017). Republic of Mordovia. In *Arheologicheskaya karta Rossii. [Archaeological map of Russia]*, 340-388. IA RAS, Moscow, Russia, (in Russian).
- Brown, K.J., Hebda, N.J., Conder, N., Golinski, K.G., Hawkes, B., Schoups, G., & Hebda, R.J. (2017). Changing climate, vegetation, and fire disturbance in a sub-boreal pine-dominated forest, British Columbia, Canada. *Canadian Journal of Forest Research*, 47(5), 615-627.
- Büntgen, U., Myglan, V.S., Ljungqvist, F.C., McCormick, M., Di Cosmo, N., Sigl, M., & Kirdyanov, A.V. (2016). Cooling and societal change during the Late Antique Little Ice Age from 536 to around 660 AD. *Nature geoscience*, 9(3), 231-236. <https://doi.org/10.1038/ngeo2652>
- Dunets, A.N., Vakhruhev, I.B., Sukhova, M.G., Sokolov, M.S., Utkina, K.M., & Shichiyakh, R.A. (2019). Selection of strategic priorities for sustainable development of tourism in a mountain region: concentration of tourist infrastructure or nature-oriented tourism. *Journal of Entrepreneurship and Sustainability Issues*, 7(2), 1217. [https://doi.org/10.9770/jesi.2019.7.2\(29\)](https://doi.org/10.9770/jesi.2019.7.2(29))
- Galaasen, E.V., Ninnemann, U.S., Irvani, N., Kleiven, H.K.F., Rosenthal, Y., Kissel, C., & Hodell, D.A. (2014). Rapid reductions in North Atlantic Deep Water during the peak of the last interglacial period. *Science*, 343(6175), 1129-1132. <https://doi.org/10.1126/science.1248667>
- Gordon, J.E. (2018). Geoheritage, geotourism and the cultural landscape: Enhancing the visitor experience and promoting geoconservation. *Geosciences*, 8(4), 136. <https://doi.org/10.3390/geosciences8040136>
- Hall, C.M., & Page, S.J. (2002). The Supply of Recreation and Tourism. In *The geography of tourism and recreation: Environment, place and space*, 87-130, Routledge, London, United Kingdom. <https://doi.org/10.4324/9780203246276>
- Isachenko, T. (2009). Cultural landscape dynamics of transboundary areas: A case study of the Karelian Isthmus. *Journal of Borderlands Studies*, 24(2), 78-91. <https://doi.org/10.1080/08865655.2009.9695729>
- Kagansky, V.L. (2001). World of cultural landscape. In *Kulturnyj landshtaf i sovetskoe obitaemoe prostranstvo [Cultural landscape and Soviet habitable space]*, 23-135, UFO, Moscow, Russia, (in Russian).
- Makeev, A., Rusakov, A., Kurbanova, F., Khokhlova, O., Kust, P., Lebedeva, M., & Mihailov, E. (2021). Soils at archaeological monuments of the Bronze Age – a key to the Holocene landscape dynamics in the broadleaf forest area of the Russian Plain. *Quaternary International*, 590, 26-47. <https://doi.org/10.1016/j.quaint.2020.09.015>
- Nikolaev, V.A. (2000). Landshaftovedenie. Seminarskie i prakticheskie zanyatiya [Landscape studies. Practical and seminary classes], Moscow university Publishing House, Moscow, Russia, (in Russian).
- Novenko, E.Y., Volkova, E.M., Nosova, N.B., & Zugarova, I.S. (2009). Late Glacial and Holocene Landscape Dynamics in the Southern Taiga Zone of East European Plain According to Pollen and Macrofossil Records from the Central Forest State Reserve (Valdai Hills, Russia). *Quaternary International*, 207(1-2), 93-103. <https://doi.org/10.1016/j.quaint.2008.12.006>
- Novenko, E.Y., Mazei, N.G., Kupriyanov, D.A., Volkova, E.M., & Tsyganov, A.N. (2018). Holocene dynamics of vegetation and ecological conditions in the center of the East European Plain. *Russian Journal of Ecology*, 49(3), 218-225. <https://doi.org/10.1134/S1067413618030062>
- Ringer, G.E. (2013). Destinations. In *Destinations: Cultural landscapes of tourism*, 49-174, Routledge, London, United Kingdom.
- Sochava, V.B. (1978). Evolution and dynamics of geosystems. In *Vvedenie v uchenie o geosistemah [Introduction to the Study of Ecosystems]*, 106-127, Nauka. Sibirskoe otdelenie, Novosibirsk, USSR, (in Russian).
- Terkenli, T.S. (2001). Towards a theory of the landscape: the Aegean landscape as a cultural image. *Landscape and urban planning*, 57(3-4), 197-208. [https://doi.org/10.1016/S0169-2046\(01\)00204-3](https://doi.org/10.1016/S0169-2046(01)00204-3)
- Vos, W., & Meekes, H. (1999). Trends in European cultural landscape development: perspectives for a sustainable future. *Landscape and urban planning*, 46(1-3), 3-14.
- Yamashkin, A.A. (2008). General characteristics of the cultural landscape of the Republic of Mordovia. In *Prirodnoe i istoricheskoe nasledie kulturnogo landshafta Mordovii [Natural and historical heritage of the cultural landscape of Mordovia]*, 22-47. Mordovia State University Publishing House, Saransk, Russia, (in Russian).
- Yamashkin, A.A., Yamashkin, S.A., Aksyonova, M.Y., Cimbaljević, M., Demirović, D., Vuksanović, N., & Milentijević, N. (2020). Cultural landscapes space-temporal systematization of information in geoportals for the purposes of region tourist and recreational development. *Geojournal of Tourism & Geosites*, 29(2), 440-449. <https://doi.org/10.30892/gtg.29205-480>
- Yamashkin, A.A. (Ed.). (2012). Population and Social Infrastructure. In *Geographical Atlas of the Republic of Mordovia*, 74-103, Mordovia State University Publishing House, Saransk, Russia, (in Russian).
- *** Geoportal of the Natural and Cultural Heritage of Mordovia, accessed 21.08.2021. <https://tourismportal.net/>

CHARACTERISTICS AND ASSESSMENT OF SELECTED WATERFALLS FORMED IN DIFFERENT GEOLOGICAL BASEMENTS IN THAILAND

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Abstract: Thailand is under the influence of the complicated tectonic settings, resulting in various geomorphological features, especially waterfalls. There has been no insightful research conducted to describe the relationship between the types of waterfalls and the lithology of basements. Thus, this work aims to classify representative waterfalls and describe their lithology, origin, and characteristics. The twelve selected waterfalls are distributed in ten provinces with different basements. Field investigations (lithology, structure, and geomorphology) and geoinformatics analysis were integrated and co-interpreted with geological interpretations, characteristics, classification, and assessment. High-grade metamorphic rocks associated with granitoids demonstrate fan-type waterfalls with high slopes, and limestone presents multi-tiered waterfalls with vividly coloured pools, while sandstone in the Khorat Plateau exhibits three types of waterfalls including cascade, plunge, and punchbowl. National park authorities manage all the studied waterfalls, so these areas have outstanding natural and tourism values, while education and international also present good scores.

Key words: geomorphology, geology, geotourism, fan-type waterfall, cascade, landform

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INTRODUCTION

Waterfalls often form in the headwaters, where lakes in valleys flow into steep mountains (Carreck, 1982). Based on their locations in the landscape, many waterfalls occur over bedrock fed by low-contributing terrain. Thus, the waterfalls may be ephemeral and flow only during rainfalls. Downstream rivers have more consistent waterfalls with various scales of depth, width, and length. When the river flows over resistant bedrock, erosion is slow and dominated by the impact of water-borne sediment on the bedrock. In contrast, downstream erosion is more rapid (Carreck, 1982) as the watercourse increases its velocity at the edge of the waterfall, it may uproot material from the riverbed if the bed is fractured or otherwise more erodible. Hydraulic jets and hydraulic jumps at the toe of a fall can generate large forces that erode the bed significantly when amplified by water-borne sediment (Pasternack et al., 2006, 2007). Horseshoe-shaped falls focus erosion on a central point, enhancing riverbed change below the waterfalls (Pasternack et al., 2006, 2007). A river sometimes flows over a giant step in the rocks that a fault line may have formed (Carreck, 1982). The classification divided waterfalls into ten types (National Geographic, 2018; Goudie, 2019), which consist of (1) a block waterfall with a comprehensive stream, (2) a cascade descending over a series of rock steps, (3) a powerful and dangerous cataract, (4) a chute with stream passage that is very narrow, (5) a waterfall with a fan-like shape, (6) a horsetail waterfall contacting with hard rock, (7) a multi-step waterfall connecting waterfalls with plunge pool, (8) a plunge waterfall lose contact with hard rock, (9) a punchbowl waterfall with vast pool at the base, and (10) a segmented waterfall that flows in separate and distinct streams. The size of a waterfall is considered by the height of the most significant vertical fall, the site's width, and the combined height of all falls at a site (Matthes, 1922; Plumb, 1993; Mabin, 2000).

Thailand has various types of landforms, all of which are the inspiration for this work. The northern region comprises the Thai highlands and consists of mountainous areas as well as intermountain basins, with Doi Inthanon being the highest point in the western part of Chiang Mai Province. The well-known Khorat Plateau in the northeast is bordered to the east by the Mekong River. Meanwhile, central Thailand is dominated by floodplains, with some small hills crossed by many rivers that discharge their sediments into the Gulf of Thailand. The southern region is a narrow strip of land between the Indian Ocean (Andaman Sea) to the west and the Pacific Ocean (Gulf of Thailand) to the east (Figure 1). The waterfalls are some of the famous landforms that are the destination for tourists, both Thais and foreigners. Therefore, this work describes and compares the waterfall characteristics of waterfalls in the different basements, including intrusive, volcanic, clastic sedimentary, chemical sedimentary, and metamorphic rocks.

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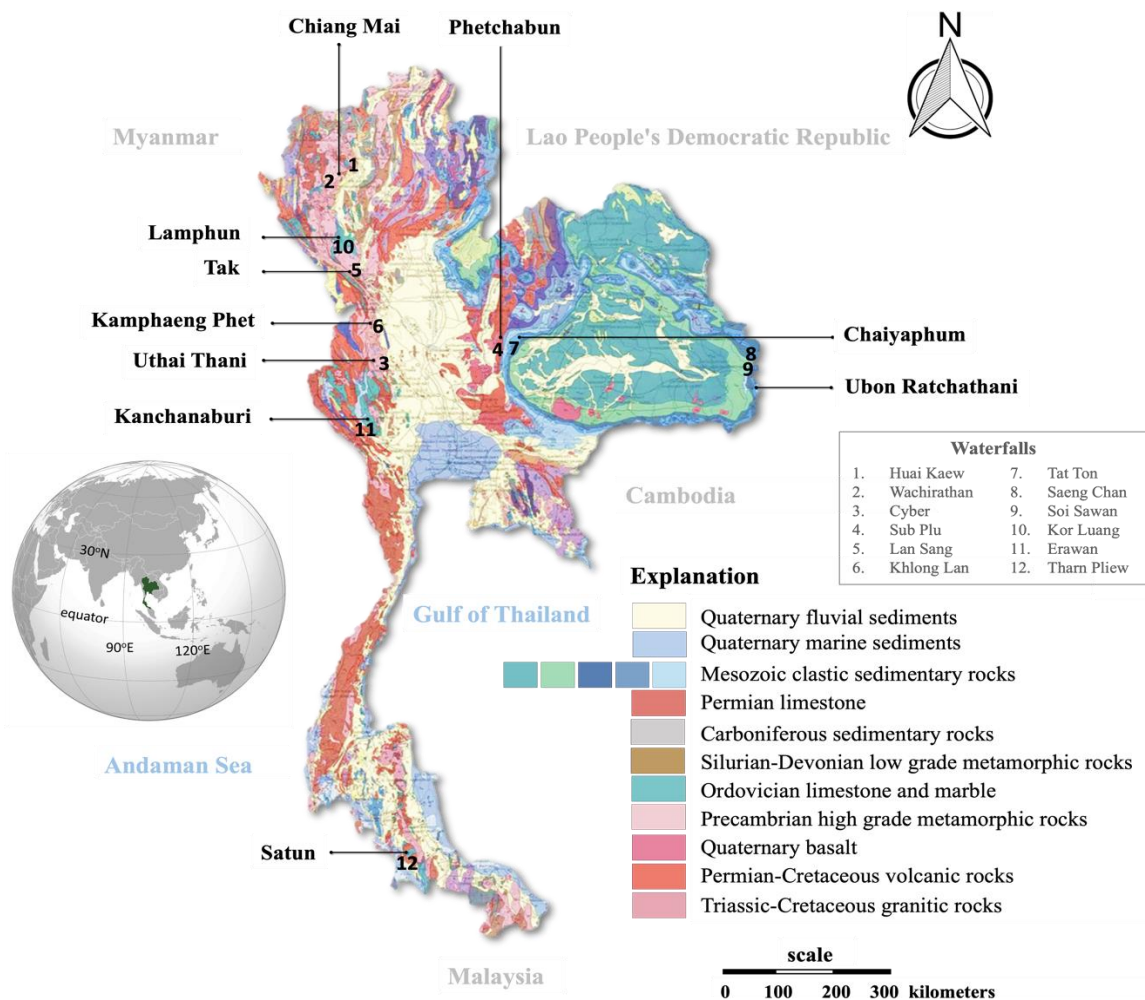


Figure 1. Location of studied areas on the background of geological settings of Thailand (geologic data modified from DMR, 1999)

Thailand is generally accepted to be composed of at least two ancient terranes as the Shan-Thai or Sibumasu and Indochina, which collided as tectonic plate landmasses during the Triassic period (Bunopas, 1981; Metcalfe, 2011; Metcalfe, 2013; Sone and Metcalfe, 2008; Ueno and Hisada, 2001). The Indochina terrain was derived from the Gondwana Supercontinent that existed in the Devonian era, while the Shan-Thai originated during the Late Carboniferous (Metcalfe, 2011; Metcalfe, 2013; Ueno and Hisada, 2001; Sone et al., 2012). Regarding the last event, this region is affected by the collision of Indian-Eurasian plates in the Cretaceous-recent. The Palaeo-Tethys Ocean separated these two terrains during the middle-upper Palaeozoic era before the Late Triassic–Early Jurassic convergence (Bunopas, 1981; Sone and Metcalfe, 2008). Therefore, many kinds of rocks are distributed in the region, including intrusive, volcanic, clastic sedimentary, chemical sedimentary, and metamorphic rocks (Figure 1). High-grade metamorphic and granitic rocks formed as high and complex mountain ranges in the West, northern and western parts of Thailand. Silurian-Devonian low-grade metamorphic rocks are presented as high lateral mountains in northern and small mountains in central Thailand. Granitoids of Triassic to Cretaceous intruded as batholiths and present as a mountain range in the northern and southern parts, while in Thailand's central and Loei Province occur as stock and present as a single mountain. Volcanic and associated rocks are distributed throughout this region, especially in the north, from Permian to Cretaceous. Cenozoic basalts, which still show volcanic features, generally erupted in the lower terrane of north-central-east Thailand and south of the Khorat Plateau. Ordovician and Permian limestone are distributed as high mountains and generally show karst landforms, excluding the Khorat Plateau. Mesozoic sedimentary rocks are mainly distributed in the Khorat Plateau (NE Thailand) and small areas in the northern part of Thailand. Geotectonic processes in Thailand are currently influenced by mainland Southeast Asia comprising many georesources in the form of a multitude of geomorphological features. Cenozoic strike-slip faults affect many scales of basins and fault escarpments, presenting cliffs and waterfalls (Bait et al., 1997; Fenton et al., 1997; Kosuwan et al., 1998; Singtuen and Won-In, 2018a).

MATERIALS AND METHODS

This study focused on outstanding waterfalls considering both geology and tourism in Thailand. General geotourism study methods were used, including inventory, field observation, characterisation, classification geoinformatics analysis and results in interpretation of twelve waterfalls: Wachirathan, Lan Sang, Khlong Lan, Huai Kaew, Cyber, Sub Plu, Tat Ton, Saeng Chan, Soi Sawan, Kor Luang, Erawan, and Tharn Pliew. These waterfalls are distributed in ten provinces: Chiang Mai, Tak, Kamphaeng Phet, Uthai Thani, Phetchabun, Chaiphaphum, Ubon Ratchathani, Lamphun, Kanchanaburi, and Satun (Table 1). Materials for analysis consisted of topographic maps, geological maps, satellite imagery, and

previous geologic research. Accordingly, criteria such as occurrence, rarity, integrity, and representativeness of geological features must be taken into consideration for the geosite identification process (Đurović and Đurović, 2010, Pralong, 2005, Nazaruddin, 2015). Waterfalls were inventoried and mapped based on their significant geotourism values. In addition, this work also characterised and classified selected waterfalls in different rock basement types and interpreted their occurrence.

Thus, field investigations and geomorphological analysis by Google Earth Pro 7.3.3.7786 (64-bit) with NVIDIA Graphics Driver (00027.00020.00100.08681) were integrated to determine the shape, elevation, slope, and type. Furthermore, this work assessed all waterfalls regarding both qualitative and quantitative international, natural, cultural, educational, and economic geotourism significance.

Table 1. Location and basement rocks of the selected waterfalls

Waterfall	Province	Location	Rock Type	Rock Name
Huai Kaew	Chiang Mai	18.81187N 98.94451E	Igneous and Metamorphic Rock	Triassic Granite
Cyber	Uthai Thani	15.30414N 99.42243E		Cenozoic Basalt
Sub Plu	Phetchabun	15.85101N 101.28203E		Precambrian Gneiss
Wachirathan	Chiang Mai	18.54242N 98.59817E		
Lan Sang	Tak	16.77746N 99.00300E		
Khlong Lan	Kamphaeng Phet	16.13092N 99.27680E	Sedimentary Rock	
Tat Ton	Chaiyaphum	15.98210N 102.03892E		Mesozoic Sandstone
Saeng Chan	Ubon	15.51613N 105.58967E		
Soi Sawan	Ratchathani	15.45975N 105.57903E		
Kor Luang	Lamphun	17.58352N 98.81750E		Permian Limestone
Erawan	Kanchanaburi	14.36880N 99.14394E		
Tharn Pliew	Satun	7.13354N 99.83841E		

Waterfall's Characteristics and Classification

1. Igneous and Metamorphic basement

All igneous and metamorphic bases always produce a fan-type waterfall, in which the water circulates horizontally as it descends and remains in contact with the bedrock (Figure 2).



Figure 2. The morphology of waterfalls in igneous and metamorphic basements
(a) Huai Kaew, (b) Cyber, (c) Sub Plu, (d) Wachirathan, (e) Lan Sang, and (f) Khlong Lan

Huai Kaew waterfall is a part of Suthep-Pui National Park in Chiang Mai (Figure 2a), which was truncated by the Chiang Mai Low Angle Normal Fault (CMLANF) in the Eocene–Oligocene period (Morley, 2009a, 2009b; Macdonald et al., 2010). This complicated geological area consists of stress granites with the relicts of high-grade metamorphic rocks (gneiss, marble, and calc-silicate rock), and pegmatites/aplite that intruded by the Triassic S-type granitic rocks (Beckinsale et al., 1979; Beckinsale, 1981; Hutchison, 1983) forming a high mountain in the western Chiang Mai Basin.

Huai Kaew waterfall displays the Huai Kaew stream flows from west to east for merging with Mae Ping River in the basin centre. This waterfall is small (height about 10 meters) with a perennial stream, presenting Chiang Mai's beautiful landform and stunning landscape. Cyber waterfall in the western part of Uthai Thani Province is a peaceful natural area and has many waterfalls in a perennial stream such as Loi Choi and Hin Lat. This area presents a Triassic granite - granodiorite basement that resulted from Srisawat fault segment movement (Figure 2b). The river flows upstream from the high mountain of Huai Kha Khaeng Wildlife Sanctuary in the western flank to the eastern. It is protected and conserved by the Cyber Forest Preservation Unit. Sub Phlu waterfall flows through columnar basalts with an intermittent stream of the Phetchabun National Geopark. These Cenozoic basalts have transitional composition between Tholeiite and Calc-alkaline Series, which occurred in a continental rifting process similar to Wichian Buri basalt (Limtrakul et al., 2013; Sriwichai et al., 2018). After this basalt eruption, the area was controlled by the Phetchabun fault segments, making a columnar basalt waterfall tilted with many small steps developed by streamflow (Figure 2c). Wachirathan is a part of Doi Inthanon National Park (the highest mountain peak of Thailand), Chiang Mai Province. This waterfall demonstrates that the Klang River flows from the Doi Inthanon Mountain range to the south-eastern flank (Figure 2d). Doi Inthanon is the western part of the CMLANF and is covered by the Pre-Cambrian-like metamorphic rocks (Doi Inthanon metamorphic core complex), comprising orthogneisses, paragneisses, mica schists, calc-silicates, and pegmatites (e.g., Baum et al., 1981; MacDonald et al., 1993). Wachirathan is one of the largest waterfalls in a perennial stream, presenting only one tier with 80 meters in height. Thus, this waterfall displays beautiful scenery throughout the year. Lan Sang is located in Lan Sang National Park, western Tak Province, and is affected by the striking Mae Ping fault 66.2 ± 1.6 Ma in area from the northwest to southeast (Palin et al., 2013). It is covered by Precambrian gneisses, Tertiary augen gneisses, and other metamorphic rocks (DMR, 1999; Österle et al., 2019). These rocks should have undertaken high-grade metamorphism belonging to greenschist facies and amphibolite facies and started from granitic and sedimentary protoliths prior to regional metamorphism in Late Eocene-Early Miocene magmatism (Österle et al., 2019). This waterfall is a part of the Huai Lan Sang stream (perennial stream) that flows from the Thanon Thong Chai Range (Figure 2e), demonstrating four tiers with approximately 40 meters in height. Khlong Lan is one of two stunning waterfalls in the Khlong Lan National Park, which is situated on Khun Khlong Lan Mountain in the Dawna Mountain range, which comprised of high-grade metamorphic rocks (gneisses, calc-silicates, and schists) associated with granitic rocks similar to the Lan Sang area. This area lies in the districts of Khlong Lan and Mueang Kamphaeng Phet, Kamphaeng Phet Province, located in the west of Thailand. Khlong Lan waterfall is a nine-tier waterfall with a perennial stream (Figure 2f).

2. Sandstone basement

Almost all sandstone waterfalls in Thailand occur in the Khorat Plateau, NE Thailand.

The Tat Ton cascade is on a perennial stream, presenting only one tier that is 7 meters in height and 30 meters in width at Tat Ton National Park, Chaiyaphum Province. The Tat Ton is built of the Phra Wiha Formation, Khorat Group. This formation comprises well-sorted, rounded, fine- to coarse-grained, pale-yellow sandstones, thin-bedded siltstones, mudstones, and conglomerates. Thick sandstone beds, occurring as high cliffs, were deposited in a braided stream environment, whereas thinner sandstone beds were deposited in meandering rivers (Meesook, 2000).



Figure 3. The morphology of waterfalls in sedimentary and limestone basements
(a) Tat Ton, (b) Saeng Chan, (c) Soi Sawan, (d) Kor Luang, (e) Erawan, and (f) Tharn Pliew

The steep scarp is formed of very resistant sandstones. Meanwhile, the less resistant rocks are siltstones and mudstones (Figure 3a). This type of waterfall is rare in Thailand. However, the Tat Ton waterfall is representative of the north-eastern part of the country (Singtuen and Won-In, 2018). Saeng Chan (two-tier waterfall that is 7 meters in height) and Soi Sawan

waterfall (20 meters in height) are located in Pha Chan-Sam Phan Bok National Geopark, Ubon Ratchathani Province, which is in the eastern most edge of the Khorat Plateau. These cascades are formed on perennial streams and dominated by the Phu Phan Formation, Khorat Group, which consists of medium to coarse-grained light grey sandstones. Some sandstones grade into thick beds of a conglomerate with large planar and trough cross-bedding. Pebbles consist of white quartz, grey and green volcanic rocks, and various colours of cherts. Detrital grains are well rounded but poorly sorted. In some areas, lenses of dark grey shales are found interbedded. This rock formation was deposited in braided streams and meandering rivers conditions in hot-humid to the semi-arid environment (Meesook, 2000). The Saeng Chan waterfall is a unique feature that flows through a mountain tunnel to a pool below (Figure 3b). It is classified as the Punchbowl type, presenting water that descends in a constricted form, and then it spreads out into a broader pool. In addition, Soi Sawan waterfall is a large perennial plunge-type waterfall originating from 2 main creeks before merging with the Mekong River (Figure 3c).

3. Limestone basement

Both Ordovician and Permian Limestone mainly form the multi-tiered, foliage-framed waterfalls, presenting with vividly coloured streams, tufa, and emerald green small pools. The tufa is formed on the rock surfaces when $\text{CaCO}_3 + (\text{H}_2\text{O} + \text{CO}_2)$ dissolves $\text{Ca}(\text{HCO}_3)_2$ from the lime-rich waters, leaving calcite (CaCO_3) to crystallize and $\text{H}_2\text{O}(\text{l}) + \text{CO}_2(\text{g})$ evaporate. The tufa-coated rock surface with flowing water is not slippery. Kor Luang is located in Mae Ping National Park, Lamphun Province, which displays a seven-tier perennial stream that is 20 meters in height. This waterfall is one of the well-known waterfalls in Thailand and is very famous for tourists in all seasons. Kor Luang waterfall is covered by Ordovician limestone, which consists of greyish argillaceous and dolomitic limestone associated with marble and some fossils (Figure 3d). Meanwhile, the Erawan waterfall in Kanchanaburi is covered by Permian limestone composed of massive and dolomitic limestone with chert nodules and numerous fossils (Figure 3e). This waterfall is located on a perennial stream in the Tenasserim Hills range, western Thailand, with 7 tiers and emerald green ponds. Moreover, Tharn Pliew in Satun UNESCO Global Geopark (Figure 3f) is a mountainous limestone area in the north with a five-meter-high waterfall and smaller waterfalls down below. The water source is a perennial stream from cavities or caves in the dark grey Ordovician limestone (similar as Kor Luang) mountains with calcium carbonate dissolution. Water from the main waterfall is diverged into many creeks, falling onto many levels of terraces which finally converge into a single stream.

Waterfalls Basic Parameters

Since there are many kinds of rocks in Thailand, there are many features and characteristics of waterfalls. This study presents waterfalls in different basement rocks including (1) igneous and metamorphic rocks, (2) clastic sedimentary rocks, and (3) limestone. These waterfalls are classified as fan, punchbowl, cascade, plunge, and multi-tiered. Table 2 presents the critical numeric data for the selected waterfalls comprising the upstream and downstream elevation, length of tourism zone, and maximal and average slopes. A fan-type waterfall formed from fault-controlled igneous and metamorphic rocks always has a high slope value, presenting a steep slope

(Figure 4) and stunning stream flow phenomena.

Excluding columnar waterfall depends on the main structural geology and the size of the lava flow. When a stream flows through limestone basements, calcite and other carbonate minerals are dissolved, with the rocks forming the karst topography or high slope waterfall by weathering and erosion processes. Kor Luang, Erawan, and Tharn Pliew waterfalls display a similar trend of slopes, 4.6-5.1% in max slope and 2.1-3.2% in average slope. In addition, clastic sedimentary rocks show different trends of the slope, both steep and gentle. Cascade (gentle slope) formally occurs in clastic sedimentary basements with different bedding resistance and non-resistance rocks (Figure 4). There are noteworthy features like Soi Sawan Waterfall, which presents a steep slope with streamflow in the escarpment slope.

Waterfalls Assessment for Geotourism Development

Qualitative assessment (Table 3) focuses on the international, natural, cultural, educational, and economic geotourism implications. Meanwhile, the quantitative assessment evaluates all those values in preliminary numerical criteria that consist of zero (0) to five (5) scoring, denoting none, very poor, poor, fair, good, and very good, respectively. All the selected waterfalls are located in national parks that manage and protect physical and natural features by national legislation (Singtuen and Won-In, 2018a; Singtuen and Won-In, 2018b; Singtuen and Won-In, 2018c; Singtuen and Won-In, 2019). Thus, these waterfalls automatically have high natural values with biotic (plants and animals) and abiotic (landforms and landscapes) components. The selected waterfalls also have aesthetic and tourism values by default because the national park organisations manage and develop them for serving visitors. International value relates to the number of geological research promotions via peer-reviewed journals or international-specific conferences. There are different numbers and ranks of their international publications (Singtuen and Won-In, 2018a; Singtuen and Won-In, 2018b; Singtuen and Won-In, 2018c; Singtuen and Won-In, 2019).

Table 2. Significant numeric data of selected waterfalls

Waterfall	Upstream (m. m.s.l.)	Downstream (m. m.s.l.)	Length (meter)	Max Slope (%)	Average Slope (%)
Huai Kaew	392	372	160	uc -39.6	uc -39.6
Cyber	394	377	286	13.9 -16.9	5.4 -6.6
Sub Plu	314	296	146	uc -53.9	uc -48.3
Wachirathan	795	665	974	12.3 -41.4	3.7 -15.9
Lan Sang	393	323	542	1.1 -45.7	0.4 -13.1
Khlong Lan	342	230	540	10.0 -51.4	4.4 -21.1
Tat Ton	286	250	1,470	5.1 -9.1	1.3 -2.9
Saeng Chan	139	134	101	uc uc	uc uc
Soi Sawan	239	214	326	12.6 -26.7	4.2 -9.0
Kor Luang	500	384	698	5.1 -42.1	3.2 -16.6
Erawan	509	77	2,460	4.6 -62.1	2.3 -17.7
Tharn Pliew	292	90	1,390	4.8 -35.3	2.1 -15.2

*uc: uncalculated and difficulty calculated

Table 3. Quantitative assessment of selected waterfalls in Thailand

Rock	Waterfall	Values				
		Inter-national	Nature	Culture	Edu-cation	Eco-nomy
Precambrian Gneiss	Wachirathan	4	5	3	2	5
	Lan Sang	5	5	1	4	2
	Khlong Lan	2	5	2	2	4
Triassic Granite	Cyber	3	5	1	2	2
	Huai Kaew	4	5	5	2	5
Cenozoic Basalt	Sub Plu	4	5	1	2	1
Mesozoic Sandstone	Tad Ton	4	5	1	4	1
	Saeng Chan	3	5	1	2	1
	Soi Sawan	3	5	1	2	1
Permian Limestone	Kor Luang	2	5	1	2	1
	Erawan	2	5	1	3	5
	Tham Pliew	2	5	2	4	1

score: 5 = very good, 4 = good,
3 = fair, 2 = poor, 1 = very poor, 0 = none

National parks always support educational activities and create scientific panels in order to educate people. However, the majority of investigated waterfalls have poor science visibility. Almost all sites lack cultural value because local people cannot portray their cultures in national parks since they must follow/respect national laws. However, Huai Kaew has high cultural value and is located close to a Hmong village as well as Kruba Sri Wichai (Thai Buddhist monk) Monument. The economy in these sites is managed by national park authorities, excluding Wachirathan, Khlong Lan, Huai Kaew, and Erawan. Local people also collaborate in various businesses such as restaurants, souvenir shops, local transportation, and local guides. Therefore, Huai Kaew, Wachirathan, and Lan Sang are the top three in terms of the highest evaluation scores within all selected waterfalls (Figure 5). These studied waterfalls have significant potential for geotourism development, similar to Tone Nga Chang (Seven-tier) waterfall in Songkhla Province, southern Thailand, which is dominated by granitic rocks (Nazaruddin, 2019).

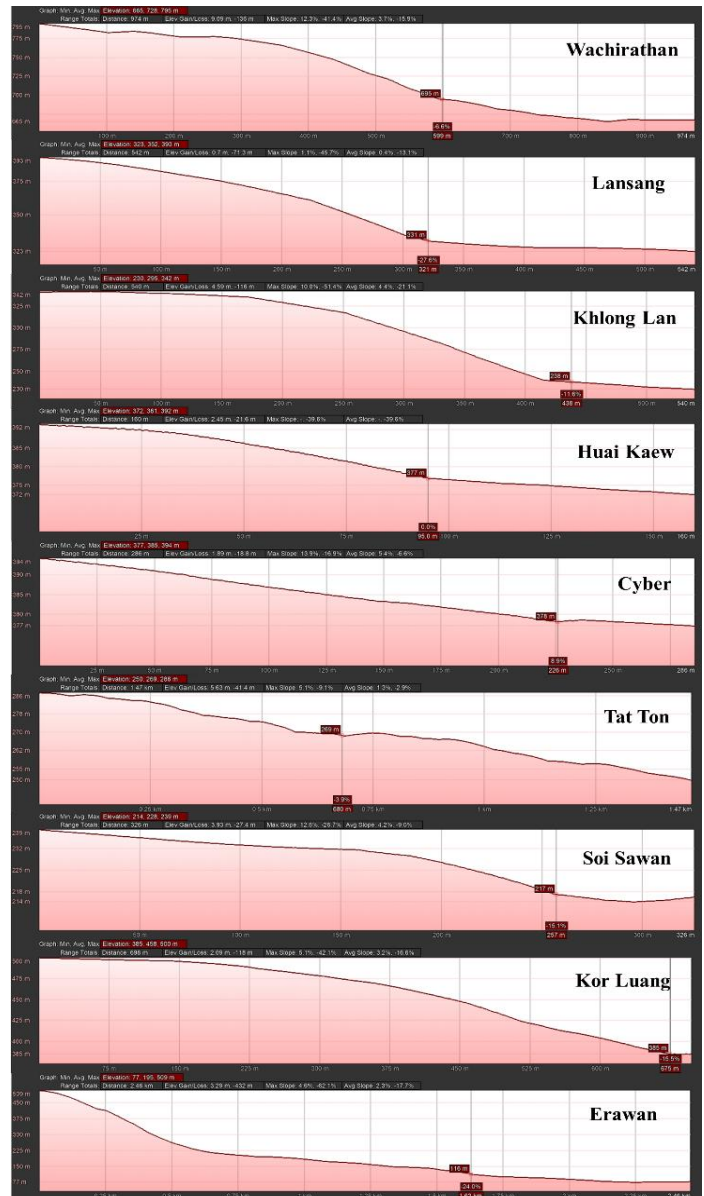


Figure 4. Elevation profile of selected waterfalls (data analyzed by Google Earth Pro 7.3.3.7786 with NVIDIA Graphics Driver (00027.00020.00 100.08681). The highlighted points present the tourist center of each area

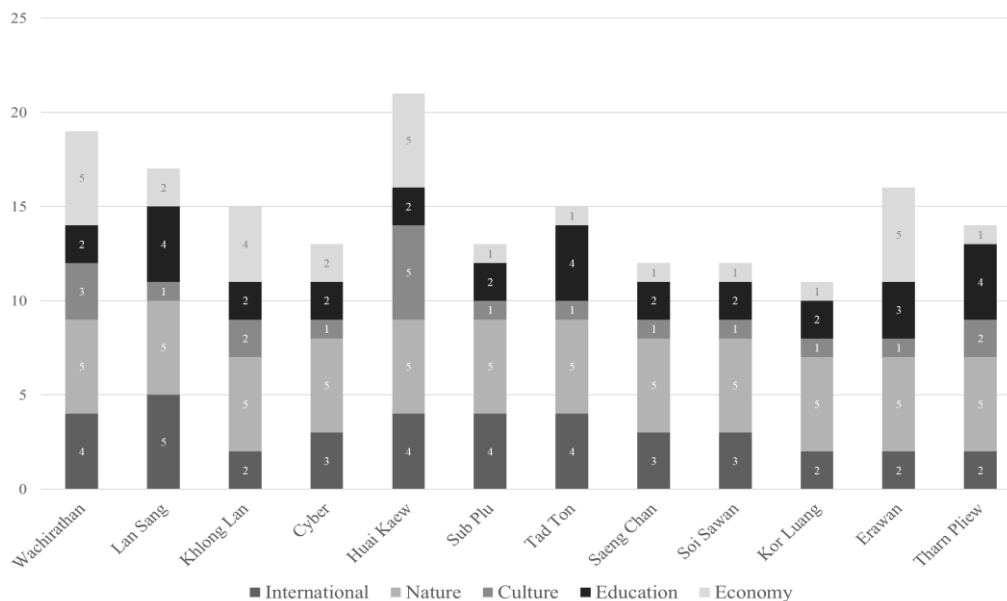


Figure 5. Quantitative geotourism assessment of studied waterfalls by field investigation and previous studied of Singtuen and Won-In (2018a, 2018b, 2018c, 2019)

CONCLUSION

Waterfalls are common. At the same time, they are unique landforms in Thailand due to the geological settings and large number of rocks. Igneous and metamorphic waterfalls are located in Precambrian high-grade metamorphic rocks and Triassic granitoid, distributed in the northern and western parts of Thailand, specifically Chiang Mai, Tak, Kamphaeng Phet, and Uthai Thani provinces. In addition, limestone waterfalls, both Ordovician and Permian, are formed in many places, e.g. Lamphun, Kanchanaburi, and Satun. On the other hand, sandstone waterfalls are vital landforms in the Khorat Plateau, such as those in Chaiyaphum and Ubon Ratchathani provinces. Fan-type waterfalls generally present igneous and metamorphic fault-controlled basements. Meanwhile, a multi-tiered waterfall is a type formed in the limestone basement. Both types demonstrate the steep slope of waterfalls (10-13.9% max. slope in igneous and metamorphics and 4.6-5.1% in limestone), so there are beautiful and unique geological phenomena in these areas. Clastic sedimentary rocks with different properties in each layer always form a cascade (5.1% max. slope with long-distance horizontal streamflow). However, Saeng Chan Waterfall is classified as a punchbowl, while Soi Sawan is a plunge type (12.6% max. slope in escarpment) based on their characteristics and processes.

These waterfalls have high natural and tourism value, but some areas score low in terms of culture and economy that should be augmented to enhance the population's understanding of the fundamental geological processes and help reinforce the importance of their resources through sustainable geotourism development. Moreover, the international and educational values range from fair to good and could be developed further. National parks in Thailand are stimulating and support scientific as well as tourism activities and research geared toward achieving geo-sustainable development in line with the 12th National Economic and Social Development Plan (2017-2021).

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REFERENCES

- Bait, J., Wong, I., Prachaub, S., Wechbunthung, B., Hinthong, C., & Sarapirome, S. (1997). *Contemporary seismicity in northern Thailand and its tectonic implication*. In Phisit. Dheeradilok (Ed.), Proceedings of International Conference on Stratigraphy and Tectonic Evolution of Southeast Asia and the South Pacific, 453-464, Thailand, Department of Mineral Resources.
- Baum, F., Braun, E.V., Hess, A., & Kock, K.E. (1981). *Geologic map of northern Thailand*, Department of Mineral Resources Thailand, Bangkok, Thailand.
- Beckinsale, R.D. (1981). *Granite magmatism in the tin belt of Southeast Asia*, Shiva Publishing, Chandigarh, India.
- Beckinsale, R.D., Suensilpong, S., Nakapadungrat, S., & Walsh, J.N. (1979). Geochronology and geochemistry of granite magmatism in Thailand in relation to a plate tectonic model. *Journal of the Geological Society*, 136, 529-540. <https://doi.org/10.1144/gsjgs.136.5.0529>
- Bunopas, S. (1981). *Paleogeographic history of western Thailand and adjacent parts of Southeast Asia—a plate tectonics interpretation*, Doctoral Dissertation, Victoria University of Wellington, New Zealand, 810.
- Carreck, R. (1982). *The Family Encyclopedia of Natural History*. The Hamlyn Publishing Group, 246-248, The Hamlyn Publishing Group, London.
- Đurović, P., & Đurović, M. (2010). Inventory of geoheritage sites – the base of geotourism development in Montenegro. *Geographica Pannonica*, 14(4), 126-132. <https://doi.org/10.5937/GeoPan1004126D>
- Fenton, C., Charusiri, P., Hinthong, C., Lumjuan, A., & Mangkornkarn, B. (1997). Late Quaternary faulting in northern Thailand. In Phisit. Dheeradilok (Ed.), Proceedings of the International Conference on Stratigraphy and Tectonic Evolution of Southeast Asia and the South Pacific, 436-452, Bangkok: Department of Mineral Resources Thailand.
- Goudie, A.S., (2020). Waterfalls: forms, distribution, processes and rates of recession. *Quaestiones Geographicae*, 39(1), 59-77. <https://doi.org/10.2478/quageo-2020-0005>
- Hutchison, C.S. (1983). Multiple Mesozoic Sn-W-Sb granitoids of Southeast Asia. *Geological Society of America Memoirs*, 159, 35-60.
- Kosuwon, S., Charusiri, P., Takashima I., & Lumjuan, A. (1998). *Active tectonics of the Mae Chan Fault, northern Thailand*. In Guan Hoe. Teh (Ed.), Proceedings of Ninth Regional Conference on Geology, Mineral and Energy Resources of Southeast Asia, 653-665, Kuala Lumpur: Geological Society of Malaysia.
- Limtrakun, P., Panjasawatwong, Y., & Khanmanee, J. (2013). Petrochemistry and origin of basalt breccia from Ban Sap Sawat area, Wichian Buri, Phetchabun, central Thailand. *Songklanakarin Journal of Science and Technology*, 35(4), 469-482.
- Mabin, M.C.G. (2000). In search of Australia's highest waterfalls. *Australian Geographical Studies*, 38(1), 85-90.
- Macdonald, A.S., Barr, S.M., Miller, B.V., Reynolds, P.H., Rhodes, B.P., & Yokart, B. (2010). P-T-t constraints on the development of the Doi Inthanon metamorphic core complex domain and implications for the evolution of the western gneiss belt, northern Thailand. *Journal of Asian Earth Sciences*, 37, 82-104. <https://doi.org/10.1016/j.jseas.2009.07.010>
- Matthes, F.E. (1922). Which is the highest water fall in the World?. *Science*, 56(1438), 75-76.
- Meesook, A. (2000). *Cretaceous environment of northeastern Thailand*. In *Cretaceous environment of Asia*, 207-223, Elsevier Science Publishers BV, Amsterdam.
- Metcalfe, I. (2011). Tectonic framework and Phanerozoic evolution of Sundaland. *Gondwana Research*, 19(1), 3-21. <https://doi.org/10.1016/j.gr.2010.02.016>
- Metcalfe, I. (2013). Gondwana dispersion and Asian accretion: tectonic and palaeogeographic evolution of eastern Tethys. *Journal of Asian Earth Sciences*, 66(8), 1-33. <https://doi.org/10.1016/j.jseas.2012.12.020>
- Morley, C.K. (2009a). Evolution from an oblique subduction back-arc mobile belt to a highly oblique collisional margin: the Cenozoic tectonic development of Thailand and eastern Myanmar. *Journal of the Geological Society*, 318, 373-403. <https://doi.org/10.1144/SP318.1>
- Morley, C.K. (2009b). Geometry and evolution of low-angle normal faults (LANF) within a Cenozoic high-angle rift system, Thailand: implications

- for sedimentology and the mechanisms of LANF development. *Tectonics*, 28(5, TC5001). <https://doi.org/10.1029/2007TC002202>
- Nazaruddin, D.A. (2015). Systematic Studies of Geoheritage in Jeli District, Kelantan, Malaysia. *Geoheritage*, 9(1), 19-33. <https://doi.org/10.1007/s12371-015-0173-9>
- Nazaruddin, D.A. (2019). Selected Geosites for Geoheritage, Geotourism, and Geoconservation in Songkhla Province, Southern Thailand. *Quaestiones Geographicae*, 38(1), 161-177. <https://doi.org/10.2478/quageo-2019-0011>
- Österle, J.E., Klötzli, U., Stockli, D.F., Palzer-Khomenko, M., & Kanjanapayont, P. (2019). New age constraints on the Lan Sang gneiss complex, Thailand, and the timing of activity of the Mae Ping shear zone from in-situ and depth-profile zircon and monazite U-Th-Pb geochronology. *Journal of Asian Earth Sciences*, 181, 1367-9120. <https://doi.org/10.1016/j.jseae.2019.103886>
- Palin, R.M., Searle, M.P., Morley, C.K., Charusiri, P., Horstwood, M.S.A., & Roberts, N.M.W. (2013). Timing of metamorphism of the Lansang gneiss and implications for left-lateral motion along the Mae Ping (Wang Chao) strike-slip fault, Thailand. *Journal of Asian Earth Sciences*, 76, 120-136. <https://doi.org/10.1016/j.jseae.2013.01.021>
- Pasternack, G.B., Ellis, C., Leier, K.A., Valle, B.L., & Marr, J.D. (2006). Convergent hydraulics at horseshoe steps in bedrock rivers. *Geomorphology*, 82:126-145. <https://doi.org/10.1016/j.geomorph.2005.08.022>
- Pasternack, G.B., Ellis, C.R., & Marr, J.D. (2007). Jet and hydraulic jump near-bed stresses below a horseshoe waterfall. *Water Resources Research*, 43, W07449. <https://doi.org/10.1029/2006WR005774>
- Plumb, G.A. (1993). A scale for comparing the visual magnitude of waterfalls. *Earth-Science Review*, 34(4), 261-270.
- Pralong, J.P. (2005). A method for assessing tourist potential and use of geomorphological sites. *Geomorphologie: relief, processus, environnement*, 11(3), 189-196. <https://doi.org/10.4000/geomorphologie.350>
- Singtuen, V., & Won-In, K. (2018a). Geoheritage Sites and Geoconservation at Pha Chan - Sam Phan Bok Geopark, Ubon Ratchathani Province, Thailand. *Geoconservation Research*, 2(1), 12-25. <https://doi.org/10.30486/GCR.2019.664490>
- Singtuen, V., & Won-In, K. (2018b). Geodiversity and Geoconservation of the Chaiyaphum Region in Thailand for Sustainable Geotourism Planning. *GeoJournal of Tourism and Geosite*, 22(2), 548-560. <https://doi.org/10.30892/gtg.22223-310>
- Singtuen, V., & Won-In, K. (2018c). Geological Perspective for Geotourism Development in Uthai Thani Province, Thailand. *Journal of Environmental Management and Tourism*, 9(5), 1003-1010. [https://doi.org/10.14505/jemt.9.5\(29\).12](https://doi.org/10.14505/jemt.9.5(29).12)
- Singtuen, V., Gafka, E., Phajuy, B., & Won-In, K. (2019). Evaluation and Geopark Perspective of the Geoheritage Resources in Chiang Mai Area, Northern Thailand. *Geoheritage*, 11, 1955-1972. <https://doi.org/10.1007/s12371-019-00410-0>
- Sone, M., & Metcalfe, I. (2008). Parallel tethyan sutures in mainland SE Asia: new insights for palaeo-Tethys closure. *Comptes Rendus Geosciences*, 340(2), 166-179. <https://doi.org/10.1016/j.crte.2007.09.008>
- Sone, M., Metcalfe, I., & Chaodumrong, P. (2012). The Chanthaburi terrane of southeastern Thailand: stratigraphic confirmation as a disrupted segment of the Sukhothai arc. *Journal of Asian Earth Sciences*, 61, 16-32. <https://doi.org/10.1016/j.jseae.2012.08.021>
- Sriwichai, M., Rachanark, B., Assavapanuva, Pr., Wattanacharekul, P., Makakum, Ch., Watcharamai, Th., Ardkham, P., Chaikam, A., Phujareanchaiwon, Ch., Srisunthon, Pr., Leknettip, S., Kaewpaluk, S., Khamsir, S., & Chawchai, S. (2018). Preliminary study of basaltic rock in Phetchabun, Thailand. *Bulletin of Earth Sciences of Thailand*, 9(1), 44-54.
- Ueno, K., & Hisada, K. (2001). The Nan-Uttaradit-Sa Kao suture as a main paleo-Tethyan suture in Thailand: is it real?. *Gondwana Research*, 4(4), 804-806. [https://doi.org/10.1016/S1342-937X\(05\)70590-6](https://doi.org/10.1016/S1342-937X(05)70590-6)
- *** DMR. (1999). *Geologic map of northern Thailand*, Department of Mineral Resources Thailand, Bangkok, Thailand.
- *** National Geographic, (2018). Waterfall. Online: www.nationalgeographic.org/encyclopedia/waterfall (accessed 20 December 2018).

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PROSPECTS FOR THE DEVELOPMENT OF HEALTH TOURISM ON LAKE RAY IN THE ALMATY REGION OF THE REPUBLIC OF KAZAKHSTAN

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Abstract: Lake Ray is a unique natural object of the Republic of Kazakhstan. It is located in the Balkhash depression of the Almaty region. The waters of the lake are characterized by a peculiar hydrochemical and mineral composition, which can be used for various types of health tourism and recreation. The study aimed to show scientifically substantiated therapeutic and health-improving attractiveness of the territory of lake basins, to attract investment in the development of tourism. This study presents the physicochemical and spectral analysis of water and therapeutic mud. Organoleptic characteristics (color, odor, consistency, structure) and sanitary and microbiological indicators of the declared sample of mud, physical and chemical indicators of the declared sample of water have been determined. The results indicated that the physicochemical composition of water and brine met the regulatory sanitary and epidemiological requirements and could be used in stationary medical institutions and physiotherapy. Lake Ray in the Republic of Kazakhstan has a unique variety of hydromineral recreational resources.

Key words: Lake Ray, physical and chemical analysis, trace elements, recreation, health tourism

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INTRODUCTION

Health tourism, as a type of ecological tourism, is a kind of spa treatment and considers the organization of health improvement of the population from the point of view of travel technology (Akhmedenov, 2020; Constable, 2014; Dunets et al., 2019) and is achieved through the formation of a tourist product, which is based on a medical or health-improving technology that improves the quality of life by fully satisfying the need for rest, health improvement and treatment using various components of the natural complex (landscape, comfortable climate, healthy regime, change of environment, etc.) and - such methods of influence on the human body as balneo-, peloid-, landscape-, thalasso- and climatotherapy (Akhmedenov et al., 2017; Egorina et al., 2016; Erdavletov, 2010). Medical travel has a long history. Even the ancient Greeks and Romans used healing springs and places with a favorable climate in order to improve their health. Not only sick people arrived at the resorts, but also healthy people who wanted to relax and had sufficient funds for this (Carretero et al., 2014; Beketova et al., 2019; Khomitch et al., 2019; Dracheva, 2010). Recently, the health tourism market has been undergoing changes. Traditional resorts are becoming more and more multifunctional wellness centers designed for a wide range of consumers. There are a growing number of people around the world who want to keep fit and need restorative anti-stress programs (Suleimenov et al., 2021).

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Basically, these are middle-aged people who are not alien to active physical rest. In addition, the reorientation of resorts to a new market segment is associated with a reduction in financial support from municipalities and the state (Erdavletov, 2010; Egorov, 1993; Datta, 2020). It should also be said that in the domestic tourist practice the concept of "medical tourism" has received recognition only in recent years in connection with the introduction of a number of new treatment programs and foreign standards in the practice of resort business (Herman et al., 2019). Previously, the basis of medical tourism in the CIS countries, as many authors emphasize, were sanatorium and resort institutions. Therefore, it was assumed that medical tourism should be considered only within the framework of sanatorium-resort institutions. In this case, clinics, specialized medical centers, private specialists who receive tourists and vacationers at their expense in order to implement treatment and rehabilitation programs fall out of sight (Ilies et al., 2017; Jackson and Murphy, 2002; Kolesnikov, 2007).

A number of definitions do not specify a spatial criterion, that is, a criterion for a temporary change in the place of permanent residence. In particular, in the definition of medical tourism given by R.P. Sukhov (Sukhov, 2002), the distinction between medical and health tourism is carried out only on the basis of the specialization of accommodation bases, without indicating that the tourist receives medical services outside of his permanent place of residence (Nazarova et al., 2019). There is also a group of definitions in which medical and health tourism are synonymous. Medical tourism is identified with health recreation, which, depending on the means of influence on the human body, is subdivided into balneotherapy, climatotherapy and mud therapy (Mukayev et al., 2020; Nefedova et al., 1973; Vilesov et al., 2009).

There is also an approach that identifies health tourism with rehabilitation, and health tourism with recreational (Semenchenko, 2001). This approach is difficult to accept, since medical tourism cannot be limited only to rehabilitation, and the use of the term "recreational tourism" is not entirely correct methodologically, since tourism itself is a part of recreation. The object we are investigating, as a promising one for the development of medical and health tourism, is Lake Paradise, located at an altitude of 351 meters above sea level in the lower reaches of the Aksu River in the southeast of the Republic of Kazakhstan. This study has three primary objectives:

- To introduce the little-known Lake Ray to readers and government officials,
- To examine the characteristics of the lake, which have not been studied much by the scientific experts and publish the scientific results through this study,
- To promote the tourism potential of the region and draw the attention of the officials of the tourism ministry in order to enable the potential tourism investments.

MATERIALS AND METHODS

Geographic coordinates are 46°04'51" north latitude and 78°04'40" east longitude (Figure 1). The distance from the largest city of Kazakhstan Almaty to Lake Ray is 414 km, and 154 km from the city of Taldykorgan. The nearby hotels, restaurants and recreation centers are located to the southwest of the unique Lake Ray in the city of Taldykorgan (Egorina et al., 2016).

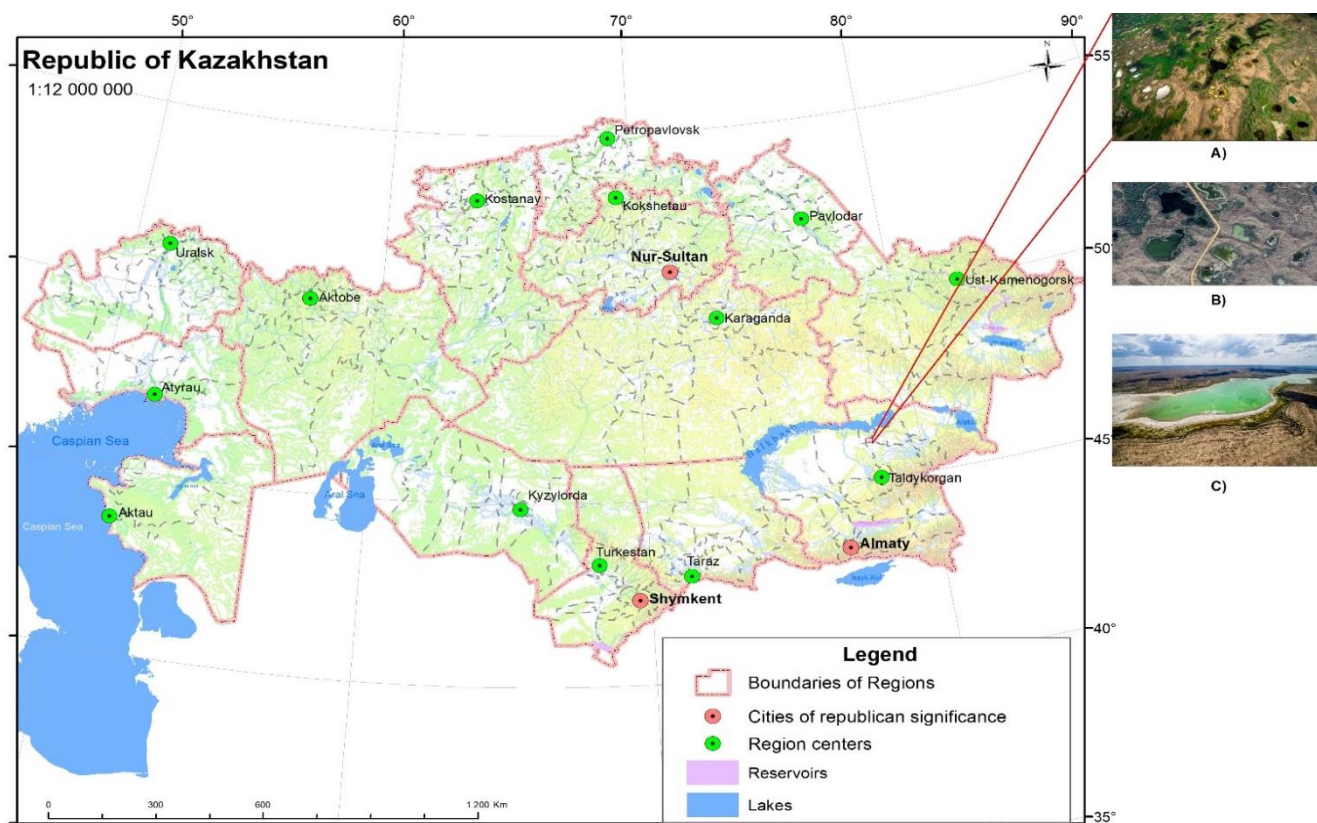


Figure 1. Geographic location of Lake Ray on the physical map of the Republic of Kazakhstan (Source: own editing with the program ArcGIS). A) Satellite image of the study area in 2020 (Landsat-8, 30 m.), B) Satellite image of Lake Ray from the SasPlatena program for 2020, C) Photo by the author of Lake Ray from an unmanned aerial vehicle (2020)

The lake stretches from west to east. The area of the lake's water surface is about 1.2 km², the maximum length is 400 m, the maximum width is 150 m, and the length of the coastline is 1150 m. The volume of water is 156 thousand m³. The catchment area is 20 km² and the average depth is 2.6 meters (Vilesov, 2009). The lake has the body of a closed inland water. Water is supplied mainly by the groundwater and melted snow water. The annual level fluctuations are about 1.1 m. Freeze-up lasts from the first quarter of December to April. The swimming season lasts for about 2 months (from mid-June to the end of August). The peculiarity of the relief of the bottom of the lake, the basin and the nutrition generate an insignificant seasonal level of fluctuations in the water of the lake. Only with intensive melting of snow in the spring months, the area of the lake increases to 1.4 km². In summer, with intense evaporation of water, the area of the water table decreases down to 1.1 km². Between 1950-1980, Omarov and Filonets, 1970 the limnologists of the Institute of Geography of Kazakhstan studied the morphometry and content of the microelements carried out in the lake.

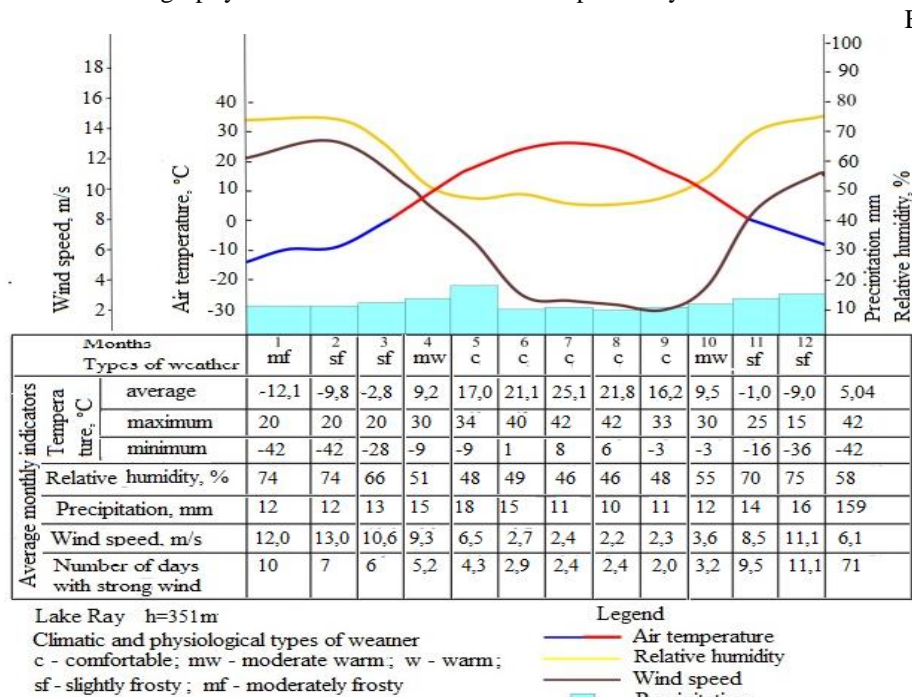


Figure 2. Climate diagram of Lake Ray

(Source: own editing with Microsoft Excel 2010 and own calculation)

During the study period 2012-2015, we took water samples for physical and chemical analysis. Sampling was carried out in accordance with ST RK GOST R 51592 - 2003. In the period 2012-2015. 30 water samples were taken from Lake Rai from different depths from 10 points located at a distance of 120 meters from each other. 13 samples and curative mud were taken. The study of physical and chemical analysis of water and therapeutic mud was closely related to the problem of determining the degree of their suitability for the development of health tourism and recreation.

As a result of physical and chemical analysis, the following were determined:

1. Organoleptic characteristics of the declared sample of mud (color, smell, consistency, structure);
2. Physicochemical indicators of the declared water sample;
3. Sanitary and microbiological indicators of the declared sample of mud (Kotov et al., 2019; Margaret et al., 2018).

It was found that the presence of pollutants (detergents and heavy metals) in the peloid did not exceed the established permissible standards. According to these indicators, the state of the mud-forming reservoir was assessed as environmentally friendly (Berdenov et al., 2017). Therefore, the relevance of the study of the processes of formation, the feeding regime of water and medicinal mud of the lake, their importance for the development of health tourism was very reasonable. A "Hitachi" atomic absorption spectrometer, model 180-50 (Japan), a PFP7 flame photometer (Great Britain) and optical emission spectrometer with inductively coupled plasma Optima 2000 DV (USA), electric autoclave in accordance with GOST 9586-61, biological microscope in accordance with GOST 8284-78 LeicaDMLS brand with digital video camera LeicaDC 300F were used to obtain sample analyzes.

RESULTS DISCUSSIONS

As a result of water evaporation in summer, the level of the lake decreases by 0.5-0.8 m. However, it does not dry up due to the supply of groundwater. This also explains the similarity of the chemical composition of sea and lake waters, which belong to the same type - sodium chloride-sulfate. Unlike the sea, the water of Lake Ray is more mineralized. Total mineralization of water with increased evaporation of water in the summer months reaches 140 g/l. Salt marshes are formed on the shore of the lake as a result of water evaporation in summer, and are saturated with various chemical elements that are beneficial to human health. The etymology of the lake is associated with the name of a man who lived in this area in the middle of the XX century, who treated wounded soldiers during the Great Patriotic War between 1941-1945. The

physicochemical composition of the water and therapeutic mud of the Lake Ray are rich in various microelements useful for the human body. Further study of the physical and chemical characteristics of water and the healing properties of mud will provide scientific justification for the planning and design of seasonal health resorts specializing in heliotherapy, thalassotherapy, climatotherapy, and mud therapy. The mineral substrate that forms the mud, the quality and amount of organic matter involved in mud formation, the liquid medium in which mud-forming processes take place and microbes that cause these processes are the main factors of peloid formation in Lake Ray. Mineralization of water in the lake has a certain effect on the intensity of mud-forming processes. Their speed slows down in waters with very high salinity. The thermal regime of the reservoir, the feeding conditions of the lake, and the adsorption of substances is an important factor. The ability of bottom sandy and clayey sediments to adsorb bacteria enhances the intensity of mud formation processes (Gomes et al., 2013).

Expeditionary analysis carried out in order to study the suitability of water and therapeutic mud showed that the drainlessness and shallowness of the waters, active evaporation of water in the summer months had an impact over the chemical and mineral composition of the water of Lake Ray (Table 1). The results of laboratory analysis of the samples taken

Table 1. Results of the spectral analysis of Lake Ray's water

Chemical elements in the composition water	Dissolved chemical elements, g/l	Chemical elements in the composition of water	Dissolved chemical elements, g/l
Ammonia	0,00036	Phosphates	0,0001
Chloride	45,631	Iron	0,0001
Calcium	0,016	Lead	0,0013
Fluorides	0,00338	Sodium	54,63
Magnesium	0,559	Potassium	0,102
Nitrites	0,0021	Iodites	0,00055
Carbonates	2,64	Bromites	0,03096
Hydrocarbonates	3,5757	Boron	0,009
Sulfates	32,537	Total mineralization	139,72

Note: The data in Table 1 was compiled on the basis of analysis of laboratory data from a laboratory study of water from Lake Ray of the National Scientific Laboratory of the Joint-Stock Company "Center for Earth Sciences, Metallurgy and Enrichment" of the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan

13 chemical elements of the periodic table were identified in the composition of the water sample from Lake Ray. Among them, sodium (54630.1 mg/l), magnesium (559.4 mg/l), potassium (102.0 mg/l), chlorides (45631.2 mg/l), hydrocarbonates (3575.7 mg/l), carbonates (2640.0 mg/l), sulfates (32537.0 mg/l) were present. A comparative analysis of the data of laboratory studies of water samples in different seasons showed the difference in the cations and anions found in the western and eastern parts of Lake Ray (Table 2 and Table 3). The data analysis of the chemical composition of the waters in the eastern part of the lake in comparison with the western part of the Na was more by 7571.6 mg/l (13.85%); magnesium 4.9 mg/l (0.87%); chloride 423.5 mg/l (0.92%); more sulfate by 218.2 mg/l (0.67%), and less potassium by 29.5 mg/l (22.43%), carbonates 12 mg/l (0.45%); and bromides 8.53 mg/l (8.67%) (Table 2 and Table 3).

Table 2. Results of the spectral analysis of water in the eastern part of Lake Ray

Found cations				Found anions			
components	mg/dm ³	meq dm ⁻³	meq dm ⁻³ /%	components	mg/dm ³	meq dm ⁻³	meq dm ⁻³ /%
Sodium	54630,1	2375,22	98,0	Carbonates	2640,0	88,0	3,6
Potassium	102,0	2,62	0,1	Hydrocarbonates	3575,7	58,6	2,4
Calcium	16,0	0,80	0,0	Chlorides	45631,2	1600,0	66,0
Magnesium	559,4	46,00	1,9	Sulfates	32537,0	677,43	27,9
Ammonium	0,2	0,01	0,00	Fluorides	4,35	0,23	0,01
Iron (+3)	0,1	0,01	0,0	Iodites	0,55	0,004	0,000
				Bromites	30,96	0,39	0,02
				Boron	9,00		

Table 3. Results of the spectral analysis of water in the western part of Lake Ray

Found cations				Found anions			
components	mg/dm ³	meq dm ⁻³	meq dm ⁻³ /%	components	mg/dm ³	meq dm ⁻³	meq dm ⁻³ /%
Sodium	47058,5	2046,02	97,6	Carbonates	2652,0	88,4	4,2
Potassium	131,5	3,37	0,2	Hydrocarbonates	3563,5	58,4	2,8
Calcium	8,0	0,40	0,0	Chlorides	45207,7	1275,0	60,8
Magnesium	554,5	45,60	2,2	Sulfates	32318,8	672,89	32,1
Ammonium	0,2	0,01	0,00	Fluorides	4,06	0,21	0,01
Iron (+2)	-	-	-	Iodites	1,47	0,012	0,001
Iron (+3)	0,1	0,01	0,0	Bromites	39,53	0,49	0,02

Based on this, we can conclude that the increased concentration of salts of sodium, potassium, other metals and sulfate increases the healing properties of the lake. This allows the lake to be used for medical and recreational purposes.

Spectral analysis of the water in the eastern part of the lake showed that the pH was 8.95; total mineralization 139.72 g/l; dry residue 1486.96 mg/eq/dm³; and total water hardness 46.00 mol; parchment oxidation –

$$M\ 139,72 \frac{Cl\ 66\ SO_4\ 28}{Na\ 98} pH\ 8,95$$

$$M\ 131,55 \frac{Cl\ 61\ SO_4\ 28}{Na\ 98} pH\ 8,95$$

Spectral analysis of the water in the western part of the lake showed a pH of 8.95; total mineralization of water was 131.55 g/l; dry residue 1233.24 mg/eq/dm³; and total hardness 46.00 mol; parchment oxidation –

As a result of the performed spectral analysis of the curative mud samples, 9 chemical elements were identified. Among them, the composition of peloids was dominant by Cu 4.6 mg/kg; Ni 11.3 mg/kg; Pb 3.036 mg/kg; Cd 0.04 mg/kg; Mn 15.98 mg/kg; As 8.12 mg/kg; Zn 9.7 mg/kg; and Cr 0.02 mg/kg.

According to doctors of balneologists, iodine, bromine and other microelements in the composition of the water and therapeutic mud of the lake are of great importance for cleansing the digestive system, regulating the work of the cardiovascular and musculoskeletal systems, and treating the thyroid gland, skin and gynecological diseases (Ushakov et al., 2019). A laboratory analysis of the chemical composition of the water and therapeutic mud of this lake showed that many microelements would have a positive effect on the human body, which would eventually make it possible to develop health tourism and recreation in Lake Ray. Due to a wide range of chemical elements, water enters into the body through the skin, making its way into the bloodstream and has a very positive healing effect on the body. For instance, acting directly on the skin, it causes a number of neuro-reflex reactions and has a rejuvenating effect as well.

A good example and standard is the city of Sol-Iletsk in the Orenburg region of the Russian Federation, being an industrial center in the 19th century, at the beginning of the 20th century it was renamed into a resort city, in the early 2000s the city became a well-known center of health tourism in Russia, and is now known in all CIS countries. The city is known for its unique lakes with various concentrations of salt and healing mud. Today, the resort has seven unique lakes in terms of the chemical composition of water. They are small - more like natural baths or springs for hydrotherapy. But their healing power is great. Today the city has over 850 guest houses and hotels. Also, work continues on the development of the infrastructure of the city of Sol-Iletsk and attracting investments (Sokolova, 2004; Demir, 2014).

CONCLUSION

Lake Ray is a small lake that is not connected to other lakes or seas and has a closed basin feature. However, the fact that lake water and lake mud have healing power indicates that health tourism can develop in the region. The composition of the healing mud of Lake Ray is dominated by ions of magnesium, calcium, sodium, copper, chromium, manganese. The analysis of the research results showed that the physicochemical composition of water and brine met the regulatory sanitary and epidemiological requirements and could be used in stationary medical institutions and physiotherapy. The analysis carried out, it is possible to conclude that Lake Ray in the Republic of Kazakhstan has a unique variety of hydromineral recreational resources. However, their use for recreational and health-improving purposes, unfortunately, is not up to the mark. Therefore, it is necessary to develop a sanatorium-resort and health-improving infrastructure, as well as streamlining and improving the efficiency of using the recreational resources of this lake. Inadequate transportation connections, insufficient number of accommodation facilities, incompetent publicity and undeveloped tourist infrastructure negatively impact the tourism activities in the region.

Thanks to the tourism investment programs to be organized by the government of Kazakhstan and the Ministry of Tourism, Lake Ray and its surroundings can be transformed into a new tourism center. As it stands today, it is clearly observed that no recreation and tourism investments have been made on the shores of the lake. Geographic factors for the development of health tourism on Lake Paradise are associated with the fact that there are healing springs, healing mud, unique minerals - tools for treating people, and also important is the location in the south, with a favorable climate. It is necessary to pay attention to the organization of health tourism, and create the conditions for a modern resort.

Factors available:

- availability of medicinal resources that ensure the development of the resort;
- availability of infrastructure for health tourism - swimming pools, beaches.

Factors requiring development:

- availability of medical and preventive establishments - hotels, clinics, sanatoriums, where medical care for patients is provided;
- availability of entertainment infrastructure - cinemas, libraries, sports grounds, since the main goals of health tourism are not only therapy, but also good rest;
- availability of catering establishments, shops, hairdressing salons, where visitors can fulfill their everyday needs.

REFERENCES

- Akhmedenov, K.M. (2020). Tourist and recreational potential of the salt lakes of Western Kazakhstan. *GeoJournal of Tourism and Geosites*, 30(2spl), 782–787. <https://doi.org/10.30892/gtg.302spl01-505>
- Akhmedenov, K., Petrishchev, V., Noreika, S., & Ramazanov, S. (2017). *Perspektivy sozdaniya osobo ohranyayemoy pripodnoi territorii "Gora Maloye Bogdo" [Prospects for the creation of a specially protected natural area "Mount Maloe Bogdo"]*. *Voprosy geografii i geokologii (Geography and Geoecology Issues)*, 3, 3-18 (in Russian).

- Beketova, A., Berdenov, Z., Mendiybayev, E., Safarov, R., Shomanova, Z., & Herman, G.V. (2019). Geochemical monitoring of industrial center for development of recreational areas (on the example of Khromtau-Don industrial hub, Kazakhstan). *GeoJournal of Tourism and Geosites*, 27(4), 1449-1463. <https://doi.org/10.30892/gtg.27428-447>
- Berdenov, Z., Mendibaev, E., Salihov, T., Akhmedenov, K., & Ataeva, G. (2017). Geoecological analysis of industrial cities: On the example of Aktobe agglomeration. *Chemistry*, 26(6), 890-902.
- Carretero, M.I., Pozo, M., Legido, J.L., Fernández-González, M.V., Delgado, R., Gómez, I., Armijo, F., & Maraver, F. (2014). Assessment of three Spanish clays for their use in pelotherapy. *Applied clay science*, 99, 131–143. <http://dx.doi.org/10.1016/j.clay.2014.06.022>
- Constable, P., (2007). The Challenge of France's 'Great Lake'. Project, In: Németh, Á. And Dávid, L. (Eds) *Handbook of Lakes and Reservoirs: A Sustainable Vision is Tourism*, 26–33. (Gyöngyös: Department of Tourism and Regional Development, Károly Róbert College)
- Datta, B. (2020). Factors affecting the satisfaction level of medical tourists: a case study of Delhi National Capital region. *GeoJournal of Tourism and Geosites*, 29(2), 628–635. <https://doi.org/10.30892/gtg.29219-494>
- Demir, K. (2014). *Recreational potential of health tourism in Russia* / K. Demir. - M.: LAP Lambert Academic Publishing, 272, (in Russian).
- Dunets, A., Muhamedieva, A., Sycheva, I., Perepechikina, E., Vakhrushev, I., & Kulchytskyi, A. (2019). Spatial tourism planning: Using the model of functional and planning complexes. *Journal of Environmental Management and Tourism*, 10(4), 711-719. [https://doi.org/10.14505/jemt.v10.4\(36\).01](https://doi.org/10.14505/jemt.v10.4(36).01)
- Dracheva, E.L. (2010). *Special types of tourism*. Medical tourism: textbook. allowance / E.L. Dracheva. - M. KNORUS, P. 144. (in Russian)
- Egorina, A.V., Kaliakperova, N.Z., & Kanatkyzy, N. (2016). Recreational opportunities of East Kazakhstan for tourism development. *International Journal of Applied and Fundamental Research*, 3, 298-302.
- Egorina, A., Saparov, K.T., & Zhensikbayeva, N.Z. (2016). The Structure of the Geo-Cultural Space of Southern Altai as a Factor of Tourist-Recreational Development, in: Vestnik, KNU, *Scientific Journal*. Almaty, 214-219.
- Egorina, A.V. (2015). *The Climate of Southwest Altai*. Textbook, Semey, 315.
- Egorov, A.N. (1993). Mongolian salt lakes: some features of their geography, thermal patterns, chemistry and biology. *Hydrobiologia*, 267, 13–21. <https://doi.org/10.1007/bf00018788>
- Erdavletov, S.R. (2010). *Tourism history*. Development and scientific study. Almaty: Atamura, 336.
- Filonets, P.P., & Omarov, T.R. (1970). *The content of trace elements in surface waters-Taldy-Kurgan and Alma-Ata regions*. Alma-Ata, 175, (in Russian).
- Gomes, C., Carretero, M.I., Pozo, M., Maraver, F., Cantista, P., Armijo, F., & Delgado, R. (2013). Peloids and pelotherapy: Historical evolution, classification and glossary. *Applied Clay Science*, 75, 28-38.
- Herman, G.V., Wendt, A.J., Dumbavă, R., & Gozner, M. (2019). The role and importance of promotion centers in creating the image of tourist destination: Romania. *Geographia Polonica*, 92(4), 443-454. <https://doi.org/10.7163/GPol.0158>
- Ilies, A., Hurley, P.D., Ilies, D.C., & Baias, S. (2017). Tourist animation –a chance adding value to traditional heritage: case studies in the Land of Maramures (Romania). *Revista de Etnografie si Folclor*, 1–2(1-2), 131-151.
- Jackson, J., & Murphy, P. (2002). Tourism Destinations as Clusters: Analytical experiences from the New Word. *Tourism and Hospitality Research*, 4(1), 36-52.
- Khomitch, S., Ramanchuk, A., Daniltchenko, A., & Rzętała, M. (2019). Key factors for tourist and recreational use of quarry ponds of Belarus and Poland. *GeoJournal of Tourism and Geosites*, 27(4), 1114–1133. <https://doi.org/10.30892/gtg.27401-420>
- Kolesnikov, D.A. (2007). *A review of existing methods for assessing recreational areas*. GeoSiberia 2007-International Exhibition and Scientific Congress, 6, 206–209.
- Kotov, S., Kotova, I., & Kayukova, E. (2019). Geological controls and the impact of human society on the composition of peloids of present-day salt lakes (coastal zones of the Black, Azov, and Dead Seas). *Journal of Coastal Conservation*, 23(4), 843-855.
- Margaret, S.M., Nadia, M.V., Patricia, G.H., Clara, M.R., Josiel, B.C., Rebeca, H., & Cristina, D.L. (2018). Physicochemical characterization, elemental speciation and hydrogeochemical modeling of Santa Lucía peloid used for therapeutic uses. *Revista Internacional de Contaminacion Ambiental*, 34, 105-110.
- Mukayev, T.Z., Ozgeldinova, O.Z., Janaleyeva, M.K., & Zhanguzhina, A.A. (2020). Assessment of the tourist recreation capacity of lake Alakol basin. *GeoJournal of Tourism and Geosites*, 30(2spl), 875–879. <https://doi.org/10.30892/gtg.302spl13-517>
- Nazarova, T.V., Fomin, I.A., Dmitriev, P.S., Wendt, J.A., & Janaleyeva, K.M. (2019). Landscape and limnological research of lake systems of the plain areas of the northeastern borderlands of the Republic of Kazakhstan and assessment of their recreational capacity. *GeoJournal of Tourism and Geosites*, 25(2), 485–495
- Nefedova, V., Smirnova, Y., & Shvidchenko, L. (1973). Methods of recreational assessment. *Bulletin of Moscow State University. Series Geography*, 5, 25-29.
- Semenchenko, S.I., (2001). Balneological resorts of the Russian Federation. Cherkasy, 89.
- Sokolova, M.V., (2004). History of tourism / M.V. Sokolov. - M.: Academy, 123 p. (in Russian)
- Sukhov, R.I., (2002). *Features of development and the current state of tourism in the Rostov region*. Abstract of the dissertation of geographical science. Rostov-on / Don, 23, (in Russian).
- Suleimenov I., Bakirov A., Niyazova G., Shaltykova D. (2021). University as an analogue of the neural network. E3S Web Conf., Vol.258 (07056). <https://doi.org/10.1051/e3sconf/202125807056>
- Ushakov, D.S., Yushkevych, O.O., Ovander, N.L., Tkachuk, H.Y., & Vyhovskiy, V.H. (2019). The strategy of thai medical services promotion at foreign markets and development of medical tourism. *GeoJournal of Tourism and Geosites*, 27(4), 1429–1438. <https://doi.org/10.30892/gtg.27426-445>
- Vilesov, E., Naumenko, A., Veselova, L., & Aubekerov, B. (2009). *Phizicheskaya geografiya Kazakhstana [Physical geography of Kazakhstan]*. Edited by Vilesov, E., Naumenko, A., Veselova, L., Aubekerov B. Almaty: Kazakh University, Kazakhstan, (in Russian).
- *** National Atlas of the Republic of Kazakhstan (2010). Volume 1: Natural conditions and resources / Editor-in-chief Medeu A.R. – Almaty: Parasat, 150.
- ***Resolution of the Government of the Republic of Kazakhstan dated January 18, 2012 No. 104. On approval of the Sanitary Rules Sanitary and Epidemiological Requirements for Water Sources, Water Intake Points for Household and Drinking Purposes, Household and Drinking Water Supply and Places of Cultural and Household Water Use and Safety of Water Bodies. <https://adilet.zan.kz/rus/docs/P1200000104/history>.

SUSTAINABLE MANAGEMENT POLICY STRATEGY OF COASTAL TOURISM IN PANGANDARAN DISTRICT, INDONESIA

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Abstract : One of the crucial coastal tourism is a region of Pangandaran District coastal tourism. The area represented a coastal region that has various exploiting characteristics and interconnected one another. The primary purpose of this research is to analyze the sustainable management policy strategy of coastal tourism. To reach the especial target, hence there are some activities which require to be conducted as a particular target that is (1) identifying determinant in the future, (2) determining strategic target and importance of the main stakeholder ; and (3) defining and describe of evolution possibility of future. The prospective analysis was conducted to yield a sustainable regional development scenario of coastal tourism in Pangandaran District, with determining key factors that affect system performance. From various possibilities that could happen, is formulated three regional development scenario of Pangandaran District coastal tourism to come, that are : 1) Conservative - Pessimistic by conducting to repair of main key factor only, 2) Moderate - Optimistic by conducting repair about 50 % of the primary key attribute (factor), 3) Progressive - Optimistic by conducting repair to entire key attribute (factor). To increase sustainable status forwards (long-period), a scenario that must be conducted to increase the regional sustainable development status of the coastal of Pangandaran District is Progressive – Optimistic by conducting repair by totally to all sensitive attribute so that all dimension become sustainable for coastal region development.

Key words: Pangandaran District, Coastal Tourism, Sustainable Management, Policy Strategy

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INTRODUCTION

Coastal tourism is a process involving tourists and the people and places they visit. It is more specifically defined as tourism brought to bear on the coastal environment and its natural and cultural resources. Most coastal zone tourism takes place along the shore and in the water immediately adjacent to the shoreline. Coastal tourism activities occur outdoors and indoors as recreation, sport, play, leisure, and business (Miller and Ditton, 1986; Miller and Hadley, 2005). One of the coastal tourism that is economically and ecologically important in West Java Province is coastal tourism in Pangandaran District. Pangandaran coastal tourism is established nationally as a tourism destination. Pangandaran tourism is coastal tourism with various uses and is related to one another. In the Pangandaran district, there are economic activities based on natural resources such as capture fisheries, housing, transportation, and coastal tourism itself. Pangandaran has also become a National Tourism Strategic Area (NTSA), an area with the primary function of tourism or can develop national tourism, which has a significant influence Pangandaran is one of the top attractions in West Java Province.

The existence of various activities in the coastal environment of Pangandaran District has led to a decrease in environmental quality in the form of pollution and changes in coastal morphology. Based on the results of research by Permana et al. (2020), the cause of the decline in the quality of the coastal environment of Pangandaran District is thought to have come from three dominant sources, namely the concentration of population in the capital city of Pangandaran, industrial activities, and agricultural activities in the upper reaches of the Cikidang river and Cikembulan river. The concentrated urban population produces a large amount of solid and liquid waste (Rizal et al., 2019). The waste enters the Pangandaran coastal waters and results in silting the coast and changes in water quality parameters such as DO (*Dissolved Oxygen / Oxygen Demand*) content, BOD (*Biological Oxygen Demand*) value, COD (*Chemical Oxygen Demand*) value, and the appearance of toxic and eutrophied compounds. With these various kinds of problems, efforts are needed to manage coastal tourism in Pangandaran District in a sustainable manner so that Pangandaran District's distinctive features as a "Coastal tourism City" will be maintained. This management cannot be separated from three leading environmental management indicators: economic, social, and environmental benefits. Efforts to minimize the negative impact of coastal tourism management and maintain the ecosystem's stability can be made by compiling an environmentally sound

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management plan so that the area's arrangement can be more optimal and does not exceed its carrying capacity. In the context of optimal and sustainable coastal management, an integrated management policy direction is required (Moreno and Amelung, 2009; Palmer, 2012; Rizal et al., 2020a; Rizal et al., 2020b).

Pangandaran is a Coastal tourism City that is very vulnerable to various changes, but these changes are expected to continue to pay attention to environmental aspects because it is a complex and dynamic ecosystem. For this reason, a sustainable coastal tourism management policy strategy in Pangandaran District is essential so that the effects of tourism on the coastal environment can be known and anticipated. The main objective of this research is to analyze the strategy for sustainable coastal tourism management policies. Several activities need to be carried out to achieve the main objectives, as specific objectives, namely (1) identifying future determinants, (2) determining the strategic objectives and interests of the main actors, and (3) define and describe the possible evolution of the future.

LITERATUR REVIEW AND METHODS

Tourism Assessment and Future Challenges

Although the exact beginnings of the phrase "tourism academics" are difficult to trace, it is generally assumed that tourism research has experienced rapid development in the last two decades. Butler (2015) points out that it is a common misconception that tourism emerged after the advent of mass tourism, while recent travel has a lot in common with tourism dating back two thousand years. Travel literature itself does have a millennial history with early evidence of travel writings by the ancient Greeks and Romans. Tourism is defined as a multidisciplinary field, the interest of tourism academics has grown steadily, and the number of journals has increased significantly. However, at the technical level in the field, it has long been criticized because tourism studies are considered to have limited capacity to solve real-world problems (Wagner et al., 2011; Butler, 2015; Mostafa and Mahmood, 2018; Zenker and Kock, 2020).

Contemporary tourism academics find their roots in early descriptive and advocacy studies of tourism phenomena (Wagner et al., 2011; Butler, 2015; Zenker and Kock, 2020), while a more cautious and critical turn was initiated in part by intense theoretical developments in the 1970s; primarily as responding to real-world and industrial problems. Regarding current tourism academics, a complex picture of a multidisciplinary field that is developing globally. Tourism researchers are now facing a situation called the phenomenon of uncertain evolution of the future related to sustainable tourism opportunities. The situation of possible future evolution is an unexpected phenomenon in the modern history of tourism. Several management experts have reviewed that this will be an essential issue for tourism studies to assist research efforts during the pandemic crisis (Wagner et al., 2011; Butler, 2015; Zenker and Kock, 2020).

Tourism Development Policy

Tourism policy is a product of a very complex process and is related to various aspects. The complexity of tourism is caused by significant changes at the local, national, and international levels. In the context of this significant change, the policy environment on tourism has become a strategic medium for the government to market its tourism potential (UN-WTO, 2005; Rizal et al., 2019; Trip et al., 2021). In this condition, tourism policy becomes very strategic and essential in tourism development. Tourism is a multidimensional and cross-sectoral industry (Panzabekova, 2018; Trip et al., 2021). The involvement of all parties is needed because tourism is not an independent sector. The consideration of the linkages between sectors and the handling of tourism is increasingly complicated in developing an integrated destination.

One of the stakeholders that has an important role is a good understanding of the government in planning and implementing all tourism planning consistently and sustainably. The government will certainly pay attention and ensure that tourism development will benefit while reducing social, economic, and environmental impacts. On the other hand, more profit-oriented business actors cannot regulate what to do, but the government can regulate what they cannot do through policies and regulations, for example, by establishing spatial regulations, permits, licenses, accreditation, and legislation (Miller and Ditton, 1986; Miller and Hadley, 2005; Moreno and Amelung, 2009; Palmer, 2012).

Government intervention in tourism development can be carried out by implementing several policy instruments. That can be used to control and provide incentives in developing sustainable tourism, such as; land use regulations, limiting tourist access to areas prone to damage, protecting local culture, directing environmentally friendly tourist behavior, limiting energy use, conserving scarce natural resources, reducing pollution and providing incentives to infrastructure development that also benefits hosts such as transportation systems, protection of urban green spaces and national parks (Pahl-Wostl et al., 2013; Lemmetyinen, 2017; Leposa, 2020; Aktymbayeva et al., 2020). The choice of a policy instrument will be very decisive if it is based on a comprehensive study of the objectives to be achieved in the most efficient manner possible, not based on a partial and incomplete study. The most important thing also needs to be based on good morals and political will. Currently, developing issues regarding tourism planning emphasize the technical aspects, even though it is a political problem concerning the regulation of all existing tourism components in the direction of sustainable tourism (Lemmetyinen, 2017; Panzabekova, 2018; Leposa, 2020; Aktymbayeva et al., 2020; Trip et al., 2021).

The role of policymakers is critical in determining tourism policies that will be taken to develop sustainable tourism. For this reason, it is necessary to have an understanding for policymakers about the concept of good tourism planning. In various cases in Indonesia, planning is critical as a guide in future development (Rizal et al., 2019; Rizal et al., 2020b). Without comprehensive planning, tourism development can be carried out sustainably (Wagner et al., 2011; Butler, 2015; Zenker and Kock, 2020). So far, development planning is still partially contained in each sub-activity sector. Sustainable tourism development is also adopted as the tourism development vision of each region (Rizal et al., 2019; Rizal et al., 2020a; Rizal et al., 2020b). However, in its development, formal and holistic regulations and indicators that can be adopted

and used as guidelines in assessing development success are not entirely available. Sustainable tourism policies cannot be implemented concretely in the development of tourism in all regions in Indonesia.

Government and Tourism Policy

Tourism policy is generally seen as part of economic policy. The economic policy deals with the structure and growth of the economy, which is usually manifested in tourism planning. Some of the critical factors that concern economic policy include employment, investment, finance, industry, and trade (Panzabekova, 2018; Trip et al., 2021). Furthermore, Miller and Hadley (2005) and Wagner et al. (2011) explained that the formulation of tourism policies is an essential responsibility that governments must carry out to develop or maintain tourism as an integral part of the economy. The policy generally refers to an overall, high-level plan that includes objectives and procedures. For this reason, public policy considers the desired outcome of the government and the methods for achieving these results. Policies embody goals and strategies that the government has adopted concerning tourism, economic development, jobs, political relations, or a combination of the three. Therefore, the involvement of the public sector is critical in determining tourism policy.

According to Trip et al. (2021) states that the scope of the national tourism policy has become a promotional tool to attract tourist visits. All policies made are for efforts to improve the image of a tourist destination. In the last decade, cooperation and collaboration between government and private institutions have grown stronger. Tourism development policies need to be implemented by the private sector as well as the public sector. For this reason, the synergy between the government, entrepreneurs, and the community is needed in tourism planning and development (Panzabekova, 2018; Leposa, 2020; Aktymbayeva et al., 2020; Trip et al., 2021). The government, private sector, and society must have the option to do something constructive about tourism policy. The situation is an opportunity and, at the same time, an obligation to make, implement and maintain a well-made policy. The most important thing is coordination with the private sector and government to avoid concerns about public welfare (Butler, 2015). According to Zenker and Kock (2020), almost universally, governments globally accept tourism that has a positive impact, so that tourism policies are made to expand the tourism industry.

Research Framework

Pangandaran District has coastal tourism that can be developed to improve community welfare and regional income. The tourism potential is supported by various other sectors such as fisheries, transportation, hotels, ports, and the coastal industry. Given these supporters' potential, coastal tourism management must be carried out in an integrated manner (Integrated Coastal Tourism Management) by involving all relevant stakeholders. However, the reality shows that coastal tourism management in Pangandaran District tends to be carried out partially by relying on each agency's sectoral ego, which causes its management to be suboptimal and full of conflicts of interest, threatens the sustainability of coastal tourism itself. In the management of sustainable coastal tourism, it is mandated that the sectors contained therein can be optimally utilized for the community's welfare, both present and future generations. Measuring coastal tourism management's sustainability can be seen from three dimensions of sustainable development: ecological, economic, and social dimensions (Munasinghe, 1993; Molina-Azorín and Font, 2016). In connection with the previous, this study aims to analyze a sustainable coastal tourism management policy strategy (Figure 1), where the results of this study are expected to be used as consideration in the formulation of regional development policies in Pangandaran District.

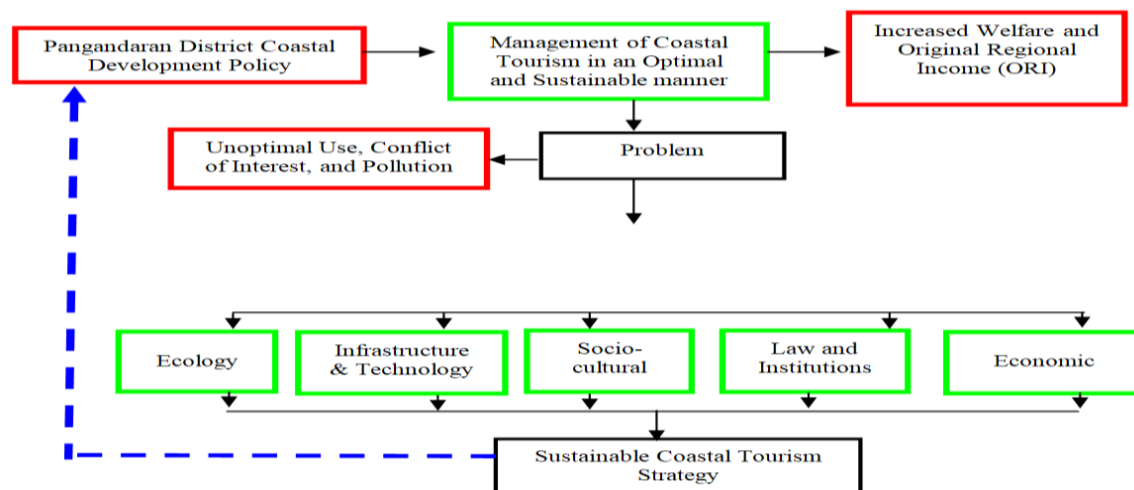


Figure 1. Research Framework

The research was conducted in the coastal Pangandaran District, six districts were designated as a purposive study from 10 districts, with considerations; (1) the geographical location of a sub-district close to or directly adjacent to the Pangandaran beach (2) the sub-district based on the determination of the Ministry of Marine Affairs and Fisheries (MMAF) to be included in the coastal sub-district in Pangandaran District (3) synergy with the development program that has been declared by the local government (4) land potential that allows for the development of coastal tourism and is supported by adequate public facilities and infrastructure. The research was conducted from January to March 2021.

METHOD OF ANALYSIS

This sustainable development model will use a variety of analysis tools such as those described above by using resource mapping analysis, economic market and non-market valuation, social mapping, social perception analysis, Rap-CoastalDev (Rapid appraisal for Coastal development), adapted from the RAPFISH model for a fisheries sustainability analysis (Pitcher, 1999; Pitcher and Preikshot, 2001), efficiency analysis (data envelopment analysis), B/C non-conventional analysis using economic valuation (Pitcher et al., 2013). In this paper, the authors will focus only on readiness analysis and Rap-CoastalDev analysis (Rizal et al., 2020a). Rap-CoastalDev is RAP and MDS as a rapid multidisciplinary appraisal to evaluate comparative sustainability, based on many easy-to-score attributes. In this study, the Rap-CoastalDev application is developed to develop coastal tourism and analyze tourism development sustainability at the Pangandaran District (Figure 2). The Rap-CoastalDev analysis uses ecological, economic, socio-culture, infrastructure and technology, and institutional dimensions.

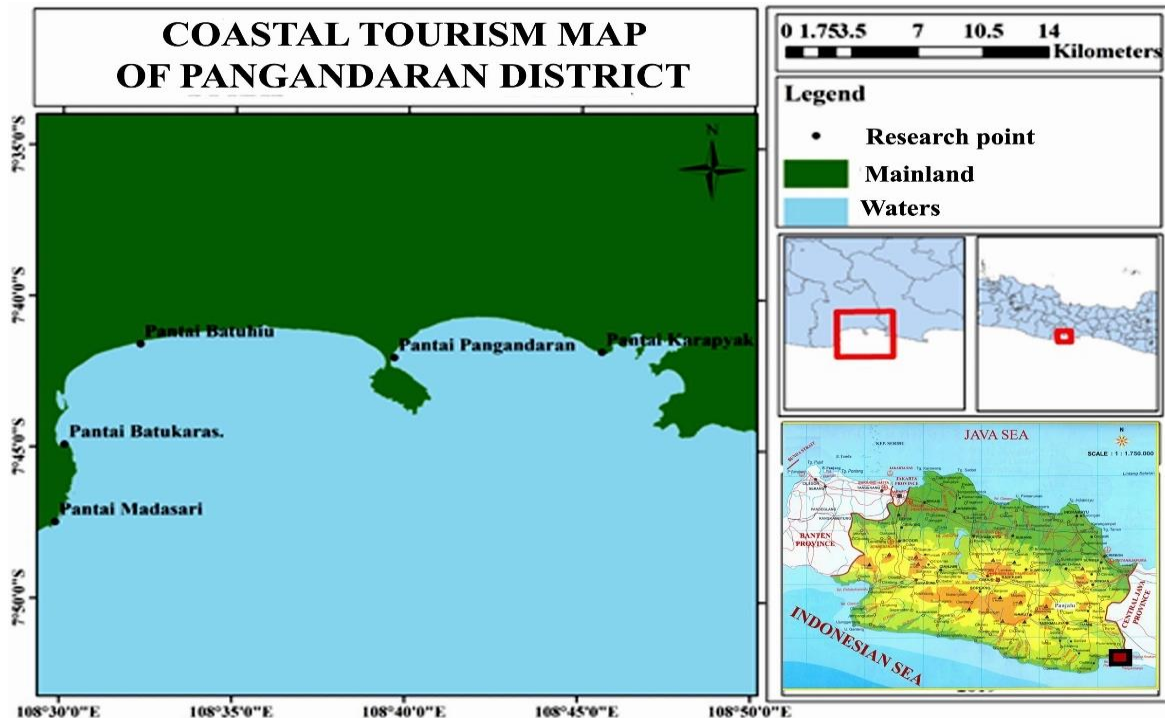


Figure 2. Research sites map (Source: Rizal et al., 2020)

The prospective analysis is carried out to produce a sustainable coastal tourism development scenario in Pangandaran District by determining the key factors affecting system performance. The key factors were taken from the results of the Multidimensional Scaling (MDS) analysis of 18 critical factors as follows:

1. Ecological dimensions consist of critical factors: (1) Coastal water productivity, (2) intensity of coastal area conversion, (3) availability of information on agro-climate zones, and (4) Condition of the coastal environment.
2. Economic dimensions consist of critical factors: (5) Feasibility of local food processing industry, (6) Feasibility of the local souvenir industry, and (7) the contribution of the tourism sector to Gross Domestic Region Product (GDRP).
3. Socio-cultural dimensions consist of critical factors: (8) community empowerment in tourism activities, (9) the role of indigenous peoples in tourism activities, and (10) community relations patterns in tourism activities.
4. Infrastructure and technology dimensions consist of critical factors: (11) level of mastery of technology, (12) internet network availability, (13) use of online reservation technology, (14) support for road facilities and infrastructure, and (15) availability of tourism database.
5. Legal and institutional dimensions consist of critical factors: (16) cooperation agreements with private parties, (17) existence of microfinance institutions, and (18) cross-sectoral cooperation mechanisms in the development of coastal areas.

Table 1. Conditions that may occur in the future in the Development of Coastal Tourism in Pangandaran District

FACTOR	CONDITIONS AND CIRCUMSTANCES		
FACTOR	1A	1B	1C
1			
FACTOR	2A	2B	2C
2			
FACTOR	3A	3B	3C
3			
FACTOR	nA	nB	nC
n			

Table 2. The results of scenario analysis of sustainable coastal tourism development in Pangandaran District

No	Scenario	Order Factor
1.	Conservative-Pessimistic (Enduring existing conditions while making improvised repairs)	1B, 2B, 3A, 4C, 5C, 6A, 7B, 8A, 9C, 10B, 11B, 12A, 13B, 14B, 15A, 16B, 17C, 18C
2.	Moderate-Optimistic (make improvements but not maximal)	1B, 2B, 3B, 4C, 5C, 6B, 7B, 8B, 9C, 10C, 11C, 12A, 13B, 14C, 15B, 16C, 17C, 18C
3.	Progressive-Optimistic (make comprehensive and integrated repairs)	1C, 2C, 3C, 4C, 5C, 6C, 7C, 8B, 9C, 10C, 11C, 12C, 13C, 14C, 15B, 16C, 17C, 18C

Based on the key factors that affect the system, a situation that may occur in the future from these factors is developed as an alternative to developing scenarios for coastal tourism in Pangandaran District. Table 1 presents conditions that may occur in the future and the dominant factors in coastal tourism development. Based on Table 1 above, a coastal tourism development scenario is built-in Pangandaran District. The scenarios that might occur in the future are as shown in Table 2.

RESULTS DISCUSSIONS

Pangandaran District coastal tourism development strategy for sustainable regional development is carried out using prospective analysis to predict the possibilities that will occur in the future according to the objectives to be achieved. The prospective analysis is carried out in three stages, namely (1) identifying critical factors in the future, (2) determining strategic goals and interests of the main actors, and (3) defining and describing the evolution of possibilities in the future as well as determining sustainable coastal tourism development strategies according to natural resources, which are owned. The critical factors in this analysis are determined by determining the key factors sensitive to the sustainability analysis results' system performance. Based on the sustainability analysis results, 18 sensitive factors (attributes) are obtained, as in Table 3.

The results of determining the key factors above then compiled the state (state) that may occur in the future. The state of each factor is presented in Table 4.

Table 3. Critical Influencing Factors in Coastal Tourism Development Based on the Sustainability Analysis

No	Sustainability Analysis Factors
1.	Coastal water productivity
2.	The intensity of conversion of the coastal area
3.	Availability of agro-climate zone information
4.	Condition of the coastal environment
5.	Feasibility of local food processing industry
6.	Feasibility of the local souvenir industry
7.	The contribution of the tourism sector to GDRP
8.	Patterns of public relations in coastal tourism activities
9.	The role of indigenous peoples in coastal tourism activities
10.	Community empowerment in coastal tourism activities
11.	Level of mastery of technology
12.	Internet network availability
13.	Use of online reservation technology
14.	Support for road facilities and infrastructure
15.	Availability of tourism database
16.	Cooperation agreements with private parties
17.	Existence of microfinance institutions
18.	Cross-sectoral cooperation mechanisms in the development of coastal areas

Table 4. Conditions of Each Key Factor in the Development of Coastal Tourism in Pangandaran District

No	Factor	Situation (State)		
		1A	1B	1C
1	Coastal water productivity	Bad	Still, as it is today (Moderate)	Good
		2A	2B	2C
2	The intensity of conversion of the coastal area	Uncontrolled rising (high)	Still, as it is today (Moderate)	Decreasing due to land policy (low)
		3A	3B	3C
3	Availability of agro-climate zone information	Still, as it is today (not available)	Available but only in certain places	Available in all places accessible to tourists
		4A	4B	4C
4	Condition of the coastal environment	Still, as it is today (not so good)	Improving the quality in certain areas	Improve the quality in all areas
		5A	5B	5C
5	Feasibility of local food processing industry	Not feasible (not economically profitable)	Moderate	feasible (there was an increase due to coaching)
		6A	6B	6C
6	Feasibility of the local souvenir industry	Not feasible (not economically profitable)	Moderate	feasible (there was an increase due to coaching)
		7A	7B	7C
7	The contribution of the tourism sector to GDRP	Still, as it is today (Low)	There is an increase but not optimal	Increased sharply due to service and technology improvements
		8A	8B	
8	Patterns of public relations in coastal tourism activities	Not mutually beneficial because it relies on the relationship between them	Mutual benefit because it prioritizes group cooperation	
		9A	9B	9C
9	The role of indigenous peoples in coastal tourism activities	It does not play a role	Play a more dominant role without being balanced with existing rules and technology	A role that is balanced with the rules and the introduction of technology
		10A	10B	
10	Community empowerment in coastal tourism activities	The community is not empowered	There is community empowerment but only in specific activities	The community is always empowered in every tourism activity
		11A	11B	11C
11	level of mastery of technology	there was a setback because there was no transfer of technology to the community	there is mastery of technology, but there is no improvement and progress	Improvement and mastery of technology through the introduction of new technology

		12A	12B	12C
12	Internet network availability	Not available	Moderate	Available
		13A	13B	13C
13	Use of online reservation technology	Basic	Medium	Modern
		14A	14B	14C
14	Support for road facilities and infrastructure	Still, as it is today (inadequate)	There are improvements but only in certain areas	there has been an increase in all road access (District, Subdistrict, Village, tourism site)
		15A	15B	15C
15	Availability of tourism database	Still, as it is today (Not available)	Moderate	Available
		16A	16B	16C
16	cooperation agreements with private parties	Not available	Available but not effective	Available and effective
		17A	17B	17C
17	existence of microfinance institutions	Not available	Available but not effective	Available and effective
		18A	18B	18C
18	cross-sectoral cooperation mechanisms in the development of coastal areas	Not available	Available but not effective	Available and running effectively by involving related agencies

Based on Table 4 above, some situations have little or no chance of occurring together (mutually incompatible). There is a line connecting one state to another, such as the productivity of coastal water decreasing gradually according to the high economic activities with the intensity of land conversion increasing uncontrollably (high). Likewise with other state relationships, but due to the key factors that are multi-scenario and displayed in several sheets so that the relationship that is not possible to occur together cannot be displayed on different sheets, but in scenario preparation, this relationship is still considered. From the various possibilities that occur as mentioned above, three groups of coastal tourism development scenarios in Pangandaran District can be formulated for the development of sustainable coastal areas that have a great chance of happening in the future, namely:

1. Conservative-pessimistic by making modest improvements to the key attributes (factors),
2. Moderate-Optimistic by making improvements about 50% of the critical attributes (factors),

Progressive-Optimistic by making improvements to all key attributes (factors). The scenarios that can be arranged are shown in Table 5. As in Table 5 above, the preparation of scenarios is based on the consideration of the government's ability as a facilitator in implementing a pilot coastal tourism development program and an allocation of program implementation time which is around five years, which is then submitted to the coastal tourism management agency. Thus, the implementation time allocation can be divided into short term, namely around 1-2 years ahead, medium-term around 3-5 years ahead, and long term, i.e., more than five years ahead. The following is a description of each scenario and the sustainability status that can be achieved for the future.

Table 5. Results of the Scenario Analysis of the Coastal Tourism Development Strategy for the Pangandaran District

No.	Strategy Scenarios	Factor composition
0	Existing conditions	1B, 2A, 3A, 4C, 5C, 6A, 7A, 8B, 9C, 10A, 11B, 12A, 13A, 14C, 15A, 16A, 17A, 18C
1.	Conservative-pessimistic	1B, 2B, 3A, 4C, 5C, 6A, 7B, 8A, 9C, 10B, 11B, 12A, 13B, 14B, 15A, 16B, 17C, 18C
2.	Moderate-Optimistic	1B, 2B, 3B, 4C, 5C, 6B, 7B, 8B, 9C, 10C, 11C, 12A, 13B, 14C, 15B, 16C, 17C, 18C
3.	Progressive-Optimistic	1C, 2C, 3C, 4C, 5C, 6B, 7C, 8B, 9C, 10C, 11C, 12C, 13C, 14C, 15B, 16C, 17C, 18C

Table 6. Changes in the Scoring Attribute Value that Affects Scenario1 on the Improvement of Coastal Tourism Status

No	Key Attribute	Scoring	
		Existing	Scenario 1
1	Coastal water productivity	2	2
2	The intensity of conversion of the coastal area	0	1
3	Availability of agro-climate zone information	0	0
4	Condition of the coastal environment	2	2
5	Feasibility of local food processing industry	2	2
6	Feasibility of the local souvenir industry	0	0
7	The contribution of the tourism sector to GDRP	0	1
8	Patterns of public relations in coastal tourism activities	1	1
9	The role of indigenous peoples in coastal tourism activities	2	2
10	Community empowerment in coastal tourism activities	0	1
11	Level of mastery of technology	1	1
12	Internet network availability	1	1
13	Use of online reservation technology	0	1
14	Support for road facilities and infrastructure	0	1
15	Availability of tourism database	0	0
16	Cooperation agreements with private parties	0	1
17	Existence of microfinance institutions	2	2
18	Cross-sectoral cooperation mechanisms in the development of coastal areas	0	0

Scenario 1. Conservative-pessimistic

As explained above, the sustainability status of coastal tourism for district development can be improved by improving

the key factors (attributes) that affect the area's status. In this scenario, efforts are made to make modest improvements, or in other words, improvements made based on the efficiency of costs incurred can be minimized as much as possible. Some of the sought-after vital attributes can be improved, such as coastal water productivity, the intensity of fishery land conversion, Feasibility of the local food processing industry, Feasibility of the local souvenir industry, and tourism contribution sector to GDRP. There will be changes in the improved attribute scoring values with these key attribute improvements as in Table 6. Changes in the scoring values of several key attributes above, then conducted a Rap-CoastalDev analysis to see how much increase in the value of the coastal tourism sustainability index of Pangandaran District for district development. The amount of change in the index value is based on the Rap-CoastalDev analysis results, as in Table 7.

Table 7 above shows an increase in the value of the sustainability index for all dimensions. Most of the dimensions have an index value below 50%, except for the economic dimensions, which are still above 50%. However, if seen from the value of the sustainability index in all dimensions, it is generally at a less sustainable status. There is implies that the coastal tourism conditions of Pangandaran District have not fully supported sustainable development. It can be seen that when this strategy was chosen, increasing the index value through the improvement of several critical attributes had not been maximally implemented. Therefore, efforts to improve the key attributes need to be continued for the future. Of course, with strong policy support from the government in an integrated manner, both the central government, provincial governments, and district governments, so coastal tourism in Pangandaran District has an increased status to be sustainable (Rizal et al., 2019).

Table 7. Changes in Pangandaran District Coastal Tourism Sustainability Index Value Based on Scenario 1

No.	Sustainability Dimensions	Existing Index Value	Scenario Index Value 1	the difference
1.	Ecological	47,13	50,94	3,80
2.	Economic	53,89	56,52	2,63
3.	Socio-cultural	34,82	44,25	9,43
4.	Infrastructure and technology	13,28	29,79	16,51
5.	Legal and institutional	45,06	47,05	1,99

Table 9. Changes in Pangandaran District Coastal Tourism Sustainability Index Value Based on Scenario 2

No.	Sustainability Dimensions	Existing Index Value	Scenario Index Value 2	the difference
1.	Ecological	47,13	58,15	11,02
2.	Economic	53,89	60,87	6,98
3.	Socio-cultural	34,82	52,53	17,71
4.	Infrastructure and technology	13,28	43,87	30,59
5.	Legal and institutional	45,06	48,43	3,37

Table 8. Changes in Scoring Attribute Value that Affects Scenario 2 on the Improvement of Coastal Tourism Status

No	Key Attribute	Scoring	
		Existing	Scenario 2
1	Coastal water productivity	2	2
2	The intensity of conversion of the coastal area	0	2
3	Availability of agro-climate zone information	0	1
4	Condition of the coastal environment	2	2
5	Feasibility of local food processing industry	2	2
6	Feasibility of the local souvenir industry	0	1
7	The contribution of the tourism sector to GDRP	0	1
8	Patterns of public relations in coastal tourism activities	1	1
9	The role of indigenous peoples in coastal tourism activities	2	2
10	Community empowerment in coastal tourism activities	0	2
11	Level of mastery of technology	1	2
12	Internet network availability	1	1
13	Use of online reservation technology	0	1
14	Support for road facilities and infrastructure	0	2
15	Availability of tourism database	0	1
16	Cooperation agreements with private parties	0	2
17	Existence of microfinance institutions	2	2
18	Cross-sectoral cooperation mechanisms in the development of coastal areas	0	0

Scenario 2. Moderate-Optimistic

In contrast to scenario one, efforts to improve several critical attributes in scenario two comprise 50% of all critical attributes (sensitive attributes). This strategy is based on considering that coastal tourism should be carried out in stages while still considering the available cost capabilities. Based on these considerations, it will have implications for the achievement of coastal tourism development for district development faster, and it is not easy to realize, while several attributes need to be addressed more seriously, and as soon as possible they affect other attributes. For example, the provision of road facilities and infrastructure will seriously hamper access to tourism if it is not handled immediately. The key attributes that were improved are as shown in Table 8. The results of changes in the scoring values of several key attributes in table 8 above, then a Rap-CoastalDev analysis is carried out to see how much the increase in the value of the coastal tourism sustainability index of Pangandaran District for district development in each dimension. The amount of change in the index value is based on the Rap-CoastalDev analysis results, as in Table 9.

In table 9 above, it can be seen that all the dimensions have a sustainability index value above 50% or are already in a reasonably sustainable status, except in the infrastructure - Technology and Legal - Institutional dimensions. However, to achieve ideal conditions, efforts to increase this index's value can still be made by maximizing improvements to existing attributes—some of the attributes still have the opportunity to be improved. Some of those things are Community empowerment in coastal tourism activities and Coastal water productivity, increasing the level of mastery of technology, Support for road facilities and infrastructure, Internet network availability, increasing use of online reservation technology, availability of tourism databases, cooperation agreements with the private sector as well as cross-sectoral cooperation mechanisms in developing coastal tourism. The handling of these attributes can be carried out in scenario three by making comprehensive and integrated repairs.

Scenario 3. Progressive-Optimistic

In scenario 3, improvements are made to all key attributes. With this repair, of course, it requires money and takes a long time. In this case, it can be done in three time periods, namely the short term, by making improvements to the urgent attributes to be handled, then the medium and long term by making improvements to the attributes that support coastal tourism development. This situation can be done with a strong commitment from the government as a facilitator in pioneering coastal tourism development. Some of the critical factors that can be improved are shown in Table 10.

Table 10. Changes in the Scoring Attribute Value that Affects Scenario 3 on the Improvement of Coastal Tourism Status

No	Key Attribute	Scoring	
		Existing	Scenario 3
1	Coastal water productivity	2	3
2	The intensity of conversion of the coastal area	0	3
3	Availability of agro-climate zone information	0	2
4	Condition of the coastal environment	2	2
5	Feasibility of local food processing industry	2	2
6	Feasibility of the local souvenir industry	0	1
7	The contribution of the tourism sector to GDRP	0	2
8	Patterns of public relations in coastal tourism activities	1	1
9	The role of indigenous peoples in coastal tourism activities	2	2
10	Community empowerment in coastal tourism activities	0	3
11	Level of mastery of technology	1	2
12	Internet network availability	1	2
13	Use of online reservation technology	0	2
14	Support for road facilities and infrastructure	0	2
15	Availability of tourism database	0	1
16	Cooperation agreements with private parties	0	2
17	existence of microfinance institutions	2	2
18	Cross-sectoral cooperation mechanisms in the development of coastal areas	0	1

Table 11. Changes in Pangandaran District Coastal Tourism Sustainability Index Value for District Development Based on Scenario 3

No.	Sustainability Dimensions	Existing Index Value	Scenario Index Value 3	the difference
1.	Ecological	47,13	68,97	21,84
2.	Economic	53,89	64,75	10,68
3.	Socio-cultural	34,82	58,93	24,11
4.	Infrastructure and technology	13,28	63,99	50,71
5.	Legal and institutional	45,06	63,97	18,91

The results of the change in the scoring values of several key attributes above then carried out a Rap-CoastalDev analysis to see how much the increase in the value of the Pangandaran coastal tourism sustainability index for District development in each dimension. The amount of change in the index value is based on the Rap-CoastalDev analysis results, as in Table 11. Based on table 11, it can be seen that value increasing of the sustainability index in all dimensions is close to the actual condition, which is at the value of 60% or the sustainable status, except for the socio- cultural dimension whose value is still below the value of 60%.

The low value of the sustainability index in the socio-cultural dimension is because many socio-cultural dimensions have not been considered to be handled in this scenario. After all, these attributes are not sensitive to affect the development of coastal tourism. Therefore, to further strengthen coastal tourism development in Pangandaran District, handling insensitive attributes is difficult to deny. This circumstance can be seen from the sustainability index value, which only reached around 60%, while improvements to sensitive attributes were handled optimally. The situation means that the sustainability index value of around 40% is an error factor for the attributes that are not considered in increasing the value of the sustainability index in each scenario, namely attributes that are not sensitive to influence.

Sustainability Indicators Development of coastal tourism in Pangandaran District

Judging from the multidimensional sustainability analysis results illustrates that the sustainable condition of coastal tourism in Pangandaran District is currently in a less sustainable status with a sustainability index value of 41.09%. Sustainability index value, both in the ecological, economic, socio-cultural, infrastructure and technology, and legal and institutional dimensions. Attributes that need to be addressed are attributes sensitive to the value of the area's sustainability index, without neglecting the attributes with no or less sensitive effect based on the Leverage analysis results.

In the context of developing Pangandaran District coastal tourism for future development, benchmarks are needed to find out whether coastal tourism has increased or decreased its sustainability status from development activities carried out, including improvements to attributes in each dimension. One of the benchmarks commonly used in assessing the sustainability of coastal tourism in the future is to establish indicators for the sustainability of regional development. WCED (1987), IUCN, UNEP, and WWF (1990), CSD (2001), World Bank (2006), UN-General Assembly (2015), and UN-Water (2015) have determined sustainable development indicators, which are divided into four dimensions of sustainability, namely environmental, economic, social, and institutional. However, based on needs, in this study, the sustainability of coastal tourism is developed into five dimensions with dimensions and sustainability indicators (Rizal et al., 2020a).

Achievement of indicators that support the status improvement in the ecological dimension, in principle, can be achieved by making improvements to the attributes in the ecological dimension, especially those that are sensitive to the increase in the value of the sustainability index. These attributes include the increase in Coastal water productivity, The intensity of conversion of the coastal area, and the availability of information on the Agro-climate zone. To support the development of coastal tourism in Pangandaran District, the urgent matter to be addressed is maintaining or reducing the intensity of conversion of the coastal area. However, currently, the intensity of coastal land conversion is still relatively low due to its slow development in this district. On the other hand, what needs to be promoted is Coastal water productivity.

This state is aimed at supporting the development of coastal tourism. The productivity of existing coastal water, both old and new, needs to be increased by improving new environmentally friendly technologies. By increasing the productivity of coastal water, it is expected that the productivity of fishing activities to support the tourism business can increase so that people's income will increase (Chaverri, 1989; Kuralbayev, 2016; Anna et al., 2017; Khan et al., 2020).

Sustainability indicators in the economic dimension can be achieved by improving the attributes of the economic dimension. Attributes that need to be addressed are improving the feasibility level of local food processing industry business, especially those that have a high price value in the market and increasing the Feasibility of the local food processing industry so that business profits in this sector can also increase and increase the number of workers working in the tourism sector (Rakhmatullayeva et al., 2015; Lemmetyinen, 2017; Lemmetyinen and Go, 2010; Leposa, 2020). From the economic aspect, the main objective of developing coastal tourism is how the community's welfare can increase. This state can be achieved by increasing profits from coastal business activities and other businesses conducted by local business actors. This increase in welfare is closely related to the existing workforce, both in number and quality (Cincin-Sain and Robert, 1998; Panzabekova, 2018; Thapa, 2019; Goliath-Ludic and Yekela, 2020). As coastal tourism, it should be dominated by local workers from the local area. For the existing workforce to feel at home working in the tourism sector, it is essential to note that the supporting facilities needed in business activities must be adequate, such as mastery of internet technology and online reservation technology, tourism database availability, and broader marketing.

In the socio-cultural dimension, the achievement of sustainability indicators in this dimension can be obtained through improving attributes such as increasing mutually beneficial public relations patterns in tourism activities, increasing the role of indigenous peoples in tourism activities, increasing the number of villages with residents working in the tourism sector (Lester and Weeden, 2004; Franks and Cleaver, 2007; Liggett et al., 2010; Lozano et al., 2015; Mamutova, 2020). Pangandaran district as a coastal district, villages in Pangandaran district must be characterized as supporting coastal tourism villages, especially in villages that function as hinterlands. The impact of the growth of tourism villages is an increase in the local workforce. Concerning labor, an essential factor that needs to be considered for the existing workforce is the level of education they have, where this level of education is one of the keys to the sustainability of the area in the socio-cultural dimension. The fact shows that the workforce in coastal tourism in Pangandaran District is still classified as low, both formal education, which is still below the average level of national education and non-formal education.

In the infrastructure and technology dimensions, the achievement of sustainability indicators in this dimension can be achieved by improving attributes such as mastery of internet technology, support for public facilities and infrastructure, support for road facilities and infrastructure, Internet network availability, and online reservation technology. In coastal tourism in Pangandaran District, public facilities and infrastructure are still classified as very minimal, such as education, health, and social facilities, including road facilities, village roads, and tourism business roads. Likewise, the supporting facilities and infrastructure for tourism business, such as online reservation technology availability, are minimal. On the other hand, the mastery of Internet network technology for existing coastal tourism workers is also low, and access to tourism information is also lacking. This condition will significantly affect the sustainability of coastal tourism in the future (Wunder, 2000; Marsh, 2012; Kuralbayev et al., 2016; Morgan, 2018; Mardiatno et al., 2020). Therefore, in developing coastal tourism in Pangandaran District, public and tourism business facilities and infrastructure need to be appropriately handled. Of course, all relevant stakeholders, especially the government, are needed as facilitators in developing coastal tourism.

Leverage analysis is carried out to see the sensitive attributes contributing to the sustainability index value of the legal and institutional dimensions. Based on the results of the Leverage analysis, three sensitive attributes are obtained, the value of the sustainability index of the legal and institutional dimensions, namely (1) cooperation agreements with the private sector, (2) mechanisms for cross-sectoral cooperation in the development and (3) the existence of microfinance institutions in the coastal tourism sector. In the legal and institutional dimensions, the achievement of sustainability indicators in this dimension can be done through the provision of Microfinance Institutions (MFIs), as well as increasing cross-sectoral cooperation in developing coastal tourism and synchronizing central and regional policies. The policy for developing coastal tourism in Pangandaran District is very much needed to get this district out of the way of being left behind and isolated, considering that this district has great potential for development in the tourism sector (Muth'en and Muth'en, 2002; Mustaina, 2015; Rizal et al., 2020a).

These coastal tourism development programs need synchronization between national and regional policies by prioritizing local communities' interests. In other words, proposals for coastal tourism development programs must come from the grass root, namely the local community (bottom-up) and not from the central government (top-down), although support from the central government is needed. On the other hand, cross-sectoral cooperation is also very much needed and the role of each existing social institution. Sustainability change based on these indicators can be seen from two types of indicators (Pahl-Wostl et al., 2013; Lemmetyinen, 2017; Leposa, 2020; Aktymbayeva et al., 2020), namely (1) condition indicators, namely indicators that define system conditions relative to desired can be used to assess environmental conditions. This condition indicator characterizes the entire magnitude of a particular resource state from the ideal condition values during the simulation period and (2) trend indicators, measuring how the system changes over time. This indicator describes all the linear trends of a resource state during the starting period.

CONCLUSION

Based on the research location's existing conditions, the ecological dimension is considered less sustainable, the economic dimension, the socio-cultural dimension, and the legal and institutional dimensions are pretty sustainable. In contrast, the infrastructure and technology dimensions are not sustainable.

In multidimensional terms, coastal tourism in Pangandaran District has a reasonably sustainable status with 18 sensitive attributes that increase the sustainability index's value. The attributes include four attributes in the ecological dimension, three attributes in the economic dimension, three attributes in the social and cultural dimensions, five attributes in the infrastructure and technology dimensions, and three attributes in the legal and institutional dimensions. To increase the status of future (long-term) sustainability, the scenario that needs to be done to increase the sustainability status of coastal tourism development in Pangandaran District is a Progressive-Optimistic scenario by making comprehensive improvements to all sensitive attributes so that all dimensions become sustainable for the development of coastal tourism. The sustainability of coastal tourism development follows two types: condition indicator and trend indicator that describe a linear trend from resource development to optimal limits.

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REFERENCES

- Aktymbayeva, B., Koshkimbayeva, U., Abisheva, Z., Tokbergenova, U., & Tumazhanova, M. (2020). Tourism Industry Development and Governance: A Comparative Stage Review of Kazakhstan's Experience for The Years of Independence, 1991-2020. *GeoJournal of Tourism and Geosites*, 34(1), 69–76. <https://doi.org/10.30892/gtg.34110-621>
- Anna, Z., Agus, A.H.S., Maulina, I., Rizal, A., & Hindayani, P. (2017). Biological Parameters of Fish Stock Estimation in Cirata Reservoir (West Java, Indonesia): A Comparative Analysis of Bio-Economic Models. *Biodiversitas*, 18 (4), 1468-1474. <https://doi.org/10.13057/biodiv/d180423>
- Butler, R. (2015). The evolution of tourism and tourism research. *Tourism Recreation Research*, 40(1), 16–27. <https://doi.org/10.1080/02508281.2015.1007632>
- Chaverri, R. (1989). *Coastal Management: The Costa Rica Experience*. Coastal Zone'87, 5273-5285, V, America Society of Civil Engineering, New York.
- Cincin-Sain, B., & Robert, W.B. (1998). *Integrated Coastal and Ocean Management, Concepts and Practices*, Island Press Washington, DC. Covello, California, 964.
- Franks, T., & Cleaver, F. (2007). Water governance and poverty: a framework for analysis. *Progress in Development Studies*, 7(4), 291-306.
- Goliath-Ludic, K., & Yekela, S. (2020). Resident's Perception of the Environmental Impact of Tourism: A Case Study of the Bawa Community in Butterworth, South Africa. *GeoJournal of Tourism and Geosites*, 33(4spl), 1527–1531. <https://doi.org/10.30892/gtg.334spl12-603>
- Khan, A.M.A., Nasution, A.M., Purba, N.P., Rizal, A., Zahidah., Hamdani, H., Dewanti, L.P., Junianto., Nurruhwati, I., Sahidin, A., Supriyadi, D., Herawati, H., Apriliani, I.M., Ridwan, M., Gray, T.S., Jiang, M., Arief, H., Mill, A.C., & Polunin, N.V.C. (2020). Oceanographic characteristics at fish aggregating device sites for tuna pole-and-line fishery in eastern Indonesia. *Fisheries Research*, 225, 105471. <https://doi.org/10.1016/j.fishres.2019.105471>
- Kuralbayev, A., Myrzaliev, B., & Sevim, B. (2016). Organizational and economic problems in the management of the spiritual-Historical development of tourism in South Kazakhstan Region. *International Review of Management and Marketing*, 6(2). <https://doi.org/10.35808/ersj/699>
- Lemmetynen, A. (2017). *Safe, secure, and sustainable: Attributes of a strong cruise brand*. In R. Dowling, & C. Weeden (Eds.), *Cruise ship tourism*, 2nd ed., pp. 261–274, Oxfordshire: CABI.
- Lemmetynen, A., & Go, F.M. (2010). Building a brand identity in a network of cruise Baltic's destinations – a multi-authoring approach. *Journal of Brand Management*, 17 (7), 519–531. <https://doi.org/10.1057/bm.2010.5>
- Leposa, N. (2020). Problematic blue growth: A thematic synthesis of social sustainability problems related to growth in the marine and coastal tourism. *Sustainability Science*, 15, 1233–1244. <https://doi.org/10.1007/s11625-020-00796-9>
- Lester, J.A., & Weeden, C. (2004). Stakeholders, the natural environment, and the future of Caribbean cruise tourism. *International Journal of Tourism Research*, 6(1), 39–50. <https://doi.org/10.1002/jtr.471>
- Liggett, D., McIntosh, A., Thompson, A., Storey, B., & Gilbert, N. (2010). Stakeholder perspectives on the governance of Antarctic cruise tourism. In M. Lück, P. T. Maher, & E. J. Stewart (Eds.), *Cruise tourism in polar regions. Promoting environmental and social sustainability?* (pp. 167–180). London: Earthscan from Routledge.
- Lozano, R., Carpenter, A., & Huisingh, D. (2015). A review of 'theories of the firm' and their contributions to corporate sustainability. *Journal of Cleaner Production*, 106, 430–442. <https://doi.org/10.1016/j.jclepro.2014.05.007>
- Mamutova, K. (2020). Destination Management Approach for Sustainable Tourism Development in Kazakhstan. *Eurasian Journal of Economic and Business Studies*, 2(56). <https://doi.org/10.47703/ejeb.v2i56.15>
- Mardiatno, D., Malawani, M.N., & Nisaa, R.M. (2020). The future tsunami risk potential as a consequence of building development in Pangandaran Region, West Java, Indonesia. *International Journal of Disaster Risk Reduction*, 46, 101523. <https://doi.org/10.1016/j.ijdrr.2020.101523>
- Marsh, E. (2012). The effects of cruise ship tourism in coastal heritage cities. *Journal of Cultural Heritage Management and Sustainable Development*, 2(2), 190–199. <https://dx.doi.org/10.2139/ssrn.2187653>
- Miller, M.L., & Hadley N.P. (2005). Tourism and Coastal Development. In: Schwartz M.L. (eds) *Encyclopedia of Coastal Science. Encyclopedia of Earth Science Series*. Springer, Dordrecht. https://doi.org/10.1007/1-4020-3880-1_328
- Miller, M.L., & Ditton, R. (1986). Travel, tourism, and marine affairs. *Coastal Zone Management Journal*, 14(1/2): 1–19. <https://doi.org/10.1080/08920758609361992>
- Molina-Azorín, J.F., & Font, X. (2016). Mixed methods is sustainable tourism research: An analysis on prevalence, deigns and application in JOST (2005-2014). *Journal of Sustainable Tourism*, 24(4), 549–573. <https://doi.org/10.1080/09669582.2015.1073739>
- Moreno, A., & Amelung, B. (2009). Climate change and coastal & marine tourism: Review and analysis. *Journal of Coastal Research*, 56, 1140–1144. <https://doi.org/10.1080/08920750903054997>
- Morgan, D.L. (2018). Living within blurry boundaries: The value of distinguishing between qualitative and quantitative research. *Journal of Mixed Methods Research*, 12 (3), 268–279. <https://doi.org/10.1177%2F1558689816686433>
- Mostafa, G., & Mahmood, M. (2018). Eurasian Economic Union: Evolution, challenges, and possible future directions. *Journal of Eurasian Studies*, 9 (2), 163-172. <https://doi.org/10.1016/j.euras.2018.05.001>

- Munasinghe, M. (1993). *Environmental Economics and Sustainable Development*. The International Bank for Reconstruction and Development/THE WORD BANK. Washington D.C. 20433. The U.S.A.
- Mustaina, M., Armonoa, H.D., & Kurniawan, D.T. (2015). The Evaluation of Beach Recreational Index for Coastal Tourism Zone of: Deigan, Kenjeran, and Wisata Bahari Lamongan. *Procedia Earth and Planetary Science*, 14, 17–24. <https://doi.org/10.1016/j.proeps.2015.07.080>
- Muth'en, L.K., & Muth'en, B.O. (2002). How to use a Monte Carlo study to decide on sample size and determine power. *Structural Equation Modeling*, 9(4), 599–620. https://doi.org/10.1207/S15328007SEM0904_8
- Pahl-Wostl, C., Conca, K., Kramer, A., Maestu, J., & Schmidt, F. (2013). Missing links in global water governance: a processes-oriented analysis. *Ecology and Society*, 18(2), 122–130. <http://dx.doi.org/10.5751/ES-05554-180233>
- Palmer, M.A. (2012). Socioenvironmental sustainability and actionable science. *BioScience*, 62(1), 5–12. <https://doi.org/10.1525/bio.2012.62.1.2>
- Panzabekova, A.Z. (2018). Diversification of tourism and economic development of Kazakhstan. *R-Economy*, 4(3), 82–87. <https://doi.org/10.15826/recon.2018.4.3.012>
- Permana, R., Rizal, A., & Hasan, Z. (2020). Plastic Consumption in Group of Teens and Young Adults from Pangandaran District, Indonesia: A Glimpse of Environmental Awareness among the Locals outside Big Cities, *Asian Journal of Advanced Research and Reports*, 12 (2), 1–9. <https://doi.org/10.9734/ajarr/2020/v12i230282>
- Pitcher, T.J., & Preikshot, D. (2001). RAPFISH: a rapid appraisal technique to evaluate the sustainability status of fisheries, *Fisheries Resource.*, 49, 255–270. [https://doi.org/10.1016/S0165-7836\(00\)00205-8](https://doi.org/10.1016/S0165-7836(00)00205-8)
- Pitcher, T.J. (1999). *Raffish, A rapid appraisal technique for fisheries, and its application to the code of conduct for responsible fisheries*, FAO Fisheries Circular, 947, 47.
- Pitcher, T.J., Lam, M.E., Ainsworth, C., Martindale, A., Nakamura, K., Perry, R.I., & Ward, T., (2013). Improvements to Rapfish: a rapid evaluation technique for fisheries integrating ecological and human dimensions. *Journal of Fish Biology*, 83, 865–889. <https://doi.org/10.1111/jfb.12122>
- Rakhmatullayeva, D.Z., Bobkov, V.N., & Zhatkanbayev, E.B. (2015). Modeling of Social Effect of Foreign Direct Investment in the Regions of Kazakhstan. *R-Economy*, 1(2), 325–339. <https://doi.org/10.17059/2015-2-23>
- Rizal, A., Subiyanto., Juahir, H., & Lananan, F. (2019). Freshwater Governance on Limboto Lake in Gorontalo Province of Indonesia. *Indian Journal of Public Health Research & Development*, 10 (4), 782–787. <https://dx.doi.org/10.5958/0976-5506.2019.00798.8>
- Rizal, A., Apriliani, I.M., & Permana, R. (2020 a). Sustainability assessment of coastal development in the southern region of west java province, Indonesia. *GeoJournal of Tourism and Geosites*, 30(2spl), 808–817. <https://doi.org/10.30892/gtg.302spl05-509>
- Rizal, A., Apriliani, I.M., Permana, R., & Nurruhwati, I. (2020 b). Development and Coastal Environment Change, Will Have A Meeting Point? Case Study of Coastal Zone of West Java Province, Indonesia. *GeoJournal of Tourism and Geosites*, 31(3), 1034–1042. <https://doi.org/10.30892/gtg.31315-538>
- Thapa, B. (2019). Ecotourism education and development in Kazakhstan. *Journal of Hospitality & Tourism Education*, 31(2), 119–124. <https://doi.org/10.1080/10963758.2018.1485499>
- Trip, D.T., Fagadar, C.F., Badulescu, D., & Badulescu, A. (2021). Entrepreneurship and Tourism Through the Lens of Sustainability. Charting the Knowledge Base Through Bibliometric Analysis. *GeoJournal of Tourism and Geosites*, 34(1), 140–146. <https://doi.org/10.30892/gtg.34118-629>
- Wagner, M.E., Alves, H., & Raposo, M. (2011). Stakeholder theory: Issues to resolve. *Management Decision*, 49(2), 226–252. <https://doi.org/10.1108/00251741111109133>
- Wunder, S. (2000). Ecotourism and economic incentives—an empirical approach. *Ecological economics*, 32(3), 465–479. [https://doi.org/10.1016/S0921-8009\(99\)00119-6](https://doi.org/10.1016/S0921-8009(99)00119-6)
- Zenker, S., & Kock, F. (2020). The coronavirus pandemic—a critical discussion of a tourism research agenda. *Tourism Management*, 81, 104164. <https://doi.org/10.1016/j.tourman.2020.104164>
- *** Commission on Sustainable Development [CSD]. (2001). *Indicator of Sustainable Development; Framework and Methodology*. Commission on Sustainable Development. Background Paper No.3. New York; Division for Sustainable Development.
- *** UN - General Assembly. (2015). *Transforming Our World. The 2030 Agenda for Sustainable Development*. A/RES/70/1, United Nation.
- *** UN - Water. (2015). *Water for a sustainable world*. The United Nations World Water Development Report. [https://doi.org/10.1016/S1366-7017\(02\)00004-1](https://doi.org/10.1016/S1366-7017(02)00004-1)
- *** UN - WTO. (2005). *Making Tourism More Sustainable - A Guide for Policy Makers*, United Nation.
- *** World Bank. (2006). *Poverty and social impact analysis of reform: Lessons and Examples from Implementation*, The World Bank, 1818 H Street NW, Washington, DC. <https://doi.org/10.1596/978-0-8213-6486-4>
- *** World Commission on Environment and Development (WCED). (1987). *Our Common Future ("The Brundtland Report")*. New York: Oxford University Press.
- *** World Conservation Union (IUCN), the United Nations Environment Programme (UNEP), and the World-Wide Fund for Nature (WWF). (1990). *Caring for the World: A Strategy for Sustainability*. (Second Draft). Gland: IUCN.

CHALLENGES FACING THE OF TOURISM SPORT ACTIVITIES IN JORDAN

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Abstract: The purpose of this research is to identify challenges facing the tourism sport activities, identify the most important activities of tourism sport and proposed model for developing tourism sport activities in Jordan. The sample was consisted of 180 participants who living in Jordan. Data collection in this study was consisted of quantitative and qualitative. Quantitative and qualitative were administered in training camps and residential areas. Moreover, interviews were conducted with local community leaders. The results revealed that there are many challenges facing tourism sport activities such as weak infrastructure and the lack of qualified technical cadres to help tourists. The study came out with a set of recommendations, the most prominent of which is to work on overcoming the challenges facing tourist sport activities and taking into account the proposals put forth by experts to develop the tourism sport sector in Jordan.

Key words: Sports, Tourism, Challenge, Tourist Sport activities, Jordan

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INTRODUCTION

Tourism is a hospitality business, and they expect gracious and prompt service any time tourists visit any attraction (Kersulić et al., 2020; Hritz and Ross, 2010). If tourism deserves (Murphy, 1985: 133) its pseudonym of being hospitality in this regard, it must look beyond its own doors and staff and take into account the economic social, and cultural effects it has on the host community. It is therefore useful that tourism researches investigate the social effects of tourism on host communities as suggested by Fredline (2006). Sport tourism is one of the fastest growing market segments in the tourism industry, according to Kersulić et al., (2020), and is attracting improved attention for its environmental, economic and social effects on destinations. In comparison to previous research into tourism impacts, tourism as a whole has tended to focus primarily on tourism and does not distinguish between the various forms of tourism that might be present in the destination. Brunt and Courtney (1999) suggest that tourism's social and cultural effects should be taken into account in the planning process and in the process of environmental impact assessment, so that benefits are optimized and concerns minimized. The engagement of communities so that people realize tourism is an important general planning strategy for strengthening positive and mitigating negative impacts.

This can be accomplished by the involvement of the group in decision-making and the equal distribution of business benefits (Brunt and Courtney, 1999). In addition, an important planning and policy factor for the effective growth, promotion and implementation of current and future programs and projects is likely to be the expectations and attitudes of residents towards the effects of tourism. In Jordan, there are many types of sports tourism that are very popular in the world of sports in the region and the world (Wise et al., 2019; Perić et al., 2019; ALdmour et al., 2011).

There are different types of sports tourism, such as football games, water sports, diving, swimming, and other games that represent an important aspect of sports tourism in Jordan. Therefore, the purpose of this research is to identify challenges facing the tourism sport activities and proposed model for developing tourism sport activities in Jordan.

LITERATURE REVIEW

Sport tourism is one of the largest tourism patterns and expanding rapidly, according to Standeven and De Knop (1999: 36), and is attracting improved attention for its economic, social and environmental growth and advantages. It is commonly recognized that major sporting events greatly contribute to the economic growth and traffic of visitors in an area and are a critical component of the tourist destination marketing mix (Kersulić et al., 2020; Hritz and Ross, 2010). Numerous studies have been dedicated to recognizing and describing sports tourism.

Sport tourism, however, is described in this paper as all types of passive and active participation in sporting activity, involved casually or in an organized manner for business reasons that require travel from home and work locations

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(Standeven and De Knop, 1999: 12). Nyikana and Tichaawa (2020) seeks to examine the nature of sport and tourism interrelationships in Central Africa, using Cameroon as a case study area. The key findings indicate that the interrelationships between sport and tourism in this context are relatively weak, especially at the policy and planning levels, despite there being potential for strengthening of these at the local operational level for sustainable tourism development. Sport tourism is considered a medium for economic growth (Gibson, 1998).

The perceived economic impacts of particular sports tourism activities by community members have been investigated in previous studies. Boonsiritomachai and Phonthanukitithaworn (2019) and Perić et al., (2019) emphasized that one of the factors affecting tourism sports is the combined participation and awareness on how to improve the support of the local population for tourism sporting events. Several previous studies have sought to reveal the relationship between sport and tourism, (Kersulić et al., 2020; Wise et al., 2019; Perić, et al., 2018; Kranjčević, 2017) sporting events and activities contributed to the promotion of tourism activity.

According to Getz and Page (2016), the role of tourism sports to stimulate new forms of internal development, such as the renewal of infrastructure, building community, voluntary capacity, and improving marketing, which would bring new economic gains. Walö et al., (1996) indicated that an economic benefit from sporting activities was perceived by residents. Soutar and McLeod (1993) analyzed the expectations of residents of Australia's America's Cup protection and discovered that the perceptions of residents before the case were strikingly different from the real social and economic impacts encountered. Garidzirai and Pasara (2020) aim to explore the role of tourism on economic growth.

The study outcomes show a positive association among infrastructure index, tourism receipts, number of local, international tourists and economic growth. Therefore, the study recommends that the factors of production be shifted to the tourism industry for high productivity. The real economic effects on the city were not as high as predicted, and the social costs of the event, such as traffic and pollution, were not viewed as an issue before the event (Soutar and McLeod, 1993). Although comprehensive in their analysis, studies have not looked challenges facing the tourism sport activities and proposed model for developing tourism sport activities.

METHODOLOGY

There were local people living within Aqaba and the surrounding area in the sample population. To choose the sampling units where most local people live, cluster sampling was applied. To recruit respondents from each sampling unit, simple random sampling techniques were applied. The collection of data was a mixture of questionnaires and interviews. In suburban areas, questionnaires and interviews were conducted (Rassel et al., 2020). Additionally, interviews with local community leaders were conducted. 180 respondents participated in the study in total. The data collected was arranged, tabulated and analyzed using the Social Science Statistical Kit (SPSS).

The study used research design for surveys. In addition, areas within Aqaba, which are highly frequented by sports tourists, were chosen for the study using purposeful sampling. Local community members, business community members and training managers were then recruited into the study using simple random sampling. This research used both secondary and primary data sources, gathering secondary information from written materials such as journals and books, while obtaining primary information from questionnaires and interview schedules. Furthermore, both descriptive statistics and inferential tests were carried out with the aid of the Statistical Kit for Social Science (SPSS).

RESULT AND DISCUSSION

To answer the first research question namely, what are the Challenges of sports tourism, the result can be seen on Table 1 below. In the result above all challenge variables had a mean more than 3.9 which indicates strong approval to positive social impacts associated with sport tourist in the region.

Table 1. Challenge Facing sports tourism

N	Items	N	Mean	Std. Deviation
1	High cost	180	4.51	.901
2	The lack of infrastructure	180	4.11	.861
3	The lack of appropriate equipment for some types of sports	180	3.98	.645
4	The limited availability of safety and security elements for some types of tourist sport	180	3.96	.784
5	Insufficient number of experts in the field of tourism sport	180	4.05	.751
6	The prevailing social culture that prevents some aspects of tourist sport	180	4.04	.852

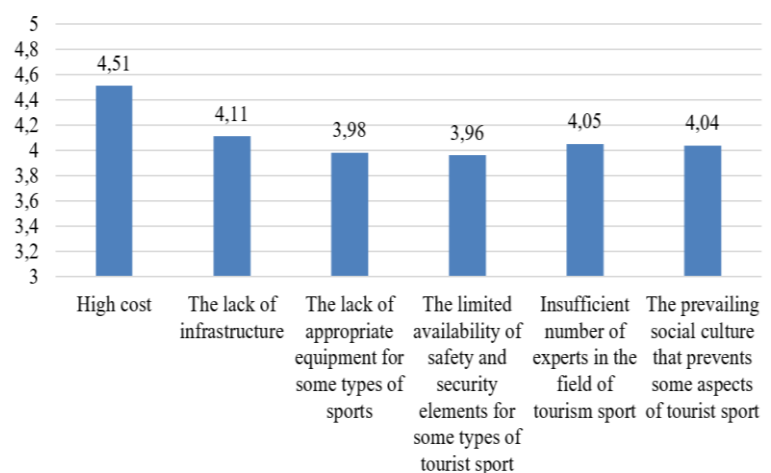


Figure 1. Challenge facing Sport Tourism

Very strong means above 4.0 were scored on challenge variables including: cost (4.51), infrastructure (4.11), appropriate equipment (3.98), safety and security (3.96), experts (4.05) and social culture (4.04). The high cost is an important factor that affects the tourism sport in Jordan, followed by the lack of infrastructure.

To answer the second research question namely, what are the most important activities of tourism sport in Jordan? The result of mean and standard deviations can be seen on Table (2) below.

In the result above all important variables of sport tourist had a mean more than 3.11 which indicates strong approval to positive social impacts associated with sport tourist in the region. Very strong means above 4.0 were scored on challenge variables including: Water Sports (4.60), Jumping (4.10), Climbing (4.58), Bicycle Race (3.18), Skydiving (4.70) and Walking (3.11). The Water Sports is an important factor that affects the tourism sport in Jordan, followed by the Climbing.

To answer the third research question namely, what are the most important proposals for developing tourism sport in Jordan? The result can be seen on Table (3) below.

Table 2. The Most Important Variable

N	Items	N	Mean	Std. Deviation
1	Water Sports	180	4.60	.901
2	Jumping	180	4.10	.861
3	Climbing	180	4.58	.645
4	Bicycle Race	180	3.18	.784
5	Skydiving	180	4.70	.751
6	Walking	180	3.11	.852

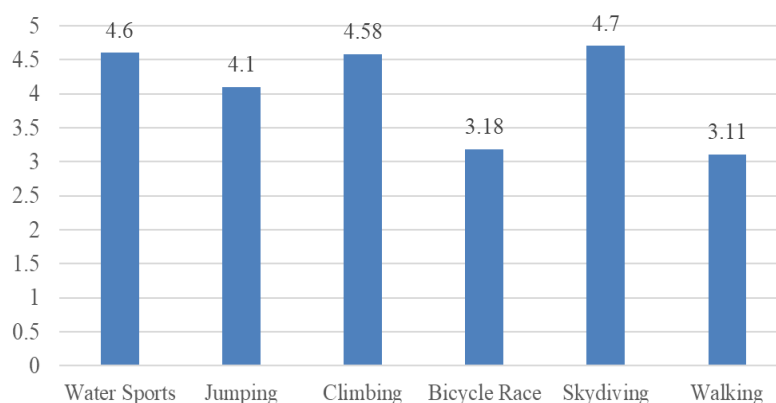


Figure 2. Important Variable

Table (3) introduce a number of proposals and suggestions to encourage tourism in Jordan. The table shows that 80% suggest creating the infrastructure for tourism as the highest percentage. Table 3 reveals that tourism obstacles in Jordan can be managed by developing the interest of tourism ant tourist activities. Also, it is very important to increase our awareness of sports role in tourism development.

Table 3. Proposals for developing tourism sport

Suggested	Iterations	Percentage
Create the infrastructure for tourism	144	80%
Increasing the number of technical cadres to enhance the practice of tourism sport activities	128	71%
Awareness of the most important tourist sport facilities in Jordan	120	67%
Promotion of tourism sport activities in Jordan.	114	63%

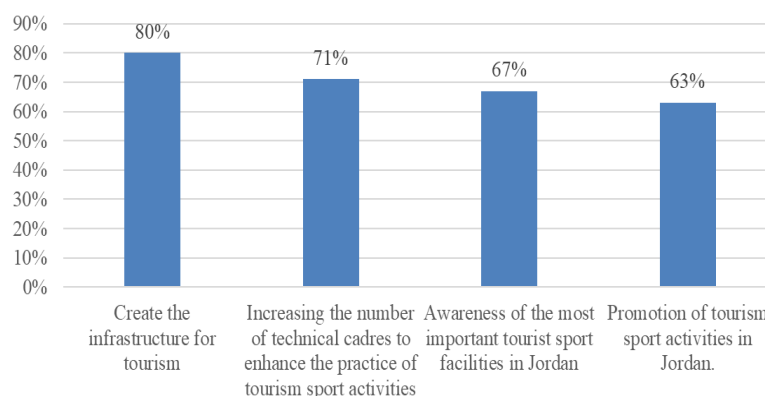


Figure 3. Proposals for Developing Tourism Sport

DISCUSSION

The results endorsed the social and indicated that the economic benefits seem to have the greatest effect on whether local people support the creation of more sport tourism. This can be due to the belief of people that tourism can provide alternative sources of revenue, expanded business operations, and improved livelihoods in general.

In addition, in order to earn the financial benefit from the sports tourist dollars, people appeared able to ignore any negative social impacts. Recognizing that social effects are substantially equal to economic benefits, tourism planners should track resident quality of life problems, which can contribute to resident-friendly initiatives (Kersulić et al., 2020; Wise et al., 2019; Perić et al., 2019; Hritz and Ross, 2010). These writers state that people who frequently use tourist attractions view them more as leisure amenities for the city. A balance must be developed between the social, environmental and economic aspects of sports tourism because the study of the quality of life of residents in tourist places is reflected in the methods of attracting sports tourism. It should be noted that the water sports are an important factor that affects the tourism sport in Jordan, followed by the climbing, and the high cost is an important factor that affects the tourism sport in Jordan, followed by the lack of infrastructure.

CONCLUSION

This research offers a more concise picture of what particular kinds of effects affect the promotion of sports tourism. The findings revealed that economic impacts remain a key factor behind development funding.

This study examined the perceived effects of sports tourism by analyzing the attitudes of residents towards sports tourism at their destination. The participants were funded by general sports tourism. As powerful predictors for funding, these variables also contributed. Therefore, tourism planners ought to adapt their decisions to the needs of the community (Kersulić et al., 2020; Hritz and Ross, 2010). This will boost the support of the community, which is an important ingredient for the success of the destination's sports tourism.

REFERENCES

- ALdmour, H.A., ALSarayreh, M.N., & Jawabreh, O.A. (2011). The role of sports events in the revitalization of touristic movement from the perspective of the tourist (golden triangle case study). *Research Journal of International Studies-Issue, 1* (21), 159-168. <https://www.researchgate.net/profile/Mohammad-Alsarayreh/publication/324976883>
- Boonsiritomachai, W., & Phonthanukitithaworn, C. (2019). Residents' support for sports events tourism development in Beach City: The role of community's participation and tourism impacts. *Sage Open, 9* (2), 1-15. <https://doi.org/10.1177/2158244019843417>
- Brunt, P., & Courtney, P. (1999). Host perceptions of sociocultural impacts. *Annals of tourism Research, 26* (3), 493-515. [https://doi.org/10.1016/S0160-7383\(99\)00003-1](https://doi.org/10.1016/S0160-7383(99)00003-1)
- Fredline, E. (2006). Host and guest relations and sport tourism. *Sport in Society, 8* (2), 263-279. <https://doi.org/10.1080/17430430500087328>
- Getz, D., & Page, S.J. (2016). Progress and prospects for event tourism research. *Tourism management, 52* (1), 593-631. <https://doi.org/10.1016/j.tourman.2015.03.007>
- Gibson, H.J. (1998). Active sport tourism: who participates? *Leisure studies, 17* (2), 155-170. <https://doi.org/10.1080/026143698375213>
- Hritz, N., & Ross, C. (2010). The perceived impacts of sport tourism: An urban host community perspective. *Journal of sport management, 24* (2), 119-138. <https://doi.org/10.1123/jsm.24.2.119>
- Kersulić, A., Perić, M., & Wise, N. (2020). Assessing and considering the wider impacts of sport-tourism events: a research agenda review of sustainability and strategic planning elements. *Sustainability, 12* (11), 4473-4485. <https://doi.org/10.3390/su12114473>
- Kranjčević, J. (2017). The relation between sport and tourism at the beginning of tourism development—the case of Croatia. *European Journal of Tourism Research, 16* (1), 19-31. <https://ejtr.vumk.eu/index.php/about/article/view/275>
- Murphy, P.E. (1985). *Tourism: A community approach*. New York: Methuen.
- Nyikana, S., & Tichaawa, T. (2020). Revisiting Sport and Tourism Interrelationships: The Case of Cameroon. *GeoJournal of Tourism and Geosites, 29*, 756-771. <https://doi.org/10.30892/gtg.29214-489>
- Perić, M., Đurkin, J., & Vitezić, V. (2018). Active event sport tourism experience: the role of the natural environment, safety and security in event business models. *International Journal of Sustainable Development and Planning, 13* (5), 758-772. <https://doi.org/10.2495/SDP-V13-N5-758-772>
- Perić, M., Vitezić, V., & Mekinc, J. (2019). Comparing business models for event sport tourism: case studies in Italy and Slovenia. *Event Management, 23* (3), 379-397. <https://doi.org/10.3727/152599518X15403853721466>
- Rassel, G., Leland, S., Mohr, Z., & O'Sullivan, E. (2020). *Research methods for public administrators*. 7th Edition, New York, Routledge.
- Garidzirai, R. & Pasara, M.T. (2020). An Analysis of the Contribution of Tourism on Economic Growth in South African Provinces: A Panel Analysis. *GeoJournal of Tourism and Geosites, 29*(2), 554–564. <https://doi.org/10.30892/gtg.29214-489>
- Soutar, G.N., & McLeod, P.B. (1993). Residents' perceptions on impact of the America's Cup. *Annals of Tourism Research, 20* (3), 571-582. [https://doi.org/10.1016/0160-7383\(93\)90010-Z](https://doi.org/10.1016/0160-7383(93)90010-Z)
- Standeven, J., & De Knop, P. (1999). *Sport Tourism*. Champaign, IL: Human Kinetics.
- Walo, M., Bull, A., & Breen, H. (1996). Achieving economic benefits at local events: A case study of a local sports event. *Festival Management and Event Tourism, 4* (3-4), 95-106. <https://doi.org/10.3727/106527096792195353>
- Wise, N., Perić, M., & Đurkin, J. (2019). Benchmarking service delivery for sports tourism and events: Lessons for Gorski Kotar, Croatia from Pokljuka, Slovenia. *European Journal of Tourism Research, 22* (1), 107-128. <https://ejtr.vumk.eu/index.php/about/article/view/378>

THE PHENOMENON OF "ECOLOGICAL SELF-AWARENESS" AND ITS INFLUENCE ON ECOLOGICAL TOURISM

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Abstract: The concept of "ecological self-awareness" is an integral part of ecological tourism. Ecological tourism is considered in a broad and a narrow aspects. In a broad aspect ecotourism is a market capitalization of the environmental benefits of some regions and the whole country. The Purpose of the research is to detect the influence of ecological self-awareness on the development of ecological tourism. For the first time, from the individual-centered, humanistic, holistic standpoint, the category of ecological self-awareness is defined as complex mental phenomenon, which integrates cognitive, emotional, value and behavioral components, which enhance the attitude of individuals towards ecotourism. The data were collected from the experimental and the control groups by calculating the empirical parameter value. The scale of ranks were used to measure the results. The results show positive changes in ecological self-awareness in the experimental group. The dynamics of the changes in the experimental group is much higher than in the control group. This fact let us assert that the applied formation technology has its effectiveness. The ecological self-awareness is directly related to ecological education and influences the development of ecotourism.

Key words: ecological tourism, ecological self-awareness, environment, environmental education, the system of environmental knowledge, skills, attitudes, influence on ecotourism, ecological education

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INTRODUCTION

The concept of "ecological-self-awareness" is an integral part of ecological tourism. Ecological tourism is considered in broad and narrow aspects. In a broad aspect ecotourism is a market capitalization of the environmental benefits of some regions and the whole country. Ecotourism improves socio-economic conditions, increases investment activity of businesses and employment, it also overcomes unemployment by teaching the population specific professional skill, as well as provides the efficient use of the potential of natural recreational facilities and resources and entails the development of transport infrastructure. In a narrow aspect, ecological tourism is associated with recreation and recreational impact on humans. As a one of the popular types of tourism, it is designed to make up for the loss of energy and internal strength due to excessive emotional burnout in the age of information and computer technologies. However, in both aspects the approach to ecological tourism is often just a formality. Despite the reasoning about the recreational effect, which manifests itself as a kind of balance, harmony, calmness, lack of fuss, the connection between these aspects is lost. Ecological self-awareness is the very link between economic needs of a community and tourists' expectations in terms of receiving positive emotions from ecotourism. The Purpose of the research is to detect the influence of ecological self-awareness on the development of ecological tourism.

The scientific novelty of the research is the following. For the first time, from the individual-centered, humanistic, holistic standpoint, the category of ecological self-awareness is defined as complex mental phenomenon, which integrates cognitive, emotional, value and behavioral components, which enhance the attitude of individuals towards ecotourism.

MATERIALS AND METHODS

The theoretical significance of the study lies in the discovery of the devices, which would stimulate the development of

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the ecological self-awareness and the factors which determine their effective impact on ecotourism (Björk, 2000; Blamey, 1997; Cater, 2006; Fenell, 2001). The practical significance of the study lies in the fact that the proposed diagnostic technique allows to indentify the level of ecological self-awareness of an individual and to trace its formation dynamics.

Today, when ecotourism plays a significant part in global tourism industry, special attention should be paid to the prospects for its development in Russian regions. World Tourism Organization (UNWTO) predicts the growth of ecological tourism and its income in the XXI century, which can make a considerable contribution to the development of the Russian economy, especially in developing regions.

Ecotourism, as a rule, implies traveling to places of natural or ecological interest in order to observe wildlife and get an idea of the environmental, cultural and ethnographic features of an area, which do not violate the integrity of ecological systems. From a scientific point of view, such type of tourism contributes to the environmental protection and minimizes the negative impact on it (Collins English Dictionary, 2000). Ecotourism not only stimulates and satisfies the desire to communicate with nature, it is also an important part of the sustainable development of natural areas (Carvache-Franco et al., 2020a; Carvache-Franco et al., 2020b; Eshun, 2020; Fennell, 2004). Moreover, those types of tourism activities that have the most positive environmental, economic and social impact are more sustainable. An integral part of ecotourism is ecological awareness (Szente et al., 2021). Ecological awareness as a reflection of ecological reality and the personal recognition of this reality forms individual ecological self-awareness.

The process of such recognition takes place during environmental education. Environmental education is, first of all, a process of acquisition by a person of his own image in the environment (Sergeeva, 2004). It is making conditions for the harmonious development of an individual in interaction with nature on the basis of the principles of ecocentrism, and the transformation of a person as a passive observer into an active explorer of environmental issues and a creator of his own sustainable future. Environmental education based only on the traditional knowledge-centered approach cannot provide a solution to ecological problems of current interest, because a person who has mastered the necessary knowledge does not obligatory manifest himself as a subject of ecotourism.

Being both an object and a subject of activity, an individual is transforming not only his bio-social reality, but also himself (Genovese, 2003; Piaget, 1971; Weaver, 2007). In our research we drew on studies of the authors who considered the current problems of the theory and practice of education in the field of the environment and other diverse areas of the humanities: philosophy and global problems of ecology (Weaver, 2005). The works of contemporary authors were of particular interest (Carvache-Franco et al., 2020; Eshun et al., 2020; Higham et al., 2003; Sergeeva, 2004; Szente et al., 2021; Toassa, 2019; Weaver et al., 2007; Zielinski et al., 2020). These authors consider a wide range of issues that can be important for the scientific foundation of phenomenon of eco tourism (Carvache-Franco et al., 2020; Eshun et al., 2020; Higham et al., 2003; Sergeeva, 2004; Szente et al., 2021; Toassa, 2019; Weaver et al., 2007; Zielinski et al., 2020).

Environmental education is focused not only on its content, but also on technology. Consequently, the problem of finding means and techniques to stimulate the development of ecological self-awareness becomes urgent (Weaver, 2005). Also the growth of ecotourism in the world has eventually predetermined the formation of ecological self-awareness of people (Toassa, 2019). Ecological self-awareness of an individual has a complex structure and includes the following components (Sergeeva, 2004):

- the cognitive component of ecological self-awareness (self-knowledge) characterizes: an individual's awareness of his knowledge / ignorance about natural environment, the interaction between man and nature; knowledge of the behavioral norms and rules of interrelation with nature in accordance with environmental ethics; knowledge on ecology and nature preservation, about the interaction between society and nature; knowledge about himself, induced into self-image, an emotional view of himself: awareness of the grounds for his participation in environmental protection activities, motivation to learn environmental challenges; the present-self and the future-self of an individual in the interrelations with nature (Wight, 1993);
- the affective component (self-attitude) includes conscientious, emotionally positive attitude and cognitive interest of an individual towards environment; the evaluation of one's actions and the interpersonal relationships with other individuals in the field of environmental preservation; attitude to one's personal qualities and to one's personality as a whole; the assessment of accordance of the present-self to the ideal-self as a subject of ecological activity;
- the executive component of ecological self-awareness reflects the behavioral volitional aspect (self-regulation) and includes the ability to see the beauty in nature, enjoy its sounds, colors, aromas, preserve them as a source of joy, the ability to comprehend environmental phenomena, to discover connections and dependencies that exist in the world of plants and animals; draw generalizations and conclusions about the state of environment, make recommendations for a reasonable interaction with it; the ability to protect nature in community-development activities; the skills to regulate the behavior in environment - to define the purpose of the activity, to analyze and to identify conditions, to choose the best technic and sequence of actions, to evaluate the results and to correct them if necessary; the capabilities for personal growth and self-fulfillment through participation in ecological activities (Zielinski et al., 2020).

Thus, the ecological self-awareness of an individual is considered as a integral relatively stable structure which involves the individual's ideas about himself as an eco-social being, as a subject of environmental activities in general social ecological system; as a means of resolving the ecological issues on the basis of educated judgments, humanistic ideals and progressive national traditions with a combination of emotional value attitude towards the world around and adequate self-image (Higham et al., 2003). An abstract society with a whole complex of technocratic and civilization disturbances dominating over it can not be regarded as measure of ecological problems, but a real person who makes decisions and choices in his life. That is why, the environment should gain personally significant meaning for individuals. This will

revitalize their approach to ecological tourism. To reach that goal it is essential to use forms, methods and means of teaching, where interaction between nature and people should be regarded as interpersonal. Trainings, role plays, media and other practice-oriented and learner-centered techniques to form ecological awareness at school (Higham et al., 2003).

The link between ecological self-awareness and ecotourism is established under the following condition: knowledge on natural and social science should be connected to sensory perception of environment, which awakens aesthetic emotions and generates the desire to make a practical contribution to its improvement. Thus, the core connection between ecological self-awareness and ecotourism is represented by the following knowledge, skills and value attitudes:

- the information about environment, from bio-ecology, human ecology and social ecology, selected and adapted if necessary, about general principles of human behavior in the natural environment, about cause –and- effect dependency between a society and the environment, which helps to find environmental problems solutions and to make right moral choices and decisions;

- concern for natural environment: responsible, careful and empathic attitude to environment, aesthetic experiencing natural areas, the feeling of engagement with native nature;

- skills: the ability to see the beauty in nature, enjoy its sounds, colors, aromas, preserve them as a source of joy, to behave in the natural environment, to comprehend environmental phenomena, to discover connections and dependencies that exist in the world of plants and animals; to draw generalizations and conclusions about the state of nature, to make recommendations for reasonable interaction with it, the ability to protect nature in community-development activities.

Considering that the scale of ranks was used in our research to evaluate the experimental data, it is most expedient to use X² (chi-squared test)

The empirical parameter value is calculated by following formula (Sergeeva, 2004):

$$\Sigma^2 = N * M * \chi$$

Where:

N, M - the number of participants in groups;

L - the number of points on the scale of rank. In our case, L = 3 ("low", "medium", "high");

n_i, m_i - the number of participants in groups who received an i-point.

In our case:

n₁, m₁ - the number of participants who received a "low score";

n₂, m₂ - the number of participants who received an "average score";

n₃, m₃ - the number of participants who received a "high score";

The empirical parameter value calculated by the formula is compared with critical parameter value (error probability) taken from the table. We have taken the following critical parameter value:

error probability @ = 0.05. It is usually applied in pedagogical research, the calculations are based on assumptions of no more than 5% of error probability.

for L - 1 = 2.

In our case critical parameter value is X_{20.05} = 5.99, so we proceed from the fact that if the calculated empirical parameter value in the compared groups:

- less than 5.99 or equal to 5.99, the null hypothesis is accepted and we conclude that the characteristics of the compared groups coincide with the significance level of 0.05;

- more than 5.99, the alternative hypothesis is accepted and we conclude that the characteristics of the compared groups are different with a reliability of 95 %.

RESULTS AND DISCUSSIONS

The experiment was carried out to study the level of ecological self-awareness. It was a field experiment conducted among students during their practical training. For the purpose of the experiment a control group and an experimental group of 25 people each were formed. To obtain the necessary data the following methods were applied: observation, interview, archival research. The data required for calculating the empirical parameter value are given below in tables 1, 2, 3 and 4.

Table 1. Empirical value χ^2 for affective value component (Source: the authors' own calculations)

	Experimental group before the experiment	Experimental group after the experiment	Control group before the experiment	Control group after the experiment
Experimental group before the experiment	0	21.32	0.35	2.04
Experimental group after the experiment	21.32	0	20.16	14.48
Control group before the experiment	0.35	20.16	0	1.11
Control group after the experiment	2.04	14.48	1.11	0

Table 2. Empirical value χ^2 for cognitive component (Source: the authors' own calculations)

	Experimental group before the experiment	Experimental group after the experiment	Control group before the experiment	Control group after the experiment
Experimental group before the experiment	0	21.46	0.35	2.01
Experimental group after the experiment	21.46	0	16.95	13.2
Control group before the experiment	0.35	16.95	0	1.59
Control group after the experiment	2.01	13.2	1.59	0

Table 3. Empirical value χ^2 for executive component (Source: the authors' own calculations)

	Experimental group before the experiment	Experimental group after the experiment	Control group before the experiment	Control group after the experiment
Experimental group before the experiment	0	21.35	1.4	1.95
Experimental group after the experiment	21.35	0	13.44	12.44
Control group before the experiment	1.4	13.44	0	0.04
Control group after the experiment	1.95	12.44	0.04	0

Table 4. Empirical value χ^2 for the level of ecological self-awareness (Source: the authors' own calculations)

	Experimental group before the experiment	Experimental group after the experiment	Control group before the experiment	Control group after the experiment
Experimental group before the experiment	0	25.02	0.48	1.61
Experimental group after the experiment	25.02	0	19.94	15.39
Control group before the experiment	0.48	19.94	0	0.71
Control group after the experiment	1.61	15.39	0.71	0

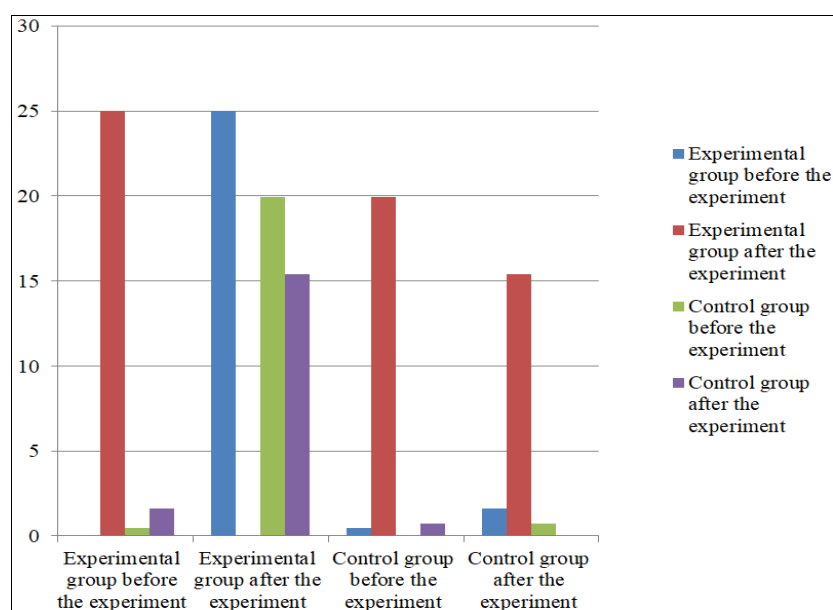


Figure 1. Empirical value parameter for the level of ecological self-awareness (Source: developed by the authors)

During the research the following indicators of the level of the ecological self-awareness were identified: cognitive, affective, executive. The evaluation criteria for affective component were the following indicators (Figure 1):

- enhanced appreciation of natural environment: aesthetic experiencing natural areas, demonstration of responsible and respectful approach towards nature;
- attitude to one's personality as a subject of environmental activity, cognitive interest in acquiring the norms of ecological tourism.

The evaluation criteria for the cognitive component were:

- the knowledge of ecological issues, the interaction between a society and various natural systems;
- the knowledge about oneself as a subject of environment protection activity.

The evaluation criteria for the behavioral component were:

- showing conservation initiative in the immediate environment;
- pro-environmental skills, regarding living and non living nature as a subject;
- self-reflection, self-esteem and self-regulation in the ecological environment.

At the initial stage a low level of ecological awareness was testified both in the experimental and the control groups, which, in turn, indicates a low impact on the attitude of the participants towards ecotourism. The projective technology was applied and its effectiveness was proved. Thus, the dynamics of the ecological self-awareness formation in percentage terms for all the above components were significantly higher in the experimental group than in the control group. Based on the results represented in the tables we can conclude: empirical parameter value χ^2 for experimental group compared with control group (including classes) before the experiment is less than 5.99, which means null hypothesis is not rejected and it can be claimed that the level of ecological self-awareness in both groups coincides at the initial stage. Moreover, the empirical parameter value χ^2 for experimental group after the completion of the experiment, compared with control group (including classes) is more than 5.99, which means the alternative hypothesis is confirmed and it can be concluded that the characteristics of the compared groups differ with 95% reliability. The empirical parameter value χ^2 , calculated for control group after the completion of the experiment, compared to experimental and control groups before the experiment (including classes) is less than 5.99, which means null hypothesis is not rejected and it can be claimed that the characteristics of the compared groups coincide with a significance level of 0.05.

Therefore, the analysis of the experiment's results shows the changes in the level of ecological self awareness of the research participants, which revitalizes their attitude towards ecological tourism.

CONCLUSION

The development of ecotourism as an industry is impossible without potential tourists having a steady interest in this type of recreation. This interest underlines the formation of a positive and meaningful attitude towards ecotourism. Such an

attitude is established through enhancing the ecological self-awareness of an individual. Ecological self-awareness is an integrative personal structure, which combines knowledge about oneself and an emotional attitude to one's personality as a part of ecological activity and self-regulation in a specified activity. All three components are purposefully developed in dialectical unity, according to the age and the individual characteristics of a person. The enhancing of ecological self-awareness of an individual is a process of stimulating his personal self-growth and sensitivity to natural environment. This process is qualified by following criteria: the need for related, concerned, careful experiencing the natural environment and its inhabitants; the assimilation of the norms of environmentally sound interaction with living and non living matter and the focus on their practical application; the manifestation of the initiative to improve the quality of the immediate environment.

According to the result of the experiment we can conclude that projective technology, applied in the experimental group, occurred positive changes in the ecological self-awareness of the participants. This tendency is revealed in all components and let us assume that the formation technology has shown its effectiveness and will enrich the ecological education. Representation of these two concepts in every civilian's life can help them to obtain the feeling of the harmony with natural environment and a sense of security in the areas where ecological tourism is carried out.

REFERENCES

- Björk, P. (2000). Ecotourism from a conceptual perspective, an extended definition of a unique tourism form. *International Journal of Tourism Research*, 2, 189-202. [https://doi.org/10.1002/\(SICI\)1522-1970\(200005/06\)2:33.3.CO;2-K](https://doi.org/10.1002/(SICI)1522-1970(200005/06)2:33.3.CO;2-K)
- Blamey, R. (1997). Ecotourism: the search for an operational definition. *Journal of Sustainable Tourism*, 5(2), 109-130. <https://doi.org/10.1080/09669589708667280>
- Cater, E. (2006). Ecotourism as a Western Construct. *Journal of Ecotourism*, 5(1-2), 23-39. <https://doi.org/10.1080/14724040608668445>
- Carvache-Franco, M., Carvache-Franco, O., Carvache-Franco, W., & Villagómez-Buele, C. (2020). From Satisfaction in Eco-Tourism to Loyalty in a National Park. *GeoJournal of Tourism and Geosites*, 28(1), 191-202. <https://doi.org/10.30892/gtg.28115-462>
- Eshun, G., & Tichaawa, T.M. (2020). Community Participation, Risk Management and Ecotourism Sustainability Issues in Ghana. *GeoJournal of Tourism and Geosites*, 28(1), 313-331. <https://doi.org/10.30892/gtg.28125-472>
- Carvache-Franco, M., Carvache-Franco, O., Carvache-Franco, W., Villagómez-Buele, C., & Saltos-Layana, A. (2020). Sociodemographic aspects and their relationship with the Ecotourists' motivations in a Coastal national Park from Ecuador. *GeoJournal of Tourism and Geosites*, 31(3), 1075-1082. <https://doi.org/10.30892/gtg.31320-543>
- Fennell, D.A. (2001). A Content Analysis of Ecotourism Definitions. *Current Issues in Tourism*, 4(5), 403-421. <https://doi.org/10.1080/13683500108667896>
- Fennell, D., & Ebert, K. (2004). Tourism and the precautionary principle. *Journal of Sustainable Tourism*, 12(6), 461-479. <https://doi.org/10.1080/09669580408667249>
- Toassa, G. (2019). Leontiev about Matter and Consciousness: His Critique of Vygotsky in the Soviet context. *Psicologia: Teoria e Pesquisa*, 35, Brasília. <https://doi.org/10.1590/0102.3772e35315>
- Higham, J.E.S., & Carr, A. (2003). Defining ecotourism in New Zealand: differentiating between the defining parameters within a national/regional context. *Journal of Ecotourism*, 2(1), 17-32. <https://doi.org/10.1080/14724040308668131>
- Genovese, J.E.C. (2003). Piaget, Pedagogy, and Evolutionary Psychology. *Evolutionary Psychology*, 1(1), 127-137. <https://doi.org/10.1177/147470490300100109>
- Szente, V., Osiako, P.O., Nagy, M.Z., Pintér, A., & Szigeti, O. (2021). Community based Ecotourism in Hungary: Citizens perceptions towards the roma community. *GeoJournal of Tourism and Geosites*, 34(1), 233-239. <https://doi.org/10.30892/gtg.34131-642>
- Weaver, D.B., & Lawton, L.J. (2007). Twenty years on: The state of contemporary ecotourism research. *Tourism Management*, 28(5), 1168-1179. <https://doi.org/10.1016/j.tourman.2007.03.004>
- Weaver, D.B. (2005). Mass and Urban Ecotourism: New Manifestions of an Old Concept. *Tourism Recreation Research*, 30(1), 19-26. <https://doi.org/10.1080/02508281.2005.11081230>
- Wight, P.A. (1993). Ecotourism: Ethics or Eco-sell? *Journal of Travel Research*, 31(3), 3-9. <https://doi.org/10.1177/004728759303100301>
- Zielinski, S., Jeong, Y., & Milanés, C.B. (2020). Factors that influence community-based tourism (CBT) in developing and developed countries. *Tourism Geographies*, 1-33. <https://doi.org/10.1080/14616688.2020.1786156>
- Piaget, J. (1969). *Избранные психологические труды [Selected psychological works]*, Moscow, Russia.
- Sergeeva, T.K. (2004). *Ecological tourism. The textbook on Tourism Management*, Moscow, Finance and Statistics, 358, ISBN 5-279-02819-3, 5000, (Russia).
- *** Collins Dictionaries (2018). *Collins English Dictionary Complete and Unabridged*. 13th Revised Edition, Collins, 2336.

GEOTOURISM DEVELOPMENT THROUGH THE PUBLIC FACILITIES IN GEOTRAIL BAKKARA, TOBA CALDERA GEOPARK

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Abstract: Bakkara is a village with tourism potential in Geoarea Sibandang, Toba Caldera Geopark, one of UNESCO Global Geopark. This research was conducted to examine and review the geotourism development in Bakkara tourist destinations. Furthermore, the output of this research is to preserve the value of geotourism such as conservation, education, economy, and promotion, especially in public facilities. The method used in this study is a qualitative method through observation and focus group discussion. The results show that public facilities in the development of geotourism have been implemented but have not significantly affected tourism, and require some improvements.

Key words: geotourism, public facility, Bakkara, Toba Caldera Geopark

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INTRODUCTION

One of the fastest-growing industries is tourism, improving a country's economy (Farid, 2015). Tourism development is essential, especially for Indonesia, which has many tourist attractions. Therefore, the development of tourist areas is crucial to improve the standard of living in the tourism area. Currently, the concept of sustainable tourism is the most widely used because it will create sustainability of a tourist destination in the future. One part of the concept of sustainable tourism is Geotourism. Geotourism can fulfill the tourists' desires and provide benefits to the environment and society as well as a trigger for local economic development in the area (Pralong, 2006).

Geopark and geotourism are the sustainable development models that help enhance the preservation of geoheritage and the environment (Gray, 2019) because the geological knowledge and geotourism are inclusive up to 30% as an important part of the geopark compositions (Singtuen et al., 2019). In terms of the geotourism concept, geotrail is one way to improve tourism potency and increase visitors to the geosite (Norrish et al., 2014). However, the main motivation of most geotourism visitors is tourists who want to have fun (Grobbelaar et al., 2019) and not geology. Therefore, geological park management requires geotourism development (Paungya et al., 2020). Geotourism development is one method to introduce tourism (Zouros et al., 2010). UNESCO introduced Geopark by forming an organization as UGG (UNESCO Global Geopark) which has the following criteria; the area is sufficient to accommodate geopark activities, the formation of management and involvement of local communities, local economic development, education for the public, conservation, and protection, and the Geopark must join a global geopark network and regional networks (UNESCO, 2006). Today, UNESCO wants to achieve a geopark that combines conservation and sustainable development that can be economically beneficial to a particular area and educate local communities to understand their geological conditions and geographic implications. This understanding will develop local people's respect for their environment and maintain socio-cultural assets (Lin and Su, 2019). Geopark aims to manage, protect, and promote landscapes that are considered to have extraordinary potential. Through geoheritage conservation, educate tourism through geotourism activities, and provide information to geopark-related residents, it is also hoped to achieve sustainable economic development in the area (Stoffelen et al., 2019). In July 2020, the Toba Caldera, better known as Lake Toba was designate at the 209th Session of the UNESCO Executive Boards in Paris, France, as a UNESCO Global

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Geopark. Toba Caldera Geopark has a large area consisting of several districts. Bakkara is one of the tourist destinations of Humbang Hasundutan Regency, which has the wondrous natural phenomena of Toba Caldera Geopark. Bakkara has magnificent potency for development in the tourism sector. In geotourism, public facility planning, which is one aspect of regional planning, is essential to enhance the convenience of tourists and residents. In the development of tourism in the geopark areas, interpretive facilities, and services are needed to enable tourists to understand the geology. This is seen as one of the contributions to support the development of the geopark areas (Álvarez, 2020). A public facility is an element that supports the center of public activity required for regional planning (Shirvani, 1985). Therefore, appropriate public facility arrangement is necessary to intensify the development of geotourism in Bakkara.

MATERIALS AND METHODS

There is eight elements of regional planning in Urban Design Theory, namely: (1) Land-use, (2) form of building and massing, (3) Circulation and parking, (4) Open space, (5) Pedestrian walkways, (6) Public facility, (7) Signage, and (8) Preservation (Shirvani, 1985). These elements require thorough planning to create an attractive and pleasant area. A public facility is one of the environmental design aspects that physically and non-physically maintain the inheritance of places and the sense of a place. Public facilities include all activities that strengthen the city's public spaces, such as recreation areas, public libraries, markets, and restrooms. This element is essential by providing visual stimulation and beneficial for tourists or locals. Public facilities in the Geopark, such as recreations, arts, and aesthetics, which tourists will feel, have a relationship with the public facility in an area and provide identity in tourist attractions (Ginting and Sasmita, 2018). Geotourism is the concept of developing tourism, which prioritizes natural resources and explores the geodiversity of areas that are a tourist attraction (Dowling, 2011).

Geotourism enhances the community's awareness of the fascinating things in the area that attracts many tourists to obtain sustainable tourism. Geotourism relies on the unique geology, stunning nature, and local's products as it progresses. Therefore, the concept of geopark-based arrangement does not require many capitals (Bujdosó et al., 2015). Geotourism aims to take community initiatives about the Geopark through infrastructure, society, and local economic growth. Also, geotourism focuses on world heritage through interpretation and education (Dowling and Newsome, 2010). In this research, the indicators of education aspect for the development of geotourism through the public facility in the research location are comprehension and development of geosite; appreciation of world heritage and cultural values through interpretation and education; and educational activities. One of the measures to develop geotourism is through commercial products by locals aim to increase the tourists. Improving local products and appropriate marketing strategies can comply with the needs of tourists (Pralong, 2006). One of the methods to introduce tourism is by identifying geotourism as a marketing strategy to escalate the geosite (Gerner et al., 2009). Associating biodiversity conservation, geotourism, and community development help reduce resource degradation and elevate sustainable local development (Dowling and Newsome, 2006; Chen et al., 2015). In this research, the indicators of economic aspects of geotourism development through the public facility are marketing and local product improvement.

The concept of Geotourism is often implemented lately to preserve the earth's heritage, the growth of public awareness towards the earth's geological issue, and the number escalation of geoparks (Ren et al., 2013). Meanwhile, geotourism also concerns the geology and landscape of tourism and promotes tourism by conserving and preserving geodiversity through interpretation and education (Dowling and Newsome, 2010). In this study, the factors that affecting the conservation aspect as the development of geotourism through the public facility are geosite conservation and sustainability of geosite. According

to Hose (2006), indicators of the successful implementation of the concept of geotourism are physical identification and promotion, user comprehension, and efforts to elevate and disseminate the capable and communicative interpretation media (Hose, 2006). Therefore, in this study, the factors that affect the promotion aspect as well as the development of geotourism through the public facility are the image of the destination and the development of tourism products. Thus, geotourism has four aspects, namely Education, Economics, Conservation, and Promotion, which create an increase in destination tourism (Pralong, 2005). The research location is



Figure 1. Geotrail Bakkara (Source: Author, 2019)

Bakkara village in Baktiraja Sub-district, Humbang Hasundutan Regency, North Sumatera Province, Indonesia (Figure 1). Bakkara is located in Geoarea Sibandang, one of the larval domes in Toba Caldera Geopark (De Silva et al., 2015). Bakkara has a lot of diversity in the Toba Caldera Geopark area, which is potential and worthy of being developed. Bakkara location is about 20 km from Humbang Hasundutan Regency, Dolok Sanggul, and 211 km from Medan City. This research focuses on seven research points as frequently visited tourist objects in Bakkara: Bakkara Scenery, Aek Sitio-tio, Sisingamangaraja Palace, Aek Sipangolu, Hariara Tungkot, Janji Waterfall, and Tombak Sulu-sulu (Figure 2).

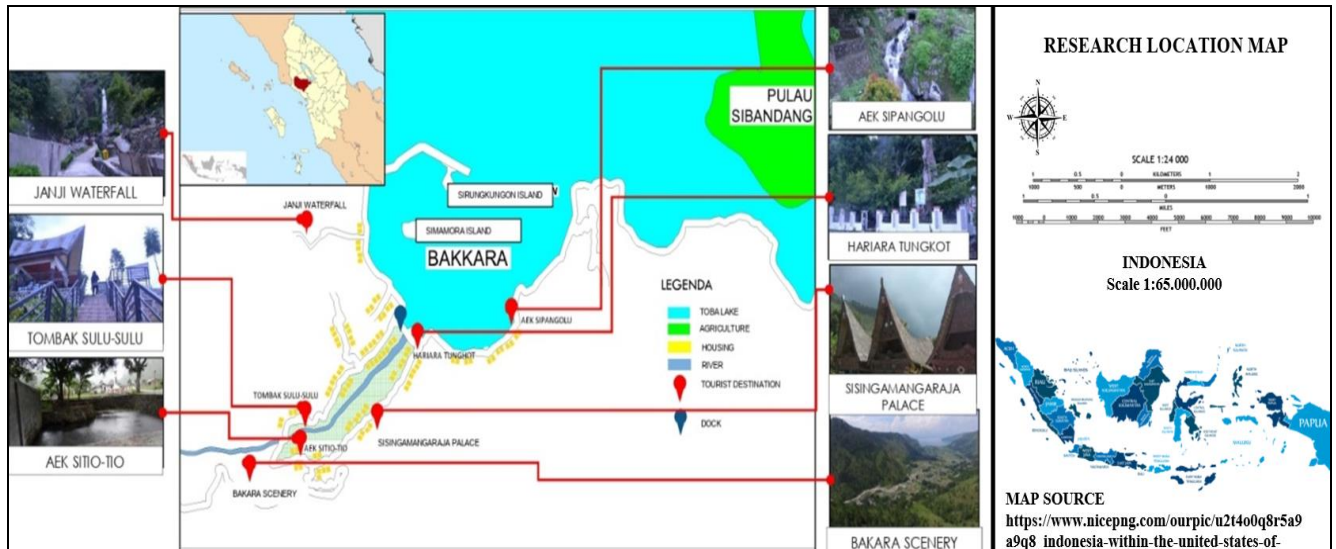


Figure 2. Research Area (Source: Author, 2019)

This research aims to find the concept of tourism planning on the arrangement of public facilities based on current observations to increase the geotourism development in the research location (Figure 3). This research uses a qualitative method by describing current observations in the Bakkara tourist area. Qualitative research methods not only have a concern for the data found while also examining the socio-culture at the research location, thus producing contextual findings (Groat and Wang, 2013). Qualitative research method data are generally more in figures and sentences than numbers (Fraenkel et al., 1993). This research implements the theory of geotourism development presented by the arrangement of public facilities as a component of the Urban Design theory by Shirvani Hamid (Shirvani, 1985).

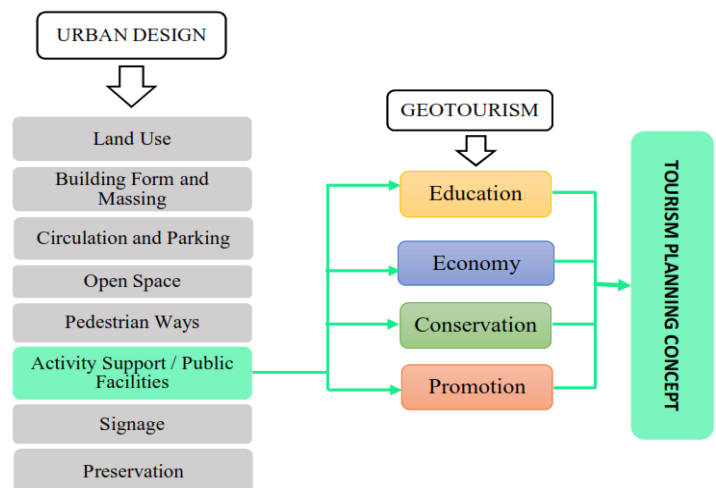


Figure 3. Analysis Chart (Source: Author, 2019)

RESULTS AND DISCUSSION

Education Aspect

Geotourism concerns world heritage and cultural values through interpretation and education (Dowling and Newsome, 2006). Geotourism must offer knowledge and educate tourists about the geodiversity of the tourist attractions and provide tourist satisfaction by requiring infrastructure and supporting tourism (Henriques et al., 2012).

The tourist Information Center is one of the tourist amenities in the tourism area by exploring the attractions. Unfortunately, most of the tourism destinations in Bakkara have not provided the Tourist Information Center. Instead, the Tourist Information Center provides information and guidance for tourists on destinations, accommodations, attractions, entertainment centers, maps, and everything related to tourism (Suwintari, 2012). Besides, some tourist destinations in Bakkara have provided signage, such as in Sisingamangaraja Palace and Janji Waterfall (Figure 4). However, most signs do not provide much information related to geotourism or Geopark, and its maintenance is relatively low (Figure 5).

As for the education aspect in terms of geotourism, the Tourist Information Center and signage help educate the public about the geotourism or Geopark. Geopark education management aims to initiate and raise Geopark's public education and all social elements to enhance economic and infrastructure development. Amenities by the host community in the geosite area will support various tourism activities that facilitate and educate tourists (Ginting and Sasmita, 2018). Therefore, to promote the geotourism in Bakkara, tourist attractions should provide the appropriate Tourist Information Center and signages to initiate and educate people about geotourism or geosite.

Economics Aspect

Service development will encourage the principle of geotourism to involve locals in developing innovative strategies (Sunaryo, 2013). The establishment of Geopark contributes to supporting local food, local products, and local accommodations (Singtuen et al., 2019). Toba Caldera Geopark provides many benefits, one of which is for sustainable economic growth and development. The arrangement of appropriate tourism facilities will increase the number of visitors and tourists as they impact the economic growth of the locals in the tourism sector.



Figure 4. Information Signage of Tourist Destination in Bakkara: (a) Sisingamangaraja Palace (b) Janji Waterfall (Source: Author, 2019)



Figure 5. Condition of Tourism Destination Signages in Bakkara: (a) Janji Waterfall (b) Tombak Sulu-Sulu (Source: Author, 2019)

Bakkara is well known for its quality and special agricultural products, such as onions, coffee beans, and rice, which will increase the economic value of Bakkara if adequately preserved (Figure 6). Unfortunately, some tourism destinations in Bakkara do not provide a souvenir shop as well as promoting and selling its natural wealth.



Figure 6. Agriculture in Bakkara
(Source: Author, 2019)



Figure 7. Local House in Bakkara which
Potentially can be Homestay

The tourists should spend everything related to creativity in improving the local economy (Swarna et al., 2013). Lodging and eatery facilities are also public facilities in tourist areas that are useful in improving the host economy. However, some tourist destinations in Bakkara have not provided the eatery as the rest area for tourists. The eatery is beneficial for tourists as well as employing locals to improve the local economy. Besides, lodging facilities are still rarely found in the tourist destinations, while nearby lodging facilities are 1 km away downtown.

According to Sunaryo (2013), service development will encourage the principle of geotourism to involve locals in developing innovative strategies (Sunaryo, 2013). The souvenir shop is an important support facility and has the potential to elevate the economy of the locals. Therefore, one of the efforts to develop geotourism from the economic aspect is by providing several souvenir shops in each tourist attraction. The souvenir shop must also be properly maintained by the locals to preserve sustainability. Moreover, some local houses have the potency to be developed as Homestays (see Figure 7). The improvement of public facilities will increase tourist amenities. Otherwise, the economic growth will affect the locals around the tourist attractions in Bakkara (Ginting et al., 2017).

Conservation Aspects

Tourism is to improve the economy and the locals' prosperity and is necessary for the sustainability of custom, tradition, and culture (Lutfianti, 2017). Historical heritage is the attractiveness of a tourist destination (Ginting and Wahid, 2016). As a tourist destination, Bakkara has a great geodiversity, biodiversity, and cultural diversity. Some of the tourist attractions that have cultural diversity are Hariara Tungkot, Tombak Sulu-sulu, and Sisingamangaraja Palace, which build the area's character. Meanwhile, several natural tourist destinations in Bakkara are Aek Sipangolu, Janji Waterfall, Tombak Sulu-sulu, Bakkara Scenery, and Aek Sitio-tio, which contains a diversity of Toba Caldera Geopark.

Bakkara is famous for its culture of Toba Batak because the ethnicity of the population is Toba Batak. The cultural diversity in Bakkara needs proper conservation as the historical building is a historical heritage from ancient times, which is important and has a unique sense of science and educational knowledge. Therefore, by presidential regulation number 9 of 2019, the preservation of Geological Heritage, Biodiversity, and cultural diversity between the Central Government, Government Regions, and Stakeholders through 3 (three) pillars covering conservation, education, and economic development efforts for the society in a sustainable manner. One of the conservation efforts carried out in the Bakara area was the rebuilding of the Sisingamangaraja Palace, which was burned in 1825 and rebuilt by the government in 1978.

Several public facilities in Bakkara have been adequately conserved (see Figure 8), but some of the architectural designs are not harmonious with the Toba Batak architectural style's identity. In addition, vandalism has been found in some tourist destinations, which means that public facilities in tourist areas are poorly preserved (Figure 9).



Figure 8. Conservation Aspect Concerning Public Facilities In Istana Sisingamangaraja, Bakkara (Source: Author, 2019)



Figure 9. Vandalism in Bakkara's Tourist Destinations
(a) Pavilion Bakkara (b) Aek Sipangolu (Source: Author, 2019)

Figure 10. Banner of Bakkara Tourism
(Source: Author, 2019)

Kotler et al. (2006) said that distinctive geotourism effects specific to this area are significant for future geotourism and geopark sustainability capabilities and, while still requiring appropriate management to sustain the destination products (Kotler et al., 2006). Some public facilities in Bakkara have been adequately conserved, but some of the architectural designs are not harmonious with the Toba Batak architecture style identity. Meanwhile, there is a need to restructure public facilities in tourist attractions areas (Zainol et al., 2011). Facilities and services by locals in the tourist area will contribute to tourism activities (Ginting and Sasmita, 2018). Stakeholders must maintain the facilities properly as keeping sustainability and tourist amenities. Unfortunately, vandalism at the stop point in the Bakkara Scenery, which is one of the tourist attractions in

Bakkara, caused the aesthetics' reduction as a tourist attraction. Thus, a stopping point requires proper maintenance from stakeholders, tourists, and locals, while the cleanliness of the attraction will affect tourists' escalation (Ginting et al., 2017).

Promotion Aspect

The success of the implementation of the geotourism is indicated by its physical promotion activities (Hose, 2006). By promoting tourism, introducing geotourism to the public will be easier as the initial step to escalate tourists and visitors. Tourism promotion activities are necessary for facilitating the public about tourism destinations.

However, local wisdom is one of the methods to promote tourism creatively, and tourism stakeholders should be aware of this (Singsomboon, 2014). According to UNESCO, Toba Caldera Geopark has been designated as a UNESCO Global Geopark in July 2020, which provides many benefits and impacts to the tourism promotion in Toba Caldera Geopark as well as for Bakkara as part of Toba Caldera Geopark. Unfortunately, the condition of public facilities for promotion purposes in Bakkara is quite defective. Some tourist attractions have not presented feature elements of street furniture for advertising purposes, attracting tourists. Meanwhile, the local government has conducted promotion activities by presenting some banners about Bakkara tourism at several hotels in Doloksanggul Town, Humbang Hasundutan Regency (Figure 10). Furthermore, several articles on several travel websites show online promotional activities, which have a positive impact on tourism in Bakkara. This study emphasizes that promotional activities in Bakkara are more encouraged online than physically. Communication to the public significantly influences the projects' hits, and the internet provides a precise instrument for promotion efforts (Yolal, 2012).

However, physical promotion is as necessary as online promotion, which is indicated by the support of activities or the public facilities at the tourist destination. Inadequacy promotion will influence the image of tourist destinations. The approach to public facilities such as hotels in the Geopark area will influence tourism. The significance of explanation in geotourism programs should be promoted to escalate tourism awareness and nature esteem (Hakim and Soemarno, 2017). Therefore, promotional activities from stakeholders or locals in Bakkara must be conducted more intensively, actively, and enterprising as improving the geotourism in Bakkara.

CONCLUSION

In the research location, the public facilities in the aspects of economics, education, conservation, and promotion as geotourism development have been implemented but have not had a significant impact on tourism. Public facilities such as stop points, restrooms, streetlights, eatery, lodging, and signage have applied and implemented but have not reached the appropriate level of maintenance. The inadequacy of understanding and contribution of stakeholders and locals has led to a slight improvement in the development of Bakkara geotourism.

From the economic aspect, locals and local government should play an active role in providing several eateries and homestays as Bakkara has good potential to escalate the development of geotourism. In addition, each tourist attraction is required to establish the Tourist Information Center and educational signboard related to geotourism and Toba Caldera Geopark to realize the development of geotourism in education. Besides, educational activities related to the geotourism are also essential to actualize as an effort to increase the awareness of the geotourism. It is necessary to have signage at each tourist locations to describe the object and its history.

From the conservation aspect, public tourism facilities are equally important with the tourist attraction, and must properly be maintained. The tourist attraction and its public facilities must prioritize hygiene, sanitation, preservation, and conserve the area to promote the development of geotourism in Bakkara. Proper management of public facilities in tourist areas will implicitly promote the tourist attraction. However, stakeholders, locals, and the government should be actively promote effectively escalate the tourist attraction and the geotourism in Bakkara impressively. This study recommends future research on the development of geotourism in Bakkara, Toba Caldera Geopark.

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REFERENCES

- Álvarez, R.F. (2020). Geoparks and education: UNESCO global geopark Villuercas-Ibores-Jara as a case study in Spain. *Geosciences (Switzerland)*, 10(1). <https://doi.org/10.3390/geosciences10010027>
- Bujdosó, Z., Dávid, L., Wéber, Z., & Tenk, A. (2015). Utilization of Geoheritage in Tourism Development. *Procedia - Social and Behavioral Sciences*, 188, 316–324. <https://doi.org/10.1016/j.sbspro.2015.03.400>
- Chen, A., Lu, Y., & Ng, Y.C. (2015). The principles of geotourism. *Berlin: Springer Berlin Heidelberg*. <https://doi.org/10.1007/978-3-662-46697-1>
- De Silva, S.L., Mucek, A.E., Gregg, P.M., & Pratomo, I. (2015). Resurgent Toba—Field, chronologic, and model constraints on time scales and mechanisms of resurgence at large calderas. *Frontiers in Earth Science*, 3, 25. <https://doi.org/10.3389/feart.2015.00025>
- Dowling, R.K. (2011). Geotourism's global growth. *Geoheritage*, 3(1), 1–13. <https://doi.org/10.1007/s12371-010-0024-7>
- Dowling, R.K., & Newsome, D. (2006). Geotourism's issues and challenges. *Geotourism*, 242–254. <https://doi.org/10.1016/B978-0-7506-6215-4.50021-X>
- Dowling, R.K., & Newsome, D. (Eds.). (2010). Global geotourism perspectives. *Goodfellow Publishers Limited*. <https://doi.org/10.1007/s12371-010-0024-7>
- Farid, S.M. (2015). Tourism management in world heritage sites and its impact on economic development in Mali and Ethiopia. *Procedia-Social and Behavioral Sciences*, 211, 595–604. <https://doi.org/10.1016/j.sbspro.2015.11.078>

- Fraenkel, J.R., Wallen, N.E., & Hyun, H.H. (1993). How to design and evaluate research in education. 7, New York: McGraw-Hill. <http://higher.ed.mheducation.com/sites/0078110394>
- Gerner, D., Rybár, P., Engel, J., & Domaracká, L. (2009). Geotourism marketing in Lake Constance region. *Acta Montanistica Slovaca*, 14(2), 197. <https://core.ac.uk>
- Ginting, N., Rahman, N.V., & Sembiring, G. (2017). Tourism development based on Geopark in Bakkara Caldera Toba, Indonesia. In *IOP Conference Series: Materials Science and Engineering*, 180. <https://doi.org/10.1088/1757-899X/180/1/012086>
- Ginting, N., & Sasmita, A. (2018). Developing tourism facilities based on geotourism in Silalahi Village, Geopark Toba Caldera. In *IOP Conference Series: Earth and Environmental Science*, 126. <https://doi.org/10.1088/1755-1315/126/1/012163>
- Ginting, N., & Wahid, J. (2016). Recalling the Past: Maintaining continuity in urban heritage tourism. *Journal of ASIAN Behavioural Studies*, 1(1), 81-89. <https://doi.org/10.21834/jabs.v1i1.174>
- Gray, M. (2019). Geodiversity, geoheritage and geoconservation for society. *International Journal of Geoheritage and Parks*, 7(4), 226-236. <https://doi.org/10.1016/j.ijgeop.2019.11.001>
- Groat, L.N., & Wang, D. (2013). *Architectural research methods*. John Wiley & Sons.
- Grobelaar, L., Bouwer, S., & Hermann, U.P. (2019). An Exploratory Investigation of Visitor Motivations to the Barberton-Makhonjwa Geotrail, South Africa. *GeoJournal of Tourism and Geosites*, 25 (2). <https://doi.org/10.30892/gtg.25101-359>
- Hakim, L., & Soemarno, M. (2017). Biodiversity conservation, community development and geotourism development in bromo-tengger-semeru-arjuno biosphere reserve. *GeoJournal of Tourism and Geosites*, 20(2), 220-230. http://gtg.webhost.uoradea.ro/PDF/GTG-2-2017/228_Hakim.pdf
- Henriques, M.H., Tomaz, C., & Sá, A.A. (2012). The Arouca Geopark (Portugal) as an educational resource: a case study. *Episodes*, 35(4), 481-488. <https://doi.org/10.18814/epiugs/2012/v35i4/004>
- Hose, T.A. (2006). Geotourism and interpretation. *Geotourism*, 22. <https://doi.org/10.1007/s12371-011-0052-y>
- Kotler, P., Bowen, T.J., & Makens, C.J. (2006). Marketing for Hospitality and Tourism, Pearson Education. Inc., Upper Saddle River, New Jersey.
- Lin, J.C., & Su, S.J. (2019). A New Way of Understanding Geoparks for Society. 55-67. https://doi.org/10.1007/978-3-030-04895-2_2
- Lutfianti, E. (2017). Geotrail planning of geotourism area Cimenyan Sub-District, Bandung Regency. *ASEAN Journal on Hospitality and Tourism*, 15(1), 12. <https://doi.org/10.5614/ajht.2017.15.1.5>
- Norrish, L., Sanders, D., & Dowling, R. (2014). Geotourism product development and stakeholder perceptions: a case study of a proposed geotrail in Perth, Western Australia. *Journal of Ecotourism*, 13(1), 52-63. <https://doi.org/10.1080/14724049.2014.938654>
- Paungya, N., Singtuen, V., & Won-In, K. (2020). The Preliminary Geotourism Study in Phetchabun Province, Thailand. *GeoJournal of Tourism and Geosites*, 31(3), 1057-1067. <https://doi.org/10.30892/gtg.31318-541>
- Pralong, J.P. (2005). A Method for Assessing Tourist Potential and Use of Geomorphological Sites. *Géomorphologie: Relief, Processus, Environnement*, 11(3), 189-196. <https://doi.org/10.4000/geomorphologie.350>
- Pralong, J.P. (2006). Geotourism: A New Form of Tourism Utilising Natural Landscapes and Based on Imagination and Emotion. *Tourism Review*, 61(3), 20-25. <https://doi.org/10.1108/eb058476>
- Ren, F., Simonson, L., & Pan, Z. (2013). Interpretation of geoheritage for geotourism—a comparison of Chinese geoparks and national parks in the United States. *Czech Journal of Tourism*, 2(2). <https://doi.org/10.2478/cjot-2013-0006>
- Shirvani, H. (1985). *The Urban Design Process Van Nostrand Reinhold. Co*, New York.
- Singsomboon, T. (2014). Tourism promotion and the use of local wisdom through creative tourism process. *International journal of business tourism and applied sciences*, 2(2), 32-37.
- Singtuen, V., Galka, E., Phajuy, B., & Won-In, K. (2019). Evaluation and Geopark Perspective of the Geoheritage Resources in Chiang Mai Area, Northern Thailand. *Geoheritage*, 11(4), 1955-1972. <https://doi.org/10.1007/s12371-019-00410-0>
- Stoffelen, A., Groote, P., Meijles, E., & Weitkamp, G. (2019). Geoparks and territorial identity: A study of the spatial affinity of inhabitants with UNESCO Geopark De Hondsrug, The Netherlands. *Applied Geography*, 106, 1-10. <https://doi.org/10.1016/j.apgeog.2019.03.004>
- Sunaryo, B. (2013). *Kebijakan pembangunan destinasi pariwisata: konsep dan aplikasinya di Indonesia (No. 1)*. Penerbit Gava Media Kebijakan Pembangunan Destinasi Pariwisata: Konsep dan Aplikasinya di Indonesia, (In Indonesian). <https://repository.ugm.ac.id/eprint/101212>
- Suwintari, I.G.A.E. (2012). Kepuasan Wisatawan terhadap Kualitas Pelayanan Tourist Information Counters di Jalan Padma Utara Legian, Kuta. *Jurnal Ilmiah Hospitality Management*, 2(2), (In Indonesian). <https://doi.org/10.22334/jihm.v2i2.77>
- Swarna, K., Biswas, S.K., & Harinarayana, T. (2013). Development of geotourism in Kutch Region, Gujarat, India: an innovative approach. *Journal of Environmental Protection*, 4(12), 1360-1372. <https://doi.org/10.4236/jep.2013.412157>
- Yolal, M. (2012). Geotourism and geoparks: the case of Kizilcahamam-Çamlidere Geopark. *GeoJournal of Tourism and Geosites*, 10(2), 193-203. http://gtg.webhost.uoradea.ro/V20122_vol10.html
- Zainol, N.Y., Yacob, I., Muhammad, M., Abd Manap, H., & Said, I.M. (2011). Implementing Langkawi Geopark Through Land Use Planning. *PLANNING MALAYSIA*, 1(1). <http://dx.doi.org/10.21837/pm.v1i1.90>
- Zouros, N., Fassoulas, K., & Valiakos, H. (2010). European Geopark Network and Geotourism. *Επιστημονική Επετηρίδα του Τμήματος Γεωλογίας (ΑΠΘ)*, 39(1/2), 423-424. <https://doi.org/10.32734/koridor.v1i102.4567>

DEVELOPING A RESORT DESTINATION THROUGH THE EYES OF THE TOURIST

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Abstract: One of the fundamental ways of enhancing destination development and sustainability is through the satisfaction of the tourists, as it provides ripple effects for the destination. The purpose of this paper was to assess the value of integrating views of the tourists in the development of a resort destination - Victoria Falls in Zimbabwe. The study followed a quantitative research design in testing seven critical elements of the tourism product drawn from literature which include accommodation, activities and tours, accessibility, attractions, facilities, image and price from the tourist visiting Victoria Falls, Zimbabwe. Data from 377 respondents were collected using systematic sampling and analysed using IBM23 Statistical Package for Social Science (SPSS). The results of this study underscore the importance of integrating the views of tourists as a fundamental element in the growth and development of a sustainable tourist destination. The tourists' evaluation of the seven elements of the tourism product further revealed the price of the offering as deeming too high, while attractions, image, accommodation and activities and tours were the outstanding elements of the resort destination's tourism product. A mixed reaction (mainly neutral), were noted on the accessibility and the facilities of the resort destination tourism product.

Key words: resort destination, tourists, tourism product, tourist satisfaction, destination development, perceptions

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INTRODUCTION

Despite the Covid-19 pandemic - one of the deadly respiratory diseases that put tourism and the world to a standstill since the end of 2019 (Anjorin, 2020), destinations are expected to offer unparalleled tourism offerings that satisfy the tourists (Sigala, 2020). Before the wave of the Covid-19 pandemic, tourism has been continuously growing over the years and competition for a better market share amongst the destinations have been prevalent (Goodall, 2004; Lowry, 2017; Haarhoff and De Klerk, 2019). Hence, tourism products need to be developed, and as a means to ward off competition, destinations have to offer tourism products that satisfy the tourists (Manhas et al., 2016). However, without putting into considerations the views of the tourists in the development equation, the sustainability of the tourism product could be futile (Aydin and Alvarez, 2020). Tourism services are intangible and can only be consumed at a tourist destination. As a result, in order to comprehend the experience of a tourism product rendered to the consumers at any tourist destination, it is important to collect the data from the tourists. These are the final users of the tourism product and are the right respondents to give their view on the nature of the available tourism product. It can be easily deduced from the tourists' views whether the tourism product is still competitive or not, as their views are drawn from their experiences.

Several types of research (Tichaawa and Mhlanga, 2015; Makoni and Chikobvu, 2019; Woyo and Slabbert, 2019; Dube and Nhamo, 2020) on the Victoria Falls tourism product neglected the aspect of involving the tourists' views on the performance of the key elements of the tourism product as a means for developing a sustainable tourism product. For a resort destination like Victoria Falls to be recognised continuously, the tourism product it offers should create a desire for travel. Mulec (2010) supports this dictum by stating that destinations may offer excellent tourism products, however, the product should be convincing to the possible clients that they will have a memorable experience. Mulec (2010) and Moral-Cuadra et al. (2019) attest that destinations should focus on changing the perceptions of the consumers towards the destination as it is the cornerstone for a sustainable competitive advantage.

This can be done by developing the offering through the views of the tourists. Not only do the tourists' perceptions assist in the future planning and development of the tourism product (Manhas et al., 2016), but their perceptions also help in shaping the tourism product to meet their demands (Dube and Nhamo, 2020) as well as pointing the direction in which the tourism product is taking. Victoria Falls tourism product is saturated with a combination of elements (accommodation, tours and activities, accessibility, price, facilities, attractions and image) that can be used to understand better the views of the tourists towards the tourism product. This leads to closing the gap in the literature on the significance of involving the tourists' views when developing a tourism product.

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LITERATURE REVIEW

The departure point into the sustainable development of a tourism product is through assessing the current offering by analysing the critical elements that built the tourism product (Torres-Delgado and Saarinen, 2013; Aydin and Alvarez, 2020). This could lead to developing a memorable holiday destination if the views of the tourists are included when assessing the current offering (Candela and Figini, 2012; Manhas et al., 2016). Tourism destinations should provide tourists with an attractive offering that help in stimulating travel (Haarhoff and De Klerk, 2019; Zappiano, 2005). Zemla (2016) argues that due to the fragmentation of tourism, several definitions are associated with the term tourism destination and can be defined based on the approach one has adopted. According to Zemla (2016), one can define a tourism destination from a spatial approach, economic approach, managerial approach, systems approach or network approach.

However, despite the approach applied, geographical location is one the most common aspect associated with most definitions proposed before (Burkart and Medlik, 1974; Murphy, 1985; Gonçalves and Águas, 1997; Goeldner and Ritchie, 2003). Adopting a managerial approach, where a tourism destination is defined as “a product”, Bieger (1998) defines a destination as “the tourist product that competes with other products in certain markets”. Different scholars (Grzinic and Zanketic, 2008; Gupta et al., 2015) ushered in several terms of a tourism product and its characteristics. Gupta et al. (2015: 49) posit the view that a tourism product is “any product that is marketed by a country or an organisation to tourists to attract them to visit the destination and enjoy the experience of the product”. Additionally, a tourism product should have special components that aid the comfort of the tourists while on holiday (Gupta et al., 2015). Grzinic and Zanketic (2008: 6) refer to the tourism product as “a sum of available resources service and facilities that tourists can use in a specific place and at a specific time to satisfy their needs”. Elements of the tourism product such as accommodation, attractions, tours and activities, accessibility, facilities, price and image play a great significance in the mindset of the tourist before they choose to visit a certain destination (Manhas et al., 2016). It is vitally fundamental to study the performance of these key elements of the Victoria Falls tourism product through the views of the tourists so as to reinforce sustainable destination development. The purpose of this study was to assess the value of integrating views of the tourists in the development of a resort destination - Victoria Falls in Zimbabwe and this was guided by the Social Exchange Theory.

SOCIAL EXCHANGE THEORY (SET)

According to Nunkoo (2016), SET is a theory that explains the social behaviour that occurs through the exchange process whereby people evaluate the benefits and costs of social relationships through maximising the benefits and minimising the costs. Makuzva and Ntloko (2018) argue that the contribution of SET is vital when dealing with aspects of perceptions as it assists in the understanding of the behaviour of the tourists on the tourism product. Holthausen (2013) and Nunkoo (2016) agree that SET is grounded on the basis that it has players who rely on each other and for the exchange to happen each player needs to evaluate the cost and benefits associated with the exchange. Therefore, in this case, the players are the tourists (customers) and the supplier is the destination (Victoria Falls). This means there is an exchange between Victoria Falls and the tourists, hence, the views of the tourists towards Victoria Falls are being investigated by making use of the SET. The tourist's responses help to determine the side to which the exchange was favourable or unfavourable. If the tourists are not satisfied with the exchange offered by the Victoria Falls tourism product, negative consequences for the destination may be experienced. On the other hand, the satisfaction of tourist needs may result in positive impacts on the destination (Mlambo and Ezeudji, 2020). The elements causing displeasure will need to be developed and positive elements be maximised using the tourists' views in order to improve sustainable growth and development of the destination.

MATERIALS AND METHODS

A systematic sampling approach was deployed to collect data from the respondents and in this case, were the tourists visiting Victoria Falls Rainforest. Levy and Lemeshow (2013:14) describe this type of sampling by stating that “individuals who are selected are considered to be most representative of the population as a whole”. Interviewer-administered questionnaires were used to gather data from both domestic and international tourists. The questionnaire was developed to gather views of the tourists towards the Victoria Falls tourism product. A quantitative research design was applied, and data collected from the fieldwork was captured and analysed using the software called IBM23 Statistical Package for Social Science (SPSS). George (2011) posits that quantitative research allows the researcher to ascertain how many respondents agree or disagree with a statement, but it is not likely to provide insight into why respondents have answered as they have. This is one of the limitations of the study and is explained on the implication section of this paper. Nykiel (2007) defines the same term as a method of research that aims to establish factual information, deduce estimates, and testing hypotheses that have been already stated.

Quantitative research is best understood in the marketing context by its ability to gather the most useful measurable information which can be pursued over time (Nykiel, 2007). The population ($N = 21420$) for this study was based on average per month tourists' arrivals (Zimbabwe Parks and Wildlife Management Authority (ZPWMA), 2016). Based on the identified population, the sample $n = 377$ was achieved in conjunction with recommendations suggested by Isaac and Micheal (1981) to attain a 95% confidence level. Data were collected at the entry/exit point of the Rainforest and the survey questionnaire was administered to the tourists on their return from seeing the waterfall. In meeting the ethical requirements, the researcher acquired a letter of permission from ZPWMA to conduct the study. Furthermore, a declaration of anonymity was added in the questionnaire survey to safeguard the participants' privacy. Additionally, an ethical clearance certificate was issued by the Ethics Research Committee of the Cape Peninsula University of Technology before the research was conducted. This was done to ensure that this study conforms to the standards required.

RESULTS AND DISCUSSION

The findings from this study are presented in the following subsections. The traditional 5-point Likert scale was used with the following options and responses SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; and SA = Strongly Agree. As a result of the close link between A and SA, as well as D and SD, the results were combined for an in-depth analysis. Livingston (2004) argue that despite the significance of the mean results which shows the average value of the data, alone, it does not reflect meaningful analysis of the results, therefore, standard deviation (Std.D) results which shows the distribution of data around the mean needs to be incorporated. As a result, a measure of variation using the mean and Std.D results was performed for further analysis by showing how dispersed or polarised were the results from the mean (Jackson, 2009). The Std.D is considered low when the results are close to zero, signifying that the results are clustered around the mean and is considered high when the results are spread away from the mean (Shane, 2008).

Tourists' responses on accommodation

To get a true representation of how the tourists feel about the accommodation in Victoria Falls, data from 191 respondents (50.7%) who stayed at least one night in the town were used. Most of the respondents liked the accommodation and they agreed with almost every statement presented in Table 1. Earlier scholars (Kotler et al., 2010; Gnanapala, 2015) agreed that customer satisfaction is achieved when products and services at the destination meet or surpass the customer's expectations. The respondents agreed to strongly agree that, staff/employees act professionally (38.7%), the accommodation was very clean (37.1%), well maintained (35.3%) and met their expectations (34.5%). Almost half (25.5%) of the respondents who stayed in Victoria Falls agreed to strongly agree that accommodation is world-class. A high standard deviation on each statement (ranging between 3.12 - 3.58) was noted which indicates that the tourists who stay overnight in this town were satisfied with the level of services they were offered in the various sectors of accommodation they stayed in. Therefore, it can be deduced that the accommodation in Victoria Falls satisfies most of the tourists, however, very few were unsatisfied. Lam and So (2013) posit that normally happy tourists are fundamental carriers of good word of mouth. Thus, these results suggest that there is a great possibility that the satisfied tourists will spread good word-of-mouth which will, in turn, create the desire to travel and stay on the Victoria Falls accommodation. Not only do such results yield improved visitation from new tourists to Victoria Falls, but they can also stimulate repeat visitation (Dolnicar et al., 2013; Chen et al., 2020; Mlambo and Ezeuduji, 2020). However, the destination needs to note that they will need to maintain the good standards rendered to the tourists or even to do more to lure the 49.3% who stated that they did not stay in any of the accommodation in Victoria Falls.

Table 1. Tourists' responses on accommodation ($n = 377$, in %)

Statements	Level of agreement in percentage					Level of agreement	
	SD	D	N	A	SA	Mean	Std.D
Accommodation is world class	2.4	4.2	18.6	14.9	10.6	3.70	3.12
Accommodation met my expectations	1.9	2.9	11.4	21.8	12.7	3.83	3.44
Accommodation was very clean	1.3	2.7	9.6	24.9	12.2	3.84	3.43
Accommodation is well maintained	0.8	2.7	11.9	23.6	11.7	3.82	3.40
Staff/employees act professionally	0	0.5	11.5	23.1	15.6	4.03	3.58
N/A (Not Applicable)	49.3 %						

Table 2. Tourists' responses on accessibility ($n = 377$, in %)

Statements	Level of agreement in percentage					Level of agreement	
	SD	D	N	A	SA	Mean	Std.D
Getting to this destination was not a problem	2.7	10.8	13.8	37.2	35.3	3.92	3.55
It is very complicated to travel around this destination	20.2	38.2	30.2	9.8	1.6	2.34	2.01
Roads are well maintained	4.0	12.4	53.6	22.6	7.4	3.16	2.76
Access is supported by necessary infrastructure	2.4	3.7	63.1	23.9	6.9	3.29	2.84
Making a booking online was very difficult	7.2	16.1	71.9	4	0.8	2.75	2.29
Making a booking by telephone was very difficult	3.4	10.9	78.8	6.4	0.5	2.89	2.41
Generally, the infrastructure is of good standards	1.1	5.5	55.7	34.5	3.2	3.33	2.86

Tourists' responses on activities and tours

As mentioned earlier, tourists consider destinations that offer them activities and tours where they can directly or physically participate. The results show that most of the respondents (76.4%) agreed to strongly agree with the statement that the destination offers world-class adventure activities and (70.9%) agreed to strongly agree that the variety of activities increased their willingness to visit. A mixed response – neutral (Mean 3.09) was noted on the statement that says, “additional transport costs are relatively low”. This could be as a result of almost 60% of the respondents who stated that they booked their trip through travel agents in home country (46.9%) and tour operator (13.0%) having received a packaged itinerary instead of itemised costed itinerary. Generally, the responses from tourists' perceptions of the activities and tours were mostly agreeing to strongly agree (standard deviation between 2.65 – 3.60) with the statements in Figure 1. The results show that the tourists perceive Victoria Falls as having good activities and tours that match their needs. It could also mean that most of the tourists who visited this resort town were adventure tourist as they were happy with this tourism element of the tourism product. As noted by Rogerson (2004) Victoria Falls is referred to as the adventure capital of Africa.

Tourists' responses on accessibility

The overall impression on this aspect was that most of the respondents (72.7%) agreed to strongly agree that it was easy to get to Victoria Falls, but, there was a considerable number of respondents who were neutral to the statements: “making a booking by telephone was very difficult” (78.8%), “making a booking online was very difficult” (71.9%),

“access is supported by necessary infrastructure” (63.1%), “generally, the infrastructure is of good standards” (55.7%) as well as “roads are well maintained” (53.6%). Interestingly, the high level of neutral responses on the statements in Table 2 also shows how close the standard deviation is to the mean which may suggest that these areas of this tourism product element need to be improved as being neutral may make it easy for tourists to fall on the positive or negative side of perceptions. Most respondents (Mean 2.34) disagreed to strongly disagree with the statement that says, it is very complicated to travel around this destination. From these results, it shows that above half of the respondents did not struggle to travel from one point to another while in the town and this is a positive reflection for the destination. Table 2 shows the results of the tourists’ perspectives on the element of accessibility.

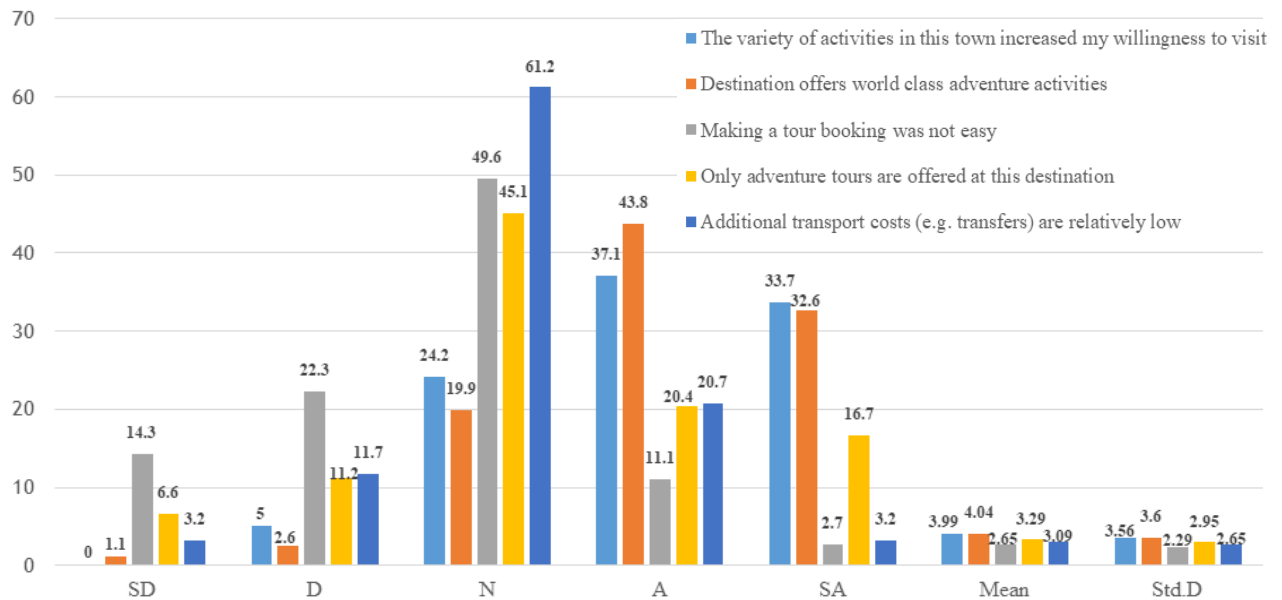


Figure 1. Tourists' responses on activities and tours ($n = 377$, in %)

Tourists' responses on attractions

Attractions are viewed as the cornerstone of every tourist destination (Patel and Nayab, 2014). They are the centre of the tourism product that pulls the tourist to a destination. This means there are certain expectations from the tourist that need to be fulfilled while the tourist is at the destination. As shown in Figure 2 the results of the tourists' perceptions of the attractions element of the tourism product indicated that the majority agreed with almost all the statements (standard deviation ranges between 3.59 – 3.73). The respondents agreed to strongly agree with the statements in Figure 2 that, “natural attractions are well maintained and managed” (85.4%), “attractions in this town were the most convincing factors in your decision to visit the town” (80.9%), “the waterfall is the only interesting attraction to see at this destination” (72.1%) as well “attractions in this town are appealing” (71.4%).

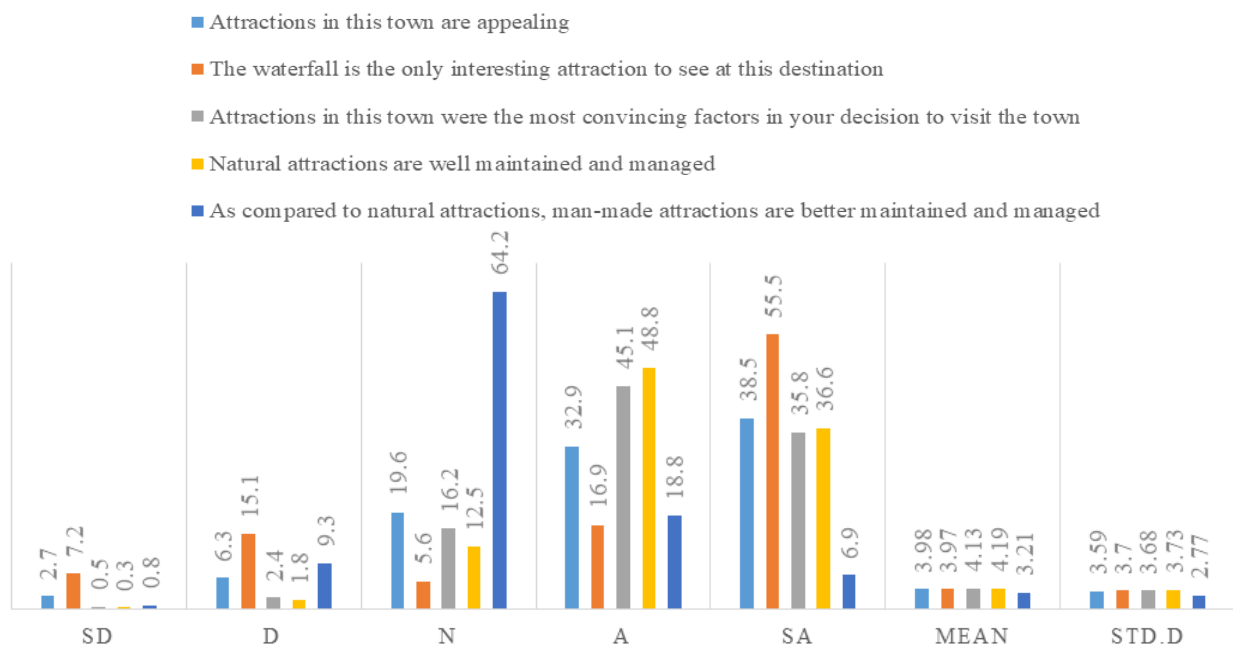


Figure 2. Tourists' responses on attractions ($n = 377$, in %)

It is interesting to note that the appealing of the attractions in this town could be attributed to the good maintenance and management of the attractions which in turn resulted in encouraging the respondents to visit the Victoria Falls tourism product. Moreover, from the SET standpoint, it could mean that the exchange benefited most of the tourists as they were satisfied by the attractions in this town and this created a positive perception of the attraction element of the tourism product of Victoria Falls. Therefore, from the destination point of view, it is crucial to maintain the available tourism resources as their maintenance and management attract the tourists to visit the destination.

There were high neutral responses (64.2%) on the statement, “as compared to natural attractions, man-made attractions are better maintained and managed”. This could be that some of the respondents did not visit the man-made attractions like the bridge, the lookout café, crocodile farm and many more, for them to have a better analysis, thereby projecting the natural attractions as having a strong pulling power.

Tourists' responses on facilities

Facilities at a destination receive considerable attention when the tourists decide on the destination to visit (Kozak, 2004; Bhatia, 2006). It is utterly fundamental to comprehend the tourists' views on the facilities in Victoria Falls. The results, as presented in Table 3 show that generally there are negative perceptions of the facilities element of the tourism product. The results show that the facilities are not convincing enough to make the tourists to return to this destination or to buy again this tourism product. This is because the respondents were mainly neutral (standard deviation between 2.23 – 2.84) to most of the statements like; “generally, the standard of facilities in this town is high” (65%), “this town offers a wide range of facilities to cater for different tourist needs” (63.7%), “dining facilities in this town are poor” (55.7%), “signage in this town is very poor and needs to be improved and maintained” (49.6%). On the other hand, 58.6% agreed to strongly agree with the statement that, transport network in this town is very functional. When considering the importance of this tourism element, there is a need to re-visit all the aspects rated as neutral by the respondents and improvement should be done before more damage to this tourism product is done. This is mainly because most of the tourists share a bad experience more often than a good experience and that will tarnish the image of the whole tourism product.

Table 3. Tourists' responses on facilities ($n = 377$, in %)

Statements	Level of agreement in percentage					Level of agreement	
	SD	D	N	A	SA	Mean	Std.D
Transport network in this town is very functional	0	3.7	37.7	39.5	19.1	3.74	3.30
Dining facilities in this town are poor	10.1	26	55.7	6.3	1.9	2.63	2.23
Signage in this town is very poor and needs to be improved and maintained	7.4	15.9	49.6	24.4	2.7	2.98	2.59
This town offers a wide range of facilities to cater for different tourist needs	1.3	6.4	63.7	24.6	4	3.23	2.77
Generally, the standard of facilities in this town is high	0.8	2.6	65	27.1	4.5	3.31	2.84

Table 4. Tourists' responses on the image of the destination ($n = 377$ in %)

Statements	Level of agreement in percentage					Level of agreement	
	SD	D	N	A	SA	Mean	Std.D
This destination is considered to be safe	0	0.3	17.5	39.5	42.7	4.24	3.78
This destination has a unique image	0	0.8	16.4	43.3	39.5	4.21	3.71
The political instability in Zimbabwe might affect the image and appeal of this destination	2.9	6.4	29.2	28.9	32.6	3.81	3.44
More should be done to promote the image of this destination	2.1	3.7	32.1	40.1	22	3.76	3.34
I will leave this town with good impressions	0	0.8	27.3	50.1	21.8	3.92	3.46
I will spread a good word-of-mouth	0	1.3	26.8	53.3	18.6	3.89	3.42

Tourists' responses on the image of the destination

This is one of the tourism elements that have a strong correlation with other elements that build up the tourism product and can get tarnished if one of the tourism elements underperforms. On the same aphorism, Table 4 shows the outcomes from the respondents on their perspectives on this tourism element in Victoria Falls. A high standard deviation ranging between 3.34 to 3.78 was noted showing more data clustered around agreeing to strongly agree with each of the statements listed in Table 4. This is good for this destination as it creates a positive perception of the tourism product.

The respondents agreed to strongly agree that, this destination has a unique image (82.8%); this destination is considered to be safe (82.2%) and equal results of 71.9% were noted on the statements, “I will spread good word-of-mouth” and “I will leave this town with good impressions” respectively. The respondents also expressed their views on the way the image of this destination is negatively portrayed internationally, and they agreed with the statement that more should be done to promote the image of this destination (62.1%). However, some of the respondents (Mean 3.81) were not happy with the political situation in the country and they agreed to strongly agree with the statement that, the political instability in Zimbabwe might affect the image and appeal of this destination. George (2011) assert that destination image is considered highly important when tourists decide on the tourism product to buy and visit, hence, the town needs to continue maintains the good image it has, however, there is still a lot of marketing and promotions to be done so that this brand will be recognised positively internationally and develop a positive perception in the minds of the tourists.

Tourists' responses on price

The results show mixed reflections on price as a tourism product element as the majority of the respondents were neutral to the statements asked in Figure 3 - projecting the price element as an unfavourable one to the tourists. The neutral

response of nearly sixty per cent (58.1%) was noted on the statement that says “generally, the price of tourism products is reasonable”, whereas 25.2% disagree to strongly disagree and 16.7% agree to strongly agree with the same statement. By and large, these results reflect the price charged on the tourism product at this destination as high.

As noted by the researcher through interaction with the tourists, some tourists do not mind paying high prices to visit a destination, but the experience must be exceptional and not compromised and they can even flex their budget. Arunmozhi and Panneerselvam (2014) support the same aphorism by stating that, “travel is a costly product and consumers expect quality for their vacation since they save up for it over some time”. Based on that, the respondents were asked to choose their response to the statement, “the quality of service delivery at this destination is worth the price paid” but again 52.2% were neutral on their response and 27.9% agree to strongly agree, whilst 19.9% disagree to strongly disagree with the statement. Another high neutral response (49.1%) was noted on the statement, “for the price I pay I always get value for my money”. Those who agreed to strongly agree with the same statement were 25.7% whereas 25.2% disagree to strongly disagree. Lastly, on the statement, “prices charged for tourism products are likely to discourage locals”, there was again a slightly high neutral response (44.8%) compared to 44.7% who agree to strongly agree whilst only 12.5% disagree to strongly disagree with the statement. These results show that tourists are not contented with the price charged on the tourism product in this town and that may result in the decline in tourist numbers or if they decide to visit they will not stay in Victoria Falls due to the price factor. This tallies with Woyo (2018) results that the competitiveness of the Zimbabwe tourism product was being affected by the high price. This has negative perceptions on the tourists as they may opt to visit cheaper destinations and Victoria Falls tourism product will be affected as it will not be able to generate revenues which in turn affects the sustainability of this tourism product.

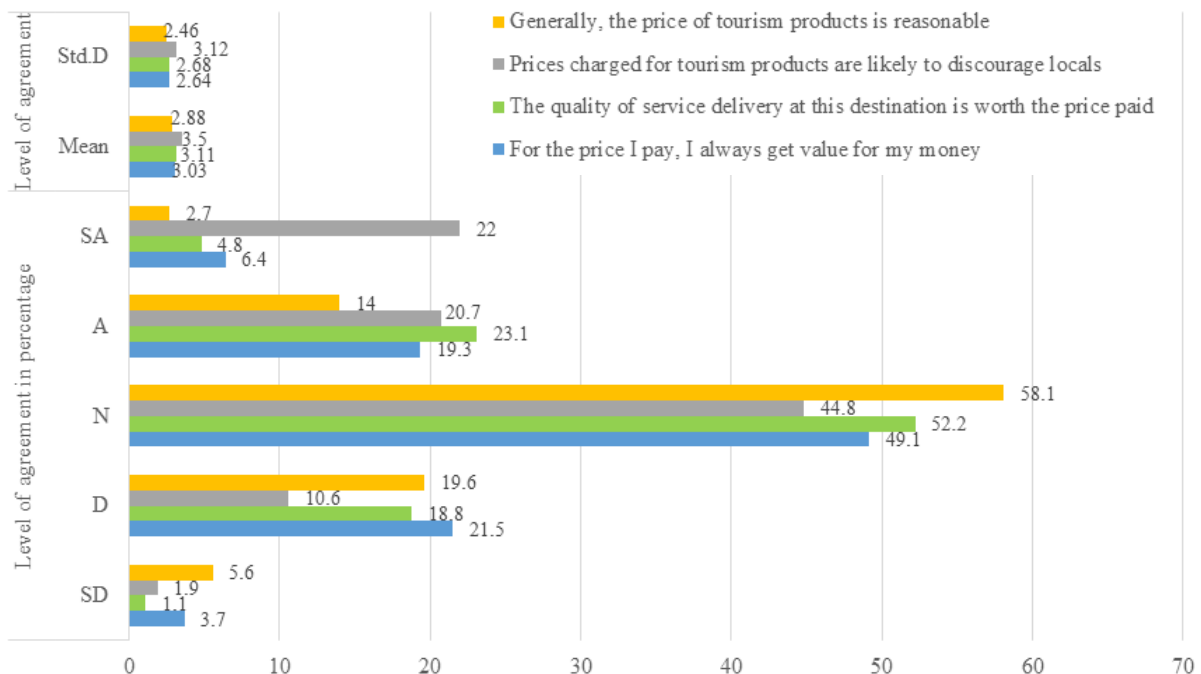


Figure 3. Tourists responses on price ($n = 377$ in %)

IMPLICATIONS

From a broader perspective, the results imply that the perceptions and satisfaction of tourists are hinged on the quality of the multifaceted tourism elements that are seamlessly joined together and provided at destinations. The results from this study also highlight implications for stakeholders (tourists, owners of tourism establishments and Zimbabwe Tourism Authority (ZTA)). Even though the attractions, image, accommodation and activities and tours were rated positively, these results show that the Victoria Falls tourism product can do much better through these elements. Additionally, the tourism elements like facilities and price can hinder the potential growth of this tourism product if not addressed accordingly. This also implies that destinations should strive to close service gaps caused by any of the crucial tourism elements which underperform for that particular destination. While the ZTA can market this tourism product through its beautiful attractions, accommodation, good image as well as great activities and tours it can offer, it is also important for the tourism establishments as well as government to play a crucial role in maintaining the facilities in the town as well as relooking on the pricing strategies for the tourism product to attract more tourists.

As it became evident that the destination is perceived to be expensive, yet offering beautiful attractions and a good image, the pricing factor can be managed by tourists booking their travel trips to this destination through travel agents and tour operators as they have negotiated rates and this may help in lowering the costs. This study does not only have a great contribution to Victoria Falls tourism product but also pave the way in understanding the perceptions of tourist on resort town destinations, thereby highlighting the crucial components of the tourism product that help to convince the tourists to choose one destination over the another. Moreover, other destinations can learn from this study that there is a

need for proper planning and coordination of the tourism elements that are prerequisites for the development of a tourism product for a successful and sustainable tourism product to prevail. To get a holistic view of the elements that impede the sustainability of the Victoria Falls tourism product, qualitative research on the assessed crucial elements could provide valuable answers as to why tourists have rated the services the way they did.

CONCLUSION

In this study, tourists' perceptions of the Victoria Falls tourism product have been investigated. This was done by looking at their views towards the current tourism product. Besides the better performance on elements of the Victoria Falls tourism product such as activities and tours, accessibility, accommodation as well as attractions, other elements like price and facilities require immediate attention as they did not offer the tourists what they were hoping for.

Additionally, the outcome of this study underscores the significance of having a seamless tourism product through the amalgamation of tourism services. The results of the study also pointed out that tourists are interested in the Victoria Falls tourism product and they will spread good word-of-mouth, however, government and tourism governing bodies in Victoria Falls should note that there is a need to consider the reduction of price on most of the elements of the tourism product that were investigated in this study. The improvement of facilities in the town is highlighted as a crucial aspect to consider for the growth and development of a sustainable tourism product. This is because these factors can create negative perceptions that can deter tourists from visiting and may also tarnish the entire tourism product including other elements that are currently performing well. This study also highlighted the significance of each of the discussed tourism element to perform incredibly well as they play a fundamental role in destination selection.

If all of the elements presented in this study are in a good form and shape, and mutually combined, the tourists would consider visiting again in future and spread good word of mouth. This in turn will create positive tourists' perceptions towards the offering, thus contributing to the development of a competitive and sustainable tourism product.

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REFERENCES

- Anjorin, A.A. (2020). The coronavirus disease 2019 (COVID-19) pandemic: A review and an update on cases in Africa. *Asian Pacific Journal of Tropical Medicine*, 13(5), 199-203. <https://doi.org/10.4103/1995-7645.281612>
- Arunmozhi, T., & Panneerselvam, A. (2014). Tourism marketing and its importance. *International Journal of Advanced Multidisciplinary Research*, 1(1), 32-34.
- Aydin, B., & Alvarez, M.D. (2020). Understanding the tourists' perspective of sustainability in cultural tourist destinations. *Sustainability*, 12(2020), 1-17. <https://doi.org/10.3390/su12218846>
- Bhatia, A.K. (2006). *The business of tourism: concepts and strategies*. Sterling Publishers, New Delhi.
- Bieger, T. (1998). Reengineering destination marketing. *Tourism Review*, 53(3), 4-17. <https://doi.org/10.1108/eb058277>
- Burkart, A.J., & Medlik, S. (1974). *Tourism. past, present and futur.*, London, Heinemann.
- Candela, G., & Figini, P. (2012). *The economics of tourism destinations*. Springer Science & Business Media, Berlin.
- Chen, X., Cheng, Z., & Kim, G. (2020). Make it memorable: tourism experience, fun, recommendation and revisit intentions of Chinese outbound tourists. *Sustainability*, 12(5), 1-24. <https://doi.org/10.3390/su12051904>
- Dolnicar, S., Coltman, T., & Sharma, R. (2013). Do satisfied tourists really intend to come back? Three concerns with empirical studies of the link between satisfaction and behavioral intention. *Journal of Travel Research*, 54(2), 152-178. <https://doi.org/10.1177/0047287513513167>
- Dube, K., & Nhamo, G. (2020). Tourist perceptions and attitudes regarding the impacts of climate change on Victoria Falls. *Bulletin of Geography. Socio-economic Series, Sciendo*, 47(47), 27-44. <http://dx.doi.org/10.1515/19152>
- George, R. (2011). *Marketing tourism in South Africa*, 4th ed, Oxford University Press, Cape Town.
- Gnanapala, W.K.A. (2015). Tourists perception and satisfaction: implications for destination management. *American Journal of Marketing Research*, 1(1), 7-19.
- Goeldner, C.R., & Ritchie, J.R.B. (2003). *Tourism: principles, practices, philosophies*. Hoboken: Willey.
- Gonçalves, V.F.C., & Águas, P.M.R. (1997). The concept of life cycle: an application to the tourism product. *Journal of Travel Research*, 36(2), 12-22.
- Goodall, B. (2004). Understanding holiday choice. In *Tourism concepts in the critical social sciences*, 172-180, Routledge, London.
- Grzinic, J., & Zanketic, P. (2008). *Tourist attractions as products of a tourist destination*. Master Thesis, University Juraj Dobrila, Croatia.
- Gupta, R., Singh, N., Kirar, I., & Bairwa, M.K. (2015). *Hospitality and tourism management*. Vikas Publishing House, Noida.
- Haarhoff, R., & De Klerk, B. (2019). Destination South Africa: analysis of destination awareness and image by international visitors. *GeoJournal of Tourism and Geosites*, 24(1), 201- 211. <https://doi.org/10.30892/gtg.24116-353>
- Holthausen, J. (2013). Scientific review of social exchange theory and its contribution to solving purchasers' decision making, *1st IBA. Bachelor Thesis Conference*, Enschede, 1-11 June 2003.
- Isaac, S., & Micheal, W.B. (1981). *Handbook in research and evaluation*. Edits Publishers, San Diego.
- Jackson, S.L. (2009). *Research methods and statistics a critical thinking approach*. 3rd ed, Wadsworth, Cengage Learning, Belmont.
- Kotler, P., Bowen, J.T., & Makens, J.C. (2010). *Marketing for hospitality and tourism*. 5th ed, Pearson Education, New Jersey.
- Kozak, M. (2004). *Destination benchmarking: concepts, practices and operations*. CABI Publishing, Oxon.
- Lam, D., & So, A. (2013). Do happy tourists spread more word-of-mouth? The mediating role of life satisfaction. *Annals of Tourism Research*, 43(2013), 624-650. <https://doi.org/10.1016/j.annals.2013.06.001>

- Levy, P.S., & Lemeshow, S. (2013). *Sampling of populations: methods and applications*. 4th ed, John Wiley & Sons, New Jersey.
- Livingston, E.H. (2004). The mean and standard deviation: What does it all mean? *Journal of Surgical Research*, 119(2), 117-123. <https://doi.org/10.1016/j.jss.2004.02.008>
- Lowry, L.L. (2017). *The SAGE international encyclopedia of travel and tourism: Cohen's model of typologies of tourists*. SAGE Publications Ltd, Thousand Oaks.
- Makoni, T., & Chikobvu, D. (2019). Modelling and forecasting Zimbabwe's tourist arrivals using time series method: a case study of Victoria Falls rainforest. *Southern African Business Review*, 22(1), 1-22. <https://doi.org/10.25159/1998-8125/3791>
- Makuzva, W., & Ntloko, N.J. (2018). Tourism product as a measure to determine the key elements that influence tourists' decisions to visit Victoria Falls, Zimbabwe. *African Journal of Hospitality, Tourism and Leisure*, 7(3), 1-12.
- Manhas, P.S., Manrai, L.A., & Manrai, A.K. (2016). Role of tourist destination development in building its brand image: a conceptual model. *Journal of Economics, Finance and Administrative Science*, 21(40), 25-29. <https://doi.org/10.1016/j.jefas.2016.01.001>
- Mlambo, S.S., & Ezeuduji, I.O. (2020). South Africa's KwaZulu-Natal tourism destination brand essence and competitiveness: tourists' perspectives. *GeoJournal of Tourism and Geosites*, 32(4), 1195-1201. <https://doi.org/10.30892/gtg.32401-557>
- Moral-Cuadra, S., Orgaz-Agüera, F., & Cañero-Morales, P.M. (2019). Attitude towards border tourism and its relationship with visitor satisfaction and loyalty. *GeoJournal of Tourism and Geosites*, 25(2), 609-622. <https://doi.org/10.30892/gtg.25226-384>
- Mulec, I. (2010). Promotion as a tool in sustaining the destination marketing activities. *Turizam*, 14(1), 13-21. <https://doi.org/10.5937/Turizam1001013M>
- Murphy, P. (1985). *Tourism a community approach*. London, Routledge.
- Nunkoo, R. (2016). Toward a more comprehensive use of social exchange theory to study residents' attitudes to tourism. *Procedia Economics and Finance*, 39(2016), 588-596. [https://doi.org/10.1016/S2212-5671\(16\)30303-3](https://doi.org/10.1016/S2212-5671(16)30303-3)
- Nykiel, R.A. (2007). *Handbook of marketing research methodologies for hospitality and tourism*. The Haworth Press, Binghamton.
- Patel, I.S., & Nayab, Z.A. (2014). *Geography of transport, tourism & management*, Solapur, Lulu.com.
- Rogerson, C.M. (2004). Adventure tourism in Africa: the case of Livingstone, Zambia. *Geographical Association*, 89(2), 183-188.
- Shane, J.M. (2008). *Developing a performance management model: Your action guide to "what every chief executive should know: using data to measure police performance"*. Looseleaf Law Publications, Flushing.
- Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 117(2020), 312-321. <https://doi.org/10.1016/j.jbusres.2020.06.015>
- Tichaawa, T.M., & Mhlanga, O. (2015). Residents perceptions towards the impacts of tourism development: the case of Victoria Falls, Zimbabwe. *African Journal of Hospitality, Tourism and Leisure*, 4 (1), 1-15.
- Torres-Delgado, A., & Saarinen, J. (2013). Using indicators to assess sustainable tourism development: a review. *Tourism Geographies: An International Journal of Tourism Space, Place and Environment*, 16(1), 31-47. <https://doi.org/10.1080/14616688.2013.867530>
- Woyo, E. (2018). *An assessment of brand Zimbabwe's competitiveness and attractiveness as a tourism destination*. PhD Thesis, North West University, Potchefstroom.
- Woyo, E., & Slabbert, E. (2019). Cross-border destination marketing of attractions between borders: the case of Victoria Falls. *Journal of Hospitality and Tourism Insights*, 2(2), 145-165. <https://doi.org/10.1108/JHTI-10-2018-0073>
- Zappiano, V. (2005). Caribbean Tourism and development: an overview. *Discussion paper No.65*, Cosenza: European Centre for Development Policy Management.
- Zemla, M. (2016). Tourism destination: the networking approach. *Moravian Geographical Reports*, 24(4), 2-14. <https://doi.org/10.1515/mgr-2016-0018>

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WHAT INFLUENCES BUSINESS TRAVELERS BEHAVIORAL INTENTIONS OF TRAVEL BOOKING: A STUDY OF THE BOTTLENECKS OF ONLINE TRAVEL PORTALS

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Abstract: This study aims to explore the bottlenecks of the Online Travel Portals while catering to business travelers. Data collection was done from Online Travel Portals and 379 foreign tourists using varied scales to determine their comprehensive perceived experience, technology adoption perception, the bottlenecks encountered and the ability to adapt while selecting online travel portals. Findings revealed that building trust is a major bottleneck for business travelers as they are skeptical of online transactions, cases of online thefts and internet security issues is another bottleneck. Safe and secure payment gateway is a big hurdle. Hotels booked through Online Travel Portals are sometimes not up to the mark and quality is a major bottleneck Online Travel Portals felt that expected tour components by the business travelers was the most problematic factor for them. Another problem was the unfavourable payment terms with the suppliers as well as non-availability of right accommodation demanded by the business travelers. Another bottleneck included not meeting the special needs of Business Travelers.

Key words: business travelers, booking, behavioral intention, bottlenecks, online travel portals

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INTRODUCTION

Internet is a magical tool which has taken the whole world by storm but its birth year is a matter of debate. The scholarly literatures also throw little light on the same. Most of the literature focuses upon Arpanet developments with a popular belief that Internet was invented in Pentagon in 1969 (Sterling, 1992). The advent of this magical tool has opened the area for computer-mediated environment (CME) as it has augmented the movement patterns between various commercial set-ups (Hoffman et al., 1995). Consumer Behavior as a discipline came into limelight in the twentieth century with the prime objective of examining consumers action pertaining to receiving, using and finally consuming the goods and services. Various initial theories were studied to understand the complex consumer behavior such as the classical microeconomic theory but it was not enough to explain the consumers buying patterns. The consumer behavior evolved as a discipline in light of other schools of thought, which came from psychology, anthropology, sociology. The conceptual framework is taken from the Technology Acceptance Model (TAM) propounded by Davis in 1989. It explains the specific behavior of the consumer in an online environment. It explains the specific Behavior included from E-commerce. It explains in detail as to why the online consumers accept or reject the websites and the attitudes affecting their online behavior (Davis, 1989). By considering the Technology Acceptance Model an attempt has been made to understand the business traveler motivation and behavior pertaining to the purchase of travel products online. This new age business traveler is now adopting these Online Travel Portals. Digitization has changed the outlook of people and the distribution of tourism products is also impacted by this e-commerce revolution highlighted by many researchers (Kracht and Wang 2010; Buhalis and Licata 2002; Bennett and Buhalis 2003). Douglas and Lubbe (2009) came across three areas pertaining to the degree of adoption of technology in business travel i.e. technology as a distribution tool for corporate travel booking, technological needs of corporate travelers across the corporate travel network, use of technology as a possible medium for corporate travel booking. Technological revolution presents opportunities for online travel portals through the internet (re-intermediation) and threats due to disintermediation, which includes direct bookings through suppliers. Some other previous studies throw light on the attitude of consumers towards online service providers, they beg to differ based on product, and service category (Law et.al., 2004). It is worth noting that the travel and tourism industry has embraced technology with open arms and are providing their valuable services in the information super highway. The Online Travel Agencies were the first to cash in the market opportunities by critically analyzing the value system that provides innovative ideas pertaining to new business opportunities (Mohammed et al., 2002).

LITERATURE REVIEW

Consumer Perspective

It does not matter whether a purchase is made through an offline mode or online mode. The consumers usually pass through five phases in consumer's decision-making process before procurement finally happens (Cetina et.al. 2012). These phases comprise of recognition of need, search for information, evaluating the alternatives, purchase decision and most importantly studying the post purchase behavior. Consumer Behavior as a discipline was in its nascent stage in the middle to late 1960s and after that, it has actually kept pace.

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Need Recognition

Understanding the consumer Behavior and their search pertaining to information is of paramount importance and will assist the decision makers to develop their websites and portals accordingly to satisfy the wants of the prospective consumers. Internet has developed as one of the significant instruments of consumer data (Zins, 2007) especially for the younger and educated travelers (Kim and Morrison, 2005). It is also witnessed that the mature and grey travelers prefer traditional and outmoded sources of information (Law and Ngai, 2005) and there are also travelers who use an intermix of internet and information from brick-and-mortar travel agencies for travel planning (Lee et al., 2007).

Information Search

It is also witnessed that consumers of different nationality, gender, age show dissimilar exploration patterns (Kim et al., 2007). People who have travelled earlier to a destination and know that place prefer to book it online but many still trust the travel agents Cheyne et al., 2006). In the era of internet quest instruments play a vital role in data search (Ho and Liu, 2005). Search engines such as google is viewed as a vital tool for information search (Law and Huang, 2006). Mobile technologies are a new find in the travel and tourism industry as they assist to collect information from any location and establish dynamic interaction with tourism service providers (Buhalis and Law, 2008). Tourism Marketers can use the GIS to keep an eye of the tourist movement pattern at the destination, understand the tourist Behavior at the destination, and devise strategies to create tourism experiences (Lau and McKercher, 2006).

Evaluation of Alternatives

Prospective travelers use the internet frequently to evaluate alternative travel opportunities and they use the internet to compare the travel products. The prospective travelers can detect and assess the tourism products conferring to their likings and necessities (Buhalis and O'Connor, 2005). It is also witnessed that prospective traveler's value information content and their data quest and behavioral patterns vary at different levels of travel (Choi et al., 2007). Online travel purchase motivation varies according to the complexity of the portal and the skill level of internet users (Beldona et al., 2005).

Purchase Decision

There is a great surge in understanding different consumers online Behavior as it could lead to an increase in successful completion of online transactions (Lexhagen, 2005). Early researches indicate that decision making initially focused on purchase decision making (Loudon and Britta, 1993). Modern studies on Marketing indicate that ideas of marketing were integrated in the studies of decision-making patterns pertaining to consumers (Engel et al., 1995). Purchase decision making process varies across people, choices and contexts (Xia and Sudarshan, 2002).

Post -Purchase Behavior

Travelers after visiting a particular destination have a longing to show their feelings and rate their know-how (Thevenot, 2007). They can express their experience in the form of blogs and through it they can communicate with the other travelers (Pudliner, 2007). The creation of a three-dimensional electronic tourism environment is likely to augment the vibrancy of digital ambience (Berger et al., 2007). Tourism Marketers should be vigilant pertaining to the digital environment and society and it will help them to know the customers view and the discussion of the brand online, which will help them to reinvent themselves (Dwivedi et al., 2007). It is imperative to understand the likings and varying needs of travelers by tourism businesses and it has been a vital area for research among the tourism academia, industry, consulting agencies. Tourist Behavior is one vital area because of the numerous factors associated with it. Various theories and models have been developed by researchers to understand the complex tourist behavior. The late twentieth century has seen the advent of Information and Communication Technology and the reason that can be attributed to it is globalization. Today's tourist is highly digitized and always connected. This generation of consumers is called C-generation also known as connected generation (Dimanche, 2010). This breed of traveler is not restricted to any age group. They are connected with each other through electronic devices. They were earlier named as e-consumers and the tourists connected through mobiles are known as m-tourists.

Online Travel Portals

Dhar and Wertenbroch (2000) opined that the Internet has emerged as a prime information source for the prospective customers and this trend is seen in many businesses. High levels of market transparency is witnessed which has helped the outlook of the consumers and information is readily available which is not observed via other distribution channels.

O'Connor and Frew (2002) were of the opinion that the Online Travel Portals offers manifold choices for a given search. It can serve manifold clients concurrently. Carroll and Siguaw (2003) opined that digitization has opened new vistas for travel related data, price assessment and readiness, which will support customers to book, travel products online. The advent of online booking is the most prominent discovery in the digital space and these digital platforms are likely to be used by individuals as well as corporate clients. O'Connor and Murphy (2004) were of the view that digitization has transformed many organizations. The advent of digitization has brought intense competition in the cyber space, and organizations are forced to adopt technology in order to survive in this highly competitive cyber space. Online travel portals have proved to be beneficial tools for individuals as it has assisted them in checking airfares and suitable flights and eventually book the ticket through the cyber space. Kim and Lee (2004) opined that the online travel portals and suppliers of online travel products provide common array of travel products. The common elements include the content of information, structure, security aspects, ease of use. Park et al., (2007) were of the opinion that the travel portals in the digital space are fiercely competing against each other and are revisiting their websites, as they have understood that only the efficient ones will survive in the end.

METHODOLOGY

Sampling and data collection

a. The primary data was collected through a structured questionnaire consisting of both open ended and closed ended questions, which were asked to Business Travelers pertaining to their usage of Online Travel Portals for travel booking. Another questionnaire was prepared from the perspective of Online Travel Portals. Eight Online Travel Portals were targeted serving the needs and wants of business travelers. Business travelers filled the questionnaire at the departure lounge of IGI Airport, Delhi. The questions, which were asked in the questionnaire, were pertaining to the satisfaction of business travelers on important factors and overall satisfaction provided by Online Travel Portals. This was measured on a five-point Likert Scale. Apart from these parameters, some questions on demography were also included in the questionnaire. The business travelers were asked to respond on their perception pertaining to Online Travel Portals, information before considering it for booking their trips, convenience, adaptability, resolution of complaints. Apart from the primary data, the secondary data was also relied upon. This data was collected through a comprehensive analysis of the pertinent published data extracted from the Internet, reputed journals and scholarly books.

b. The data, which was collected through structured questionnaires from Online Travel Portals, was analyzed in a significant way to deduce useful and meaningful conclusions from it. The data collected from Business Travelers was carefully transmitted to the Statistical Package for Social Sciences for tabulation and analysis of data to deduce results. Kolmogorov-Smirnov test and chi-square test were used to study the bottlenecks of the online travel portals. The demographic data of the Business Travelers was analyzed and cross tabulated for understanding the trends in the data. The null hypothesis was rejected if the p value is less than 0.05 level of significance.

The Data Analysis was carried out through the following steps:

a. Primary Data was collected from independent business travelers pertaining to their requirements from Online Travel Portals, information source, their perception pertaining to the online travel portal, their satisfaction level i.e. pre and post usage of online travel portal.

b. The profile of the independent business travelers drawn on the questionnaire is on the basis of Gender, Marital Status, Age Group, Educational Level, occupation, Travelling companion, travel arrangements and duration of stay.

c. Descriptive and Analytical Statistics is employed

Table 1. Bottlenecks faced by Online Travel Portals (Source: Author)

Bottlenecks faced by Online Travel Portals									
	Business Travelers data is not readily available	Generally, the Business Travelers are not very familiar with Online Travel Portals	Payment terms with suppliers are not favourable	Special needs of Business Travelers	Non availability of right accommodation desired by business travelers	Expected tour components by the business travelers not available	Online trust in payment transaction	There is a huge gap in the display of the contents on the website and in reality	There is immense competition in the Online Travel Space with numerous aggregators
Mean	1.3	1.4	2.2	2	2.2	2.4	1.4	1.3	1.3
Std. Deviation	0.466	0.498	0.761	0.455	0.61	0.498	0.498	0.466	0.466
Skewness	0.92	0.43	-0.362	0	-0.117	0.43	0.43	0.92	0.92
Std. Error of Skewness	0.427	0.427	0.427	0.427	0.427	0.427	0.427	0.427	0.427
Kurtosis	-1.242	-1.95	-1.141	2.608	-0.298	-1.95	-1.95	-1.242	-1.242
Std. Error of Kurtosis	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833

Table 2. One-Sample Kolmogorov-Smirnov Test

		Business Travelers data is not readily available	Generally the Business Travelers are not very familiar with Online Travel Portals	Payment terms with suppliers are not favourable	Special needs of Business Travelers	Non availability of right accommodation desired by business travelers	Expected tour component s by the business travelers not available	Online trust in payment transaction	There is a huge gap in the display of the contents on the website and in reality	There is immense competition in the Online Travel Space with numerous aggregators
Normal Parameters	Mean	1.3	1.4	2.2	2	2.2	2.4	1.4	1.3	1.3
	Std. Deviation	0.466	0.498	0.761	0.455	0.61	0.498	0.498	0.466	0.466
Most Extreme Differences	Absolute	0.44	0.389	0.253	0.4	0.328	0.389	0.389	0.44	0.44
	Positive	0.44	0.389	0.204	0.4	0.328	0.389	0.389	0.44	0.44
	Negative	-0.26	-0.286	-0.253	-0.4	-0.272	-0.286	-0.286	-0.26	-0.26
Kolmogorov-Smirnov Z		2.411	2.13	1.388	2.191	1.799	2.13	2.13	2.411	2.411
Asymp. Sig. (2-tailed)		0	0	0.042	0	0.003	0	0	0	0
a. Test distribution is Normal										

RESULTS, FINDINGS & DATA INTERPRETATION

Online Travel Portals were asked about the problems they faced in the selling the trips to the business travelers. The result of this survey helped to understand the bottlenecks in online travel portals. To utmost surprise it was felt that expected tour components by the business travelers was the most problematic factor (Table 1). The second big problem is the unfavourable payment terms with the suppliers as well as non-availability of right accommodation by the business travelers. The other bottlenecks include not meeting the special needs of Business Travelers. We can conclude pointing towards the individual problems, which is a bottleneck for the growth of online travel portals. It also indicates the lack of professional attitudes amongst the suppliers of services to the Online Travel Portals. Online Travel Portals must work in close cooperation with the suppliers of services so the business travelers can use their services pertaining to booking their trips.

Data is found to be normally distributed which we can witness from Table 2 after the application of Kolmogorov-Smirnov Test. The data is significant after the application of the chi-square test displayed in above Table 3. It was further inferred that the responses of the Online Travel Portals are likewise disseminated in all the accounts barring the statement i.e., special needs of Business Travelers. The blockages in Online Travel Portals have also been understood through secondary sources through reports published by Online Travel Portals, research and consulting firms. The phenomenon of e-commerce has grown rapidly but it is still in the nascent stage. Another bottleneck is the trust building as business travelers are skeptical of online transactions as there are reported cases of online thefts and internet security issues. Convincing the travelers about a safe and secure payment gateway is a big issue. The reliability of offline partners is another issue. Hotels booked through Online Travel Portals are sometimes not up to the mark and reflects very badly on the image of the Online Travel Portals. Ensuring their quality is a major bottleneck. The payment terms with the service providers is the most problematic factor and is another major bottleneck for the Online Travel Portal.

Table 3. Chi-Square Test

	Business Travelers data is not readily available	Generally, the Business Travelers are not very familiar with Online Travel Portals	Payment terms with suppliers are not favourable	Special needs of Business Travelers	Non-availability of right accommodation desired by business travelers	Expected tour components by the business travelers not available	Online trust in payment transaction	There is a huge gap in the display of the contents on the website and in reality	There is immense competition in the Online Travel Space with numerous aggregators
Chi-Square	4.800 ^a	1.200 ^a	2.400 ^b	29.400 ^b	11.400 ^b	1.200 ^a	1.200 ^a	4.800 ^a	4.800 ^a
Df	1	1	2	2	2	1	1	1	1
Asymp. Sig.	0.028	0.273	0.301	0	0.003	0.273	0.273	0.028	0.028

Chi-Square Results for the Bottlenecks of Online Travel Portals

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 15.0.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 10.0.

CONCLUSION, DISCUSSION & FUTURE IMPLICATIONS

Personal problems are the bottleneck for the growth of online travel portals. It also indicates the lack of professional attitudes amongst the suppliers of services to the Online Travel Portals. Online Travel Portals must work in close cooperation with the suppliers of services so that the business travelers for booking their trips can further utilize it. The following bottlenecks are identified in Online Travel Portals:

1. Non reliability of offline partners-Hotels booked through Online Travel Portals are sometimes not up to the mark and reflects badly on the image of the Online Travel Portals. Ensuring their quality is a major bottleneck;
2. Payment processing issues are also a major challenge faced by the Online Travel Agencies. This is a major bottleneck in the online travel portals as there are chances of online theft or server might not respond in time;
3. The payment terms with the service providers was the most problematic factor is a major bottleneck for the Online Travel Portal.

LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

Business Travel has grown extensively in the last twenty years and in numerical terms its share has dwindled between 14-16% of the total global inbound travel according to the purpose of travel (UNWTO Tourism Highlights). An investigation of the decision-making patterns of individual corporate travelers buying Business trips online is an important area of research and it is imperative to understand the online purchase behavior of this growing segment.

In numerical terms, the Business Travelers are a small segment in contrast to their counterpart i.e., leisure travelers but the segment is growing slowly and steadily especially their revenue generating capabilities. Business Travel has come of age because of its low detrimental environmental impacts in comparison to their counterpart leisure mass travelers. As the world becomes a global village because of globalization and integrating economies. The communication technology is a medium, which has brought people close. The businesses are spreading their claws throughout the world. International corporate travel has become a requirement of business and spreading its claws, which pushes us into studying and researching their online purchase Behavior through Online Travel Portals.

1. Investigators can carry out in depth comparative analysis between the online Behavior of Leisure Travelers and Business Travelers through an intermix of both parametric and non-parametric tests.
2. More studies can be undertaken with a prolonged geographical area and prolonged sample size.
3. More studies can be carried out to study the online travel purchase Behavior of Outbound Leisure and Business Travelers.

REFERENCES

- Beldona, S., Morrison, A.M., & O'Leary, J. (2005). Online shopping motivations and pleasure travel products: A correspondence analysis. *Tourism Management*, 26, 561–570. <https://doi.org/10.1016/j.tourman.2004.03.008>
- Bennett, M., & Buhalis, D., (2003). *The Future for Internet Travel Distribution: the travel agent perspective, Insights*. English Tourism Council, January 2003, pp. D.25-30
- Berger, H., Dittenbach, M., Denk, M., Merkl, D., & Pesenhofer, A. (2007). Getting Tourists Quicker to the Fun Part: Photographs, Tourist Types, Community Beings, and their Implications for a 3D e-Tourism Environment. *Information Technology & Tourism*, 9(3), 211-226. <https://doi.org/10.3727/109830507782167024>
- Buhalis, D., & O'Connor, P. (2005). Information Communication Technology – Revolutionising Tourism. *Tourism Recreation Research*, 30(3), 7-16. <https://doi.org/10.1080/02508281.2005.11081482>
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the internet: The state of eTourism research. *Tourism Management*, 29 (4), 609–623. <https://doi.org/10.1016/j.tourman.2008.01.005>
- Buhalis, D., & Licata, C. (2002). The future of eTourism intermediaries. *Tourism Management*, 23(3), 207-220. [https://doi.org/10.1016/S0261-5177\(01\)00085-1](https://doi.org/10.1016/S0261-5177(01)00085-1)
- Carroll, B., & Sigauw, J. (2003). The evolution of electronic distribution: Effects of hotels and intermediaries. *Cornell Hotel and Restaurant Administration Quarterly*, 44(4), 38-50.
- Cheyne, J., Downes M., & Legg, S. (2006). Travel agent vs Internet: What Influences Consumer Choices? *Journal of Vacation Marketing*, 12(1), 41-57. <https://doi.org/10.1177/1356766706059307>
- Choi, S., Lehto, X.Y., & O'Leary J.T. (2007). What does the consumer want from the DMO Website? A study of the US and Canadian tourist's perspectives. *International Journal of Tourism Research*, 9(2), 59-72. <https://doi.org/10.1002/jtr.594>
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–339. <https://doi.org/10.2307/249008>
- Dhar, R., & Wertenbroch, K. (2000). Consumer Choice between Hedonic and Utilitarian Goods. *Journal of Marketing Research*, 37(1), 60 – 71.
- Dimanche, F., & Andrade, L. (2010). *Tourism in Russia: A Management Handbook*
- Douglas, A., & Lubbe, B. (2009). Violation of the Corporate Travel Policy: an Exploration of Underlying Value/related Factors. *Journal of Business Ethics*, 84(1), 97-111. <https://doi.org/10.1007/s10551-008-9676-5>
- Dwivedi, M., Shibu, T.P., & Venkatesh, U. (2007). Social Software Practices on the Internet. *International Journal of Contemporary Hospitality Management*, 19(5), 415-416. <https://doi.org/10.1108/09596110710757570>
- Engel, J., Blackwell, R.D., & Miniard, P. (1995). *Consumer Behavior*, (8 Ed.) Forth Worth, TX: Dryden.
- Ho, C., & Liu, Y. (2005). An exploratory investigation of Web based tourist information search Behavior. *Asia Pacific Journal of Tourism Research*, 10 (4), 351-60. <https://doi.org/10.1080/10941660500363645>
- Hoffman, D.L., Novak, T.P., & Chatterjee, P. (1995). Commercial Scenarios for the Web: Opportunities and Challenges. *Journal of Computer Mediated Communication*, 1(3), 3,0-0. <https://doi.org/10.1111/j.1083-6101.1995.tb00165.x>
- Kim, D.Y., Lehto, X.Y., & Morrison, A.M. (2007). Gender Differences in Online Travel Information Search: Implications for Marketing Communications on the Internet. *Tourism Management*, 28(2), 423-433. <https://doi.org/10.1016/j.tourman.2006.04.001>
- Kim, J., & Larose, R. (2006). Interactive E-Commerce: Promoting Consumer Efficiency or Impulsivity? *Journal of Computer-Mediated Communication*. <https://doi.org/10.1111/j.1083-6101.2004.tb00234.x>
- Kim, S., & Morrison, A. (2005). Change of Images of South Korea among Foreign Tourists after the 2002 FIFA World Cup. *Tourism Management*, 26 (2), 233-47. <https://doi.org/10.1016/j.tourman.2003.11.003>
- Cetina, I., Munthiu, M.C., & Radulescu, V. (2012). Psychological and social factors that influence online consumer Behavior. *Procedia Social and Behavioral Sciences*, 62(2012), 184-188, Bucharest. <https://doi.org/10.1016/j.sbspro.2012.09.029>
- Kracht, J., & Wang, Y. (2010). Examining the tourism distribution channel: Evolution and Transformation. *International Journal of Contemporary Hospitality Management*, 22 (5), 736 – 757. <http://dx.doi.org/10.1108/0959611011053837>
- Lau, G., & McKercher, B. (2006). Understanding tourist movement patterns in a destination: A GIS Approach. *Tourism and Hospitality Research*, 7 (1), 39-49. <https://doi.org/10.1057/palgrave.thr.6050027>
- Law, R., & Ngai, C. (2005). Usability of travel websites: A case study of the perceptions of Hong Kong travelers. *Journal of Hospitality & Leisure Marketing*, 13(2), 19-31. http://dx.doi.org/10.1300/J150v13n02_03
- Law, R., Leung, K., & Wong, J. (2004). The impact of the Internet on travel agencies. *International Journal of Contemporary Hospitality Management*, 16(2), 100-107. <http://dx.doi.org/10.1108/09596110410519982>
- Law, R., & Huang, T. (2006). How do travelers find their travel and hotel websites? *Asia Pacific Journal of Tourism Research*, 11(3), 239-246. <https://doi.org/10.1080/10941660600753273>
- Lee, J., Soutar, G., & Daly, T. (2007). Tourists' Search for Different Types of Information: A Cross-National Study. *Information Technology & Tourism*, 9(3), 165-176. <https://doi.org/10.3727/109830507782167006>
- Lexhagen, M. (2005). The Importance of Value-Added Services to Support the Customer Search and Purchase Process on Travel Websites. *Information Technology & Tourism*, 7(2), 119- 135. <https://doi.org/10.3727/10.3727/1098305054517336>
- Loudon, D.L., & Britta, A.J.D. (1993). *Consumer Behavior: concepts and applications*, (4 ed.) McGraw Hill.
- Mohammed, R.A., Fisher, R.J., Jaworski, B.J., & Cahill, A.M. (2002). *Internet marketing: Building advantage in a networked economy*. New York: McGraw-Hill/Irwin
- O'Connor, P., & Murphy, J. (2004). Research on information technology in the hospitality industry. *International Journal of Hospitality Management*, 23(5), 473-484
- O'Connor, P., & Frew, A. (2002). The future of hotel electronic distribution: expert and industry perspectives. *Cornell Hotel and Restaurant Administration Quarterly*, 43 (3), 33-45.
- Park, Y., Gretzel, U., & Sirakaya-Turk, E. (2007). Measuring web site quality for online travel agencies. *Journal of Travel and Tourism Marketing*, 23(1), 15-30. https://doi.org/10.1300/J073v23n01_02
- Pudliner, B.A. (2007). Alternative Literature and Tourist Experience: Travel and Tourist Weblogs. *Journal of Tourism & Cultural Change*, 5 (1), 46-59. <https://doi.org/10.2167/jtcc051.0>
- Sterling, B. (1992). *The hacker crackdown: Law and Disorder on the Electronic Frontier*. London: Penguin.
- Thevenot, G. (2007). Blogging as a Social Media. *Tourism and Hospitality Research*, 7(3/4), 287- 289. <https://doi.org/10.1057/palgrave.thr.6050062>
- Xia, L., & Sudharshan, D. (2002). Effects of interruptions on consumer online decision processes. *Journal of Consumer Psychology*, 12(3), 265–280. https://doi.org/10.1207/S15327663JCP1203_08
- Zins, C. (2007). Conceptual approaches for defining data, information, and knowledge. *Journal of American Society of Information Science*, 58(4), 479–493. <https://doi.org/10.1002/asi.20508>

MANAGEMENT MODEL OF ECOTOURISM-BASED FOREST VILLAGE COMMUNITY LAND TO INCREASE LOCAL ECONOMIC IN KARANGANYAR, INDONESIA

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Abstract: Berjo Village has the potential for ecotourism which can increase the economic potential of its people. This study aims to determine how Berjo Village manages the potential of natural tourism, agricultural tourism, and improves the economy of forest village communities. The method used is qualitative with a case study approach and triangulation as data validity, and interactive techniques as analysis. The results showed that the economic sector of the people of Berjo Village came from agriculture and tourism. The location of the forest area has high potential to be developed into ecotourism, which consists of Sukung Temple, Jumog Waterfall, Telaga Madirda, Forest Park, Tenggir Park, Camping Ground or Outbound Tourism, Plangatan Site, Kampung Gunung Palace, Berjo Hydroponics, Ornamental Flower and Cut Flower Centers, Horticultural Plant Nursery Centers, the potential for climbing Mount Lawu by making a basecamp for prospective mountain climbers. All tours are in one location, namely, Berjo Village as an ecotourism destination. Tourism management is carried out by applying the concept of empowerment and the existence of embeddedness among various stakeholders with all the potential for ecotourism in an effort to improve the lives of the people in Berjo Village, Karanganyar Regency, Indonesia.

Key words: ecotourism, local economic, management model, forest

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INTRODUCTION

The village is a sector that is no less important and makes a significant contribution to the sustainable development process. As an agricultural country, Indonesia has so many villages with various characteristics (Némethová, 2020). The multiple characteristics inherent in the village are related to the village typology, landscape, geographical factors, both physical and non-physical, the potential of the village both natural and human resources. If managed properly, the potential that exists in each village with its various characteristics can play a role in improving the village community (Saberifar and Mishrab, 2020) and supporting revenue for the government, both regional and national, even international scope. Therefore, it is essential to create a management model that is very good at utilizing all the potential that exists in the village. One of the prospects that can be developed in the village is developing environmentally based tourism or using village land and has the potential for economic development for the village community. Tourism development like this is similar to the concept of ecotourism. Ecotourism, according to The Ecotourism Society (1990), is as follows: Ecotourism is a form of travel to natural areas carried out to conserve the environment and preserve the lives and welfare of residents (Fandeli, 2000). At this time, ecotourism has developed. This tour is not only for bird watching, horse riding, tracing in the wilderness, but has been linked to the concept of forest conservation and residents. Ecotourism is then a combination of various interests that arise from concerns for the environment, economy, and society. Ecotourism cannot be separated from conservation. Therefore, ecotourism is called a form of responsible tourism. Ecotourism also provides learning opportunities for eco-travelers or tourists in general, apart from learning about various impressive natural offerings, it also teaches how to conserve the best nature (Aswita et al., 2020).

Ecotourism is a form of tourism that is closely related to the principles of conservation. Even the ecotourism development strategy also uses a conservation strategy. Thus, ecotourism is very appropriate and effective in maintaining ecosystems' integrity and authenticity in unspoiled areas (Chandel and Kanga, 2020; Carvache-Franco, 2020). Even with ecotourism, nature conservation can be improved due to the insistence and demands of eco-travelers. The notion of ecotourism has developed from time to time. However, in essence, the definition of ecotourism is a form of tourism that is responsible for the preservation of unspoiled areas, provides economic benefits, and maintains cultural integrity for the local community. Based on this understanding, ecotourism is a form of conservation movement carried out by the world's population. The eco-traveler is, by nature, a conservationist. Ecotourism is a form of tourism that is managed with a conservation approach. Suppose ecotourism is the management of the heart and culture of the community that guarantees sustainability and prosperity. At the same time, conservation is an effort to maintain the continuity of natural resources for the present and future. This is consistent with the definition made by The International Union for Conservation of Nature and Natural Resources (1980), that conservation is a human effort to utilize the biosphere by trying to provide extensive and sustainable results for present and future generations.

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Village development currently also leads to sustainability or sustainable development; this refers to most of the development patterns of rural communities utilizing nature. The utilization of nature for rural communities is a close bond, so efforts are needed to maintain natural ecosystems in village development efforts. One type of development carried out by the government in rural areas is establishing the Forest Village Community Institution (LMDH). This institution was formed by the government to channel the aspirations of village communities in the framework of joint forest management with Perhutani. The LMDH program is implemented to support village communities' economy and income, management of forest areas, and conserving forests. LMDH also has a role in developing the potential of village land and forest land to support each other in various ways. The point is how humans can make nature sustainable and how a character can positively impact humans. This reciprocity is the primary basis for the formation of LMDH.

This is also very relevant in supporting the ecotourism development program in the village. A potential is present when supporting factors are balanced with needs (Izwar et al., 2020). Also, to manage a prospect into a beneficial outcome, the role or participation of the community and various stakeholders is required (Fibrianto et al., 2021, Fistingrum and Harini, 2021; Kummitha, 2020; Eshun and Tichaawa, 2020). The potential of forest land in Berjo Village is quite productive if the community can manage it. The location of this research was conducted in Karanganyar Regency.

The reason for choosing the site is that Karanganyar Regency consists of several villages that can become a Tourism Village. One of the villages in Ngargoyoso District, Karanganyar Regency, namely Berjo Village, is one of the villages that formed the LMDH (Lembaga Masyarakat Desa Hutan/ Forest Village Community Institution) as an institution in the forest village community structure. Berjo Village itself is located in Karanganyar Regency, Central Java, Indonesia. This village is a village with land contours in the form of hills and is a mountainous area, precisely on Mount Lawu. There are many potential abundant natural resources if the community can manage the land in Berjo Village properly. Berjo Village is famous for its tourist destinations, but it can still be developed and become one of the advanced tourist destinations. There are various natural tourism, agricultural tourism, and all the tours closely related to nature. Berjo Village can be one of the ecotourism destinations because the primary purpose of tourism development in Berjo Village is to develop village nature tourism while maintaining and preserving nature and improving the village community's economy. This is in line with the concept of ecotourism.

Based on what has been described above, the researcher is interested in uncovering the various tourism potentials in Berjo Village and how ecotourism management has been running. Also, to what extent does ecotourism in Berjo Village has contributed to improving the community's economy. Thus, the researcher raised a title, 'Management Model of Ecotourism-Based Forest Village Community Land to Increase Local Economy in Karanganyar, Indonesia.'

MATERIALS AND METHODS

This study uses a qualitative research method with a case study approach. Case studies, according to Yin (2013), are used to answer research questions in the form of "how" and "why" of a set of present-day events. Case studies themselves can be interpreted as a research method or strategy in a particular case. Case studies are understood as an approach to studying, explaining, or solving an issue in a natural context without any intervention from outside parties (Salim, 2006: 118). The LMDH is an effort to manage forest potential in the village environment and empower local communities in improving the economic quality of forest village communities.

The subjects or informants of this research were the Government (Forestry Service, Perhutani, local village officials, etc.), the LMDH (Forest Village Community Institutions), and Forest Village Communities (MDH). Data collection techniques used are literature study, observation, interviews, and documentation. The data validity used was triangulation techniques data checking techniques. Data analysis techniques include four things, namely data collection, data reduction, data presentation, and drawing conclusions or verification (Miles and Huberman, 2007).

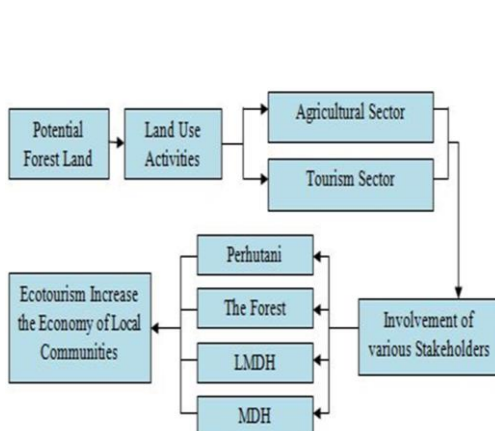


Figure 1. Roadmap of the Research
(Source: Personal Documentation, 2020)

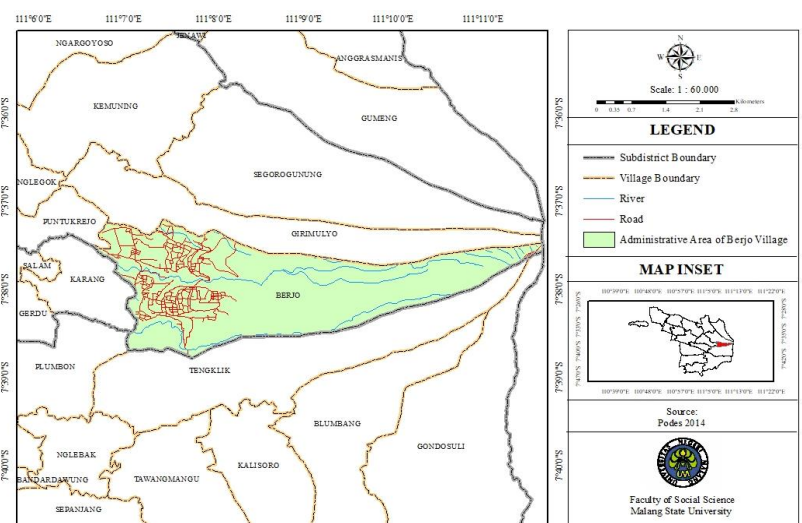


Figure 2. Map of Berjo Village, Karanganyar Regency, Indonesia
(Source: Personal Documentation, 2020)

The flow in this research can be seen through the flow chart in Figure 1. Information for some of the abbreviations in Figure 1, including: Perhutani (*Perusahaan Hutan Negara Indonesia*/ Indonesian State Forest Company), LMDH (*Lembaga Masyarakat Desa Hutan*/ Forest Village Community Institution), MDH (*Masyarakat Desa Hutan*/ Forest Village Community). This research's output can show the main economic sectors of forest village communities in Karanganyar Regency, both through the agricultural sector, tourism sector, and land use with a variety of economic activities and activities reflected in the forest village community (MDH) in Karanganyar Regency. This is reinforced by the location of Berjo Village in Figure 2, where most of the area is a forest area. The material in this research is in the form of useful data that researchers get from books, journals, and other scientific papers, as well as various sources from online media, as well as data from the field in the form of monographs, village data, data from interviews, data from documentation results. Personal and other documentation from various reliable sources related to the object under study and different other data, primary data (main data), and secondary data (supporting information).

The equipment used in this research is a research instrument consisting of an interview guide or a list of questions that the researcher uses for the interview process with several research informants to explore in-depth data regarding the objects and problems studied in the field. Instruments that function to document data in the form of images or photos are also used as data amplifiers with cameras, as well as voice recording devices with recorders, and several other types of equipment used by researchers to support activities in the field such as means of transportation, and so on.

RESULT AND DISCUSSION

Berjo Village Geographical Condition

Berjo Village is located in Ngargoyoso District, Karanganyar Regency, Central Java Province, Indonesia. Berjo Village has an area of 1,623,865 hectares and is located on the lower slopes of Mount Lawu. Based on the topography, Berjo village is at an altitude of ± 800 masl and has a tropical climate with an average temperature of $\pm 22^{\circ}\text{C} - 32^{\circ}\text{C}$. The boundaries of Berjo Village are illustrated in Figure 3 below. Figure 3 explains that, in the north, Berjo Village is directly adjacent to Girimulyo Village. In the eastern part, Berjo Village is directly adjacent to the Mount Lawu forest. In the western region, Berjo Village is directly adjacent to Puntukrejo Village. Then, in the south, Berjo Village, Ngargoyoso Regency, is directly adjacent to the Tawangmangu District area. Berjo Village has a population of 5,551 people or 16% of the Ngargoyoso Regency population. The total population of productive age in Berjo Village is 3,741 people. Several types of occupation for residents in Berjo Village are presented in the following Figure 4 chart:

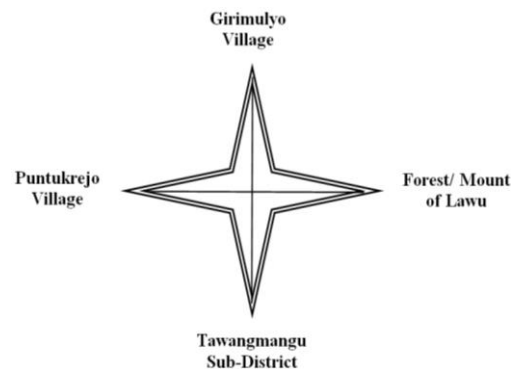


Figure 3. Areas Directly Adjacent to the Village of Berjo (Source: Personal Documentation, 2020)

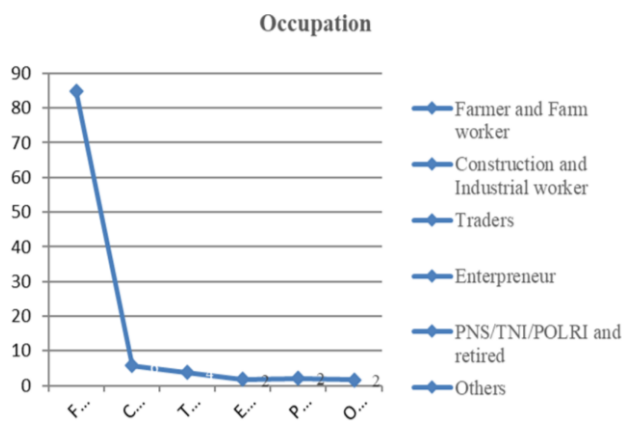


Figure 4. Percentage of Total Population in Berjo Village Based on Occupation (Source: BPS, 2019)

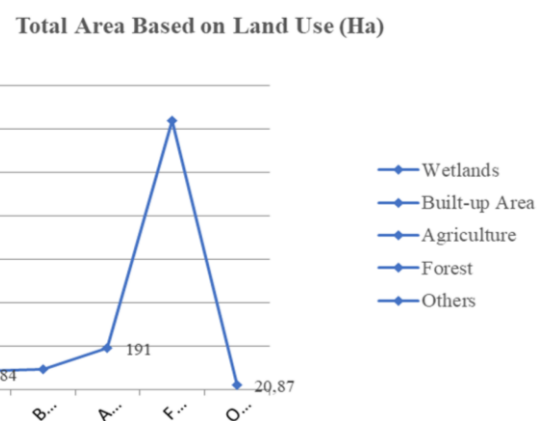


Figure 5. Percentage of Land Use in Berjo Village (Source: BPS, 2019)

The vertical and horizontal lines in Figure 4 represent the number of professions out of the total population. The majority of the population in Berjo Village have a livelihood as farmers and farm laborers. As many as 85% of the total population in this village work as farmers and farm laborers. The second-largest number of livelihoods after farmers are construction or industrial workers at 6%, and traders occupy the third position with a total of 4% of the population.

The vertical and horizontal lines in Figure 5 show the percentage of area and usage. The large number of people who work as farmers is due to the geographical conditions in Berjo Village, Ngargoyoso District, Karanganyar Regency, as a village with the potential for high soil fertility. It can be seen in Figure 5 above that the rice field area in Berjo Village is 84 Ha or 5%. The built-up area (settlement) in Berjo Village is 92 hectares or 6% of the total area of Berjo Village. 191 Ha or 12% of the total land area in Berjo Village is used as plantation land or farming or cultivating crops. The largest land area, namely 1,236 hectares or 76% of the total land, is forest area. Then, the latter is another land use, which is an area of 20.87 hectares. Data belonging to BPS (2019) shows that around 57% of the land area in Ngargoyoso District, Karanganyar Regency, is used for rice fields or farming activities. Because the area's most significant potential in agriculture is vegetable

farmers, flower farmers, and fruit farmers. Thus, many people in Berjo Village choose to farm to make ends meet because this farming activity has been around for a long time and has been passed down from generation to generation. Berjo Village is one of the villages that use its land to dominate simple irrigated rice farming activities. As for the community's economic activities, which in this case, are farmers, apply a subsistence economy as their survival strategy. That is, the existing agriculture is short-term agriculture. In a broader sense, a subsistence economy is an agricultural economic system by consuming its agricultural products as a fulfillment of daily necessities.

Berjo Village, Ngargoyoso District, Karanganyar Regency is an area that is more dominated by forest areas and is located on the slopes of Mount Lawu. The availability of natural resources in the form of forests with an area of 1,236 hectares or 76% of the total area of Berjo Village, can be managed as much as possible for the survival of the surrounding community. However, it is still obligatory to protect the forest and preserve it as a mandatory rule for forest village communities. In terms of forest management, there are three main parties, namely Tamah Hutan Raya, the Indonesian State Forest Company (Perhutani), and the Forest Village Community Institution (LDMH) (Setiyawan, 2019). Berjo Village itself has enormous tourism potential, as evidenced by the existence of several well-known tours in this village, namely, Jumog Waterfall, Sukuh Temple, Madirda Lake, and many other times that have the potential to be managed and developed, as well as same potential as a forum for empowerment for the surrounding community.

Main Economy of Berjo Village Community

Like the village community in general who are spread across Indonesia, the people of Tambak Hamlet, Berjo Village, are mostly farmers. The area of Tambak hamlet has the characteristics of a plateau with a cold climate; most of the people of Tambak hamlet depend on their economic activities on farming in rainfed rice fields. Farming here is not planting rice but planting vegetables in the areas or what they call tegal. The types of vegetables grown vary from cabbage, carrots, mustard greens, chilies, chayote, etc. according to the season, because the resistance of vegetables to different weather; for example, during the rainy season, carrots tend to be less useful because the soil is too wet causing the carrots too often experience rot. The planting period for each vegetable varies from 10 days to 3 months; some people practice intercropping by planting other vegetables so that the harvest period does not come together. Vegetable crops are usually sold to the Karangpandan market; some middlemen come to the location to buy directly. The limited distance to the market causes some middlemen to come to Tambak hamlet to collect the vegetables they buy.

A physical need is a place for buying and selling transactions; in Tambak hamlet, a market term is essentially the same as a market in general, which functions as a time for buying and selling. Still, the term market here is when the people of Tambak hamlet use as a time for trading and selling. Buy, the market is technically determined by calculating the days according to the Javanese calendar (*Legi, Pahing, Pon, Wage, Kliwon*). The people of Tambak hamlet used the market at the time of Pahing and Wage; the location was still in Karangpandan, there were also some in Tuwungan where it was held on legi, pon, kliwon. Meanwhile, the community's leading economy from agricultural products is used to pay for their daily needs and repurchase seeds for planting. As the leading economy, most people are very concerned about their land and vegetables; in one day, the average person is in the field for 8 hours, but this depends on what period is being done, such as planting, matun, or harvesting. The people who are mostly in the fields cause their homes to be deserted during the daytime; the hours used by the people to go home for a moment are at noon.

The division of labor carried out in the main economic sectors is usually done together, between husband and wife to the fields together; another pattern is that the husband in the area and the wife take grass in the forest to feed livestock (or vice versa). Time to the fields is usually done in the morning around 5 am to 4 pm; some of the generals brought equipment is grass and sickle bearers, some of them carry fertilizers and seeds (during the planting period). People usually walk to their fields, but some use motorbikes to go to the areas, usually accompanied by carrying specific loads (seeds, fertilizer, harvesting tools). Apart from the fields, people also plant around their house yards.

Economic Support (Path Dependency) of the Berjo Village Community

In addition to farming, the villagers of Berjo also have livestock as other income; most of them raise cows. Although some residents also raise goats, there are also chickens that they present to sell if they are deemed appropriate. The ease of finding animal feed in the form of grass, which is widely available on the slopes of Mount Lawu, is one of the factors why many people raise livestock. But even though most people work as farmers and breeders, some people use them as traders by opening small stalls in their homes and transporting goods in markets. Apart from farming in the fields, in the economic sector, especially women, some become "glidig," trading as many as four people and fern seekers. Here is a form of forest used by women. The yield from looking for ferns is approximate IDR 70,000, if in the season you can get a lot of up to IDR 100,000. The income from looking for this fern is used for children's pocket money and daily kitchen needs.

Besides having their main economic activities as vegetable farmers, the people of Tambak hamlet have other economic activities used as a source of income. Some sectors that are used as a form of economic activity besides being vegetable farmers are selling porridge, selling wood, vegetable brokers, opening stalls, working in factories, migrating, owning livestock, caring for other people's livestock (rowdy system), and being labor for those who do not own fields.

Some of these side economic activities are carried out on the sidelines of farming activities, for example selling porridge and selling wood. Working outside the city or migrating is one of the supporting economies to invest where they live, for example, building houses, buying vehicles, and buying livestock. The percentage of people who migrate is not as much as people who work as farmers. Usually, they migrate to Jakarta, Bandung, Sulawesi, and Kalimantan, even abroad, to become migrant workers, but this is not necessarily the economic activity that is the community's first choice.

The generation of migrants began to occur mostly at a younger age, while their older generations mostly became vegetable farmers. Some residents also sell for additional income. Selling here, among others, is selling porridge every morning by Mrs. Yati; before 6 am, the porridge is usually bought. Bu Yati's husband sells Timber, traditionally sent to Ampel; this wood is planted by themselves in their fields and usually takes 2-3 days to sell the wood.

The stalls in Tambak hamlet sell various daily necessities ranging from kitchen spices, groceries, toiletries, snacks to household utensils; the stalls in Tambak hamlet can be said to be small stalls, but the presence of stalls here really helps residents' lives because to buy goods to the city is quite far. Apart from being a place to buy daily necessities, the shop also functions as a gathering point for residents to look for signals because Tambak hamlet conditions are challenging to reach by cellphone signals. Labor and the rowdy system is one of the alternatives to economic activities carried out by residents in Tambak hamlet; labor is carried out by someone who does not own a field so that he works in someone else's field, laborers usually work for a certain period such as planting, matun, and harvesting, with a profit-sharing system that is determined *mertelu*, in which a worker gets 1/3 of the agricultural output they work on.

Whereas rowdy works to care for other people's livestock, this rebellious system is carried out according to two parties' agreement about what is done and how they plan for sharing the results. This side economic activity is not always the first choice; it is said that this economic activity supports the implementation of the leading economy, namely vegetable farmers. In this case, the side economy is micro and is carried out personally or individually flexibly. This economic activity is in the community financial organization in Tambak hamlet, but not the community's majority.

Management of Ecotourism-Based Forest Village Land Potential

Berjo village has great potential in developing its eco-tourism. During its development, Berjo Village itself is very up to date with advances and use of technology. The profile of Berjo Village can be seen on the wisataberjo.com website; besides that, there are also various social media managed by the Berjo Village government in collaboration with village communities in their management and development. Several existing social media such as Instagram @wisataberjo, Twitter @wisataberjo, Youtube Channel with the name Wisata Berjo, and Facebook [facebook.com/wisataberjo](https://www.facebook.com/wisataberjo). Berjo Village residents' accessibility to technology and various online-based application media is solely done to maximize the promotion that Berjo Village has different nature-based tourism vehicles that are synonymous with ecotourism. Since its establishment as a tourist village in 2004, Berjo Village is expected to develop economic value in the tourism sector. This village, located in Ngargoyoso District, Karanganyar Regency, is known to have many tourist attractions. For this reason, awareness is needed to participate in the development of Berjo Village as a community empowerment-based tourism village.

Currently, guidance is still needed to develop Berjo Village as a tourist village. BUMDes (Village-Owned Enterprises) is one of the parties that play an active role in promoting tourism in Berjo Village. Berjo Village is one of the villages in Karanganyar Regency with geographical conditions on Mount Lawu. Berjo Village is well-known as a tourist destination in Karanganyar Regency and Indonesia. There are many cultural, historical uniquenesses such as Suku Temple in Figure 6, and the natural scenery of the Jumog Waterfall in Figure 7 attract domestic and foreign tourists.



Figure 6. Location Map and Cultural Tourism of Suku Temple Sites (Source: Personal Documentation, 2020)

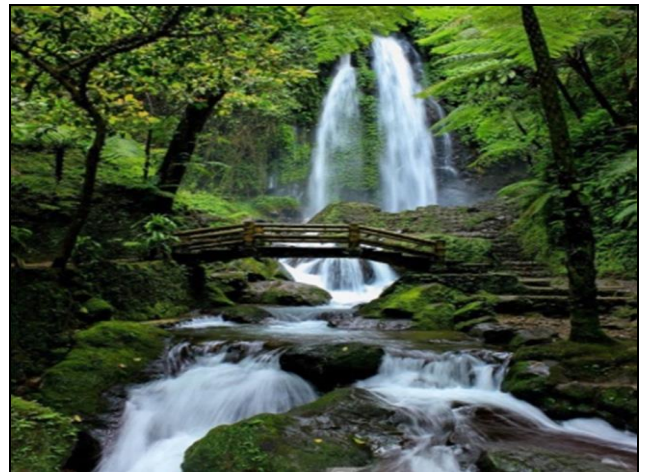


Figure 7. Location Map and Natural Tourism of Jumog Waterfall (Source: Personal Documentation, 2020)

BUMDes Berjo Village has a vital role in increasing village tourism. Established in 2004, BUMDes Desa Berjo always tries to develop village companies. The main objective of BUMDes in Berjo Village is to empower the community. In 2008, BUMDes was given responsibility by the village to oversee the tourism of Jumog Waterfall and Madirda Camping Ground. Until now, BUMDes managers continue to make various additions and rejuvenation of tourist facilities. Not only tourist locations but the Berjo Village BUMDes has also managed savings and loan units since 2012. According to its type, community savings in BUMDes consist of *pesapon* savings from clean environmental fees, Eid savings, *qurban* savings that people use to buy *qurban* animals, and savings. PKK (women's association organization). Apart from Jumog Waterfall, Madirda Camping Ground, Savings, and Loan Unit, BUMDes Berjo Village also manages kiosks and restaurants, and agro-tourism in Berjo Village.

In tourism management, the presence of BUMDes plays an active role in developing and advancing local tourism in Berjo Village. Berjo Village is endowed with beautiful natural resources and has several cultural heritages such as the Suku Temple Site, Planggatan Temple, and Batu Bulus (Turtle). This makes Berjo Village a particular village. As an independent village, Berjo tries to manage and develop all regional potential independently.

It is proven that Berjo Village has represented Karanganyar Regency in village competitions at the provincial and national levels. The existence of abundant tourism potential makes the tourism sector a significant source of village income. Several tourist objects that exist spatially are part of the tourism development area of Berjo Village. However, not all tourist objects in the site can be managed. For example, Suku Temple is under the Archaeological Heritage Conservation Center's management, while the Tourism and Culture Office is the beneficiary.

Suku Temple depicted in Figure 6, is one of the favorites and famous tourist destinations in Karanganyar Regency, Indonesia. This temple is a cultural heritage and is closely related to Hinduism. Apart from being managed by the Archaeological Heritage Preservation Center and utilized by the Tourism and Culture Office, Suku Temple is also used by Berjo Village people to trade, manage to park and become a tour guide in this Suku Temple. So, the existence of Suku Temple as a tourist spot also contributes significantly to the economy of the people in Berjo Village.

Then, the very famous and most favorite tour in Berjo Village is Jumog Waterfall. Jumog Waterfall depicted in Figure 7, is located in Jumog Hamlet, Berjo Village, Ngargoyoso District, Karanganyar Regency, with GPS coordinates: 7° 37 '52.68 "LS and 111° 7' 37.24" East Longitude, Jumog Waterfall has a height of ± 30 m. It is equipped with several facilities such as performing arts, simple waterboom, playground, rest area, bathroom, and seven food stalls on site. The location of Jumog Waterfall is quite close to the location of Suku Temple, about 800 m, and Nippon Cave or Goa Sari in Puntukrejo Village. The Jumog Waterfall comes from direct mountain springs and is very fresh, about five hundred meters which is still clear and stable throughout the year and season.

Although not too high and still simple, this waterfall still exudes a distinctive beauty from natural tourism. That said, every 10:00 WIB (Western Indonesian Time), a rainbow will appear at Jumog Waterfall. So, it is not an exaggeration if foreign tourists call it 'the lost paradise'. In 2004, Jumog Waterfall began to be developed into a commercial tourist attraction whose management was delegated to BUMDes. Apart from providing a beautiful view, Jumog Waterfall under the management of BUMDes also provides land for trading for village communities, with the aim of improving the economy of rural communities in the tourism sector through trading activities.

There is also land that is specially provided for traders from outside the village by providing retribution fees, so that all existing income is collected in BUMDes and managed by BUMDes. Another source of the economy is through public facilities such as toilets, showers, and paid changing rooms that can be used by tourists, as well as fines against tourists who litter. So, for every tourism in Berjo Village, its sustainability and beauty will be maintained, because the residents of Berjo Village who manage tourist attractions also invite tourists, both domestic and foreign tourists, to participate in maintaining the natural environment so that it remains natural and looks beautiful.



Figure 8. Location Map and Nature Tourism
Madirda Lake (Source: Personal Documentation, 2020)



Figure 9. The Planggatan Site
(Source: Personal Documentation, 2020)

Figure 8, is the Madirda Lake, which is a spring that forms a lake and is located in Tlogo Hamlet, Berjo Village, Ngargoyoso District, Karanganyar Regency. Its existence is still beautiful, with a field often used as a camping and outbound area. Also, this lake is often used as the location for Melasti Ceremony for Hindus in the Ngargoyoso District.

So, tourists will be lucky to come to Telaga Madirda to coincide with Hindus' religious ritual activities, namely the Melasti Ceremony. The Melasti ceremony is a process of cleansing humans' body and mind with nature, where the procession is carried out by washing away dirt using living water. Philosophically, it can make oneself become holy again and become one with nature, where this nature is God's creation.

As human beings, we must always protect, care for, preserve, and coexist with nature. Figure 9, is the Planggatan Site, which is the location above Madirda Lake, used for ritual prayers for the Hindu belief, which consists of artifacts that symbolize nature as a source of life, especially water as an abundant natural resource.

It is said that the existence of Madirda Lake is closely related to the legend of *Cupu Manik Astagina* (a Javanese mythology story). It is noted that Madirda Lake is the incarnation of *Cupu Manik Astagina*, a mustika, which is a struggle between *Anjani*, *Subali*, and *Sugriwa* in the *Ramayana* story. Tourists who want to visit Madirda Lake will be charged an IDR 2,000 motorbike parking fee, IDR 3,000 car park, IDR 5,000 bus parking, as well as IDR 10,000 entrance ticket fee, all of which are included in BUMDes management. Organizations such as Karang Taruna (village community youth organization) also help manage tourism in Berjo Village.

The Potential of Religious Tourism Destinations based on Local Religion in Berjo Village

The existence of local religions can also be a tourism potential (Romanelli et al., 2021; Hung Lee et al., 2021; Lin et al., 2021; Izwar et al., 2020). An area has a value on the local culture with the perspective of the community, thus making it a separate tourist attraction that is closely related to cultural heritage (Teodorescu et al., 2021; Panzera et al., 2021; Putra et al., 2021; Chen, 2021; Timothy, 2021; Yang et al., 2021; Nurdiani and Felicia, 2020; Crespi-Vallbona, 2021). In every society, several values are used as guidelines or valued and continue to be preserved. Likewise, in Tambak hamlet, some of the values that are respected in the community are in the form of clean village rituals, invitations, *punjungan*, market, sprinkling *setaman* flowers (seven arrangements of blossom) at intersections, the value of cooperation and *srawung*.

The clean village ritual is a ritual that is performed in the month of *ruwah* (the term division of the month in the Javanese calendar), where this ritual is routinely held to get safety, blessings, avoiding failure, disease, and disturbance, then as a means of establishing friendship between farmers. Village cleaning was carried out by each house making a *tumpeng*, then taking it to each RT to be prayed for, when eaten together. During the cleaning of the village, several processions are also carried out, namely cleaning the *punden* (a sanctified and sacred place), which is believed to be a source that maintains the availability of a livelihood source, such as a water source. Some people believe that if they do not clean the village, there will be disturbances in their fields or affect the community. Village clean-up activities over time are combined with entertainment performances such as *wayang kulit*, *kuda lumping*, *campursari*, etc.

Kondangan is a celebratory procession that is celebrated in the life cycle of a person in Tambak hamlet experiencing several stages of invitations ranging from *mbayek* (baby birth), circumcision (circumcision for men), marriage, *ruwah* (performing clean village rituals), and *slametan* (gathering activities which is done because of a person who died). *Kondangan* here is commemorated starting from *mbayek* where someone who already has children will hold a celebration. Neighbors provide what is needed for the baby's needs, and not in the form of money.

Circumcision is held when a boy is old enough to indicate that he is already *baligh* (adult); circumcision is usually saved and the person or guest who comes to donate some money. Marriage is one of the most expensive celebrations; this is because there is a *punjungan* tradition of delivering food during D-7 to people known to those who have a festival, on the D day, they do not receive donations in the form of money.

Then at the time of *slametan*, which is releasing the departure of someone who has died, an invitation is carried out in stages to commemorate 7 days, 40 days, 100 days, and 1000 days, usually when 1000 days are celebrated on a large scale, sometimes to the point of slaughtering a cow or goat for food. In addition to tangible values, the people in Tambak hamlet also uphold several matters such as cooperation, community service, and *srawung* (social activities). *Gotong royong*, where people work together to meet their needs there, for example building roads, bridges, irrigation canals, etc. Community service here is a routine activity to clean the environment, be it residential neighborhoods, water sources, forests, and some *punden*; this is done per RT area, sometimes some are held by *Bayan* or the village.

Srawung or togetherness is one of the things that is highly respected by the community, where every time, for example, gatherings, rituals, invitations have the meaning of *srawung* or to build closeness and friendship between residents, even though the context of the meeting can vary, but the value carried is togetherness. In addition to *srawung* being carried out in broad scope, kinship is also carried out by several families, for example, family gatherings every 2 *selapanan* (*selapan* = 35 days), and the activities carried out can vary, for example, *arisan*, *bancakan* (eating together) or traveling.

Regarding the beliefs held by residents, there are several interesting places in this Tambak Hamlet area. Some sites are sacred because they are considered to have advice. Some places become the source of life for many people because of their water sources. Some areas are rites of historical relics from the past or their ancestors or predecessors. Some ritual customs leaders are in charge of leading the course of certain rituals. Some places usually used for rituals include Sumber, Taman Sari, Watu Sirah, Planggatan Site, and one of the *punden* in the Madirda Lake area.

Punden is a ritual performed by residents when holding a celebration. *Punden* is usually performed when it is intricate and *rosul*. According to residents, *Danyang* (ancestors) will be happy if someone invites (to gather together in the *punden*). If anyone wants to download the in-laws, the residents invite the grandfather (ancestor) of Sumber or Planggatan. If there is any desire, if you have asked permission from the ancestors, then any obstacle will go away, and the event will run smoothly. The belief that every time you have a birthday or even a big harvest, giving slaughter in the form of chickens or cows is believed to be a form of gratitude for the blessings given by God.

Every time there is a celebration of the harvest, they always carry out the *Kejawen* ritual. Sumber, or what is also known as a water source, or called *ndalem* or *ndaleme punden*, is a water source whose water is abundant and able to irrigate eight RT in Tambak Hamlet, as well as to irrigate Suku residents. The water irrigation system is made through *pralon*, which is channeled from the source to each region. From the center of the head, there is a white *pralon* installed and forms a T-junction, where the first route is from the water source, then the branch path is one leading to Tambak Hamlet other leading to the Suku area. At this source, once a year, namely in the month of *Ruwah*, a ritual or *tumpengan* is usually held; this activity is carried out by residents of Tambak Hamlet and attended by any citizen, many

residents are present at this source and even from outside the region or the city. Anyone can follow this ritual, from children, adolescents, adults, to the elderly, both men and women, from residents of Tambak Hamlet and outside residents of Tambak Hamlet. Usually, this ritual is led by Mbah Pawiro Diman; the ritual is carried out with the aim and purpose of sending prayers so that residents can always live in prosperity, abundant water, fertile soil, plants can thrive and income increases, kept away from problems, all residents are healthy and kept away from the disease, and other kind of things. The next ritual site is Watu Sirah. Watu Sirah is a stone or *punden*. It used to be a source of abundant water, but now it has been closed. This place is also a place for rituals carried out by residents of Tambak Hamlet. The leader of the ritual carried out at the Watu Sirah *punden* is Mbah Pawiro Gito. Not much different from the rituals performed at Sumber, in Watu Sirah, there is also a ritual by sending prayers for the residents' welfare.

Then there is also the Planggatan Site depicted in Figure 9; this site is visited by many residents from outside the area other than residents of Tambak Hamlet. The days that are believed to bring blessings when praying on this site are Tuesday and Friday *Kliwon* (days that are believed to be holy and sacred or holy days and occur only once in 1 month in the Javanese calendar). These days are supposed to bring blessings. It is more effective to send prayers because they are days inherited from generation to generation from the ancestors who usually pray on those days. Many people from outside come to pray and perform rituals at this Planggatan site, with various purposes, essentially asking for kindness. Usually, there are also offerings or prerequisites offered when praying or performing rituals on the Planggatan Site. This place consists of relief stones, some of which are ornate, and there is a vast tree, which is where people put their offerings under it.

Another ritual place is Taman Sari, which is also not much different from Sumber and Watu Sirah, usually in Taman Sari, where residents perform the ritual of sending prayers. Then there is also a place at Madirda Lake, a stone or *punden* placed in a small house, and usually, there is also a place for people to perform rituals or send prayers. Some of the ritual places above are historical places, become sources of life, and some of them are believed to provide prosperity and goodness; the essence of performing rituals or sending prayers is solely so that all citizens get blessings from nature the creator. All forms of rituals and sacred places described above can be experienced directly by people who visit and participate in their activities. In addition to entertainment tourism destinations, this village also has tourism potential inherent in local religions, making this village a unique and exciting local religious tourism destination to visit.

Management Model of Ecotourism Potential Management in Berjo Village

Ecotourism management in Berjo Village involves BUMDes with a high level of community participation. Now ecotourism is a popular source of economy in Berjo Village. With the highest income to the government comes from natural tourism owned by Berjo Village. Management carried out by BUMDes is a participatory model of village communities, village organizations, and all stakeholders, all of which are managed under BUMDes, by providing incentives to members involved in managing natural tourism in Berjo Village. The source of income included in BUMDes is collected for the welfare of the community, the development of organized tourism management, and the utilization of natural resource potential as well as increasing the capacity of its human resources with the concept of empowerment.

In addition to some of the well-known tours that have been described in the previous section, some areas have the potential to become ecotourism. Some terms already exist but need further development. Some locations are still untouched and have the potential to become new tourism. Together with the community, the government continues to strive to improve the tourism sector by involving various stakeholders. Aspects of community empowerment are also reflected through BUMDes. Several tourist sites are still under construction such as the Tenggir Park Tour, which is located next to the Raya Forest Park Tour, Planggatan Site Tour, \pm 100 m high waterfall seed tour located on Mount Purung, which is currently being managed into Kampung Gunung or Gunung Village, which has been developed into the concept of natural houses in Purung Mountain. There are still many tourism sites with great potential.

If these can be appropriately managed and optimally, it will significantly advance Berjo Village as a well-known Ecotourism Village in Indonesia. Organizations such as LMDH (Forest Village Community Institution) are also involved with tourism development in Berjo Village by developing nature tourism in Berjo Village through programs such as making a garden labyrinth, plant apple tree seedlings of 20 hectares, and plant seeds and the lemongrass refining industry. This strengthens the identity of Berjo Village as an ecotourism destination.

CONCLUSION

The management pattern of ecotourism potential in Berjo Village, Ngargoyoso District, Karanganyar Regency is always in the optimization stage by involving the community under BUMDes, as well as involving various stakeholders in the development of natural tourism in Berjo Village, such as the LMDH organization, Karang Taruna, Berjo Village Government, Perhutani, Dinas Forestry, Archaeological Heritage Conservation Center, Tourism Office, and various other related stakeholders. The economic sector is also overgrowing with tourism development and tourism management that involves the community's roles with the concept of empowerment in the tourism sector. Thus, ecotourism in Berjo Village can go hand in hand by increasing its people's economic resources. Therefore, ecotourism-based economic activities can be said to prosper the lives of people in Berjo Village, Ngargoyoso District, Karanganyar Regency, Central Java Province, Indonesia.

REFERENCES

- Aswita, D., Suryadarma, I.G.P., Suyanto, S., & Herawan, T. (2020). The Natural Resources Potency of Marine Ecotourism as an Environmental Education Source. *GeoJournal of Tourism and Geosites*, 31(3), 996–1003. <https://doi.org/10.30892/gtg.31310-533>

- Carvache-Franco, M., Carvache-Franco, O., & Carvache-Franco, W. (2020). Exploring the Satisfaction of Ecotourism in Protected Natural Areas. *GeoJournal of Tourism and Geosites*, 29(2), 672–683. <https://doi.org/10.30892/gtg.29223-498>
- Chandel, R.S., & Kanga, S. (2020). Sustainable Management of Ecotourism in Western Rajasthan, India: A Geospatial Approach. *GeoJournal of Tourism and Geosites*, 29(2), 521–533. <https://doi.org/10.30892/gtg.29211-486>
- Chen, Z. (2021). Visualizing experiencescape—from the art of intangible cultural heritage. *Current Issues in Tourism*, 1-20. <https://doi.org/10.1080/13683500.2021.1892040>
- Crespi-Vallbona, M. (2021). Satisfying experiences: guided tours at cultural heritage sites. *Journal of Heritage Tourism*, 16(2), 201-217. <https://doi.org/10.1080/1743873X.2020.1771345>
- Eshun, G., & Tichaawa, T.M. (2020). Community Participation, Risk Management and Ecotourism Sustainability Issues in Ghana. *GeoJournal of Tourism and Geosites*, 28(1), 313–331. <https://doi.org/10.30892/gtg.28125-472>
- Fandeli, C. (2000). *Pengertian dan konsep dasar ekowisata*. Yogyakarta: Fakultas Kehutanan UGM.
- Fibrianto, A.S., Yuniar, A.D., Deffinika, I., Azzardina, A., & Afrianty, D. (2021). Geo-ecological interaction: Community based forest management in Karanganyar, Indonesia. In *Development, Social Change and Environmental Sustainability: Proceedings of the International Conference on Contemporary Sociology and Educational Transformation (ICCSET 2020)*, Malang, Indonesia, 23 September 2020 (p. 62). Routledge. <https://doi.org/10.1201/9781003178163>
- Fistiningrum, W., & Harini, R. (2021). The impacts of mangrove ecotourism management on the socio-economic conditions of people in kulonprogo regency. In *IOP Conference Series: Earth and Environmental Science*, 683(1), 012-116, IOP Publishing. <https://doi.org/10.1088/1755-1315/683/1/012116>
- Hung, Lee, T., Jan, F.H., & Lin, Y.H. (2021). How authentic experience affects traditional religious tourism development: evidence from the Dajia Mazu Pilgrimage, Taiwan. *Journal of Travel Research*, 60(5), 1140-1157. <https://doi.org/10.1177/0047287520921240>
- Izwar, I., Badaruddin, B., Mulya, M.B., & Sibarani, R. (2020). Potential of Reusam Island to Become Sharia Ecotourism Area. *GeoJournal of Tourism and Geosites*, 30(2spl), 827–834. <https://doi.org/10.30892/gtg.302spl07-511>
- Kummittha, H.R. (2020). Stakeholders Involvement Towards Sustaining Ecotourism Destinations: The Case of Social Entrepreneurship at Mangalajodi Ecotourism Trust in India. *GeoJournal of Tourism and Geosites*, 29(2), 636–648. <https://doi.org/10.30892/gtg.29220-495>
- Lin, H.H., Ling, Y., Lin, J.C., & Liang, Z.F. (2021). Research on the development of religious tourism and the sustainable development of rural environment and health. *International Journal of Environmental Research and Public Health*, 18(5), 2731. <https://doi.org/10.3390/ijerph18052731>
- Miles, Matthew, B., & Huberman, A.M. (2007). *Qualitative Data Analysis (terjemahan)*. Jakarta: UI Press.
- Némethová, J. (2020). Comparison of Implementation of Rural Development Programmes Focussing on Diversification in Slovakia in the Years 2007-2013 and 2014-2020. *Folia Geographica*, 62(1), 35-51.
- Nurdiani, N., & Felicia, N.T. (2021). The efforts of local community in preserving cultural heritage in the city of Semarang–Indonesia. In *IOP Conference Series: Earth and Environmental Science*, 780(1), 012-078. IOP Publishing. <https://doi.org/10.1088/1755-1315/780/1/012078>
- Panzer, E., de Graaff, T., & de Groot, H.L. (2021). European cultural heritage and tourism flows: The magnetic role of superstar World Heritage Sites. *Papers in Regional Science*, 100(1), 101-122. <https://DOI:10.1111/pirs.12562>
- Putra, I.D.G.A.D., Adhika, I.M., & Yana, A.A.G.A. (2021). Reviving Cultural Tourism in Kendran Bali Indonesia: Maintaining Traditional Architecture and Developing Community-based Tourism. *Civil Engineering and Architecture*, 9(2), 328-338. <https://DOI:10.13189/cea.2021.090206>
- Romanelli, M., Gazzola, P., Grechi, D., & Pollice, F. (2021). Towards a sustainability-oriented religious tourism. *Systems Research and Behavioral Science*, 38(3), 386-396. <https://doi.org/10.1002/sres.2791>
- Saberifar, R., & Mishrab, P.K. (2020). Analysis of National Development Using Labour Market Model: A Case Study of Khaf. *Folia Geographica*, 62(1), 5-20.
- Salim, A. (2006). *Teori dan Paradigma Penelitian Sosial*. Yogyakarta: Tiara Wacana. 118.
- Setiawan, Khabib Bima. (2019). “Modal Sosial Dalam Pengelolaan Hutan Rakyat: Studi Kasus Di Desa Berjo Ngargoyoso Karanganyar Jawa Tengah.” *Jurnal Sosial Ekonomi Pertanian* 15(2), 156–63.
- Teodorescu, C., Szemkovics, L.S., Ducman, A., Panoiu, I., & Pop, V. (2021). Local culture-a source of attraction for tourism based on traditions. Case study, Oltenia, Romania. *Quaestus*, (18), 217-227.
- Timothy, D.J. (2021). 20 Living Heritage, Intangible Culture and Indigenous People. In *Cultural Heritage and Tourism*, 461-482. Channel View Publications. <https://doi.org/10.21832/9781845417727-024>
- Yang, H., Qiu, L., & Fu, X. (2021). Toward Cultural Heritage Sustainability through Participatory Planning Based on Investigation of the Value Perceptions and Preservation Attitudes: Qing Mu Chuan, China. *Sustainability*, 13(3), 1171. <https://doi.org/10.3390/su13031171>
- Yin, Robert, K. (2013). *Case Study Research: Design and Methods*. New York: Sage Publications.
- *** BPS. 2019. *Kecamatan Ngargoyoso Dalam Angka 2019*. Kabupaten Karanganyar: Badan Pusat Statistik Kabupaten Karanganyar.
- *** IUCN, International Union for Conservation of Nature and Natural Resources, 1980. *World conservation strategy: living resources conservation for sustainable development*. Copyright© IUCN-UNEP-WWF.
- <https://www.google.co.id/maps/>, Berjo Village, Ngargoyoso Sub-district, Karanganyar Regency, Central Java Province, Indonesia. (Accessed on Agustus 10, 2020).

ENVIRONMENTALLY SPECIFIC SERVANT LEADERSHIP AND EMPLOYEES' PRO-ENVIRONMENTAL BEHAVIOUR IN HOSPITALITY FIRMS IN SOUTH AFRICA

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Abstract: Leaders can influence the prosocial behaviour of employees through their behaviour and action. The study investigated the effect of environmentally specific servant leadership (ESSL) on employees' voluntary pro-environmental behaviour (PEB) in hospitality firms. In addition, the study examined the mediating role of harmonious environmental passion (HEP) in the relationship between ESSL and PEB. The study adopted the quantitative research design and the cross-sectional survey method was adopted for data collection. The Partial Least Square Structural Equation Modelling (PLS SEM) with Smart-PLS 3.2.8 software was used for data analysis. The results indicated a significant positive relationship between ESSL and employees' PEB. The mediating effect of HEP is significant. Theoretical, empirical and managerial implications are discussed.

Key words: environmentally specific servant leadership, employees, voluntary, pro-environmental behaviour, harmonious environmental passion, hospitality

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INTRODUCTION

Environmental challenges such as global warming, pollution, loss of biodiversity, natural resource depletion, ozone layer depletion, deforestation and waste disposal have become globally recognised problems (Roberson and Barling, 2013; Ferreira and Barbi, 2016). Climate change is one of the existential threats faced by the world and the first three top global risks by likelihood are extreme weather, climate action failure and human environmental damage (World Economic Forum, Global Risks Report, 2021). Business and human activities are central to the debate on global environmental challenges (Singh and Singh, 2017). Although, environmental problems such as climate change can be caused by natural variation or human activity, the conclusion of scientists is that climate change is mainly anthropogenic ((Roberson and Barling, 2013). There is now a 100% consensus among scientists on anthropogenic global warming and human activities have contributed a significant part of the increase in greenhouse gases in the atmosphere (Powell, 2019). The hospitality industry is a major economic sector in most countries with significant contribution to employment and economic growth (United Nations World Tourism Organisation, 2020). However, the hospitality industry also negatively affects the environment through over consumption of natural resources, pollution and solid and liquid waste (Rosa and Silva, 2017; Alipour et al., 2019). Despite the fact that businesses contribute significantly to environmental degradation, they can also enhance environmental preservation through their activities (Ones and Dilchert, 2012; Robertson and Barling, 2017). Positive changes in individual human behaviour towards pro-environmental actions and behaviour are highly necessary to manage environmental challenges and achieve sustainable tourism (Williamson et al., 2018; Balunde et al., 2019). According to Steg and Vlek (2009), pro-environmental behaviour (PEB) refers to actions performed in private or public domains with the aim of avoiding harm or safeguarding the environment. In the context of employees, PEB refers to the behaviour engaged by employees that is aligned to environmental sustainability (Wu et al., 2019). Employees are a major actor in the hospitality industry and their involvement is important to environmentally sustainable processes and operations (Ones and Dilchert, 2012; Robertson and Carleton, 2017; Jahanshahi et al., 2021).

Businesses that intend to improve their environmental performance must encourage employees to engage in PEB and this engagement can be voluntary (organizational citizenship behaviours for the environment (OCBE)) and/or involuntary (work-task-related PEB (Jiang et al., 2019). Involuntary PEB is formally mandated by organisations to enable employees perform their work task in an environmentally friendly way (Wu et al., 2019). Voluntary PEB is the extent to which employees engage in environmentally friendly behaviours beyond the realm of their required work tasks. Voluntary PEB is discretionary and done beyond the formal reward and performance-evaluation system of the organisation (Robertson and Barling, 2017; Alzaidi and Iyanna, 2021). The effectiveness of an organisation's sustainability practices depends on the support and contribution of employees especially the discretionary or voluntary behaviour that is beyond the formal performance evaluation system (Robertson and Carleton, 2017; Xiao et al., 2020; Jahanshahi et al., 2021).

Zientara and Zamojska (2018) remark that involuntary PEB, although important is not enough to reduce environmental footprint. Corporate greening stems from the extra role and the personal sense of PEB of employees. It is difficult for an organisation to mandate volunteerism and impossible to obtain genuine commitment of employees to the environment by bureaucratic fiat (Jiang et al., 2019). Therefore, this study focuses on employees' voluntary PEB.

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Leadership has a major role in promotion employees' PEB. Leaders are role models and can influence the prosocial behaviour of employees through their behaviour and action (Ture and Ganesh, 2018; Han et al., 2019). Servant leadership (SL) is a leadership style that emphasises ethics and moral values in order to develop followers (Eva et al., 2019). Traditionally, researchers have examined the effect of different leadership styles (i.e. transformational and servant leadership) across different contexts. However, the new paradigm is the use of target specific leadership styles to predict specific outcomes (Li et al., 2020). The integration of servant leadership with the environment is termed environmentally specific servant leadership (ESSL). Based on the view that the motivation of a servant leader is to serve stakeholders, the motivation for ESSL is the development of environmental values in employees in order to sustain the community and environment (Afsar et al., 2018; Siddiquei et al., 2021). In addition, research on the mechanisms through which environmentally specific leadership can affect employees' voluntary PEB is sparse (Robertson and Carleton, 2013). In building a model linking ESSL to employees' voluntary PEB, this study draws on environmental passion. Theoretical arguments suggest that employees tend to be passionate about issues that they consider socially and environmentally important and servant leaders can invoke emotion and spark passion in followers (Robertson and Barling, 2013; Afsar et al., 2016). Passion can be categorised into two: obsessive and harmonious. While obsessive passion is often associated with undesired outcomes, harmonious passion motivates and contributes positively to individual and organisational outcomes (Ng et al., 2019). This study will focus on the effect of harmonious environmental passion (HEP). Afsar et al. (2016) and Saleem et al. (2021) remark that employees with HEP tend to engage in environmental protection because of their preference and not because of external pressures or results-oriented rewards.

The theorisation of this study is based on the Social Identity Theory (Tajfel, 1978), which argues that leaders develop strong bonds with employees and make employees feel like partners in an organisation. Employees identify themselves as belonging to a group in an organisation and are likely to engage in behaviours that are beneficial to the organisation (Tajfel, 1978). The study has two objectives (1) to examine the effect of ESSL on employees' voluntary PEB (2) to investigate the mediating effect of HEP in the relationship between ESSL and PEB. Therefore, this study will develop and test of model that incorporates HEP as a mediator in the relationship between ESSL and PEB. The study will be significant in the following ways. First, research on PEB has often focused on the organisation with scant attention paid to employee behaviour (Xiao et al., 2020). Second, theoretical studies on the mediating effect of HEP in the relationship between ESSL and PEB are scarce (Ng et al., 2019). Studies such as Li et al. (2020) and Peng et al. (2020) have linked passion to environmentally specific transformational leadership. However, while transformational leadership focuses on inspiring followers to work towards the achievement of a common goal, a servant leader focuses on supporting and developing individuals within an organisation (Allen et al., 2016). This study will contribute to the research on the role of ESSL in promoting employees' voluntary PEB with the goal of reducing the negative environmental footprint of hospitality firms and ensuring sustainable tourism. The study is structured as follows. Section two will review the literature and develop hypotheses. Sections three, four, five and six will focus on the research methodology, results, discussion and conclusion respectively.

LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

1. Environmentally specific servant leadership (ESSL)

Servant leadership (SL) is a community-oriented leadership style that focuses on ethics and moral values aimed at elevating followers so that they can better themselves in their everyday lives (Sendjaya and Cooper, 2011; Zhang et al., 2021). Greenleaf (1977: 14) remarks that the process of SL starts with "a natural feeling that one wants to serve, to serve first". The features of servant leadership include empowering, emotional healing, putting subordinates first, helping subordinates to succeed, behaving ethically, conceptual skills and creating value for the community (Liden et al., 2008). While the motivation for servant leadership is community service, the integration of servant leadership with the environment is termed ESSL. The focus of ESSL is on socially responsible behaviour, community stewardship and environmental protection. ESSL refers to the leadership provided to employees with the goal of serving green-related interests (Tuan, 2020; Siddiquei et al., 2021).

2. Pro environmental behaviour (PEB)

Kollmuss and Agyeman (2002: 240) define PEB as "behaviours that consciously seeks to minimise the negative impact of one's actions on the natural and built world". PEB refers to the behaviour that an individual undertakes to reduce negative environmental impact with a clear purpose of changing the environment (Li et al., 2019). PEB can be voluntary (organizational citizenship behaviours for the environment (OCBE)) and/or involuntary (work-task-related pro-environmental behaviour). While involuntary PEB is formally mandated by organisations, voluntary PEB is discretionary (Wu et al., 2019).

3. Harmonious environmental passion (HEP)

Passion is a strong inclination of an individual to invest effort, time and money in an activity that he or she views as important or loves (Vallerand, 2012). The dualistic model of passion differentiates between obsessive and harmonious passion. Obsessive passion describes a situation in which an individual is compelled to engage in certain activity because of certain contingencies such as to gain social acceptance and this often leads to psychological distress. Harmonious passion is associated with positive effect and psychological wellbeing because it is the outcome of an autonomous internalisation activity into an individual's identity (Vallerand, 2012). Harmonious passion is associated with the freedom of an individual to perform an activity rather than been forced (Ng et al., 2019; Peng et al., 2020). Robertson and Barling (2013) linked harmonious passion to the environment and this is termed as harmonious passion for the environment or harmonious environmental passion (HEP). Robertson and Barling, 2013: 180) define HEP as "a positive emotion that results in an individual wanting to engage in PEB"

4. Theoretical framework

Eva et al. (2019) point out that the theoretical frameworks for empirical studies on servant leadership mainly draw from social-based theories. The Social Exchange Theory (Blau, 1964) follows the norm of reciprocity in which servant leaders focus on the development of followers and followers reciprocate the positive behaviour of the leader with positive behaviours of their own. Based on the argument by Greenleaf (1991) that servant leaders tend to transform followers into servant leaders themselves, researchers have examined the transforming effects of servant leaders on changing the mindsets and behaviours of followers. Therefore, servant leadership can be linked to the Social Learning Theory (Bandura, 1977) that followers emulate the behaviour of leaders because they see the leader as a credible role model. In addition, the Social Identity Theory (SIT) (Tajfel, 1978) is related to servant leadership in organisations on the basis that servant leaders develop strong bonds with employees and make employees feel like partners in the organisation. Employees identify themselves as belonging to a group in an organisation and are likely to engage in behaviours that are beneficial to the organisation. The SIT has often been used as the theoretical foundation for studies on ESSL and employee behaviour (Tuan, 2019; Sidequel et al., 2021). The SIT provides a strong link between environmental leadership and PEB because the higher an individual's identification with a pro-environmental group, the higher the readiness to participate in pro-environmental action. Because an environmental specific servant leader leads with the intention and motivation to develop followers to achieve environmental goals, employees are likely to identify themselves with a servant leader and consider him/her a member of a team. Thus, an environmental specific servant leader will be able to shape employees' green self-identity and subsequent PEB (Schulte et al., 2020; Sidequel et al., 2021)

5. ESSL and employees' voluntary PEB

Sidequel et al. (2021) point out that a servant leader focuses on social contribution and society welfare and environmentally specific servant leaders display developmental and altruistic values that are useful in sustainable organisations. The study by Sidequel et al. (2021) investigate the effect of team ESSL on individual PEB.

Data was collected from forty-two project based sustainable organisations in China. The results indicate that team ESSL positively impacts on the PEB of team members. Tuan (2019) examines the relationship between ESSL and employees' voluntary PEB. The study focused on employees working in resort hotels in Vietnam and the results show that ESSL has a significant positive relationship with PEB. Ying et al. (2020) investigate the effect of servant leadership on employees' voluntary green behaviour in power sector firms in Pakistan. Data was collected from 315 subordinates and supervisors and the results indicate a significant positive relationship between servant leadership and employees voluntary green behaviour. Tuan (2019) remarks that employees are likely to develop positive affective responses toward environmental conservation if they perceive and observe the green behaviour of environmentally specific servant leaders. Consequently, it is hypothesised:

Hypothesis one: There is a significant positive relationship between ESSL and employees' voluntary PEB

6. ESSL and HEP

Environmentally specific leadership can stimulate employees' harmonious passion for the environment when leaders provide a vision about the importance of environmental sustainability in the workplace (Ng et al., 2019). Robertson and Barling (2013) find a significant positive relationship between environmentally specific transformational leadership and employees' HEP. Leaders can inspire HEP in employees by inspiring employees to put the collective good above their own needs and motivating them to behave in an environmentally friendly way (Afsar et al., 2016). It is hypothesised that

Hypothesis two: There is a significant positive relationship between ESSL and employees' HEP

7. HEP and PEB

Afsar et al. (2016) remark that HEP is a moral behaviour that gives the inspiration to make a difference by contributing to environmental protection and is an experience that is filled with energy. Robertson and Barling (2013) and Afsar et al. (2016) find that employee's HEP positively affects their PEB. HEP is linked to positive emotions such as happiness, joy, satisfaction and spiritual wellbeing and such factors positively affect the willingness to engage in PEB (Afsar et al., 2016). It is hypothesised that:

Hypothesis three: There is a significant positive relationship between HEP and employees' voluntary PEB

8. Mediating effect of HEP in the relationship between ESSL and PEB

Li et al. (2021) show that HEP is a mechanism through which environmentally specific transformational leadership can affect PEB. Ng et al. (2019) find that HEP partially mediates the relationship between green work climate and PEB. An individual that is passionate about the environment will want to be involved in practices that will lead to environmental protection (Robertson and Barling, 2013). Therefore, HEP can be a mechanism through which ESSL can affect employees' PEB. It is hypothesised that:

Hypothesis four: HEP mediates the relationship between ESSL and employees' voluntary PEB

RESEARCH METHODOLOGY

The study utilised the quantitative research design. The cross-sectional survey method was used to collect data from the respondents. The survey focused on hotel employees. The sample population was all employees working for all hotels in South Africa. The participating hotels were developed by the researcher from the websites of the Tourism Grading Council of South Africa. The simple random sampling method was used to select hotels graded as three, four and five star by the the Tourism Grading Council of South Africa. Upscale hotels are more likely to be engaged in environmental practices

compared to small hotels. The survey was conducted in Pretoria and Johannesburg in the Gauteng Province and Polokwane, Polokwane and Bela- Bela in the Limpopo Province. The Gauteng Province is the economic hub of South Africa and many hotels are located in the Province. The two towns in Limpopo province have a sizeable number of hotels. The management of selected hotel were contacted through phone calls and emails to solicit their participation.

After, the questionnaire depicting the purpose of the study and a covering letter were sent to the manager of the hotels that agreed to participate in the survey. Three trained field agent assisted in the collection and the self-administered questionnaire method was used for data collection from the employees of participating hotels. The emails and phone numbers of the participants were obtained during questionnaire distribution and reminders were sent weekly to request for the completion of questionnaire. If a questionnaire is not completed after two months, it is regarded as non-response. The questionnaire contained a cover letter that explained the aim of the study and anonymity and confidentiality. Two experts in the field of sustainability and strategy also assisted to validate the questionnaire and a pilot study was conducted to improve the face and content validity. The survey was conducted between July 2020 and February 2021. The questionnaire was divided into four sections demographic variables, ESSL, PEB and HEP. The study employed the Partial Least Square Structural Equation modelling for analysis. The Cronbach's alpha was used as a measure of reliability.

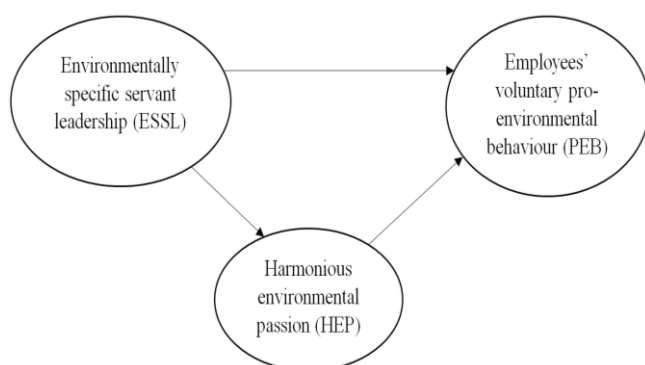


Figure 1. Depicts the conceptual model for the study

Table 1. Biographical details of the respondents

Biographical details of the respondents	Frequency (N=382)
Gender of the respondents	
Male	167
Female	215
Age of the respondents	
21-30 years	148
31-40 years	175
41-50 years	50
51-60 years	9
Level of qualification of the respondents	
Matric	158
Post Matric	224
Experience of the respondents in the hospitality industry	
Less than five years	142
More than five years	240

Measures:

ESSL: Twelve questions adapted from the servant leadership questionnaire by Liden et al. (2008) were used to measure employees' perception of the ESSL of owner/manager. All the questions were anchored on the five point Likert scale with "1 strongly disagree and 5 strongly agree". **PEB:** Ten questions adapted from Robertson and Barling (2017) was used to measure employees' PEB. All the questions were anchored on the five point Likert scale with "1 strongly disagree and 5 strongly agree". **HEP:** Ten questions adopted from environmental passion scale by Robertson and Barling (2013) were used to measure HEP. All the questions were anchored on the five point Likert scale with "1 strongly disagree and 5 strongly agree".

RESULTS AND DISCUSSION

1. Response rate and biographical characteristics

Sixty hotels were contacted by the researcher and forty-two agreed to participate in the survey. Twenty questionnaires were distributed per hotel. The total number of employees working in the forty-two hotels were one thousand six hundred and eighty according to the contacted managers. The researcher decided to sample half of the number of employees through the convenience sampling method because of cost and time constraints. Therefore, eight hundred and forty questionnaires were sent out to the participants and 382 questionnaires were returned and found usable. Some questionnaires were not usable because the respondents did not complete all the important parts. The "rule of ten" was used to determine the appropriate minimum sample size to test the model. According to Hair et al. (2011), when using PLS SEM to test a model, the minimum sample size should be ten times the highest number of structural paths directed at the latent construct at a time. In this study, there are 32 question items (appendix one) and so a minimum of 320 respondents will be needed. The biographical details of survey participants are presented in Table 1. The data analysis shows that the respondents are mostly females, in the 31-40 age group with Matric qualification and with more than five years of experience in the hospitality industry.

2. Evaluation of PLS SEM

The evaluation of PLS SEM includes the measurement and structural models.

2.1 Measurement model

Hair et al. (2019) point out that the evaluation of the measurement model should include the examination of factor loadings (>0.708), composite reliability (>0.790), Cronbach's alpha (>0.700) and the AVE (>0.500). Table 2 presents the results of the measurement model. The values of the Cronbach's alphas are greater than 0.700, the values of composite reliability range from 0.936 to 0.952 and the values of AVE from 0.626 to 0.646. This implies an acceptable level of construct validity. The AVEs ranged between 0.626 and 0.646 suggesting a good convergent validity of the scales. The

discriminant validity was assessed through the Fornell and Larcker criteria (Hair et al., 2019). The results as depicted by table 3 showed that the square roots of AVEs are depicted on the diagonals are greater than the corresponding correlation coefficients within the constructs. It can be concluded that the measurement model is satisfactory.

Table 2. The measurement model

Construct	Measurement items	Mean and standard deviation	Item loading	Cronbach's alpha	Composite reliability	AVE
Environmentally specific servant leadership (ESSL)		3.55 1.04		0.812	0.952	0.626
My leader emphasises the importance of contributing to the environmental improvement.	ESSL1		0.804			
I am encouraged by my leader to get involved and volunteer for environmental activities	ESSL2		0.744			
My manager cares about my eco-initiatives	ESSL3		0.801			
My manager cares about the environment	ESSL4		0.825			
My manager emphasises the importance of protecting the environment	ESSL5		0.742			
My manager is always interested in initiatives that help to protect the environment	ESSL6		0.781			
My manager has a thorough understanding of the environmental challenges faced by the world	ESSL7		0.788			
My manager gives me the responsibility to make important decisions about how to manage environmental challenges	ESSL8		0.747			
My manager is interested in making sure that our firm's environmental goals are achieved	ESSL9		0.805			
Manager provides information on the way to manage environmental challenges	ESSL10		0.777			
My manager holds high environmental standards	ESSL11		0.849			
My manager will not sacrifice environmental interests in order to achieve financial success	ESSL12		0.822			
Employees pro-environmental behaviour (PEB)		3.86 1.01		0.788	0.947	0.639
I recycle at work when it is possible.	PEB1		0.828			
At work, I provide help to my co-workers to be environmentally friendly	PEB2		0.801			
At work, I make sure that I conserve the amount of materials that I use.	PEB3		0.769			
At work, I encourage my co-workers to turn off work-related equipment when they are not in use.	PEB4		0.817			
At work, I promote environmentally friendly behaviours amongst my colleagues.	PEB5		0.829			
I persuade my manager to purchase environmentally friendly products for work purposes.	PEB6		0.808			
I always make sure that I reduce the amount of energy that I use at work	PEB7		0.826			
At work, I discuss with my manager how my organisation can become more environmentally friendly.	PEB8		0.768			
I encourage my organization to support an environmental charity. (deleted)	PEB9		0.308			
I always encourage my organization to reduce its environmental impact.	PEB10		0.802			
Harmonious environmental passion (HEP)		4.08 1.07				
I am passionate about the environment	HEP1		0.882	0.808	0.936	0.646
I enjoy practicing environmentally friendly behaviours.	HEP2		0.862			
I enjoy engaging in environmentally friendly behaviours	HEP3		0.791			
I take pride in helping the environment	HEP4		0.801			
I enthusiastically discuss environmental issues with others.	HEP5		0.740			
I get pleasure from taking care of the environment.	HEP6		0.808			
I passionately encourage others to be more environmentally responsible.	HEP7		0.758			
I am a volunteered member of an environmental group. (deleted)	HEP8		0.336			
I have voluntarily donated time or money to help the environment in some way (deleted)	HEP9		0.360			
I feel strongly about my environmental values.	HEP10		0.775			

Table 3. Discriminant validity

Construct	ESSL	PEB	HEP
ESSL	0.791		
PEB	0.588	0.799	
HEP	0.614	0.577	0.803

Diagonals in bold signify the square root of the AVE while the other figures depict the correlations

Table 4. Path coefficient and T-statistics (*P<0.01)

Hypothesised path	Path coefficient	T-statistics	Decision
H1 ESSL→PEB	0.752	9.802 *	Supported
H2 EL→HEP	0.661	7.408 *	Supported
H3 HEO-PEB	0.700	8.140 *	Supported
H4 ESSL→HEP→PEB	0.471	7.512 *	Supported

2.2. Structural model

To assess the structural model, the common method bias, the goodness of fit, the R^2 , the Q^2 and the effect size were evaluated in line with the requirements of Hair et al. (2019). The variance inflation factor (VIF) was used to test the existence of common method bias (CMB). The VIFs for the three constructs in the models are 1.48, 1.68 and 2.15 (all below 3.3) which is suggestive of the absence of CMD. The coefficient of determination R^2 value of 0.51 can be considered as moderate. Henseler et al. (2016) point out that when using PLS SEM, R^2 value of 0.75 is regarded as substantial, value of 0.50 moderate and 0.26 weak. According to Henseler et al. (2015), the goodness of fit value (GOF) ranges from 0 to 1. The GOF value of 0.516 suggests that the model has a strong predictive power.

The Q^2 was used to measure the predictive relevance of the model and the value of 0.408 (>0) suggests that the model has sufficient predictive power. The effect size variables are 0.328, 0.341 and 0.300 are indicative of a moderate effect of the exogenous latent constructs. The Standardised root mean square residual (SRMR) of 0.03 suggests a good model fit. The summary of the results of the path coefficients and T-statistics are presented in Table 4. The results (β 0.752, T 9.802, $p < 0.01$) show a significant positive relationship between ESSL and employees' PEB. Hypothesis one of the study is supported. The results (β 0.661, T 7.408, $p < 0.01$) depict a significant positive relationship between ESL and HEP. Hypothesis two is supported. The results (β 0.700, T 8.140, $p < 0.01$) show a significant positive relationship between HEP and employees' PEB. Hypothesis three of the study is supported. The results of the mediation (β 0.471, T 7.512, $p < 0.01$) show that HEP mediates the relationship between ESSL and PEB. Hypothesis four of the study is supported.

The study investigated the effect of ESSL on employees' PEB. In addition, the study examined the mediating effect of HEP in the relationship between ESSL and PEB. Four hypotheses were developed. The results indicated that there is a significant positive relationship between ESSL and PEB. Hypothesis one of the study is supported. The results suggest that employees are likely to develop positive affective responses toward environmental conservation if they perceive and observe the green behaviour of environmentally specific servant leaders. The results are consistent with the findings of previous empirical studies. Sidequel et al. (2021) investigate the effect of team ESSL on individual PEB in project based sustainable organisations in China. The results of indicate that team ESSL positively impacts on the PEB of team members. Taan (2019) examine the relationship between ESSL and employees voluntary PEB in Vietnam.

The results show that ESSL has a significant positive relationship with PEB. Ying et al. (2020) also finds a significant positive relationship between servant leadership and employees voluntary green behaviour. The findings of the study indicate a significant positive relationship between ESSL and HEP. Hypothesis two of the study is supported. The findings suggests that environmentally specific servant leaders by inspiring employees to put the collective good above their own needs can inspire harmonious passion for the environment. Robertson and Barling (2013) also find that environmental specific transformational leadership predict employees' harmonious passion for the environment.

The findings of the study indicate a significant positive relationship between HEP and PEB. Hypothesis three of the study is supported. The results suggest that HEP is a moral behaviour that gives the inspiration to make a difference by contributing to environmental protection HEP is linked to positive emotions such as happiness, joy, satisfaction and spiritual wellbeing and such factors positively affect the willingness to engage in PEB. Li et al. (2020) find that subordinates' HEP harmonious environmental passion will influence their workplace PEB. The findings indicate that HEP mediates the relationship between ESSL and PEB. Hypothesis four of the study is supported. The findings suggest that HEP is a mechanism through which ESSL can affect PEB. An individual that is passionate about the environment will want to be involved in practices that will lead to environmental protection. Li et al. (2021) find that HEP that mediates the relationship between environmentally specific transformational leadership and employees' PEB. Ng et al. (2019) find that HEP mediates the relationship between green work climate and PEB.

CONCLUSION

Traditionally, researchers have examined the effect of different leadership styles across different contexts, however, the new paradigm is the use of target specific leadership style to predict specific outcomes. The study developed and tested of model that introduces HEP as a mediator in the relationship between ESSP and PEB. The findings indicated that ESSL has a significant positive effect on employees PEB. In addition, the findings showed that ESSL positively impacts on HEP. Furthermore, HEP positively affects PEB and mediates the relationship between ESSL and PEB. The findings can be linked to the Social Identity Theory. Environmentally specific servant leaders influence employees self-identity through their role based identities and encourage employees to display pro-environmental behaviour.

Theoretically, the study shows that HEP is a mechanism through which ESSL can affect PEB. Other studies that have focused on the mediating effect of HEP have linked transformational leadership to PEB. Empirically, the study contributes to the literature on the effect of specific leadership styles on employees' PEB. The findings have some managerial implications. First, the study confirms the importance of ESSL as a driver of PEB. Therefore, it is important for the managers/owners of hospitality firms to use ESSL approach to develop employees' PEB.

Thus, the provision of training, development workshops and succession planning on ESSL by the management of hospitality are important. Some universities in South Africa has developed sustainability units. There is the need for such universities to collaborate with hospitality firms to train them on sustainability-oriented leadership. Organisations that support the hospitality business in South Africa such as the Federated Hospital Association of South Africa and government agencies that support the environment in South Africa (i.e. Department of Environmental Affairs) can also help to develop awareness campaign on how to promote pro-environmental behaviour in the hospitality business.

The study finds that HEP is a mechanism through which ESSL can affect PEB. Management must foster an environment that support the HEP of employees. This can be done through engagement with employees so that they understand that financial, social and environmental issues are important to the organisation. Employees can also build sustainability into their personal lives through their use of energy and water at home and work and by choosing to carpool to work. The study has some limitations and proposes some areas for further study. First, the study did not use the more objective peer or supervisor rating but respondents' self-reported view of their PEB. This can lead to social desirability bias. Therefore, other studies can adopt the more objective or peer rating of employees' PEB. Second, the survey was cross-sectional in nature. Therefore, to improve causality, a longitudinal survey can be used.

Third, the ESSL scale was developed from the general servant leadership scale. Other studies can develop and validate an ESSL scale that can be used in studies of environmentally specific leadership research. Fourth the survey was done on firms in one industry and one country. To improve the generalisability of the findings, further studies can include other industries in other countries. Fifth, the model tested in this study did not include moderating variables. Further research can examine the moderating effect of gender and age of the respondents. In addition, the effect of ESSL on the sustainable performance of hospital firms can be examined by other studies.

REFERENCES

- Afsar, B., Badir, Y., & Safdar, U. (2016). Linking spiritual leadership and employee pro-environmental behaviour: The influence of workplace spirituality, intrinsic motivation, and environmental passion. *Journal of Environmental Psychology*, 45, 79-88. <https://doi.org/10.1016/j.jenvp.2015.11.011>
- Afsar, B., Cheema, S., & Javed, F. (2018). Activating employee's pro-environmental behaviors: The role of CSR, organizational identification, and environmentally specific servant leadership. *Corporate Social Responsibility and Environmental Management*, 25(5), 904-911. <https://doi.org/10.1002/csr.1506>
- Alipour, H., Safaeimanesh, F., & Soosan, A. (2019). Investigating Sustainable Practices in Hotel Industry-from Employees' Perspective: Evidence from a Mediterranean Island. *Sustainability*, 11(23), 6556. <https://doi.org/10.3390/su11236556>
- Allen, P.G., Moore, W.M., Moser, R.L., Neill, K.K., Sambamoorthi, U., & Bell, S.H. (2016). The Role of Servant Leadership and Transformational Leadership in Academic Pharmacy. *American Journal of Pharmaceutical Education*, 80(7), 113. <https://doi.org/10.5688/ajpe807113>
- Alzaidi, S.M., & Iyanna, S. (2021). Developing a conceptual model for voluntary pro-environmental behaviour of employees. *Social Responsibility Journal*, Ahead-of-print. <https://doi.org/10.1108/SRJ-11-2020-0477>
- Balundė, A., Perlaviciute, G., & Steg, L. (2019). The Relationship Between People's Environmental Considerations and Pro-environmental Behaviour in Lithuania. *Frontiers in Psychology*, 1, 1-10. <https://doi.org/10.3389/fpsyg.2019.02319>
- Bandura, A. (1977). *Social learning theory* Prentice-Hall. Englewood Cliffs, New Jersey.
- Blau, P.M. (1964). *Exchange and power in social life* Wiley. New York.
- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R.C. (2019). Servant leadership: a systematic review and call for future research. *Leadership. Quarterly*, 30, 111-132. <https://doi.org/10.1016/j.leaqua.2018.07.004>
- Ferreira, L., & Barbi, F. (2016). The Challenge of Global Environmental Change in the Anthropocene: An Analysis of Brazil and China. *Chinese Political Science Review*, 1, 685-697. <https://doi.org/10.1007/s41111-016-0028-9>
- Greenleaf, R.K. (1977). *Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness*. Paulist Press, New York, 14.
- Greenleaf, R.K. (1991). *The servant as leader* The Greenleaf Centre, Page 2. Greenleaf Centre, Indianapolis.
- Hair, J.F., Risher, J.J., Sarstedt, M., & Ringle, C.M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Han, Z., Wang, Q., & Yang, X. (2019). How Responsible Leadership Motivates Employees to Engage in Organizational Citizenship Behaviour for the Environment: A Double-Mediation Model. *Sustainability*, 11, 605. <https://doi.org/10.3390/su11030605>
- Henseler, J., Hubona, G., & Ray, P.A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems*, 116(1), 2-20. <https://doi.org/10.1108/IMDS-09-2015-0382>
- Jahanshahi, A., Maghsoudi, T., & Shafighi, N. (2021). Employees' environmentally responsible behavior: the critical role of environmental justice perception. *Sustainability: Science, Practice, and Policy*, 17(1), 1-14. <https://doi.org/10.1080/15487733.2020.1820701>
- Jiang, M., Wang, H., & Li, M. (2019). Linking Empowering Leadership and Organizational Citizenship Behaviour Toward Environment: The Role of Psychological Ownership and Future Time Perspective. *Frontiers in Psychology*, 10, 1-13. <https://doi.org/10.3389/fpsyg.2019.02612>
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: why do people act environmentally and what are the barriers to proenvironmental behaviour? *Environmental Education Research*, 8(3), 239-260. <https://doi.org/10.1080/13504620220145401>
- Li, D., Zhao, L., Ma, S., Shao, S., & Zhang, L. (2019). What influences an individual's pro-environmental behavior? A literature review. *Resources Conservation and Recycling*, 146(12), 28-34. <https://doi.org/10.1016/j.resconrec.2019.03.024>
- Li, Z., Xue, J., Li, R., Chen, H., & Wang, T. (2020). Environmentally Specific Transformational Leadership and Employee's Pro-environmental Behaviour: The Mediating Roles of Environmental Passion and Autonomous Motivation. *Frontiers in Psychology*, 11, 1408. <https://doi.org/10.3389/fpsyg.2020.01408>
- Liden, R.C., Wayne, S.J., Zhao, H., & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly*, 19(2), 161-177. <https://doi.org/10.1016/j.leaqua.2008.01.006>
- Ng, L.P., Tee, C., Choong, Y.O., & Kuar, L.S. (2019). Green work climate and pro-environmental behaviour among academics: the mediating role of harmonious environmental passion. *International Journal of Management Studies*, 26(2), 77-97. <https://doi.org/10.32890/ijms.26.2.2019.10520>
- Peng, J., Chen, X., Zou, Y., & Nie, Q. (2020). Environmentally specific transformational leadership and team pro-environmental behaviors: The roles of pro-environmental goal clarity, pro-environmental harmonious passion, and power distance. *Human Relations*, 1-44. <https://doi.org/10.1177/0018726720942306>

- Powell, J. (2019). Scientists Reach 100% Consensus on Anthropogenic Global Warming. *Bulletin of Science Technology & Society*, 37(4), 183-184. <https://doi.org/10.1177/0270467619886266>
- Roberson, J.L., & Barling, J. (2013). Greening Organizations Through Leaders' Influence on Employees' Pro-Environmental Behaviours. *Journal of Organizational Behaviour*, 34(2), 176–194. <https://doi.org/10.1002/job.1820>
- Robertson, J.L., & Barling, J. (2017). Toward a new measure of organizational environmental citizenship behaviour. *Journal of Business Research*, 75, 57-66. <https://doi.org/10.1016/j.jbusres.2017.02.007>
- Robertson J.L., & Carleton, E. (2018). Uncovering how and when environmental leadership affects employees' voluntary pro-environmental behaviour. *Journal of Leadership and Organisational Studies*, 25, 197–210. <https://doi.org/10.1177/1548051817738940>
- Rosa, F.S., & Silva, L.C. (2017). Environmental sustainability in hotels, theoretical and methodological contribution. *Brazilian Journal of Tourism Research*, 11(1), 39-60. <https://doi.org/10.7784/rbtur.v11i1.1161>
- Saleem, M., Qadeer, F., Mahmood, F., Han, H., Giorgi, G., & Ariza-Montes, A. (2021). Inculcation of Green Behavior in Employees: A Multilevel Moderated Mediation Approach. *International Journal of Environmental Research and Public Health*, 18, 331. <https://doi.org/10.3390/ijerph18010331>
- Schulte, M., Barnberg, S., & Rollin, P. (2020). Social identity as a key concept for connecting transformative societal change with individual environmental activism. *Journal of Environmental Psychology*, 72, 1-16. <https://doi.org/10.1016/j.jenvp.2020.101525>
- Sendjaya, S., & Cooper, B. (2011). Servant leadership behaviour scale: A hierarchical model and test of construct validity. *European Journal of Work and Organizational Psychology*, 20(3), 416 - 436. <https://doi.org/10.1080/13594321003590549>
- Siddiquei, A., Asmi, F., Asadullah, M., & Mir, F. (2021). Environmental-specific servant leadership as a strategic tool to accomplish environmental performance: a case of China. *International Journal of Manpower*, (ahead-of-print). <https://doi.org/10.1108/IJM-07-2020-0350>
- Singh, R.L., & Singh, P.K. (2017). *Principles and Applications of Environmental Biotechnology for a Sustainable Future*. *Global Environmental Problems*, 13-41. https://doi.org/10.1007/978-981-10-1866-4_2
- Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behaviour: an integrative review and research agenda. *Journal of Environmental Psychology*, 29, 309–317. <https://doi.org/10.1016/j.jenvp.2008.10.004>
- Tajfel, H. (1978). *Social categorization, social identity and social comparison* H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations*, Academic Press, London (1978), pp. 61-76.
- Tuan, L.T. (2020). Environmentally specific servant leadership and green creativity among tourism employees: dual mediation paths. *Journal of Sustainable Tourism*, 28(1), 86-109. <https://doi.org/10.1080/09669582.2019.1675674>
- Ture, R., & Ganesh, M. (2018). Pro-environmental behaviours at workplace: An empirical study in Indian manufacturing organizations. *Benchmarking: An International Journal*, 25(9), 3743-3766. <https://doi.org/10.1108/BIJ-07-2017-0193>
- Vallerand, R.J. (2012). The role of passion in sustainable psychological well-being. *Psychology of Well-Being: Theory, Research and Practice* 2(1),1-21. <https://doi.org/10.1186/2211-1522-2-1>
- Williamson, K., Satre-Meloy, A., Velasco, K., & Green, K., (2018). *Climate Change Needs Behavior Change: Making the Case For Behavioral Solutions to Reduce Global Warming*. Arlington, VA: Rare.
- Wu, P., Ju, W., & Yuan, K. (2019). Green Information Promotes Employees' Voluntary Green Behavior via Work Values and Perceived Accountability. *Sustainability* 11(22), 6335. <https://doi.org/10.3390/su11226335>
- Xiao, J., Mao, J., Haung, S., & Qing, T. (2020). Employee-Organization Fit and Voluntary Green Behavior: A Cross-Level Model Examining the Role of Perceived Insider Status and Green Organizational Climate. *International Journal of Environmental Research and Public Health*, 17(7), 2193. <https://doi.org/10.3390/ijerph17072193>
- Ying, M., Faraz, N.A., Ahmed, F., & Raza, A. (2020). How Does Servant Leadership Foster Employees' Voluntary Green Behaviour? A Sequential Mediation Model. *International Journal of Environmental Research and Public Health*, 17, 1792. <https://doi.org/10.3390/ijerph17051792>
- Zhang, Y., Zheng, Y., Xu, S., Liu, X., & Chen, W. (2021). A meta-analytic review of the consequences of servant leadership: The moderating roles of cultural factors. *Asia Pacific Journal of Management*, 38, 371–400. <https://doi.org/10.1007/s10490-018-9639-z>
- Zientara, P., & Zamojska, K. (2018). Green organizational climates and employee pro-environmental behaviour in the hotel industry. *Journal of Sustainable Tourism*, 26(7), 1142-1159. <https://doi.org/10.1080/09669582.2016.1206554>
- *** United Nations World Tourism Organisation. (2020). Tourism and sustainable development. <https://www.unwto.org/sustainable-development>
- *** World Economic Forum. (2021). The Global Risks Report, 2021. <https://reports.weforum.org/global-risks-report-2021/>

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TOURISM DEMAND IN INDONESIA: IMPLICATIONS IN A POST-PANDEMIC PERIOD

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Abstract: This study uses an autoregressive distributed lag (ARDL) model to investigate the role of incomes, relative price competitiveness, and substitution prices in tourism demand from Indonesia's six largest countries of origin from 2007Q1 to 2019Q4. Income level, competitive prices, and substitution prices significantly impact the demand for tourism in Indonesia. Malaysia, Singapore, Australia, Japan, and India are income elastic, signaling that tourism is a luxury good, but China (normal good). Malaysia and China are price elastic while Japan, India, Singapore, and Australia are less affected by changes in relative prices. Substitute prices may drive tourist to other destinations if the change in prices is large.

Key words: tourism demand, COVID-19, international tourism, Indonesia, ARDL, price competitiveness, tourism economics, tourism development

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INTRODUCTION

The rapid growth in the number of inbound tourists from Asia Pacific and Australia to Indonesia shows that the tourism sector is a promising source of income for the country. From 2007 to 2019, arrivals from the top-grossing countries increased sharply. Inflows from China multiplied by nearly 800%; those from India expanded by 430%; and those from Malaysia grew by almost 273%. Similarly, arrivals from high-income regional partners like Australia, Japan, and Singapore hit more than 3.8 million combined in 2019. By contrast, arrivals from traditional European and American markets expanded at a much lower rate. In the last decade, the government of Indonesia has placed special attention on tourism activities, expecting to increase foreign arrivals to 20 million by 2020 and to increase the contribution of tourism to GDP.

To achieve 20 million foreign tourist arrivals, the government selected 10 strategic destinations coined as the 10 new 'Balis'. The government expects that US\$20 billion on investment would be needed, mainly for infrastructure improvement and promotional campaigns (Muryani et al., 2020). Visa schemes have been relaxed (visa-free for some Asian countries and visa-on-arrival for others). The Ministry of Tourism promoted tourism actively in Australia, India, Japan, South Korea, Malaysia, Singapore, and China via Wonderful Indonesia campaign; established Visit Indonesia Tourism Officer (VITO) operation in the six countries, and participated regularly in tourism exhibitions. There was also virtual reality launched in foreign airports under the Xperience Wonderful Indonesia campaign to feature the 10 new Bali destinations. In addition to that, the Indonesian government launched the Generasi Wonderful Indonesia (GenWi)—a campaign focusing on attracting millennials from Asian countries—since the average age of tourists from Asian countries is below 39 years old. There are also *Famtrip* events to introduce new destinations for targeted audiences (e.g., tourist agencies, bloggers, media, and event organizers). Most of the promotion efforts are within Asia and the largest European countries (traditional visitors).

Asian countries have become the largest market of Indonesian tourism, strongly driven by the economic growth and higher openness to travel. The boom raises a question about the sustainability of the Asian market. The tourism sector, both private and public, has responded to the fast-growing market with greater investments, but the question remains on the long-term expansion scenarios. Tourism is exposed to shocks (economic, political, social, or health) that may compromise the stability of the sector. The financial crisis in 2008, terrorism attacks in 2002 and 2005, natural disasters, and the

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COVID-19 pandemic demonstrates the impacts of such shocks (Muryani et al., 2020; Purwomarwanto and Ramachandran, 2015; Smyth et al., 2009; Song and Lin, 2010; Wahyuningtyas et al., 2019). For example, the COVID-19 pandemic has led to a sharp decrease in tourism arrivals and caused a sharp global economic decline. As countries impose travel restrictions, and as economic prospects continue to fall, recovery in tourism activities would not be easy. This will require support tools that help to resume activities, compensate for the losses, and recover confidence (Bakar and Rosbi, 2020; Korinth and Ranasinghe, 2020). The Indonesian government's initial recovery strategy focuses on domestic tourism while progressively resuming regional Asia Pacific activities. A fiscal stimulus of IDR4.7 trillion for tourism-related activities has been proposed, and a series of travel incentives for promotional campaign and discounts have been rolled out. The measures are substantial because the sector has been hit the hardest by the pandemic.

Despite substantial developments in infrastructure, branding, human resources, and promotion activities in the last decade (Pujiharini and Ichihashi, 2016), the tourism industry is unlikely to rebound as fast as the other sectors. Therefore, it is vital to understand the economic forces needed to bring more tourists to Indonesia. The literature highlights that the major explanatory variables in tourism models include income of tourists, touristic service prices, substitution prices, and exchange rates (Li et al., 2005; Peng et al., 2015). The pandemic has caused a reduction in the incomes of foreign tourists. Meanwhile, prices in Indonesia and other countries are adjusting, which is likely to shift the demand for tourism services. International tourism competition will tighten as countries target a quick recovery of the tourism sector by allocating generous support measures. Besides, the Indonesian Rupiah (IDR) has been depreciating against the currency in the six top-grossing countries, which may translate into a competitive advantage.

In 2020, the real GDP growth was -2.4% in Australia, -5.4 in Singapore, -5.6% in Malaysia, -4.8% in Japan, and -8% in India. China was the only top-grossing country (for the Indonesian tourism) that experienced growth in 2020 (2.3%). A contraction of GDP implies a fall in disposable income. Additionally, the declining consumer price index in countries like Thailand, Malaysia, Australia, Japan, Singapore, Hong Kong, and some European countries might help them become more price-competitive tourism destinations than Indonesia. Research has shown that incomes and prices are essential elements in demand for tourist arrivals (Barman and Nath, 2019; Gössling et al., 2020; Yazdi and Khanalizadeh, 2017).

The main objective of this study is to investigate to what degree factors like income levels, relative price competitiveness, and substitution prices drive the demand for tourism services in Indonesia. We look at arrivals from the six top-grossing countries. We include a lag variable on tourism arrivals to measure the word-of-mouth effect, an essential driver in tourism demand, and a dummy variable to observe the shock in tourism sector from the global financial crisis in 2008-09. Although previous pandemics (SARS, MERS, and H1N1) triggered a slowdown in international inbound tourists in Indonesia (Kuo et al., 2008), the effects were shorter and smaller than the current COVID-19 (Abiad et al., 2020; Gössling et al., 2020). To investigate the connection between income, price, and tourism arrivals, we use an autoregressive distributed lag (ARDL) model to estimate tourism demand from the six largest top-grossing countries in Asia Pacific: Australia, Singapore, Malaysia, Japan, China, and India. An autoregressive approach includes lag variables to model consumer demand as income and price variables commonly have lagged effects in demand for tourism services (Cheng, 2012). We employ quarterly data from 2007Q1 to 2019Q4.

The ARDL can estimate short and long-term income and price elasticity for the six countries relative to Indonesia, and these are proxies for the role of income and price competitiveness on tourism. Tourism industry is targeted to be a new source of economic growth for the Indonesian economy. Before the COVID-19 pandemic, Indonesia welcomed 16.2 million foreign visitors, contributing US\$17.6 billion in foreign currency in 2019 and supporting more than 10% of direct and indirect jobs in the country. China, India, Malaysia, and Australia have been dynamic markets (rapid growth); Singapore is less dynamic; and Japan has stagnated. The sector needs a recovery plan to restore jobs, attract foreign exchange, and boost the economy (Gössling et al., 2020; Mahadevan et al., 2017). We expect that competitiveness of the tourism industry in Indonesia is related to the depreciation of IDR and the rapid income growth from the inbound countries, particularly China (Lin et al., 2015). However, aggressive recovery plans to deal with impact of COVID-19 in other countries of destination may lead to a tighter competition (Abiad et al., 2020; Bakar and Rosbi, 2020). This is because consumer price indexes and the income of tourists are changing.

This study makes the following contributions. First, we extend the literature of tourism demand for Indonesia by providing estimates from the six largest inbound markets. Second, we investigate whether relative prices and alternative prices (a benchmark for foreign competition) explain Indonesia's boom in tourism. Third, we analyze income and price elasticities to reveal preferences towards a touristic destination. Such indicators are crucial for the development of tourism strategies (Peng et al., 2015). Finally, we offer evidence of the effects of the financial crisis in 2008-2009 to illustrate the shock resulting from the COVID-19 pandemic.

MATERIALS AND METHODS

We estimate tourism demand from the six largest markets, namely Australia, Singapore, Malaysia, Japan, China, and India. An autoregressive distributed lag model (ARDL) is applied to estimate arrivals as a function of income, relative prices, and prices at the alternative countries of destination. Income and prices are fundamental forces in explaining the demand for tourism services (Peng et al., 2015). Rapid growth in disposable income is associated with an expansion in outbound travels, which has been well documented in the Asian context (Barman and Nath, 2019; Lin et al., 2015; Zhu et al., 2018).

Prices in Indonesia are compared with its top competitors' prices in this analysis (Table 1). Competitiveness is considered an important determinant of travel destination choice (Xie and Tveterås, 2020). Competitive prices are linked to exchange-rate fluctuations, which impact tourism arrivals to a large extent (Aalen et al., 2019; Peng et al., 2015).

Specifically, relative prices capture the cost of living in the destination country relative to the country of origin (Jin and Wang, 2016; Kronenberg et al., 2016), which is often represented by the consumer price index adjusted by exchange rates.

Seetaram et al. (2016) suggest using a price competitiveness index as a more precise indicator for alternative prices. Relative prices do not capture the interaction with the alternative destinations. Meanwhile, such an indicator of alternative prices is needed to capture the competition. The Index for alternative prices that signals a positive relationship with demand indicates that the alternative destinations have more competitive prices, hence they could be substitute destinations (Salleh et al., 2007). On the other hand, negative price competitiveness index means that the alternative countries could be complementary destinations. In previous research the impact of substitution prices on tourism demand vary, as shown in Mediterranean countries (Patsouratis et al., 2005) and Asia (Athanasopoulos et al., 2014; Etzo et al., 2014).

We use quarterly data from 2007Q1 to 2019Q4. A lagged variable for arrivals is included to capture the effect of word-of-mouth, which is assumed to have a significant impact on tourism demand (Chen and Haynes, 2015; Dogru et al., 2017).

Additionally, we incorporate expected shocks in tourism arrivals as an impact of the global financial crisis (GFC) in 2008-09 to capture the impact of unusual events on tourism (Xie and Tveterås, 2020).

To measure tourism activities, we use data on tourism arrivals ($Y_{i,t}$) on a quarterly basis from the six selected countries (quarter t from country i). A number of studies have concluded that the number of tourist arrivals is a suitable proxy for tourism demand (Adeola et al., 2018; Cheng, 2012). We employ GDP as a proxy for the tourists' income level, with data sourced from the World Bank. The tourism price in Indonesia relative to country i at time t is indicated by the Consumer Price Index (CPI) and estimated as $RP_{i,t} = (CPI_{IND,t} / EXR_{IND,t}) / (CPI_{i,t} / EXR_{i,t})$, where CPI_{IND} is CPI of Indonesia and CPI_i are and the inbound country (i). Data on exchange rates of each country are obtained from the World Bank ($EXR_{i,t}$) reported in USD. The indicator on Substitute Prices (SP) is proposed by the top tourism destinations of each country i (Table 1) and computed according to Dogru et al. (2017). All datasets used are quarterly.

$$SP_{i,t} = CPI_{IND,t} / [(CPI_{T1} + CPI_{T2} + CPI_{T3} + CPI_{T4})_t \times 25\%] \times EXR \quad (1)$$

where $CPI_{IND,t}$ represents the consumer price of Indonesia at period t , $CPI_{T1,2,3,4}$ are CPI of leading four alternative destination country, and EXR is the exchange rate of Indonesia.

To find the suitable ARDL model (lags) for each of the six countries in the study, the Akaike (AIC) and the Schwartz (SIC) information criteria selection tool is employed. The variables are first tested for stationarity, followed by the cointegration analysis using the ARDL bound test proposed by (Pesaran and Shin, 1998). The ARDL model addresses the cointegrating relationship between variables under $I(0)$ and/or $I(1)$. The bound test, which is employed to assess cointegration, helps to identify if a stable and long-run relationship exists between the variables proposed to estimate tourism demand. The ARDL model is specified in Eq (2) as:

$$\ln Y_{i,t} = \beta_0 + \beta_1 \ln Y_{i,t-1} + \beta_2 \ln GDP_{i,t-1} + \beta_3 \ln GDP_{i,t} + \beta_4 \ln RP_{i,t-1} + \beta_5 \ln RP_{i,t} + \beta_6 \ln SP_{i,t-1} + \beta_7 \ln SP_{i,t} + GFC_{2009} + \varepsilon_t \quad (2)$$

Where $Y_{i,t-1}$ represents tourism arrivals from country i and t refers to the time. $GDP_{i,t}$ refers to the gross domestic product of country i at time t . RP indicates consumer price index of Indonesia relative to the price of country i at time t , and SP refers to substitute price. A variable dummy is used to cover the global financial crisis of 2008-09 (GFC). ε_t is the error term.

The ARDL model is tested using the Error Correction Model (ECM) for cointegration. After the cointegration test, the short and long-run impacts of tourism demand are estimated. Once the ECM terms are generated, the error correction is calculated following the expression:

$$\Delta Y_{i,t} = \pi_{i0} + \pi_{iGDP} \Delta GDP_{i,t} + \pi_{iRP} \Delta RP_{i,t} + \pi_{iSP} \Delta SP_{i,t} + \Delta GFC_{2009} + \pi_{ie} \varepsilon_{i,t-1} + \tau_{it} \quad (3)$$

The first-difference operator is denoted by Δ , and the error term is capture in τ_{it} . $\varepsilon_{i,t-1}$ denotes the ECM term computed as follows:

$$\varepsilon_{i,t-1} = \beta_0 - \beta_1 Y_{i,t-1} - \beta_2 GDP_{i,t-1} - \beta_4 RP_{i,t-1} - \beta_6 SP_{i,t-1} - GFC_{2009} \quad (4)$$

The short-run terms on Eq (3) do not have direct structural interpretation, more often are interpreted as transitory effects (Cheng, 2012). The lagged variables in Eq (4) capture the long-run relationships. To interpret the results as elasticities, a ratio of $-\beta_2/\beta_1$ indicates income elasticity, $-\beta_4/\beta_1$ a price elasticity, and $-\beta_6/\beta_1$ cross-price elasticity. It is expected to have positive income elasticities and negative price elasticity (relative price), while substitute price might take either positive or negative values (cross-price elasticity).

RESULTS AND DISCUSSION

Tourism arrivals in Indonesia had increased substantially (Figure 2). Uniquely rapidly is the increase in arrivals from Asia Pacific and Australia markets, indicating that geographical (regional) proximity is crucial to Indonesia. The rapid

Table 1. Top Destination Countries of Indonesia's Main Tourism Partners in 2019
Source: Authors' determination based on tourist arrivals in 2019, the World Tourism Organization

	Malaysia	Singapore	China	Australia	Japan	India
Top 1	Thailand	Malaysia	Thailand	New Zealand	United States	Thailand
Top 2	Singapore	Japan	Japan	United States	France	Singapore
Top 3	Australia	Thailand	Philippines	United Kingdom	Singapore	Malaysia
Top 4	Brunei	Hong Kong	United States	Thailand	Australia	United States

growth in income from emerging Asian markets is also a key driver of tourism sector. Another factor is price competitiveness, either via low local prices as measured by CPI relative to partner countries', or via depreciated IDR (in general terms) against partner countries' currencies (Figure 1). Compared to other Asian countries (e.g., Japan, China, South Korea, Singapore, Malaysia, Thailand, and India), Indonesia reports a lower score in the 2019 Travel and Tourism Competitiveness Index (TTCI). We follow Pesaran et al. (2001) for the ARDL estimation as it offers the advantage of admitting different integration orders on the relations among variables, either I(0) or I(1). Earlier studies have indicated the suitability of this cointegration approach for tourism demand models (Lin et al., 2015; Song and Lin, 2010). ARDL models assumes that the variable must not be stationary at I (II) because it can produce spurious regressions (Pesaran et al., 2001).

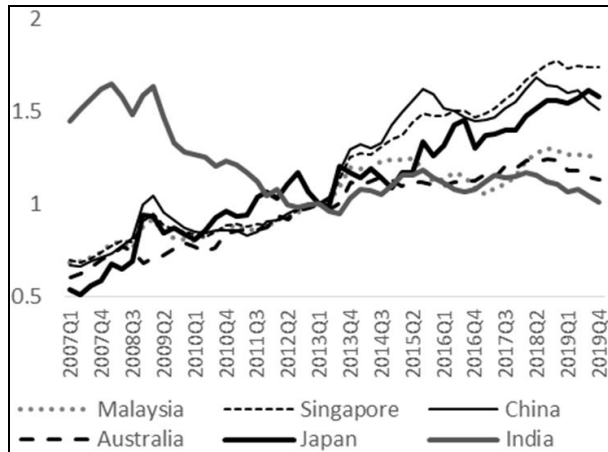


Figure 1. Relative Prices Indonesia – Partners
(Source; Data from World Bank and Statistics Indonesia)

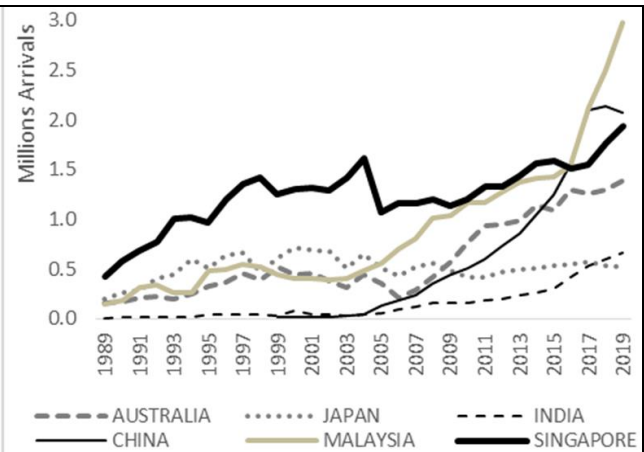


Figure 2. Tourism Arrivals Top Six count
(Source: Data from Statistics Indonesia)

The unit root test with an Augmented-Dickey Fuller (ADF) is performed to ensure that there are no stationary variables at the second difference level I (II) in the model (Rehman et al., 2020). This study indicates that tourist arrivals (Y) variable in all countries is stationary at the first-difference level, except for Australia, which is stationary at the level. Meanwhile, the GDP, substitution price (SP), and relative price (RP) variables, all are stationary at the first difference. The dummy variable for global financial crisis (GFC) is stationary at the level and the first difference. This means that none of the variables presents a unit root problem and stationary at the second difference, suggesting that the data are qualified to employ the ARDL approach and avoid spurious regression analysis (Pesaran et al., 2001; Rehman et al., 2020).

Table 2. Unit Root Test

Countries	Stationary Level	LnY	lnGDP	lnSP	lnRP
Malaysia	Level (0)	0.46	0.31	-0.89	-1.76
	First Diff (I)	-3.27**	-6.63***	-4.97***	-5.56***
	Selected Stationary Level	I(I)	I(I)	I(I)	I(I)
Singapore	Level (0)	0.12	-0.44	-1.02	-1.16
	First Diff (I)	-3.18**	-2.60*	-5.24***	-5.21***
	Selected Stationary Level	I(I)	I(I)	I(I)	I(I)
China	Level (0)	-2.96	-1.15	-1.01	-1.76
	First Diff (I)	-3.78***	-2.69*	-5.17***	-4.21***
	Selected Stationary Level	I(I)	I(I)	I(I)	I(I)
Australia	Level (0)	-3.29**	-0.71	-0.99	-2.39
	First Diff (I)	-2.47	-3.42**	-5.10***	-6.19***
	Selected Stationary Level	I(0)	I(I)	I(I)	I(I)
Japan	Level (0)	-1.67	-0.84	-0.97	-2.28
	First Diff (I)	-3.99***	-3.99***	-5.01***	-3.50**
	Selected Stationary Level	I(I)	I(I)	I(I)	I(I)
India	Level (0)	0.48	1.31	-0.99	-1.1
	First Diff (I)	-3.15**	-4.77***	-5.19***	-5.38***
	Selected Stationary Level	I(I)	I(I)	I(I)	I(I)

Table 3. Bound Test

Model	Malaysia	Singapore	China	Australia	Japan	India
Model 1	9.735***	6.188***	4.440**	6.779***	4.784***	9.179***
Model 2	12.597***	22.101***	4.693***	6.967***	5.643***	16.391***

Notes: *, **, *** indicate 10%, 5%, 1% significance, respectively. The level of significance is based on the lower and upper bounds. 10% (lower bound is 2.37 and upper bound is 3.2), 5% (lower bound is 2.79 and upper bound is 3.67), 1% (lower bound is 3.65 and upper bound is 4.66)

Table 4. Error Correction Term

Model	Malaysia	Singapore	China	Australia	Japan	India
Model 1	-0.241***	-0.818***	-1.020***	-0.276***	-0.992***	-0.362***
Model 2	-0.445***	-1.415***	-1.439***	-0.768***	-1.059***	-1.147***

Notes: *, **, *** indicate 10%, 5%, and 1% significance, respectively

Notes: The number in the table are the t-statistic. *, **, *** indicate 10%, 5%, and 1% significance, respectively. I(0) indicates stationary at level and I(I) indicates stationary at first difference

Additionally, we implement bound tests to determine cointegration relationships. The bound test coefficient (F-Statistic) is significant if the value is above the critical upper bound value (Pesaran et al., 2001; Srinivasan et al., 2012). The results from the bound test indicate that the proposed models for each country have an F-statistic value above the upper bound at the 5% significance level or better (Table 3). This result rejects the null hypothesis (no cointegration) and accepts the alternative hypothesis (cointegration) so that there is a long and short run relationship between the independent variable and the dependent variable. The ARDL estimation involves the Unrestricted Error Correction

Model (UECM). The error correction term (ECT hereafter) indicates the adjustment rate in response to deviances from the long-run equilibrium path. We accept the ECT when the value is negative and significant. Table 4 shows the value of ECT for each model in all countries. The results of this study indicate a negative and significant ECT with a significance level of 1%, in line with Banerjee et al. (1998). A significant ECT result strengthens the results of the bounds test (Onafowora and Owoye, 2012). The ECT for the case of Malaysia indicates that inbound arrivals in the current quarter will adjust towards the equilibrium by -0.445 of the deviation from the previous quarter.

Arrivals from Australia will adjust towards the equilibrium at the speed of -0.768 from the previous quarter (relatively fast speed of adjustment). For the cases where the ECT is between -1 and -2, the ECT fluctuates around the long-run equilibrium path before convergence, as noted in Narayan and Smyth (2006).

Table 5 shows the results of the classical assumption tests as a diagnostic test. The results show that the model does not have classical assumption problems and has a high bound coefficient. A model with high bounds coefficient has high cointegration (Nkoro and Uko, 2016), thus forming a strong statistical and economic base for the ECM-ARDL model.

Table 5. Diagnostic Tests

	Malaysia	Singapore	China	Australia	Japan	India
Heteroscedasticity	0.572	0.141	0.201	0.815	0.364	0.153
Autocorrelation	0.106	0.313	0.101	0.539	0.062	0.722
Normality	0.974	0.552	0.650	0.428	0.792	0.818

Notes: Determined level of significance is 5%

Tourism Demand Model

Table 6 shows the estimates for the ARDL model. The upper part of Table 6 presents the estimated results for the short run and the lower part for the long run. Although the short-run estimates do not have direct structural interpretation, they offer relevant

information on transition on the variables. In the short run, the coefficient for lagged effect from arrivals has the expected positive sign for China and Australia. It indicates a significant effect of word-of-mouth, which has been captured in tourism demand models before (Seetaram et al., 2016; Xie and Tveterås, 2020). The loyalty of tourists from China and Australia suggests that the effect of word-of-mouth might be an important driver of tourism from those countries, in line with earlier studies (Muryani et al., 2020). Word-of-mouth effects highlight the importance of creating positive touristic experiences.

A new tourist may depend on recommendations from a tourist with a previous experience visiting Indonesia. To optimize customer experience, Indonesia has invested in infrastructure since 2014, which is aimed at contributing to better accessibility and connectivity for tourists. Improvements in infrastructure often positively impact tourism (Chen and Haynes, 2015). Meanwhile, Malaysia is the largest inbound tourist market for Indonesia (almost 3 million arrivals in 2019). The coefficient of lagged arrivals from Malaysia has a negative effect on tourism demand, likely as the number of arrivals from Malaysia experience substantial fluctuation although there is a positive trend in the number of visits. In tourism demand models, income helps to approximate the purchasing power of tourists. We find that income has a positive impact both in the short run and in the long run for Malaysia and Japan. For Singapore, China, Australia, and India, income has a negative effect on tourism demand in Indonesia in the short run.

A negative coefficient does not mean that income impacts negatively. Instead, it reflects transitory effects or even that changes in quarterly income do not positively influence the decision to travel to Indonesia. Still, in the long run, income is a crucial driver for tourism demand in Indonesia for all partner countries. Only the results for Australia are not significant. For China, the coefficient is positive and significant, although lower than one, suggesting that tourism in Indonesia may be considered a non-luxurious service. For Malaysia, Singapore, Japan, and India, the income coefficient is larger than (or close to) one, signaling that tourism is a luxury good and responds strongly to increasing income.

Table 6. Results for the ARDL Estimation

Short Run						
Variables	Coefficients					
	Malaysia	Singapore	China	Australia	Japan	India
D(LNY(-1))	-0.519***		0.557**	0.327***		
D(LNY(-2))	-0.227**		0.116	0.106		
D(LNY(-3))	-0.443***		0.0005	-0.280**		
D(LNRGDP)	0.732*	-0.0007	-0.502**	-0.813	1.181***	-0.014
D(LNRGDP(-1))		-1.094***	-0.799***	-2.379***	-1.336***	-2.570***
D(LNRGDP(-2))		-0.382	0.791***	-0.101	-2.537***	-0.951**
D(LNRGDP(-3))		-0.276		1.181**	1.036*	-1.387***
D(LNSP)	0.132	-0.342	1.188	-0.626**	1.0397***	0.038
D(LNSP(-1))		2.171***	-2.888**	-0.516**		-1.730***
D(LNSP(-2))		1.870***		-0.467**		-1.247***
D(LNSP(-3))		0.618***		-0.704***		-1.197***
D(LNRP)	-0.529	0.407	0.351	0.415	-0.787***	-0.358
D(LNRP(-1))	1.021***	-1.580***	2.163*			1.277***
D(LNRP(-2))	0.593**	-1.001**				0.826**
D(GFC)	0.069	-0.431***	-0.320**	-0.0197	-0.103*	-0.148
D(GFC(-1))	-0.294***		0.233***	0.192**		0.065
D(GFC(-2))	-0.267***			0.109*		0.142**
D(GFC(-3))				0.174***		0.127**
Long Run						
Variables	Coefficients					
	Malaysia	Singapore	China	Australia	Japan	India
LNRGDP	4.894***	0.999***	0.771***	-0.081	2.468***	2.171***
LNSP	0.122	-1.123***	2.402***	0.223*	0.334***	0.794***
LNRP	-1.941**	1.139**	-1.577***	0.525*	-0.354***	-0.494**
LNGFC	0.746***	0.059	-0.264***	-0.417***	0.029	0.362***
C	-33.189***	1.515	-7.287***	6.665	-35.7401	-30.3796***

Note: *, **, *** indicate 10%, 5%, and 1% significance respectively; C is β_0 or constant

A point worth noting is the income effect for Malaysia, Japan, and India may be a threat to recovery as the GDP in all three countries contracted in 2020 and might slowly recover through 2021. In addition, Indonesia is a "sun-lust" destination for Japanese and Australian tourists who mainly travel to Bali. As the interests of many Australians are changing (Seetaram et al., 2016) and Japan is a stagnant market, it imposes a challenge for Indonesia in the recovery period. As for substitute prices, in the short run, Singapore and Japan show a positive coefficient, indicating that an adjustment in relative prices of Indonesia versus main competitors may make potential tourists opt for alternative destinations. Price competitiveness is fundamental for Indonesia and arrivals may drop if prices are no longer at a competitive edge. By contrast, the negative figure in Australia, China, and India in the short run implies that they are complementary to Indonesia as a tourism destination.

This means that improvements in alternative destinations' competitiveness may work in favor of Indonesia. In the post-pandemic period, Indonesia could capitalize on the popularity of the neighboring Asian countries such as Malaysia, Thailand, and Singapore. Substitution prices have a positive effect in the short run for Singapore. It suggests that as alternative destinations become more price-competitive, Singaporeans might prefer traveling to top alternative destinations (Malaysia, Japan, Thailand, and Hong Kong) to visiting Indonesia. Nevertheless, in the long run, a negative sign in the substitution process suggests that Singaporeans may consider Indonesia as complementary destinations to Malaysia, Japan, Thailand, and Hong Kong (top destinations for Singaporean travelers).

On the other hand, for China, Australia, and India, the coefficient of substitution price signals that top alternative destinations may be substitutes for Indonesian tourism in the long run but complementary in the short run. Meanwhile, for Japanese tourists, the positive and significant coefficient suggests that changes in prices in top destinations may encourage the Japanese to travel to alternative destinations rather than to Indonesia. The coefficient of relative prices for Malaysia, China, and India in the short run has a positive effect but, in the long run, has a negative impact on tourism demand in Indonesia. Our results are in line with Wang (2009), who noted that price increases might not necessarily change the willingness to travel in the short run. In the long run, the relative prices have the expected sign indicating a decrease in tourism demand as prices in Indonesia increase relative to the country of origin.

The effect of the relative prices for tourists from Japan is negative both in the short run and in the long run. These results are in line with theory and previous research that increasing prices can reduce demand (Dogru et al., 2017; Song and Lin, 2010). The relative prices for tourists from Singapore show a negative effect in the short run. Nevertheless, the impact of relative prices for tourists from Singapore and Australia in the long term is positive, likely as Singaporeans and Australians have a higher standard of living compared to Indonesia so that an increase in prices does not reduce demand from these two countries (Muryani et al., 2020; Wasiaturrahma and Rohmawati, 2021).

Interestingly, the coefficient of the relative price is less than one for Australia, Japan, and India, indicating that they are inelastic. As such, increases in prices may not affect the demand for tourism services. Promotion efforts, improvements in quality, and service experience might be more important for tourists from Australia, Japan, and India. By contrast, China, Malaysia, and Singapore have a positive price elasticity, which means that higher prices in Indonesia may discourage tourists from visiting. Although relative prices have a negative effect on tourists from Malaysia and China, arrivals continue to increase. Prices of tourism services seem to be relatively cheap for the Chinese, so they may not substantially affect tourists' decisions (Xie and Tveterås, 2020). Other non-price aspects, like improvements in connectivity, access, promotion, and language, might be an important determinant of tourist arrivals (Kronenberg et al., 2016). Non-price aspects may help to explain why China remains the fastest growing tourism market for Indonesia.

The different reactions in prices among nationalities suggest that promotion policies directed to Singapore and Australian tourists may improve access, quality, experience, safety, and other non-price-related aspects. To some degree, Japanese and Indians may also allow increases in prices as they are price inelastic. Additionally, for Malaysians and Chinese, tourism efforts should consider price-related policies that may help to reactive tourism flows in the long run. A combination of achieving competitive prices and increase value perception appears to be equally important, in line with previous studies (Barman and Nath, 2019; Kim et al., 2018; Yazdi and Khanalizadeh, 2017).

Both relative and substitute prices suggest that Indonesia has relatively strong competitiveness in prices. On the one hand, main tourist inbound countries are not highly sensitive to relative prices (Muryani et al., 2020). On the other hand, Indonesia may attract tourists from markets experiencing a loss in price competitiveness. Still, the coefficients of price substitution are relatively small, signaling that gains on tourism arrivals from improving price competitiveness may be small. By contrast, becoming a substitute market may require substantial promotion efforts and severe improvements in connectivity, access, and progress on quality (Ollivaud and Haxton, 2019).

The global financial crisis (GFC) coefficient has a negative impact on tourism demand in Indonesia for tourists from Malaysia, Singapore, China, and Japan (short-run impacts). The crisis had a positive impact on arrivals from Australia and India in the short run. Only tourism from China and Australia was greatly affected in the long run. The effects from the GFC for Malaysia in the short-run were a -34% decrease in arrivals. The impact in percentage terms is calculated from $(\exp(0.294) - 1) \times 100$. For the other five countries, a negative impact is -53% for Singapore, -37% for China, and -10% for Japan, while positive effects are recorded in Australia (21% and India (15%).

The shocks indicate that tourism activities may converge to equilibrium post-shock, in line with (Muryani et al., 2020; Wang, 2009). A positive aspect is that most of the negative impacts are short term. By contrast, China and Australia, which are reported having a negative impact back in 2009, have been less affected by the pandemic in 2020 than other economies. This suggests that focusing efforts on Australia, India, and China in the short run may help the recovery process. In the long run, Malaysia, Singapore, and Japan may rebound to pre-pandemic levels.

To expedite the recovery, the stakeholders in Indonesia's tourism sector can maintain price competitiveness and support the quality of services. Competitive prices are certainly an edge in tourism services in Indonesia, likely fueled by a depreciation of the IDR. Still, in the long run, a loss in price competitiveness, coupled with an improvement of prices in alternative markets, might compromise the dynamic growth of tourism in Indonesia.

CONCLUSION

The purpose of this study is to estimate a tourism demand model as a function of incomes, relative prices, substitution prices, and the global financial crisis in 2009. We look at the six top-grossing countries for Indonesia, employing quarterly data from 2007Q1 to 2019Q4. An autoregressive distributed lag model is applied to estimate tourism demand together with an Error Correction Model. The results indicate that income level, relative prices, and substitute prices are important determinants in explaining tourism inflows in Indonesia in both the short and long run. For Malaysia, Singapore, Japan, and India, income is elastic, signaling that Indonesia is a luxury good. For China, income plays a positive impact on arrivals but suggests that Indonesia's tourism is a normal good. Malaysia and China are price elastic; while for Japan and India, this is not the case. Singapore and Australia are inelastic towards relative prices, confirming that Indonesia offers substantially lower prices than services in the two countries.

As for substitute prices, in the long run, improvement in prices in alternative destinations may influence tourists' decisions from all origins to travel somewhere else, except Singapore. Only Singapore signals that improvements in price competitiveness in alternative markets may lead to complementarity. Nevertheless, the coefficients of substitute destinations are low for all but China, suggesting that the negative impact on arrivals due to improvements of prices abroad may be relatively small. As such, it indicates that Indonesia remains an attractive tourist destination with price competitiveness. The global financial crisis negatively affects inbound tourists from China and Australia, but interestingly, it increases visitors from Malaysia and India. The weakening of the IDR may strengthen Indonesia's price competitiveness during the global financial crisis (2008-2009).

As the government of Indonesia aims at boosting the economy through tourism, tourism promotion should be directed in specific ways to each market. Indonesia may benefit from competitive prices and a weak currency on the post-pandemic time, nevertheless if the disposable income of foreign tourists drop substantially it may cancel out the gains from competitive relative prices. The markets in Malaysia, Japan, and India may take a more extended period to be restored as these countries are facing a decrease in disposable income and a large income elasticity. Luxurious goods in times of shocks may not become a priority. Singapore, China, and Australia could resume trips to Indonesia more quickly than the other countries. Additionally, the perception of Indonesia as a low-priced tourism destination for Singaporeans and Australians may reinforce the income effect. Although China is the less damaged by the pandemic, Chinese travelers may prefer alternative destinations over Indonesia if substitute destinations become more price-competitive. As governments around the world may focus on attracting Chinese tourists, price competitiveness will be vital. Indonesia could capitalize its substantially low relative price compared to China and alternative markets.

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REFERENCES

- Aalen, P., Iversen, E.K., & Jakobsen, E.W. (2019). Exchange rate fluctuations and demand for hotel accommodation: Panel data evidence from Norway. *Scandinavian Journal of Hospitality and Tourism*, 19(2), 210–225. <https://doi.org/10.1080/15022250.2018.1482566>
- Abiad, A., Arao, M., Dagli, S., Ferrarini, B., Noy, I., Osewe, P., Pagaduan, J., Park, D., & Platitas, R. (2020). *The Economic Impact of the COVID-19 Outbreak on Developing Asia* [ADB Briefs]. Asian Development Bank. <https://doi.org/10.22617/BRF200096>
- Adeola, O., Boso, N., & Evans, O. (2018). Drivers of international tourism demand in Africa. *Business Economics*, 53(1), 25–36. <https://doi.org/10.1057/s11369-017-0051-3>
- Athanasopoulos, G., Deng, M., Li, G., & Song, H. (2014). Modelling substitution between domestic and outbound tourism in Australia: A system-of-equations approach. *Tourism Management*, 45, 159–170. <https://doi.org/10.1016/j.tourman.2014.03.018>
- Bakar, N.A., & Rosbi, S. (2020). Effect of Coronavirus disease (COVID-19) to tourism industry. *International Journal of Advanced Engineering Research and Science*, 7(4), 189–193. <https://doi.org/10.22161/ijaers.74.23>
- Banerjee, A., Dolado, J., & Mestre, R. (1998). Error-correction Mechanism Tests for Cointegration in a Single-equation Framework. *Journal of Time Series Analysis*, 19(3), 267–283. <https://doi.org/10.1111/1467-9892.00091>
- Barman, H., & Nath, H.K. (2019). What determines international tourist arrivals in India? *Asia Pacific Journal of Tourism Research*, 24(2), 180–190. <https://doi.org/10.1080/10941665.2018.1556712>
- Chen, Z., & Haynes, K.E. (2015). Impact of high-speed rail on international tourism demand in China. *Applied Economics Letters*, 22(1), 57–60. <https://doi.org/10.1080/13504851.2014.925043>
- Cheng, K.M. (2012). Tourism demand in Hong Kong: Income, prices, and visa restrictions. *Current Issues in Tourism*, 15(3), 167–181. <https://doi.org/10.1080/13683500.2011.569011>
- Dogru, T., Sirakaya-Turk, E., & Crouch, G.I. (2017). Remodeling international tourism demand: Old theory and new evidence. *Tourism Management*, 60, 47–55. <https://doi.org/10.1016/j.tourman.2016.11.010>
- Etzo, I., Massidda, C., & Piras, R. (2014). Migration and outbound tourism: Evidence from Italy. *Annals of Tourism Research*, 48, 235–249. <https://doi.org/10.1016/j.annals.2014.07.002>
- Gössling, S., Scott, D., & Hall, C.M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 1–20. <https://doi.org/10.1080/09669582.2020.1758708>

- Jin, X., & Wang, Y. (2016). Chinese Outbound Tourism Research: A Review. *Journal of Travel Research*, 55(4), 440–453. <https://doi.org/10.1177/0047287515608504>
- Kim, J., Lee, C.K., & Mjelde, J.W. (2018). Impact of economic policy on international tourism demand: The case of Abenomics. *Current Issues in Tourism*, 21(16), 1912–1929. <https://doi.org/10.1080/13683500.2016.1198307>
- Korinth, B., & Ranasinghe, R. (2020). Covid-19 pandemic's impact on tourism in Poland in March 2020. *GeoJournal of Tourism and Geosites*, 31(3), 987–990. <https://doi.org/10.30892/gtg.31308-531>
- Kronenberg, K., Fuchs, M., Salman, K., Lexhagen, M., & Höpken, W. (2016). Economic effects of advertising expenditures – a Swedish destination study of international tourists. *Scandinavian Journal of Hospitality and Tourism*, 16(4), 352–374. <https://doi.org/10.1080/15022250.2015.1101013>
- Kuo, H.I., Chen, C.C., Tseng, W.C., Ju, L.F., & Huang, B.W. (2008). Assessing impacts of SARS and Avian Flu on international tourism demand to Asia. *Tourism Management*, 29(5), 917–928. <https://doi.org/10.1016/j.tourman.2007.10.006>
- Li, G., Song, H., & Witt, S.F. (2005). Recent Developments in Econometric Modeling and Forecasting. *Journal of Travel Research*, 44(1), 82–99. <https://doi.org/10.1177/0047287505276594>
- Lin, V. S., Liu, A., & Song, H. (2015). Modeling and Forecasting Chinese Outbound Tourism: An Econometric Approach. *Journal of Travel & Tourism Marketing*, 32(1–2), 34–49. <https://doi.org/10.1080/10548408.2014.986011>
- Mahadevan, R., Amir, H., & Nugroho, A. (2017). Regional impacts of tourism-led growth on poverty and income inequality: A dynamic general equilibrium analysis for Indonesia. *Tourism Economics*, 23(3), 614–631. <https://doi.org/10.5367/te.2015.0534>
- Muryani, Permatasari, M.F., & Esquivias, M.A. (2020). Determinants of Tourism Demand in Indonesia: A Panel Data Analysis. *Tourism Analysis*, 25(1), 77–89. <https://doi.org/10.3727/108354220X15758301241666>
- Narayan, P.K., & Smyth, R. (2006). What determines migration flows from low-income to high-income countries? An empirical investigation of Fiji–US migration 1972–2001. *Contemporary Economic Policy*, 24(2), 332–342. <https://doi.org/10.1093/cep/byj019>
- Nkoro, E., & Uko, A.K. (2016). Autoregressive Distributed Lag (ARDL) cointegration technique: Application and interpretation. *Journal of Statistical and Econometric Methods*, 5(4), 63–91.
- Ollivaud, P. & Haxton, P. (2019). *Making the most of tourism in Indonesia to promote sustainable regional development*, OECD Economics Department Working Papers, No. 1535, OECD Publishing, Paris. <https://doi.org/10.1787/c73325d9-en>
- Onafowora, O.A., & Owoye, O. (2012). Modelling International Tourism Demand for the Caribbean. *Tourism Economics*, 18(1), 159–180. <https://doi.org/10.5367/te.2012.0102>
- Patsouratis, V., Frangouli, Z., & Anastasopoulos, G. (2005). Competition in tourism among the Mediterranean countries. *Applied Economics*, 37(16), 1865–1870. <https://doi.org/10.1080/00036840500217226>
- Peng, B., Song, H., Crouch, G.I., & Witt, S.F. (2015). A Meta-Analysis of International Tourism Demand Elasticities. *Journal of Travel Research*, 54(5), 611–633. <https://doi.org/10.1177/0047287514528283>
- Pesaran, M.H., & Shin, Y. (1998). An autoregressive distributed-lag modelling approach to cointegration analysis. *Econometric Society Monographs*, 31, 371–413. <https://doi.org/10.1017/CCOL0521633230.011>
- Pesaran, M.H., Shin, Y., & Smith, R.J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289–326. <https://doi.org/10.1002/jae.616>
- Pujiharini, F., & Ichihashi, M. (2016). *The Impact of Visa-Free Entry on the Determinants of Inbound Tourism Demand in Indonesia* (No. 6–5; IDEC DP2 Series). Hiroshima University, Graduate School for International Development and Cooperation (IDEC). <https://ideas.repec.org/p/hir/idecdp/6-5.html>
- Purwomarwanto, Y.L., & Ramachandran, J. (2015). Performance of tourism sector with regard to the global crisis—A comparative study between Indonesia, Malaysia and Singapore. *The Journal of Developing Areas*, 49(4), 325–339. <https://doi.org/10.1353/jda.2015.0149>
- Rehman, A., Ma, H., Irfan, M., Ahmad, M., & Traore, O. (2020). Investigating the Influence of International Tourism in Pakistan and Its Linkage to Economic Growth: Evidence From ARDL Approach. *SAGE Open*, 10(2), 215824402093252. <https://doi.org/10.1177/2158244020932525>
- Salleh, N.H.M., Othman, R., & Ramachandran, S. (2007). Malaysia's Tourism Demand from Selected Countries: The ARDL Approach to Cointegration. *International Journal of Economics and Management*, 1(3), 345–363.
- Seetaram, N., Forsyth, P., & Dwyer, L. (2016). Measuring price elasticities of demand for outbound tourism using competitiveness indices. *Annals of Tourism Research*, 56, 65–79. <https://doi.org/10.1016/j.annals.2015.10.004>
- Smyth, R., Nielsen, I., & Mishra, V. (2009). 'I've been to Bali too'(and I will be going back): Are terrorist shocks to Bali's tourist arrivals permanent or transitory? *Applied Economics*, 41(11), 1367–1378. <https://doi.org/10.1080/00036840601019356>
- Song, H., & Lin, S. (2010). Impacts of the Financial and Economic Crisis on Tourism in Asia. *Journal of Travel Research*, 49(1), 16–30. <https://doi.org/10.1177/0047287509353190>
- Srinivasan, P., Kumar, P.S., & Ganesh, L. (2012). Tourism and economic growth in Sri Lanka: An ARDL bounds testing approach. *Environment and Urbanization Asia*, 3(2), 397–405. <https://doi.org/10.1177/0975425312473234>
- Wang, Y.S. (2009). The impact of crisis events and macroeconomic activity on Taiwan's international inbound tourism demand. *Tourism Management*, 30(1), 75–82. <https://doi.org/10.1016/j.tourman.2008.04.010>
- Wahyuningtyas, N., Tanjung A., Idris I., & Dewi, K. (2019). Disaster mitigation on cultural tourism in Lombok, Indonesia. *GeoJournal of Tourism and Geosites*, 27(4), 1227–1235. <https://doi.org/10.30892/gtg.27409-428>
- Wasiatullahma, & Rohmawati, H. (2021). Multicollinearity in Tourism Demand Model: Evidence from Indonesia. *Economics Development Analysis Journal*, 10(1), 16.
- Xie, J., & Tveterås, S. (2020). Economic drivers for the Chinese tourists. *Scandinavian Journal of Hospitality and Tourism*, 20(2), 110–125. <https://doi.org/10.1080/15022250.2020.1734076>
- Yazdi, S.K., & Khanalizadeh, B. (2017). Tourism demand: A panel data approach. *Current Issues in Tourism*, 20(8), 787–800. <https://doi.org/10.1080/13683500.2016.1170772>
- Zhu, L., Lim, C., Xie, W., & Wu, Y. (2018). Modelling tourist flow association for tourism demand forecasting. *Current Issues in Tourism*, 21(8), 902–916. <https://doi.org/10.1080/13683500.2016.1218827>

THE MEDICAL TOURIST PRODUCT OF THAILAND: KEY FACTORS AND PROMOTION ON RUSSIAN-SPEAKING MARKETS

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Abstract: Based on the results of analyze the Thai national medical tourism product's positioning on Russia market to offer the principal guidelines for development the marketing strategy of Thai medical services at Russia markets. The article is based on the data of a Russian 2020 survey, at the same time, it tracks the dynamic trend of consumer preferences since 2017. Identified key principles of health tourism commercialization in Thailand under the conditions when this tourism sector needs to be reformatted due to post-Covid conditions, assessed the efficiency of Thai medical tourism promotion on Russian-speaking markets. Recommendations for the modernization of Thailand health tourism product in terms of its constituent services, marketing, infrastructure and investment support, pricing, promotion, taking into account current trends in the global and Russian tourism markets are given.

Key words: medical tourism, healthcare, medical services, insurance, Thailand, Russia

* * * * *

INTRODUCTION

The scope of this study is directly related to a number of problems observed at the current stage of Thailand's economic development. Overcoming these problems will contribute to not only strengthening of the country's competitiveness and its socioeconomic system, but also to provision of additional, brand new resources needed for the nation's progress.

First of all, the unevenness of Thailand regions' infrastructural development has been leading to the sectoral imbalance in the economy and it also activates the interregional exchange of the production factors (capital, resources, labor). At the same time, medical tourism clearly demonstrates the ability to quickly form powerful export-oriented clusters in the regions with slower development, thus the latter can become the centers for attracting both domestic and foreign investments, connecting the regional economic systems to the international flows of finance, tourists, innovations and various technologies. Secondly, there is clearly a need in Thailand to modernize the system of relations between the economic center and the regions. The related conceptual principles have already found their reflection in the National Strategy of Thailand for 2018–2037 (National Strategy Committee, 2017) which is focused on the growth of regional self-sufficiency, formation of strategic profit zones and regional resources being accumulated for solving the local social and economic problems. Third, diversification of Thailand's national economy overall and its inbound tourist flows' diversification in particular have been taking place recently primarily due to the growing variety of inbound tourism types. This trend has made it possible to add many new countries to the process of Thailand's inbound tourist flow generation. Table 1 and 2 clearly show which countries remain to be of strategic importance for Thailand's tourism sector.

Table 1. 15 major nationalities for tourism in Thailand, as of 2019, % (Source: www.thaiwebsites.com)

	Country	%		Country	%
1	China	58,6	9	Hong Kong	1,32
2	Russia	5,82	10	Taiwan	1,01
3	Japan	5,06	11	France	0,95
4	Korea, R.	4,21	12	Germany	0,84
5	India	3,27	13	Ukraine	0,61
6	Vietnam	3,16	14	USA	0,5
7	UK	1,92	15	Malaysia	0,27
8	Indonesia	1,63	Others		18

Table 2. Percent changes in the country shares of visitors to Thailand between 2015 and 2019, % (Source: www.thaiwebsites.com)

	Country	%		Country	%
1	India	91,9	9	Japan	30,7
2	Russia	67,8	10	Hong Kong	22,7
3	Cambodia	56,8	11	Indonesia	22,4
4	Laos	49,6	12	Malaysia	21,7
5	China	38,5	13	Germany	12,7
6	Vietnam	38,5	14	France	8,63
7	Korea	37,5	15	UK	4,97
8	USA	34,6	16	Taiwan	3,67
			All countries		32,3

Fourth, despite the now relatively low share of medical services in Thailand's export structure, its recreational potential as well as its ability to generate medical innovations will make it possible to effectively implement such medical innovations in almost any province of the country (Wilson, 2020). Fifth, current global socioeconomic trends associated with the ongoing scientific and technological progress, aggravation of multiple global problems of mankind (including the

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consequences of the coronavirus pandemic), on the one hand, also force Thailand to form additional clusters concentrating on the form of creating, among others, tourist products in the field of medical tourism. On the other hand, the current global dynamics requires even prompt implementation of the measures which would modernize the existing system of medical tourism in Thailand, associated, for example, with the inevitability of medical services digitalization, servicing of both domestic and foreign patients, changing consumer preferences and population ageing as well as formation of the concept of active longevity (Gupta, 2004). Finally, health as such is an important economic category which characterizes not only the level of material well-being of a country's population, its innovative potential, social capital, but also the quality of national labor resources along with their ability for reproduction; quality and quantity of regional demand and consumption. In other words, it is a complex combination of parameters which reflects both long-term progress and the specificity of the current stage of socioeconomic progress in any given country (Aizura, 2019). On the other hand, population of the Russian Federation (same actually applies to some other post-Soviet countries with Russian-speaking population) has a big (and growing) potential for health and medicine services consumption. A very important feature of these markets is their orientation and strong belief in foreign (first of all Western but then also Asian) medical services and their quality. This is the most specific feature of the Russian-speaking markets of the medical services, and in this they differ from the markets of Western Europe, USA or Japan (Turner, 2007). In this context, Thailand gets a solid chance and an opportunity to attract thousands of consumers from these markets, thus providing a stable national/regional income from the inflow of medical tourists. The main purpose of our research stems from the following research objectives:

- to identify the role of various specific medical services (plastic surgery, cosmetology and beauty industry) in differentiation of Thai national tourist product;
- to develop, ground and offer special medical tours to Thailand for the citizens of Russia (and other Russian-speaking countries);
- to evaluate the limits of demand for Thai national medical tourist product in Russia that would impact promotion and sales of Thai medical tours in the country;
- to develop a strategy for international marketing of Thai clinics taking into account the key specific features of medical services sales at Russian markets.

MATERIALS AND METHODS

Back in 2019, PharmaBoard placed Thailand into the top five of countries providing the best opportunities for foreign patients and investors in the medical sector (Table 3). Thus, medical tourism in the country has shown relatively high growth rates in recent years.

Table 3. Top-10 global destinations in medical tourism by value (in mln USD, as of 2019) (Source: <https://pharmaboardroom.com>)

	Country	mln USD		Country	Mln USD
1	USA	3500	6	India	450
2	Korea, S.	655	7	UK	350
3	Turkey	600	8	Malaysia	350
4	Thailand	600	9	Mexico	350
5	Germany	575	10	Iran	315

According to the official data, 20% of all foreign tourists come to Thailand with medical tourism purposes. In 2019 alone, 1.85 mln tourists visited Thailand for medical purposes, 33% of them were US citizens, 29% were representatives of China and 18% were tourists from Japan. At the same time, the interest in medical tourism in Russia is quite high, this can be somewhat explained by the unsatisfactory state of healthcare in the country. According to the research carried out by Russian sociologists, 53% of the citizens surveyed assess the healthcare status in Russia as "bad," "satisfactory" was selected by 40%, and "good" -- only by 5% of the Russian respondents (Vetitnev and Dzubina, 2018). Moreover, about 34% of Russian doctors consider healthcare in Russia to be unsatisfactory. Wealthy citizens in Russia now choose other countries that provide much higher levels of medical services (Table 5), in particular, Israel - 45% of all destination choices, and Germany - 20% of all destination choices (Table 6). These two countries have become so popular as medical tourism destinations for cultural and geographical reasons at the same time: relative proximity means quick travel, either by air, or by land, while presence of large Russian-speaking diasporas in both countries assume minimal language barriers for the incoming patients.

The most popular among the Russian medical tourists today are the medical services that require the most advanced equipment and technologies used for diagnostics, treatment and comfortable long-term medical rehabilitation (cardiology, cardiac surgery, transplantology, eye surgery, oncology, orthopedics, plastic surgery, neurosurgery) (Table 4).

Also, the Russians tend to prefer treatment with the use of various natural resources: thermal waters (63%), mineral waters (61%) and medicinal mud (46%); general therapy (35%), cosmetic procedures (32%), wraps (26%) and inhalations (18%) being the most popular (Daykhes et al., 2020). Despite the factor of geographical distance (especially from the

Table 4. Comparison of the cost of major surgical operations in the United States and Thailand (in USD) (Source: BusinessWeek, 2019)

Procedure	Average price, USD		Procedure	Average price, USD	
	USA	TH		USA	TH
Major Surgery			Abdominoplasty	4500	3000
Coronary bypass surgery	130000	11000	Correction of the shape of the nose	3500	1200
Heart valve replacement	160000	10000	Liposuction	2500	1200
Angioplasty	57000	13000	Dental procedures		
Hip replacement	43000	12000	Cleaning	100	25
Replacement of a knee joint	40000	10000	Restoration of tooth color	800	100
Hysterectomy	20000	4500	Tooth whitening	350	150
Spondylodesis	62000	7000	One implant	3500	2000
Cosmetic and plastic procedures			Amalgam filling	200	20
Breast enlargement	3500	2600	Metal Ceramic Crown	600	300
Breast lift	4000	2600	Ceramic crown	5500	470
Breast reduction	4000	2900	Treatment of the tooth canal	500	150
Buttocks implant	4000	4000	Metal Ceramic Crown	600	300

largest Russian cities with their huge tourist demand), Thailand has already offered some solid advantages as a medical tourism destination for Russian-speaking tourists: Russian-speaking diaspora residing in Thailand for years, regular transportation between Thailand and major Russian cities, absence of visa formalities, etc.

Table 5. Major reasons behind the popularity of outbound medical tourism in Russia (Medical Tourism – Russian Tourist Profile, 2018)

Major reasons	%
The cost of treatment	35
Range of services	32
Distance and location convenience	12
Recommendations of friends	12
Doctors recommendations	8
Advertising	1

Table 6. Major destinations in Russian medical tourism (Medical Tourism – Russian Tourist Profile, 2018)

Major destinations	%
European countries	39,8
Asian countries	18,3
Middle East	22,2
CIS countries	12,9
Other countries	6,8

Table 7. Medical services in Thailand popular among Russian Tourists (as of 2017 and 2020, compiled by the author)

Medical services	2017 %	2020 %
Regular health check	29	22
Manual therapy	21	17
Recovery after cosmetic surgery	14	11
Dental services	12	3
Cosmetic services (operable)	9	16
Body adjustment services	8	14
Childbirth (including prenatal and postnatal treatment)	3	11
Detox, body cleansing, retreat tours, etc.	-	7

Table 8. Key findings from the survey (compiled by the author)

	Finding	Author's comment
62%	know about the medical tourism potential of Thailand	The initial attitude of Russian tourists (even when they do not have personal experience) to the opportunity of medical tourism in Thailand is positive. Reputation of Thailand as a medical services destination is also positive.
41%	have positive attitude towards the medical treatment in Thailand	
27%	have personal experience of treatment or medical care in Thailand	
28%	have already received some information about the state of medical tourism in Thailand from reports and expert interviews	Traditionally, tours from Russia to Thailand belong to the mass market sector. To some extent, this limits the opportunities to purchase more individualized medical tours.
54%	noted that have never got any information on the opportunities of medical tours to Thailand	
36%	mentioned the following advantages of having medical treatment in Thailand: quality of care; level of servicing in medical institutions; comfort level during rehabilitation.	Still, Thailand is not seen as a destination for serious medical treatment and surgeries. The country is primarily perceived as a place for comfortable rehabilitation, regular health checkups, physical therapy, etc.
25%	noted the following advantage of having medical treatment in Thailand: technological quality of the equipment used during surgeries, treatments and diagnostics	
18%	noted that the cost of medical services in Thailand is too high and/or that Thai medical services are overpriced	Obviously, medical treatment in Thailand is chosen primarily by the representatives of the Russia's middle class, and for this social group, the price factor is of primary importance
41%	noted that Thai medical services are expensive, however, not overpriced	

Data collection has been carried out by means of a survey carried out on two large groups of people – Russians now living in Thailand (namely, in Bangkok and Pattaya), and secondly, Russians permanently living in Russia itself.

The study was conducted in January, 2020, that is, just before the start of the global restrictions on international travels associated with the coronavirus pandemic that have been seriously affecting the tourism sector later.

The total number of the respondents was 482: of them, 274 people were from Russia (all international travelers, all older than 18 and able to make their own, independent decisions about medical treatments, their own need for a medical treatment and their ability to travel). Data Collection Procedures: locations for the survey – hotels of different categories in various parts of the city. To meet the objectives of our study we have primarily focused on the hotels of high category and also on tourist information centers and medical tourism exhibitions (in Moscow, Yekaterinburg, and Rostov-on-Don).

RESULTS AND DISCUSSION

Key data and results from our 2020 survey are presented in Table 8. Previously, the author of this article has already carried out similar research into the perceptions and attitudes to medical tourism in Russia (Ushakov et al., 2019), and there are some time changes and differences that we would like to bring to the readers' attention:

- the number of respondents with the awareness about Thailand's potential in medical tourism grew from 56% up to 62%. Similar trend has been demonstrated by the number of the Russians with personal experience in using medical services in Thailand (grew from 15% to 27%);

- some growth is observed in the share of the respondents who received expert information about the medical tours to Thailand. This indirectly confirms that Thailand's efforts on promotion of such tours in Russia have been relatively efficient. Yet, the share of those with no access to such expert information and those not aware of medical tours to Thailand as such is still very high;

- a decrease is observed in the share of the respondents appreciating the quality of rehabilitation and comfort in Thailand (36% as compared to 42% previously). At the same time, the share of those convinced in technological advancement of the medical services in Thailand somewhat grew;

- analysis of the respondents' demographics (income, travel experience, level of monthly spending, readiness to spend a certain amount on medical services) demonstrates that the share of the middle class among those inclined to buy medical tours to Thailand is still very significant. At the same time, European countries, USA and Israel remain to be popular as high-income destinations in medical tourism.

- the share of those convinced that medical services in Russia are worse than those in Thailand went down and reached 9%. At the same time, a slight increase (from 36% to 38%) is observed in the share of those aware of the possible negative consequences from the medical treatment in Thailand. Considering that the overall number of those with personal experience of medical tourism in Thailand grew not that significantly, this can be interpreted as a rather bad sign.

Table 3 below overviews the most popular types of medical services (those already used by Russian tourists in Thailand or those that the Russian tourists would like to try).

In our opinion, significant changes in the statistics above have been predetermined by the following trends:

- first of all, detox and retreat programmes have gained much popularity in Russia recently. In case of Thailand, such tours could be also easily combined with vacationing in the mountains and/or on the seaside, doing sports outdoors, yoga practice and meditation and even educational tours. Also, prenatal and postnatal care in Thailand is usually organized in very comfortable conditions (which always include a top-quality hotel), while in Russia such services are either not provided (in some regions) as such, or are much more expensive than in Thailand;

- secondly, with the internationally growing popularity of plastic surgery and other body/facial improvements, the leadership of Thailand has been gradually acknowledged in many countries globally. Thus, today Thai medical services are seen as much more trustworthy than similar procedures carried out in Russia (even though in Russia they can be much cheaper). Besides, some of the medicines and medical procedures (primarily those of purely Asian production) are now being actively promoted by Thailand's clinics while they are still banned in Russia (this includes separate types of fillers, bioadditives, low-temperature procedures, treatments methods based on the use of magnetic and electric waves, hormone injections, stem cells injections and so on) (Lunt and Carrera, 2010);

- thirdly, some of the services demonstrate decreasing popularity, primarily due to the growing spread of similar services in Russia itself. This concerns dentist services (today in Russia such services are already offering an adequate level of both technology and comfort while being somewhat cheaper than in Thailand). Interestingly, this also concerns such typically Thai services as manual therapy and spa (those become easily accessible all over the world and often cost less at home). In other words, in some cases, medical tours to Thailand have become not feasible, from the standpoints of both time and cost (Carrera and Bridges, 2006). Moreover, many of our respondents do not really see spa and manual therapy as part of medical services, for them, these are usual leisure activities.

On the one hand, the described changes emphasize that many Russians perceive treatment in Thailand only as one more service that accompanies the rest of their tour. This fact opens up some opportunities to optimize the tourist offer at the Russian market. For example, short-term tours for the whole family, apart from the standard beach element, should also offer additional activities — to correct posture, treatment of platypodia, procedures normalizing blood pressure or skin condition, etc. On the other hand, it becomes obvious that the Russians today are more interested in purchasing more high-tech, “fashionable”, trendy medical services that are associated with the highest qualifications of medical specialists in Thai clinics, most advanced equipment and profile treatment with high added value overall. Problems faced by Russian tourists serviced

Table 9. Major problems faced by Russian tourists when using tourist medical services in Thailand (as of 2017 and 2020, compiled by the author)

Major problems	2017, in %	2020, in %
language difficulties (in documents)	36	35
language barrier (in personal communication)	21	9
high prices	19	26
difficulties with making a choice	16	15
difficulties with further use of Thai documents in Russia	15	14
turnover of doctors in Thailand	9	8
too narrow specialization of doctors	6	8
lack of trust; doubts about professional qualities of doctors and consumer rights protection	2	13
spread of negative information about medical treatment in Thailand and low quality of Thai medical services	1	7

Russian tourists in Thailand are forced to sign some documents that basically waive all the responsibility of Thai doctors and other medical staff) (Table 9). Lack of a Russian version in clinics' documentation also contributes to the problems with reputation and image. At the same time, we can also note some positive shifts.

The Russians today have much less problems and fears when it comes to communication in Thailand, for example. On the other hand, the share of those who fear to purchase medical services in the Kingdom due to specificity of processes organization, niche expertise of doctors and high rates of their turnover in clinics remains unchanged.

CONCLUSION

The results of our 2020 survey concerning the potential of the Russian market to supply customers to Thailand's medical tourism market and also the prospects of Thai medical tourist product promotion on other Russian-speaking markets overall confirm that quality of medical infrastructure (equipment in wards, comfort of stay, quality of meals provided) as well as quality of servicing (nursing, care, opportunities of using in-clinic/hospital infrastructure) are gradually losing their rankings as the [previously] decisive factors behind choosing Thailand as a destination for medical tourism.

At the same time, quality of medical infrastructure in Russia itself is gradually improving (new private clinics emerge in many large cities, many Soviet-age spa retreat centers are being heavily modernized, brand new spas and retreats are being

opened offering a wide variety of health programs with a range of durations and costs). Thus, for many Russian tourists their own country often becomes a medical tourist destination, primarily due to the cost factor. Therefore, promoting Thai medical tourist product as an alternative should not be based solely on a “nice package” of near-medical services, this simply is not rational any longer. Moreover, packaged health tours (covering traditional tourist services + detox, general health treatment, meditations, yoga, etc.) are actually relatively new for Thailand, this tourism direction is now being actively developed (with direct participation of Russian tourism businesses). While Russia as a country is well familiar with this type of business activity, the history of many Russian health resorts covers over 200 years, going back to the 19th century. Health resort infrastructure, in some state/shape or another, is actually present in every region of the Russian Federation (Tsymbal and Spa Consultant, 2014).

In other words, today Russia as a medical tourist destination is able to offer a wider range of locations and services under lower prices, while in Thailand the range of services is relatively limited and costs more than “back at home”. For example, special retreat programs in some niche hotels of Phuket or Chiang Mai may cost at least 200 USD per person per day (see Detox and Wellness at the Sanctuary Thailand, 2021). Back in Russia, the same price tag is applicable to the most prestigious health resorts located in the outer Moscow or in the Caucasus. In our view and taking into account the current situation on the Russian tourist market, promotion of Thailand’s medical tourism should be based on a flexible combination of the widest offering — covering various high-tech services, medical and near-medical services and full rehabilitation. For example, rhinoplasty, lipoplasty or childbirth, heart-related surgeries, liver recovery programmes, etc. should be combined with servicing options of several clinics and further rehabilitation/accommodation in the hotels of various categories. Thus, tourists may individually adjust the “from-to” price range for each specific product/service in a package (for example, doctor’s visit may be in some cases substituted by an online consultation). For many Russian tourists, one of the most unpleasant surprises while vacationing would be to have extra spending. Many of them would easily agree to pay extra 1000-2000 USD but while still purchasing a tour back in Moscow (or other city), while paying exactly the same amount being already on a Thai resort is perceived to be extremely inconvenient (Reshetnikov et al., 2019). Taking this purely psychological peculiarity, Thailand’s medical tourism businesses should make sure the initial pricing offer is trustworthy enough and does not entail any sudden changes once the tourist travels to Thailand. At the same time, Russian tourists should have the ability to manage/adjust the total price for a tour (changing, for example, the hotel category, choosing a less known clinic, selecting between several categories of wards and so on). This would provide them with a convenient capacity to manage both their spending and their expectations.

These days we can obviously observe an internationally growing popularity of such medical tourist activities as detox programs, anti-aging tours, weight and eating behavior management, cosmetology for different age groups, mental health treatment (including yoga, meditations and anti-stress practices), post-surgery and post-Covid rehabilitation, and Russia is not staying outside of these trends. Orienting on Russian-speaking tourists, Thailand needs to support the new type of hospitality, with the emphasis on a stronger niche specialty of hotels. Such hotels should not be seen as “yet another spa hotel” (as we’ve mentioned earlier in Russia spa services are not perceived as a serious type of treatment but rather as a nice bonus to a vacation/tour). Of course, all of such changes would require not only extra efforts on the side of tourism businesses and hotels, but also government support. The government of Thailand needs to develop and introduce new rules of tourism services certification. The list of regions specializing in tourism services of this type may be also revised. Investment stimulation should cover the following aspects of Thai medical tourism development: the most expensive and technologically advanced medical equipment; unique services provided by medical staff; licensing and certification procedures (based on: Alsharif et al., 2010).

From the very beginning investors should be ready to know that spending in such hotels and other facilities would be much higher than investment in a regular, standard hotel. Investors and business owners also need to keep in mind that under higher spending and extra operational costs the profitability of such health resorts (considering their orientation on the middle class of Russian-speaking travelers the price range needs to be limited to 100 USD per person a day maximum) would be relatively low. This automatically means that the Government would need to provide extra preferences (preferential crediting programs in the first place) in order to support the long-term prospects of these hotels of a new type. Besides, such hotels can be situated in places away from popular tourist locations. This would help with reducing spending on personnel, food products and medical services as well (Heung et al., 2010). Finally, such hotels should be getting financial assistance from the Ministry of Healthcare (namely, such assistance should cover part of the medical equipment costs, personnel training and other important expenses). Interestingly, popularity of this direction in the hospitality sector can be strengthened through post-Covid reformatting: reeducating the personnel fired from other hotels due to bankruptcy, reorienting the unprofitable standard hotels taking into account the latest trends in the changing internal and international demand for medical services in tourism. The 2020-2021 pandemic as such has seriously increased the interest in comfortable, socially isolated leisure with direct access to medical staff, and this interest would, most probably, be a long-term one. We can also expect that once the healthcare situation is normalized, in the world overall and in Thailand in particular, many hotels and resorts (especially those of higher categories) would be forced to change their usual concept and strategy.

First and foremost, approaches to hotels’ capacity in terms of room numbers will be certainly revised. At the same time, reducing the total number of rooms, hotels need to make sure they are providing much more extra services for the now smaller number of hotel guests (as this would keep income on the previous level). Such extra services provided in a hotel should definitely include medical ones. Since many elite-class hotels are anyway located near famous medical centers and hospitals, medical staff may work part-time (or an hourly basis) in these hotels. Besides, since hotels would be forced to reduce their capacity, part of the already available facilities can be turned into medical departments and/or offices (one floor or even a separate building in case of larger resorts). We need to mention here that these processes are already taking place, actually. Take Ban Souchada Resort in Saraburi, for example (see: <https://www.souchadaresort.com/blank-ymnws>). Several years ago it used to be a standard golf center, and in the last two years it gradually turned into a small health resort, now offering 1-2-3-

day health treatment tours with detox, fitness and anti-stress components. Initially, these services were oriented primarily on the wives of golf players coming from Bangkok but now the resort has seriously widened its target audience.

Similar programs and tours are offered in the well-known Chiva-Som in Huahin. Overall, in the last 2-3 years around 10 so-called retreat hotels have emerged (or been reformatted) in the vicinity of Bangkok. Since thermal waters and hydrotherapy overall are highly popular among Russian and Russian-speaking tourists, Thailand should pay more attention (on both business and governmental levels) to the opportunities of promoting own thermal waters among current and potential tourists. Larger part of the Kingdom (mainly Western and Northern regions) is located in the highly seismic, mountainous zone which has a lot of natural thermal springs. Most of them are located in Chiang Mai, Chaing Rai, Kanchanaburi, Kamphaeng Phet and Rayong provinces of Thailand. In many cases healing properties and potential of these springs are not yet studied at all. Thus, relevant ministries should organize (by own means or inviting foreign experts) the chemical analysis of the thermal water properties and also estimate its volumes. On the basis of this data, new resort zones may be formed in the country, being oriented on thermal treatment and other elements of hydrotherapy. Obviously, this whole process is quite expensive and a long-term one, however, Thailand really has the potential to create a brand new tourism subsector from scratch, and this subsector would be on the borderline between tourism and healthcare. Besides, those thermal springs that are already developed and known in Thailand are already overcrowded by local, Thai tourists on a nearly daily basis. Our final recommendation on promotion of Thai medical tourist product on the Russian market concerns arranging more active cooperation between Thailand's authorities and the Russian Association of Resort & Spa Treatment since the latter public body has the capacity to promote not only Russian resorts but is also engaged in state-level systematization of the related data on the world tourism resources. To simplify the process of choosing the right place for diagnostics and treatment, we consider it logical to propose a national system for assessing the achievements of hospitals and clinics in various areas of medical science and healthcare. Availability of such a national system would allow having real-time hospitals' rankings based on the number of patients admitted, treated and cured, patient reviews, compliance with international and national standards, and other parameters. This official rating can be determined every year or every two years, for example. Obviously, it should be made freely available, so that any tourist from any country of the world can make their well-grounded choice of a hospital/clinic operating the most relevant and useful information. Finally, there must be some sort of a system for adapting Thai medical documents and diagnostic standards to the standards and regulations in other countries. This would not actually require significant expenditures, and each hospital can implement such an interpretation system independently, after a series of consultations with Russian specialists, while such consultations can be relatively easily arranged in the format of a conference (offline or through teleconferencing).

REFERENCES

- Aizura, A. (2019). Where Health and Beauty Meet: Femininity and Racialisation in Thai Cosmetic Surgery Clinics. *Asian Studies Review*, 33(3), 303-317. <https://doi.org/10.1080/10357820903153707>
- Alsharif, M.J., Labonté, R., & Zuxun, Lu. (2010). Patients beyond borders: A study of medical tourists in four countries. *Global Social Policy*, 10(3), 315-335. <https://doi.org/10.1177/1468018110380003>
- Carrera, P., & Bridges, J. (2006). Globalization and healthcare: understanding health and medical tourism. *Expert Review of Pharmacoeconomics and Outcomes Research*, 6 (4), 447-454. <https://doi.org/10.1108/09526861111160580>
- Daykhes, A., Jakovljevic, M., Reshetnikov, V., & Kozlov, V. (2020). Promises and Hurdles of Medical Tourism Development in the Russian Federation. *Frontiers in Psychology*, 23.06. <https://doi.org/10.3389/fpsyg.2020.01380>
- Gupta, H.D. (2004). Medical tourism and public health. *Peoples Democracy*, 27(19), Access:11.03.2021. http://pd.cpim.org/2004/05092004_snd.htm
- Heung, V.C.S., Kucukusta, D., & Song, H. (2010). A Conceptual Model of Medical Tourism: Implications for Future Research. *Journal of Travel & Tourism Marketing*, 27(3), 236-251. <https://doi.org/10.1080/10548401003744677>
- Lunt, N., & Carrera, P. (2010). Medical tourism: Assessing the evidence on treatment abroad. *Maturitas*, 66(1), 27-32. <https://doi.org/10.1016/j.maturitas.2010.01.017>
- Reshetnikov, V., Arsentyev, E., Boljevic, S., & Jakovljevic, M. (2019). Analysis of the financing of Russian healthcare over the past 100 years. *International Journal of Environmental Research and Public Health*, 6, 1848. <https://doi.org/10.3390/ijerph16101848>
- Tsymbol, N., & Spa Consultant. (2014). *Overview of Wellness Tourism in Russia*. Access: 02.03.2021. <https://www.slideshare.net/weldest/overview-of-wellness-tourism-in-russia-by-nina-tsymbol-2014>
- Turner, L. (2007). 'First World Health Care at Third World Prices': Globalization, Bioethics and Medical Tourism. *BioSocieties*, 2(3), 303-325. <https://doi.org/10.1017/s1745855207005765>
- Ushakov, D., Yushkevych, O., Ovander, N., & Vyhovskiy, V. (2019). The strategy of Thai medical services promotion at foreign markets and development of medical tourism. *Geojournal of Tourism and Geosites*, XII, 27(4), 1429. <https://doi.org/10.30892/gtg.27426-445>
- Vetitnev, A., & Dzubina, A. (2018). Spaservices and sanatorium-resort complexes of Russia Tourism. *An International Interdisciplinary Journal*, 61(2), 187-200.
- Wilson, A. (2020). Medical Tourism in Thailand. *Asian Biotech*, Chula press. <https://doi.org/10.1515/9780822393207-006>
- *** Baan Soudchada Resort and spa (2021). Programs & Packages, Access: 02.03.2021. <https://www.soudchadaresort.com/blank-ymnws>
- *** Detox & Wellness at the Sanctuary Thailand (2021). Access: 13.06.2021. <https://www.thesanctuarythailand.com/detox-packages-5-nights.html>
- *** Medical Tourism – Russian Tourist Profile (2018). Access: 13.06.2021. <https://canarymedicalkey.com/health-tourism/profile-russian-medical-tourism>
- *** National Strategy Committee (2017). *National Strategy for 2018–2037. Summary*, Access: 13.06.2021. <http://nscr.nesdb.go.th/wp-content/uploads/2019/10/National-Strategy-Eng-Final-25-OCT-2019.pdf>
- *** Thailand Medical News (2019). *Thailand Medical Tourism Industry On A Downward Path*. Access: 13.06.2021. <https://www.thailandmedical.news/news/thailand-medical-tourism-industry-on-a-downward-path>
- *** Top–10 Global Destinations of Medical Tourism (2019). Access: 13.06.2021. <https://pharmaboardroom.com/facts/thailand-medical-tourism-snapshot>
- *** Tourism statistics for 15 Major Nationalities (2019). Access: 13.06.2021. www.thaiwebsites.com

TOURISM IN EAST JAVA, AS A USUAL BUSINESS

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Abstract: Covid-19 has had many socio-cultural, economic, and psychological impacts on various tourism stakeholders. The study used in this article is a qualitative exploratory study using the phenomenological method. This study's aim is on tourism activities that took place during the covid 19 periods to the new normal was carried out through interviews and observations in 24 Malang tourism managers and 30 residents. The method used to answer the objectives is a case study that focuses on the manager and the tourism community in Malang Raya. Determination of research informants using the snowball design. At the end of the study, several adaptation patterns carried out by tourism managers were refocusing on their market segments. Following the health protocol, the manager captures local tourists to maintain the capital's liquidity; they must ensure post-crisis periods.

Key words: new normal, tourism business, covid-19 impact, resilience

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INTRODUCTION

Tourism is a sector that has been affected during Covid-19 due to travel restrictions policies (Nepal, 2020). The younger generation sees this phenomenon as a period before covid and after covid (Friedman, 2020), and the Indonesian government responded with the New Normal policy (Fajar et al., 2020). Learn from the experiences of China, Hong Kong, Taiwan, and South Korea about the covid pandemic (Nepal, 2020), the condition of the tourism business is critical because many communities are threatened with losing their livelihoods in an unprecedented way (Brouder et al., 2020; Nepal, 2020; Tsao and Ni, 2016). East Java Province is one area with a high level of pandemic vulnerability in Indonesia (BNPB, 2020). On this basis, all activities related to the crowd temporarily stopped. As a result, Malang, which became a tourist barometer in East Java during the covid pandemic, stopped all tourism activities. However, entering the New Normal period, several prominent destination locations in East Java were opened in July 2020, resulting in a surge in tourist arrivals. Previous research has explained that a pandemic will impact areas that depend on the tourism sector for their livelihoods (Ioannides and Gyimóthy, 2020; Nepal, 2020; Tsao and Ni, 2016). Referring to the fact that now tourism is back and adjusted to health protocols, they make adjustments by shortening the product chain and narrowing the market coverage (Brouder et al., 2020). To fill the research gap in the tourism sector during crisis period, this research is based on the tourist experience (Cohen, 1972; Graburn, 1983; Hall-Lew and Lew, 2009). This paper aims to analyze tourism activities on the tourism barometer of East Java, Indonesia, in the New Normal Era. This approach can broaden the understanding of tourism managers' adaptation patterns during the covid 19 periods and help determine development opportunities and appropriate implementation strategies to prepare managers better.

LITERATURE REVIEW

The Covid-19 outbreak triggered unprecedented mobility restrictions on local, regional, and global scales. The closure of many communities and the imposition of restrictions on the economy's rotation worldwide (Ioannides and Gyimóthy, 2020). If a few months before March 2020, some places get many visits (Sharma, 2020), now the place is tranquil (Kimmelman, 2020). Museums, hotels and restaurants, beaches, hiking trails, and significant events such as concerts, matches of all sizes have been postponed or canceled. Undoubtedly, the economic impact, especially on localities or even countries heavily dependent on tourism arrivals, has been catastrophic. The impact of this crisis has also affected the economies of millions of households around the world. Due to the disruption to the economy, it will be a long time before travel patterns return to pre-crisis levels. Trip cancellations also cost the transportation business a considerable cost (Ioannides and Gyimóthy, 2020). One form of business travel also affects the tourism industry. To comply with health protocols, several meetings have shifted into virtual forums and are a new norm for many businesspeople.

With the emergence of Covid-19 and the imposition of restrictions to combat the virus's spread, people are starting to think that we are entering a new era. This era built the perception that prevention efforts were more important in an economic growth plan. Others develop the perception that they will not leave their comfort zone until the crisis has passed. This situation leads us to think that there is a possibility of a post-crisis era in which tourist mobility will experience significant and long-

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term changes. For example, destinations with high population density will be avoided and areas will be preferred to areas that are relatively quiet to minimize risks (Ioannides and Gyimóthy, 2020). This new pattern will re-strengthen domestic tourist destinations as the leading destination they believe. Tourism is an activity related to travel between regions. In the Covid-19 pandemic, this character will impact the acceleration of the spread of the virus. The preliminary study states that tourism studies during this time of crisis are not only limited to how to deal with it and resume it but should also consider refocusing (Sigala, 2020). The tourism recovery and refocusing strategy during this crisis period were carried out in three stages, namely (1) response, (2) recovery, and (3) restart (Sigala, 2020). The response stage describes how the assessment falls within the scope of tourist motives, security, and system stability. While at the recovery stage, the study focuses on the scope of segment refocusing, system digitization, and increasing the government's role in regulating regulations. The final stage in restarting the study focuses on the scope of new tourism standards, promotions, and digital systems implementation.

During the Covid-19 emergency, tourists have experienced themselves, stories from people they know about health risks on their way. This experience had a significant impact on their attitudes, intentions, and future travel behavior. Preliminary studies show that traumatic experiences will impact behavior (Baxter and Diehl, 1998). This study provides a view of understanding the behavior and attitudes of tourists. Trauma to the risk of exposure to covid-19 can be reflected in preliminary studies examining the pandemic's impact on tourism motives. Travelers perceive trauma as the risk of being exposed to a pandemic that will impact decision-making processes, future intentions, and segmentation profiles (Aliperti and Cruz, 2019; Araña and León, 2008; Dolnicar, 2005). Another study also interpreted the impact of tourists' perceptions of local managers' readiness in times of crisis on their travel intentions (Pennington-Gray et al., 2014).

The preliminary study is an essential consideration for predicting future tourism demand and developing an appropriate recovery strategy (Rittichainuwat, 2013). These considerations can differ based on tourists' characteristics, which include factors of origin, destination, age, gender, and different travel typologies (Rittichainuwat, 2013).

However, crisis information communication, and social media, which are essential variables in this digital era, seem to have wholly neglected the impact (Sigala, 2020). Tourists have the right to know about the factual crisis conditions for their consideration in planning a trip. Information about vaccine developments can also provide a sense of security and benefit the tourism business (Sigala, 2020). The implementation of large-scale social restrictions aims to reduce the risk of spreading Covid-19. These restrictions include reducing social contact, avoiding crowds, or minimizing travel. During the restriction, people looked for the antidote to travel longings and became accustomed to virtual services. This pattern reflects the increasing digital consumption as a sign of resetting values in their lives (Pieters, 2013). In order to meet the demands of a new value reorientation in society, tourism managers are competing to ensure the safety of employees and customers, brand image, and the sustainability of their capital. To start over, tour operators are redesigning travel experiences to orientate towards smaller tourist groups, outdoor activities, and personal experiences according to distance restrictions and social gatherings, and tourist expectations (Sigala, 2020). They raise hygiene standards by adopting new standards. To fulfill this, some of them have collaborated with local health offices to ensure the multiplication of new operating standards. On this basis, many tour operators promote the hygiene standards of their tours.

Restaurants, hotels, airports, public spaces re-engineer their operations to make them contact-free or contactless or more e-transaction-oriented (Sigala, 2020). The new operating standards that are enforced refer to health protocols, such as the availability of disinfectants, hand sanitizing equipment, and front officer standards. The government also participated in tourism management during this time of crisis. The government feels responsible for the restrictions imposed and impacts tourism activities (Sigala, 2020). Provision of stimulus and intervention packages (e.g., tax breaks, subsidies, deferred payments) to ensure the continuity and continuity of tourism managers and their workers.

METHODOLOGY

The study used in this article is a qualitative exploratory study using the case study method. The study's focus on tourism activities during the covid 19 periods to the new normal period was carried out through interviews and observations in 24 Malang tourism managers and 30 residents. These methods are suitable for explaining how tourists experience an impact on tourism managers' responses in crisis periods (Ioannides and Gyimóthy, 2020; Nepal, 2020; Tsao and Ni, 2016). The interactive analysis model is used for continuous data collection, starting from the data collection stage, data presentation, data reduction, and concluding (Neuman, 2013). This model enables iterative data mining that aims for in-

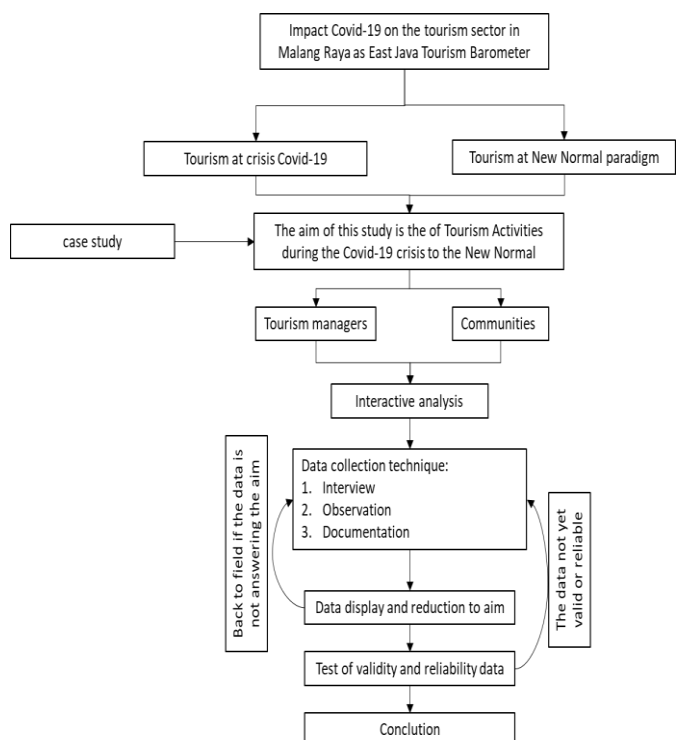


Figure 1. Research flowchart diagram

depth and accurate data interpretation (Figure 1). The background of the research location covers the area of Malang Raya (Malang City, Batu City, and Malang Regency). The first research is focused on the Batu City, a tourist reference for residents in industrial areas such as Surabaya Raya, Pasuruan, Probolinggo, and western areas of Malang, such as Kediri and Blitar. The next research area's focus is the southern Malang area, with marine tourism as its main attraction.

Determining the subject uses a snowball design, which begins with interviews with tourist visitors in Batu City. Interview data scrolls to other destinations to capture different points of view on several types of tourism.

RESULT AND DISCUSSION

Impact Covid 19 to Tourism and Regional Economic

Tourism has an essential role in several countries in the world. Tourism has great economic potential; this encourages many tourist destination countries to develop the tourism sector into a more comprehensive (international) market to attract more tourist visits to their countries. Tourism is believed to be able to encourage local economic growth. The impact of tourism on economic growth can occur in several ways. Tourism increases regional income, which can be used to provide essential community facilities (Croes, 2014). Increasing tourism will encourage the development of other industries in the economy through linkages between sectors, increase employment and income, and encourage technology spread (Haryanto, 2020). Travel for recreation or recreation is the leading destination for tourists in all regions of the world. Then, visit friends and relatives for health and religious, and business and professional purposes. Europe, Asia - Pacific, and America are the reference points for international tourism arrivals (UNWTO, 2020a). The arrival of international tourists has a significant direct & indirect economic impact on the economy in great numbers (WTTC, 2013). However, Covid-19 was caused by acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and first identified in Wuhan, China, in December 2019 to have a global impact, especially in the tourism sector. To reduce the spread of this pandemic, several countries have imposed large-scale social restrictions limiting international travel, banning all foreign visits; travel restrictions to places with confirmed cases (Haryanto, 2020). Other restrictions, such as suspending all commercial international flights, all travelers subject to a 14-day quarantine, and all visa operations suspended (Bloomberg, 2020), even Europe has closed 93% of its borders for international tourism (UNWTO, 2020b). It is estimated that this pandemic's impact on the world economy will result in a decline of 3% (IMF, 2020). The global economic decline is due to the decline in economic turnover in the tourism sector. The suspension of international flights caused international flights to fall by more than half (Haryanto, 2020). Many airlines have implemented a seat distance policy between passengers to reduce passenger capacity (IATA, 2020).

The covid 19 pandemics has caused a 22% drop in international tourist arrivals during the first quarter of 2020 and could decline by 60% -80% throughout 2020 (UNWTO, 2020b). The latest data from the UNWTO show that tourist arrivals in March fell 57% after restrictions were implemented more broadly; this translates to a loss of 67 million international arrivals and an estimated US \$ 80 billion in revenue (exports from tourism). If this decline continues to 80% compared to 2019, it is estimated that foreign tourists will fall by 850 million to 1.1 billion, loss of export revenue of US \$ 910 billion to the US \$ 1.2 trillion, risky jobs of 100 to 120 million (Haryanto, 2020). This condition was also found in Malang Raya; the Association of Indonesian Hotels and Restaurants (PHRI) Malang City stated a significant decrease in the number of tourists from March to June and a sluggish market during entry to New Normal (Cahyono, 2020).

Learn Economy Resilience in Tourism Industry in Other Sites

The consequences of the global scale limitation caused by the COVID-19 crisis have baffled many practitioners, policymakers, and researchers (Miles and Shipway, 2020). Hall (2015) predicts that there is a possibility of a global pandemic that will have interrelated social, cultural, psychological, and economic impacts and lead us on unexpected paths. While there is growing speculation mainly in the mass media that a global pandemic could trigger radical changes in market behavior, studies show that the tourism industry is usually on a comeback (Ioannides and Gyimóthy, 2020). The study shows that the sector has extraordinary resilience to mitigate sudden disruptions in demand or supply (Novelli et al., 2018).

The case of the SARS epidemic in the early 2000s in China caused a drastic drop in tourist visits, but the destination quickly recovered (Zeng et al., 2005). Other examples include Thailand and Sri Lanka, which were devastated by the massive tsunami in the Indian Ocean in 2004; the government used the disaster as an opportunity to reorganize its territory, leading to new large-scale developments that quickly attracted international visitors to return (Cohen, 2011). If a tour is suddenly delayed due to something, such as a volcanic eruption or a terrorist attack, the travel agent will usually compensate by changing to another destination that offers similar attractions and facilities (Ioannides and Gyimóthy, 2020).

The impact of these mobility restrictions affects the sustainability of sectors related to transportation, such as tourism. Tourism sustainability is related to actors' resilience and adaptive capacity who can offer recovery options (Engle, 2011; Keskitalo, 2008; Tsao and Ni, 2016). In this case, the Covid-19 crisis could trigger the emergence of new business models and revenue strategies. Innovative and adaptive capabilities play a crucial role in post-crisis recovery (Engle, 2011); however, many tourism businesses suffer from a lack of innovation (Hjalager, 2002; Sundbo et al., 2007).

Small-scale tourism operators who are considered to be a vulnerable part have been shown to respond to the crisis with a more flexible way of supporting their communities (Domenico et al., 2010). Previous research has shown that rural tourism has better recovery prospects than urban tourism (Johannisson and Olaison, 2007). Tourism in rural areas can have a better recovery than in cities due to differences in their production chains. Rural tourism tends to have a shorter supply chain in its tourism activity component, so that it needs less cost. This condition contrasts with tourism in cities with longer supply chains, resulting in higher economic needs. In the case of Covid-19, cities with densely populated conditions are considered to have a greater risk of being selected as tourist destinations. Tourists choose villages that have a lower population density. This condition increases its competitiveness as a tourist destination. Learn from the experience of

epidemics that have occurred and how they are handled; for example, SARS was in the last case. Generally, this recovery is assisted through government intervention in making their environment attractive to investors through a series of incentives (Brouder, 2020). The Indonesian government prepares an aid package rolled out in stages to ensure economic sustainability, including the tourism sector (Trevel News, 2020). An example is a case in the Mediterranean region; because tourism is a strategic economic sector, the European Union devotes about a fifth of the COVID-19 funds for tourism (Nicolas, 2020). On a global scale, interventions like these aim to keep the capitalist market's logic alive (Fletcher, 2011).

New Tourism Paradigm in Malang as East Java Tourism Barometer

Malang became one of the destinations for foreign and local tourists before Covid 19. The variety of destinations and experiences this region offers is a factor for a tourist attraction (Purnomo et al., 2018; Rahmawati et al., 2020). The pattern of visits varies from short visits to long-term visits (Table 1) because apart from being a tourist area, Malang is also a reference for higher education in Indonesia. Most of the characters of tourists who come to Malang are those who are interested in the cultural form and natural beauty of the mountains, with the peak of the visit in the middle of the year (Figure 1). Those who have a taste and try character stay in Malang City and get offers from the inn manager to make a short one-day visit to Bromo-Tengger-Semeru National Park or Batu City. Some tourists also consider visiting the beauty of the south coast along the Malang Southern Crossing Route to become natural tourism.

Table 1. Tourism Typology in Malang (Source: Purnomo et al., 2018)

International Tourists: the majority come from Malaysia, and the rest from Singapore, Taiwan, Australia, and several European countries			
No.	Psychographics	Segmentation	Trends
1	Focus on enjoying the local culture	Retirement, Cocoon Travelers, Family Trip	<ul style="list-style-type: none">• <i>Online booking</i>• Travel agents facilitate the provision of accommodation• The natural beauty and culture of the people as the main attraction• Excavation of destination information through magazines, websites, or newspapers and completed with reviews of tourist destinations• Time and experience-oriented travelers
2	Focus on natural beauty	Single, Young travelers	
3	Those who travel based on specific and detailed information	Cocoon Travelers, Retirement	
4	Those who want to explore	Taste and Try	
5	Group trip	Field study, Family, Retirement, Honey Mooners	
6	Focus on documenting the natural beauty of local culture	Single, Young travelers	
Local Tourists: the majority are students who are currently studying in Malang City, and the rest are from Java (Jakarta), Bali, Kalimantan, and Sumatra			
No.	Psychographics	Segmentation	Trends
1	Focus on enjoying the local culture	Single, Young travelers, Family Trip	<ul style="list-style-type: none">• Online booking• facilitated by a travel agent• The natural beauty and culture of the people as the main attraction
2	Focus on natural beauty	Single, Young travelers	
3	Those who travel based on specific and detailed information	Cocoon Travelers, Retirement	
4	Focus on documenting the natural beauty of local culture	Young travelers, Single, Honey Mooners	

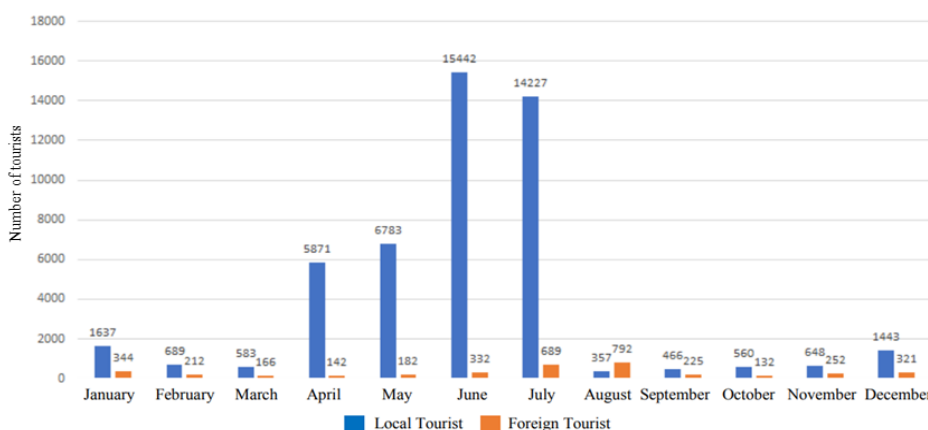


Figure 2. Number of tourists visiting Malang (in thousands) in 2019 (Source: Purnomo et al., 2018)

Large-scale social restrictions imposed from March to July 2020 paralyzed the tourism sector and affected tourism workers. However, amid this sluggishness, a bottom-line approach will provide opportunities for tourism sustainability through strengthening a more resilient and sustainable local economy (Cooper and Alderman, 2020). Redeveloping the focus of tourism on the pattern of short visits will accelerate economic regeneration (Milne and Ateljevic, 2001). The strategy used by Malang as a tourist destination is to focus on

attracting local tourists to restore and secure an economic safety net (Figure 3). At this stage, the manager applies a policy to refocus the market segment by adjusting the main attraction of the tour. The aim is to consider how to adapt to the new tourism pattern to accelerate and ensure its sustainability (Nepal Decree, 2020); therefore, they focus more on quality tourists (Nepal and Karst, 2017). For local tourists, this new normal policy is considered a cure for their burnout during the quarantine period. In the study of the sociology of tourism, the need for individuals to pursue their fantasies through personal travel is the basis for explaining how to motivate travel (Maslow, 1954) their needs are built from a taste for new experiences outside the familiar environment. Beard and Ragheb (1983) explains the components of motivation including (1) intelligence (to explore information and design trips, (2) social (including individual networks to gain influence or

information), (3) competence (ability to manifest), and (4) ability to avoid (the desire to get away from the routine.) Simplify, Pearce and Butler (1993), are linking the hierarchy of needs with tourism categories (Figure 4)

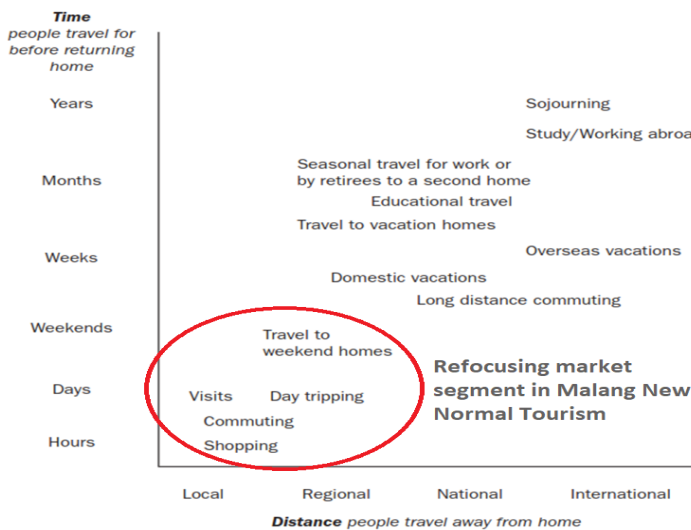


Figure 3. Tourism Typology of New Normal Tourism in Malang (base on Hall-Lew and Lew, 2009 Tourism Typology)

Maslow's Hierarchy of Needs		Travel career ladder (types of holidays)
5. Self-actualisation	Creativity, personal fulfillment, spontaneity	Lifelong dream vacations, meditation retreats
4. Self-esteem	Confidence, respect of others, satisfaction	Special interest tours, volunteer tourism, hard adventure travel
3. Affection and belonging	Social membership, avoiding alienation	Reunions and re-connections, roots and genealogy tours
2. Personal safety	Protection from elements, disease, fear	Guided soft adventure tours, ecotours, slum tours
1. Basic physiology	Oxygen, food, water for basic survival	Relaxation, spas, beach holidays

Figure 4. Basic human needs and the travel career ladder (adapted from Maslow, 1954; Pearce and Butler, 1993)

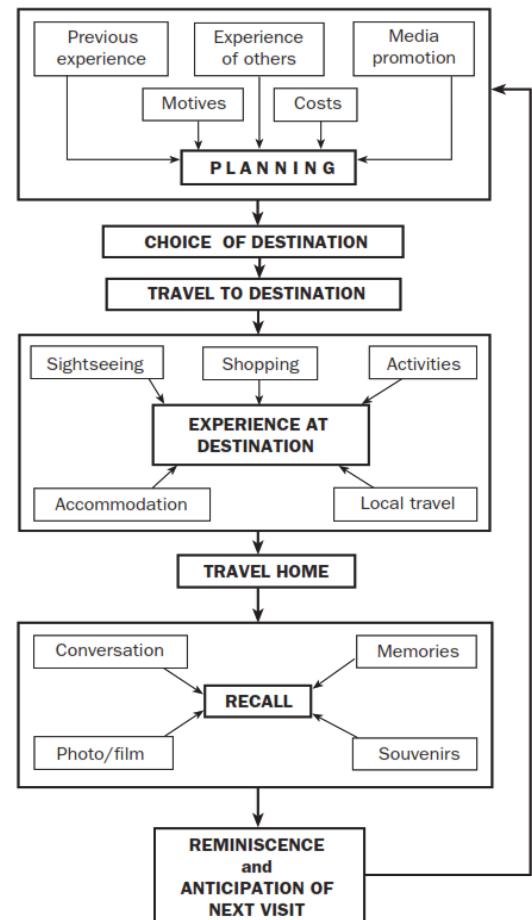


Figure 5. Structure of the tourist experience (Adaptation from Cohen, 1972; Graburn, 1983; Hall-Lew and Lew, 2009)

Although Malang has reopened its tourism, several restrictions still apply to the tourism access component. Restrictions are still being applied to public transportation such as planes, buses, and trains. Therefore, in the New Normal phase, there is a tourism gap, which was initially accessible by all parties to be exclusive to those who have private vehicles (Brouder et al., 2020). However, on the other hand, this limitation becomes an opportunity for the physical environment of the tourist destination to recover the pressure from the number of tourist visits (Nepal, 2020). On the side of tourism workers during the covid quarantine period, 19 experiences of solidarity emerged for those affected. Support for businesses developed to survive the quarantine period strengthens local economies (Brouder et al., 2020). This pattern is essential for the resilience of the tourism business when difficult times return (Brouder et al., 2020; Nepal, 2020). During a pandemic, the meaning of tourism increases from merely carrying out other routines to becoming experience-seeking trips. Cohen and MacCannell (1973) discusses travel motives for getting new experiences which define the phase in which tourists build their tourism experience which consists of five stages, namely (1) Planning, (2) Travel, (3) Experience at the destination, (4) Returning trips, and (5) Experience withdrawal (Figure 5). This stage explains the surge in tourists in Malang during the New Normal covid 19 period.

During the quarantine period, they are busy surfing in cyberspace, so it is possible to open up memorabilia such as photos or just chat with friends to fantasize about traveling. When the quarantine period ends, the enthusiasm to travel as a form of revisiting travel experiences or seeking new travel experiences is high. This factor has led to an increase in the number of local tourists visiting the area where they live. However, politically, the government is still reluctant to support the recovery in this sector fully. The government still categorizes tourism as one of the sectors with a high risk for the spread of covid 19. This condition illustrates the irony of the position of tourists as a driver of the local economy. Tourists are in a great position when it brings positive benefits but throw it away when there are negative issues (Pung et al., 2020). Some countries even carry out policies based on geopolitics, such as European countries that temporarily limit travel to China (Brouder et al., 2020).

Covid 19 provides an opportunity for the tourism industry to stop for a moment and consider what it wants from post-covid 19 tourism. This condition provides an opportunity to not only focus on the economy but also the socio-cultural and environmental aspects of the industry (Ateljevic, 2000). For example, the industry needs to act actively in protecting the environment (Crossley, 2020). In this context, we may ask how in post-lockdown world tourism will be rebuilt in a crippled global economy? Two problems come to mind: first, the economic imbalance between developed and developing countries; and second, each policyholder has its tourism agenda. However, in developing countries, the government may still expect foreign tourist visits from developed countries to benefit the economy (Brouder, 2020). In Malang, the new normal concept in

the tourism sector carries the theme of regenerative tourism development. Local tourists are getting to know the tourism potential within their reach and are starting to consider taking part in promoting it on social media. This effort will assist tourism managers in regional economic development. This development is generated from economic benefits channeled towards the fulfillment of necessary facilities such as road networks, basic sanitation, and increased local economic income (Lee and Jan, 2019; Purnomo et al., 2020). From a spatial study, the distribution of covid 19 is not evenly distributed throughout the East Java region. Growth centers that have a more dense interaction intensity, such as in Surabaya Raya, which includes Surabaya, Sidoarjo, Gresik, and Mojokerto, have developed a new type of tourism (staycation) for them to isolate themselves from environmental pollution. This tour is more exclusive to those who can access lodging and can do work online. This tour dates back to the 19th century when aristocrats fled the polluted city to recuperate in a spa or resort run by the kingdom (Lapointe, 2020). While they left the city, nature would naturally restore themselves to their original state (Crossley, 2020). During a staycation, tourists will interact more with the local community and build a more immersive experience (Brouder, 2020). This experience will build thoughts about how they view the balance between industry and the environment in their home environment. The reduced intensity and number of tourists will provide temporary rest periods in tourist activities, indicating the possibility of innovation for good on a larger scale (Brouder, 2020). The process is not a new normal, but normalization (Ateljevic, 2020). This effort will take root and become a new value after the critical period (Crossley, 2020).

At this moment, Covid-19 has given the tourism industry a chance to reset it. The travel sector, as a complement to tourism, has an opportunity to shift its attention from random development to development that positions itself as a significant partner in contributing to sustainability (Nepal and Karst, 2017); this requires several essential steps such as:

1. Reorienting the travel service segment, which is a note in this crisis, is that people will tend to avoid crowds in confined spaces and tend to choose outdoor tours that are considered safer. Improvement of infrastructure and services, especially in the aspects of hygiene, sanitation, access to health services, and clear and transparent health information.

2. Learn from the calm period during covid, which can provide opportunities for nature to recover. We are increasingly aware that tourism puts significant pressure on the environment; therefore, we are obliged to zoning a limited area that is not converted into a tourist area as a buffer zone. Therefore, we need to build sustainable tourism practices.

CONCLUSION

Covid-19 has had many socio-cultural, economic, and psychological impacts on various tourism stakeholders. The impact also differs for each manager based on segment, accommodation, attractions, the scale of services, location, and management. Likewise, the impact on the demand for tourism is very heterogeneous, for example, those with recreational, business, group, independent, and particular interest purposes such as religion.

At the end of the study, several adaptation patterns carried out by tourism managers were refocusing on their market segments. Following the health protocol, the manager captures local tourists to maintain the capital; they have to ensure post-crisis periods. Through this crisis period, they know how to make a more sustainable management strategy in order to guarantee their industry in the future. Covid-19 tourism research should reveal the impact of covid-19 and provide enriched explanatory power about the roots of these differences with the scope to examine suggestions on how to deal with the negative impacts it has on various managers. Assessment of affected groups such as tourism officials, local communities, tourism entrepreneurs, and tourism education (academics, students, and similar institutions) is also needed.

REFERENCES

- Aliperti, G., & Cruz, A.M. (2019). Investigating tourists' risk information processing. *Annals of Tourism Research*, 117, 312-321. <https://doi.org/10.1016/j.annals.2019.102803>
- Araña, J.E., & León, C.J. (2008). The impact of terrorism on tourism demand. *Annals of Tourism Research*, 35(2), 299-315. <https://doi.org/10.1016/j.annals.2007.08.003>
- Ateljevic, I. (2000). Circuits of tourism: Stepping beyond the "production / consumption" dichotomy. *Tourism Geographies*, 2(4), 369-388. <https://doi.org/10.1080/146166800750035495>
- Ateljevic, I. (2020). Transforming the (tourism) world for good and (re) generating the potential for 'new normal.' *Tourism Geographies*, 22 (3), 467-475. <https://doi.org/10.1080/14616688.2020.1759134>
- Baxter, E.A., & Diehl, S. (1998). Emotional stages: Consumers and family members recovering from the trauma of mental illness. *Psychiatric Rehabilitation Journal*, 21 (4), 349-355. <https://doi.org/10.1037/h0095289>
- Beard, J.G., & Ragheb, M.G. (1983). Measuring Leisure Motivation. *Journal of Leisure Research*, 15(3), 219-228. <https://doi.org/10.1080/00222216.1983.11969557>
- Bloomberg. (2020). Coronavirus: Mapping Covid-19 Confirmed Cases and Deaths Globally. *Bloomberg Company*. <https://www.bloomberg.com/graphics/2020-coronavirus-cases-world-map/#travel-restrictions>
- Brouder, P. (2020). Reset redux: possible evolutionary pathways towards the transformation of tourism in a COVID-19 world. *Tourism Geographies*, 22 (3), 484-490. <https://doi.org/10.1080/14616688.2020.1760928>
- Brouder, P., Teoh, S., Salazar, N.B., Mostafanezhad, M., Pung, J.M., Lapointe, D., Higgins Desbiolles, F., Haywood, M., Hall, C.M., & Clausen, H.B. (2020). Reflections and discussions: tourism matters in the new normal post COVID-19. *Tourism Geographies*, 22 (3), 735-746. <https://doi.org/10.1080/14616688.2020.1770325>
- Cahyono, D. (2020). *Annual report tourism Malang City 2020*
- Cohen, E. (1972). Toward a sociology of international tourism. *Social Research*, 39, 164-182. <https://doi.org/10.2307/40970087>
- Cohen, E. (2011). Tourism and land grab in the aftermath of the Indian Ocean Tsunami. *Scandinavian Journal of Hospitality and Tourism*, 11 (3), 224-236. <https://doi.org/10.1080/15022250.2011.593359>
- Cooper, J.A., & Alderman, D.H. (2020). Canceling March Madness exposes opportunities for a more sustainable sports tourism economy. *Tourism Geographies*, 22 (3), 525-535. <https://doi.org/10.1080/14616688.2020.1759135>
- Croes, R. (2014). The role of tourism in poverty reduction: An empirical assessment. *Tourism Economics*, 20 (2), 207-226. <https://doi.org/10.5367/te.2013.0275>
- Crossley, É. (2020). Ecological grief generates desire for environmental healing in tourism after COVID-19. *Tourism Geographies*, 22 (3), 536-546. <https://doi.org/10.1080/14616688.2020.1759133>
- Domenico, M., Haugh, H., & Tracey, P. (2010). Social Bricolage: Theorizing Social Value Creation in Social Enterprises. *Entrepreneurship Theory and Practice*, 34 (4), 681-703. <https://doi.org/10.1111/j.1540-6520.2010.00370.x>
- Dolnicar, S. (2005). Understanding barriers to leisure travel: Tourist fears as a marketing base. *Journal of Vacation Marketing*, 11 (3), 197-208. <https://doi.org/10.1177/1356766705055706>

- Nicolas, E.S. (2020). *EU pledges help, as tourism faces € 400bn hit*. EU Observer. <https://euobserver.com/coronavirus/148137>
- Engle, N.L., (2011). Adaptive capacity and its assessment. *Global Environmental Change*, 21 (2), 647–656. <https://doi.org/10.1016/j.gloenvcha.2011.01.019>
- Fajar, W.H., Hidiranto, F., Sari, E.I., & Nuraini, R. (2020). *Get to know the New Normal concept*. Indonesia.Go.Id. <https://indonesia.go.id/ragam/komoditas/ekonomi/mengenal-konsep-new-normal>
- Fletcher, R. (2011). Sustaining tourism, sustaining capitalism? The tourism industry's role in global capitalist expansion. *Tourism Geographies*, 13 (3), 443–461. <https://doi.org/10.1080/14616688.2011.570372>
- Friedman, B.T.L. (2020). Our New Historical Divide: BC and AC - the World Before Corona and the World After. *The New York Times*. <https://www.nytimes.com/2020/03/17/opinion/coronavirus-trends.html>
- Graburn, N.H.H. (1983). The anthropology of tourism. *Annals of Tourism Research*, 10 (1), 9–33. [https://doi.org/10.1016/0160-7383\(83\)90113-5](https://doi.org/10.1016/0160-7383(83)90113-5)
- Hall-Lew, L., & Lew, A.A. (2009). Speaking Heritage: Language, Identity and Tourism. *Blackwell Companion to Tourism*, second edition, Oxford, Blackwell.
- Hall, C.M. (2015). The coming perfect storm: medical tourism as a biosecurity issue. *Chapters*, 193–204, Edward Elgar Publishing. https://ideas.repec.org/h/elg/eechap/15607_19.html
- Haryanto, T. (2020). Editorial: Covid-19 Pandemic and International Tourism Demand. *Journal of Developing Economies*, 5(1), 1. <https://doi.org/10.20473/jde.v5i1.19767>
- Hjalager, A.M. (2002). Repairing innovation defectiveness in tourism. *Tourism Management*, 23 (5), 465–474. [https://doi.org/10.1016/S0261-5177\(02\)00013-4](https://doi.org/10.1016/S0261-5177(02)00013-4)
- Ioannides, D., & Gyimóthy, S. (2020). The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies*, 22 (3), 624–632. <https://doi.org/10.1080/14616688.2020.1763445>
- Johannisson, B., & Olaison, L. (2007). The moment of truth - Reconstructing entrepreneurship and social capital in the eye of the storm. *Review of Social Economy*, 65(1), 55–78, Routledge. <https://doi.org/10.1080/00346760601132188>
- Keskitalo, E.C.H. (2008). Vulnerability and adaptive capacity in forestry in northern Europe: A Swedish case study. *Climatic Change*, 87 (1–2), 219–234. <https://doi.org/10.1007/s10584-007-9337-1>
- Lapointe, D. (2020). Reconnecting tourism after COVID-19: the paradox of alterity in tourism areas. *Tourism Geographies*, 22 (3), 633–638. <https://doi.org/10.1080/14616688.2020.1762115>
- Lee, T.H., & Jan, F.H. (2019). Can community-based tourism contribute to sustainable development? Evidence from residents' perceptions of the sustainability. *Tourism Management*, 70, 368–380. <https://doi.org/10.1016/j.tourman.2018.09.003>
- MacCannell, D. (1973). Staged Authenticity: Arrangements of Social Space in Tourist Settings. *American Journal of Sociology*, 79, 589–603. <https://doi.org/10.2307/2776259>
- Maslow, A.H. (1954). *Motivation and Personality*. Harper & Row.
- Kimmelman, M. (2020). The Great Empty - The New York Times. *The New York Times*. <https://www.nytimes.com/interactive/2020/03/23/world/coronavirus-great-empty.html>
- Miles, L., & Shipway, R. (2020). Exploring the COVID-19 pandemic as a catalyst for stimulating future research agenda for managing crises and disasters at international sport events. *Event Management*, 24 (4), 537–552. <https://doi.org/10.3727/152599519X15506259856688>
- Milne, S., & Ateljevic, I. (2001). Tourism, economic development and the global-local nexus: Theory embracing complexity. *Tourism Geographies*, 3 (4), 369–393. <https://doi.org/10.1080/146166800110070478>
- Nepal, S.K. (2020). Adventure travel and tourism after COVID-19 – business as usual or opportunity to reset? *Tourism Geographies*, 22 (3), 646–650. <https://doi.org/10.1080/14616688.2020.1760926>
- Nepal, S., & Karst, H. (2017). *Tourism in Bhutan and Nepal*. In *The Routledge Handbook of Tourism in Asia*, Routledge.
- Neuman, W.L. (2013). *Social Research Methodology*. Qualitative and Quantitative Approaches.
- Novelli, M., Gussing Burgess, L., Jones, A., & Ritchie, B.W. (2018). 'No Ebola... still doomed' - The Ebola-induced tourism crisis. *Annals of Tourism Research*, 70, 76–87. <https://doi.org/10.1016/j.annals.2018.03.006>
- Pearce, D.G., & Butler, R.W. (1993). Tourism research: critiques and challenges. *Tourism Research: Critiques and Challenges*. <https://doi.org/10.11606/issn.1984-4867.v10i2p121-123>
- Pennington-Gray, L., Schroeder, A., Wu, B., Donohoe, H., & Cahyanto, I. (2014). Travelers' Perceptions of Crisis Preparedness Certification in the United States. *Journal of Travel Research*, 53 (3), 353–365. <https://doi.org/10.1177/0047287513496470>
- Pieters, R. (2013). Bidirectional dynamics of materialism and loneliness: Not just a vicious cycle. *Journal of Consumer Research*, 40 (4), 615–631. <https://doi.org/10.1086/671564>
- Pung, J.M., Gnoth, J., & Del Chiappa, G. (2020). Tourist transformation: Towards a conceptual model. *Annals of Tourism Research*, 81, 102885. <https://doi.org/10.1016/j.annals.2020.102885>
- Purnomo, A., Raja, I.N., & Irawan, L.Y. (2018). *Typology of Tourist Bromo Tengger Semeru National Park as a Basic Planning Integrated Tourism Design*. IOP Conference Series: Earth and Environmental Science, 145 (1). <https://doi.org/10.1088/1755-1315/145/1/012015>
- Purnomo, Agus, Idris, & Kurniawan, B. (2020). Understanding Local Community in Managing Sustainable Tourism at Baluran National Park-Indonesia. *GeoJournal of Tourism and Geosites*, 29 (2), 508–520. <https://doi.org/10.30892/gtg.2>
- Rahmawati, M., Wardhani, G.S., Purnomo, A., & Glenn, P. (2020). *Community Participation to Develop Rural Tourism in Cafe Sawah Pujon Kidul Village*. Proceedings of the International Conference on Social Studies and Environmental Issues (ICOSSEI 2019), 314–318. <https://doi.org/10.2991/assehr.k.200214.057>
- Rittichainuwat, B.N. (2013). Tourists' Perceived Risks Toward Overt Safety Measures. *Journal of Hospitality & Tourism Research*, 37 (2), 199–216. <https://doi.org/10.1177/1096348011425494>
- Sharma, N. (2020). Overtourism: excesses, discontents and measures in travel and tourism. *Anatolia*, 31 (2), 344–346. <https://doi.org/10.1080/13032917.2019.1690794>
- Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 117, 312–321. <https://doi.org/10.1016/j.jbusres.2020.06.015>
- Sundbo, J., Orfila-Sintes, F., & Sørensen, F. (2007). The innovative behavior of tourism firms-Comparative studies of Denmark and Spain. *Research Policy*, 36 (1), 88–106. <https://doi.org/10.1016/j.respol.2006.08.004>
- Tsao, C., & Ni, C. (2016). Vulnerability, resilience, and the adaptive cycle in a crisis-prone tourism community. *Tourism Geographies*, 18 (1), 80–105. <https://doi.org/10.1080/14616688.2015.1116600>
- Zeng, B., Carter, R.W., & De Lacy, T. (2005). Short-term perturbations and tourism effects: The case of SARS in China. *Current Issues in Tourism*, 8(4), 306–322, Multilingual Matters Ltd. <https://doi.org/10.1080/13683500508668220>
- *** BNPB. (2020). Indonesia COVID-19 Hub Site. <https://bnpb-inacovid19.hub.arcgis.com/>
- *** IATA. (2020). IATA - COVID-19 Impact on Asia-Pacific Aviation Worsens. *International Air Transport Association*. <https://www.iata.org/en/pressroom/pr/2020-04-24-01/>
- *** IMF. (2020). World Economic Outlook. The Great Lockdown. International Monetary Fund. <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020>
- *** Trevel News. (2020). EU godkänner danskt statsstöd till SAS - Travel News. <https://www.travelnews.se/flyg/eu-godkanner-danskt-statsstod-till-sas/>
- *** UNWTO. (2020a). Barometer | UNWTO. World Tourism Barometer. <https://www.unwto.org/barometer>
- *** UNWTO. (2020b). Travel Restrictions | UNWTO. World Tourism Organization. <https://www.unwto.org/covid-19-travel-restrictions>
- *** WTTC. (2013). WTTC: Economic Impact of Travel & Tourism 2013 Annual Update - Summary - Voyages - guides. <https://www.youscribe.com/catalogue/livres/loisirs-et-hobbies/voyages-guides/wttc-economic-impact-of-travel-tourism-2013-annual-update-2313984>

STORY CREATION AND THE IMPACT OF TRAVEL JOURNALISTS ON DESTINATION BRANDS

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Abstract: The main objective of this article is to present an insight into the process of story creation in the travel section of British newspapers. The research presented focuses on this specific area of written press in order to understand how stories are created and how destination brand managers can use and control this source of information to build brand image. In order to understand how journalists create their stories the authors conducted a qualitative research with six travel journalists. Because of the exploratory nature of this research, it was decided that the best method of data collection was in-depth interviews. Although the aim of the travel section is to inform readers, the nature of its written stories differs from the newspaper's other articles. In fact, reports published in the travel section tend to be positive and boast an optimistic outlook about places and leisure activities. Two main reasons may explain why this happens: first, the reason why a person reads the travel section; second, the symbiotic relationship between the press and travel or leisure organisations. These aspects influence the nature of the published stories and impact on how journalists write their articles. Despite the relevance of travel journalism, research on the topic is scant. The process of creating a story is poorly understood and therefore difficult for DMOs to manage this source of image creation

Key words: destination branding, DMOs, journalists, newspapers, travel section, image creation

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INTRODUCTION

Tourism is one of the major industries in the world (Cooper and Hall, 2008; Ninemeier and Perdue, 2005). In 2019 Tourism represented 1.3% of the Global GDP and 330 million jobs or 1 in 10 jobs around the world (World Travel and Tourism Council, 2019). In 2019, the travel and tourism sector grew 3.5%. This is significant, considering that the global economy grew only 2.5% during the same year (World Travel and Tourism Council, 2019). Travel disruptions in 2020 because of COVID-19 have demonstrated the relevance of tourism in the global economy. It is estimated that the pandemic put between 100 million and 120 million jobs in jeopardy and had a US\$2 trillion impact on global GDP in 2020 (UNWTO, 2021). Tourism is an important industry for almost all countries, contributing to exports, generating taxes and creating jobs (Blanke and Chiesa, 2013). The vital economic role of tourism in countless places justifies the growing interest in this issue, in particular by politicians. Politicians are now expected to invest and to develop strategies that increase the attractiveness of their places (Gertner and Freire, 2018; Pike et al., 2019). Therefore, politicians from countries, regions and cities are now using marketing tools such as branding to make their destinations more competitive. It can be said that the policymakers of a place are now sensitive to the issue of branding and are actively trying to apply the concept to their places (Anholt, 2014; Braun, 2012; Freire and Gertner, 2021; Zenker et al., 2013). It is in this context that places became destination brands, and organizations such as National Tourism Organizations (NTOs) or Regional Organizations (RTOs) at the regional level were set up (Pike and Page, 2014). NTOs and RTOs are organizations that are better described as being Destination Marketing Organizations (DMOs) (Pike and Page, 2014). DMOs are organizations that manage tourism within a certain place and have many tasks (Pike and Page, 2014). One of the most important is to develop a deep understanding on why and how tourists decide where to spend their holidays (Pike et al., 2019). It is vital to understand tourists so that places can develop strategies to become more attractive (Pike et al., 2019). An important factor to increase attractiveness is the development of a positive destination image (Pike et al., 2019). As a result, an important role for DMOs is to develop strategies that create and enhance positive images (Pike et al., 2019). To do this DMOs must understand the concept of image formation.

Image formation

It has been suggested that the nature of destination image formation is the result of the interaction between several elements and factors on a continuum of a sequence stage (Gallarza et al., 2002; Gartner, 1994; Gunn, 1988). This is in line with Reynolds's (1965) argument describing image formation as the development of a mental construct based on perceptions that emerge from a flood of information. It is recognised that information used to evaluate destinations emanates from two types of sources, formal (the commercial environment) and informal (the social environment) (Munro

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and Richards, 2011). Formal information can be characterised as originating from traditional sources such as travel agents, travel-guides, books, TV, specialised magazines (Echtner and Ritchie, 1991) as well as, and more importantly, from digital sources such as corporate blogs, a destination's own social networking platform, pages on Facebook and websites (Florek, 2011; Munro and Richards, 2011; Oliveira and Panyik, 2015; Page, 2009). The informal or organic information source can be characterised as recommendations and impressions from friends, family, acquaintances or other customers who have some kind of knowledge or experience with the chosen destination (Gunn, 1988; Munro and Richards, 2011). This last source of informal information increased dramatically with the Web 2.0 or social media, which is credited as contributing to an "unprecedented customer empowerment" (Constantinides and Fountain, 2008: 231).

Changes in technology have considerably increased the sources of information (Moutinho et al., 2013; Munro and Richards, 2011; Oliveira and Panyik, 2015). Cocking refers to the "emergence of hybridized forms of travel journalism" (Cocking, 2020:1), since there is now an extensive array of online channels available such as blogs, social media platforms and websites that are important sources of information and image creation (Constantinides and Fountain, 2008; Florek, 2011; Moutinho et al., 2013; Munro and Richards, 2011; Oliveira and Panyik, 2015; Page, 2009).

The division of sources of information, based on the assumption that they have a different nature, is pertinent because it acknowledges that image is partly controlled by a different sort of organisation (Gartner and Bachri, 1994; Pike and Page, 2013). This is a relevant argument supporting a destination brand management approach and the need for DMOs (Pike and Page, 2014). For example, tour operators and travel agents and hotels, through their catalogues (Schellhorn and Perkins, 2004), destination marketing organisations, through advertisements (Pan et al., 2017) and the media through their stories will influence destination brand image (Bieger and Laesser, 2004; Castelltort and Mäder, 2010; Pasquinelli and Trunfio, 2020). Media is a broad category, but in general refers to different types of communication, such as television, radio and newspaper. Media is considered relevant for destination brands since it is clear that it has an invested importance on creating destination brand awareness and diffusing destination brand values (Bieger and Laesser, 2004; Castelltort and Mäder, 2010; O'Shaughnessy and O'Shaughnessy, 2000). In the context of destination branding it is relevant to understand the media workings and its nature. Can media be a source of information controlled by destination brand managers? How can a destination brand manager control this source of information? In order to have a meaningful answer to these two questions, it is important to understand how the media works. The research presented in this article takes a restricted approach to the definition of media and focuses on written press, specifically targeting the travel section of British newspapers, with the objective of developing a better understanding on the process of story creation. By understanding how travel journalists create their stories it is possible to know if their articles can be managed by DMOs.

LITERATURE REVIEW

Travel Journalism

Considering the significant relevance of tourism and its impact on the economy, it is strange, as Hanusch (2010) has pointed out, the contempt with which travel journalism is often regarded. Hanusch noted that this field of study is viewed by many authors as a less serious genre, less related to journalism style and more linked to entertainment and lifestyle, stressing that it "has been criticised for being antithetical to public interest and watchdog notions of journalism" (Hanusch, 2010: 623-4). He also stated that travel journalism is "still ridiculed by some as being unworthy of being associated with the term journalism" (Hanusch, 2012: 2). Moss, for example, states that "at best, this copy [travel journalism] often comes with few factual errors or sloppy observations (Moss, 2008: 36). Fürsich and Kavoori had already identified the disregard for this genre by finding that travel journalism was often considered a "frivolous topic, not worthy of serious research" (Fürsich and Kavoori, 2001: 152), probably because it has been associated by some scholars with leisure and pure entertainment and mass tourism without any social cultural focus of public interest (ibidem). Fürsich states that "genres that systematically ignore the social, economic or political problems of destinations (...) do not qualify as journalism" thus calling for a more serious and critical approach to travel journalism (Fürsich, 2003: 139). Despite its apparent "bad reputation", Fürsich and Kavoori proposed arguments that justified a deeper study of travel journalism: the huge growth of the tourism industry; the evidence that leisure translates itself in a significant social practice; the fact that it is a fundamental aspect of the study of international communication and; finally, that its discourse is strongly affected or mediated by public relations (Fürsich and Kavoori, 2001: 70-71). The authors add that travel journalism is an important site for studying "the ideological dimensions of tourism, transcultural encounters and the ongoing dynamics of media globalization" stating that "travel journalism functions much like international news to provide both information and cultural frames for 'others' (2001: 153). They conclude that travel journalism has the ability to analyse and reveal different cultures and geographies (Fürsich and Kavoori, 2001).

Hanusch continues to assert that travel journalism plays "an increasingly significant role in the representation of foreign cultures" (...) underlining its "role in mediating foreign cultures, its market orientation, motivational aspects and its ethical standards", arguing that the travel journalist can be considered as a kind of "foreign correspondent" (Hanusch, 2010: 68). Duffy also underlines the importance of the travel journalist's role while connecting "the unfamiliar with the familiar" (Duffy, 2018: 863), bringing people from different regions of the globe closer together, or making the unknown visible. Following this line of thought, Santos views this type of journalist as a cultural intermediary or even a "social-cultural decoder", although sometimes forgetting to give local voices an adequate projection (Santos, 2004: 393-4). Pokazanyeva (2013) characterizes travel journalism as a genre that includes various fields of study such as "history, geography, culture, art, ethics, and philosophy", referring that "the field includes: travel writing; travel programming for television, radio and podcasting; documentary; and other forms and genres" (2013: 199). Belenguer (2002) shares a similar point of view when arguing that travel journalism is "specialized journalism, based on historical background, on the existence of numerous publishing

platforms (magazines, documentaries or thematic channels), on the diversity of genres approach (from reports, chronicles and interviews to opinion columns), or even the professional specialization of its practitioners” (Belenguer, 2002: 114).

Despite being a journalistic genre written by professionals, some accuse travel journalism of a lack of transparency or credibility since journalists are often paid for their trips (McGaurr, 2013). McGaurr explains that due to the high price of travel, many journalists today, especially freelancers, would not be able to do their job if there were no so-called “visiting journalist programs or freebies” (McGaurr, 2013: 54). Santos also tackles this argument by noting that “travelling and reporting from distant lands costs a lot of money and few, if any, newspapers seem able to pay for every trip abroad needed to fill a 40-page travel supplement every week” (Santos, 2004: 73), drawing attention to the fact that sponsorships may weigh favourably at the time of writing the article. For this reason, the author argues that journalists should “always disclose the sponsorship information” (Santos, 2004: 74). This is not equivalent to maintain that freebies necessarily imply uncritical or 100% flattering reporting. It is intended to point out that, in the specific case of travel journalism, paid tours and accommodations are sometimes the only way travel journalists can publish their articles (Santos, 2004; McGaurr, 2013).

As Cocking (2017: 1349) supports, “travel journalism is by no means wholly uncritical or lacking in integrity - travel articles might sell us tourist experiences but it might also, for example, bring to our attention specific local cultural practices, or environmental, health or poverty initiatives”. Perhaps for this reason, Pokazanyeva (2013: 201) holds that “travel journalism occupies a neutral position between commercial and independent journalism. The programs are not independent, but are also not purely commercial. Sponsoring interaction between channels and travel agencies is beneficial”. Pokazanyeva underlines that “one of the main ethical objectives of travel journalism is to establish a balance between benefits from sponsorship and desire to represent the facts (Pokazanyeva, 2013:202).

For DMOs, with their PR agencies as facilitators, the alliance with journalists is highly beneficial as they see in their work the reputation, objectivity and independence they need to make their destinations more appealing. In this respect, it should be noted that advertising is becoming less and less effective compared to news articles. On the other hand, sponsors are now more interested investing in social media and its influencers, travel blogs and vlogs, as it is cheaper and the information circulates much faster (Pirolli, 2019). As Cocking states “advertising revenue, that so long brought financial security to print journalism, is now being reassigned to rapidly changing online media environment” (2020:1).

Thus, it is a win-win relationship, as some see their destinations promoted by reliable professionals and others are paid for their work. In fact, and as Dore and Crouch (2003:140) mention, “the VJPs [visiting journalist programs] have become decisive in the fate-promoting strategies of the tourism organizations of various governments around the world”. In this context, the dialogue between PR's and travel journalists has come to be seen as “a trading or exchange relationship” (Lewis et al., 2008: 5). It is no secret that travel journalism work can be partly based “on pre-prepared public relations material produced by or for travel companies” (Hanusch, 2012a: 670), with the media assuming the role of intermediaries between the DMOs and the tourists. Journalists have the task of “gatekeepers” for the information provided by the DMOs and their PR agencies (Zerfass et al., 2016). Therefore, it can be difficult to distinguish between what is considered journalism and what constitutes business content.

The distinction between news or reporting about the destination and a promotional narrative of the same place isn't always clear (Hanusch, 2012a; Zerfass et al., 2016). As Rosenkranz recalls, “today, the journalistic field is undergoing a radical transformation of practice (...). As a result, formerly solid lines separating business and editorial departments, print and online publishing spaces, professional journalists and amateur content are blurring (Rosenkranz, 2015:1).

METHODOLOGY

Despite the relevance of travel journalism, research on the topic is scant (Pirolli, 2017). The process of creating a story is poorly understood and therefore difficult for DMOs to manage this source of image creation. In order to understand how journalists create their stories the authors conducted a qualitative research with six travel journalists. Because of the exploratory nature of this research, it was decided that the best method of data collection was in-depth interviews.

In-depth interviews as a data collection tool were preferred due to their inherent advantages, including their flexibility and exploratory nature (Patton, 1990; Shiner and Newburn, 1997). Although the in-depth interviews can be initially conducted with a pre-established logic, the interviewer is totally free to explore or clarify certain concepts that emerge or that were not totally understood. This tool gives the interviewer the freedom and flexibility to explore questions and concepts that may be relevant and unexpected (Patton, 1990). Moreover, in-depth interviews minimize the degree to which respondents have to express themselves in terms defined by the interviewers and encourages them to raise issues that are important to them (Shiner and Newburn, 1997). In-depth interviews are particularly appropriate in order to try to discover journalists' own meanings and interpretations. They are valuable instruments for clarifying concepts, understanding the existence of certain events, or opening doors to new research directions (Patton, 1990).

Participants

All of the journalists who took part in the research were contributors to UK national newspapers. Although all of the interviewees were journalists their characteristics and nature differed. Accordingly, one was the editor of the travel section for a UK national newspaper; another two were staff reporters and three others were freelancers, writing for British national newspapers. The authors identified the journalists by their contributions in leading UK national newspapers. Once identified, reporters were contacted and interviews were arranged. The interviews took on average between 45 minutes and 2 hours, and were recorded. Afterwards, the interviews were transcribed for analysis. The six interviews were conducted in different places in London, two were at the newspaper's offices and four in pubs/cafes. The location was important to

ensure that the appropriate conditions were created for the interviewees to participate honestly and genuinely (Merriam, 1988). In order to get honest and sincere answers on how journalists wrote their stories, interviewers began the conversation similar to 'everyday talk'. This method follows Ezzy (2010) recommendations. Using the notion of 'everyday talk' as a method allowed the interviewee to become a questioner and therefore the flow of the interview and all the questions asked to interviewees do not necessarily have to be pre-figured or scripted but are rather produced in reaction to the here-and-now-talk (Rapley, 2001). Basically, the route to get the answers to the research questions is not linear, rather it has to be adaptive and dependent on the flow of the conversation. This allows interviewees to express themselves in terms defined by them and with minimum interference or impact from the interviewer (Shiner and Newburn, 1997).

After field data collection, the final step of the research starts - data analysis. Data analysis involves the organization of what has been seen, read or heard, so that the researcher can provide some understanding of what has been learned. When working with data, the author can create explanations, hypothesize, theorize and link stories to other stories. To accomplish this, it is necessary to classify, synthesize, examine patterns and interpret the data. Therefore, the primary role of the investigator will be to make sense of the data collected (Lincoln and Guba, 1985; Miles and Huberman, 1994; Strauss and Corbin, 1998). Miles and Huberman (1994) argued that data analysis should be examined using a model that assumes the interaction of three groups of concurrent activities: reduction, display of data, and conclusion drawing. Reducing data refers to the process of turning data into significant units that can be easily manipulated. It involves identifying common themes and aggregating them. Data display is central to the Miles and Huberman (1994) analysis model.

This should be done in a visual format, with the aim of presenting the data collected in a schematic manner. The analysis process is made up of the representation of information, which can be done using matrices for example. In this case the researchers used NVivo software to help reduce the data into themes. NVivo software is useful to organize and visualise the data and to help to draw conclusions. The conclusion comprises the third group of analysis activities, however, the findings start to emerge once the data begins to be organized and displayed.

The validity and plausibility of the data gathered was subjected to a systematic test. This was accomplished by asking a variety of external researchers to validate the organization of the data. But data analysis needs to be viewed as an interactive and cyclical process that simultaneously involves data collection, theory building and conclusions. Final conclusions were drawn once the analytical process was completed (Strauss and Corbin, 1998). For reasons of validity, the authors followed the instructions of Wolcott (1990) and included excerpts from the interviews in this article. Essentially, with quotes from participants the reader will be able to trace the findings from the data that generated them (Attride-Stirling, 2001; Cho and Trent, 2006) and follows Wolcott's (1990:129) recommendation "let readers 'see' for themselves."

RESULTS AND DISCUSSION

Usually, newspapers are composed of several sections, each of them reporting on different topics, with tourism and travel news typically aggregated in a travel section. Although, the objective of the travel section is to inform readers, the nature of the written stories in this section is different from the rest of the newspaper as the stories tend to boast a positive outlook. Two main reasons for why this happens were identified and will be covered in part one of the findings. First, the nature of the travel section is influenced by the characteristics of the readers and, second, because of the symbiotic relation between the press and organisations linked to the travel and leisure industry. These aspects, which influence the nature of the published stories, will also impact on how journalists write their articles. Part two of the findings describes which forces influence and impact on the journalists' writing process. Part three builds on the previous two parts and concludes that a major aspect of these stories is the degree of originality. Thus, for travel journalists originality is key to getting their stories published.

1. Stories: a Positive Outlook

1.1. Readers

The travel section of a newspaper and the format it follows is different from the rest of the newspaper. The objective of this section is to inform readers about destinations and leisure activities. There is the general agreement among journalists that readers only want to read positive things in the travel section. The information in this section should be based on positive reviews, not negative ones, and providing readers with nice and pleasant reading material is the logic behind this section. It is understood that any negative incident experienced by the journalist in a destination will not be written about or exposed in this section. Journalist) That's right you normally don't read bad things about a destination ... because otherwise you would not bother to read it. You don't want to read disasters stories. There are sections that deals with sort of holidays from hell but they are normally kept apart, that's also with the TV programmes...holidays from hell. I think the reason you don't get this sort of horror stories, like: "this is the worst place I've ever visited" it's because people don't actually want to read that. People prefer to read something that they are attracted to.

Journalist) Everybody is fully aware that we do not have to give positive publicity to the destination. In fact, it has happened, being somewhere and not enjoyed it and asked the responsible - what's the point? Do you really want us to write a story saying that this is a "shit-hole"? We can do it, but it is not helping the destination and it is not helping our readers, because the point about reading the travel section is trying to give the idea about what the person might enjoy in a certain place. It wouldn't be pleasant to read a negative view. As stated above, there is a general agreement among journalists that the travel section should only contain positive reviews about destinations. Journalists defend this position and argue that readers are not interested in reading negative reviews of a destination. Clearly, there is another force conditioning the nature of the travel section. The travel section of newspapers is extremely dependent on DMOs, NTOs and other organizations operating in the travel and tourism industry such airline companies, hotels, and tour operators.

1.2. DMOs and other Travel and Tourism Organisations impact on stories

The travel section of newspapers is dependent on organisations that operate in the travel and tourism industry. In fact, staffed journalists or freelancers are dependent on the help of these organisations to conduct their work. It is not financially viable for a newspaper to support the costs of the travel section without any kind of support from external organisations. Therefore, journalists and newspapers have to rely on the sponsorship of travel and tourism organisations to write their stories for the travel section. That being the case, journalists, who are dependent on travel and tourism organisations, do not have any incentive to write negative reviews about a destination. It is reasonable to assume that a reporter who writes a negative review about a destination might have some difficulties in the future getting financial support from the travel and tourism organisations. Therefore, both journalists and newspapers have a strong incentive to avoid conflicts with tourism industry organisations, implying that material written in a newspaper's travel section might be partially controlled.

Journalist) (...) I write independent but I use the facilities provided by them [DMOs] because otherwise you couldn't afford to do it. I think people realise that but ...they expect to be honest too. So it's a funny game because yes you are accepting facilities from the people you are writing about, in one sense your hands might be tied but depends on how you see it. At the same time you wouldn't be writing the article if those facilities were not available and the newspapers wouldn't be able to cover those pages. So there is a kind of symbiosis between the newspaper world, the travel pages, the tourism boards and travel companies and their alliances. For example, the XXXX gets... BA [British Airways] provides some of the flights, free flights every year with the expectation to appear in the travel section. So they feed on each other.

Interviewer) I thought that you could just fly with your own budget and you wouldn't be so dependent on external players.

Journalist) It would be really nice if that could happen but it is very, very difficult for that to happen. I don't know one newspaper or magazine that doesn't use help. Because if you wouldn't ask for help you couldn't make it worth it.

Journalist) (...) I also write travel articles for the national papers. I come up with an idea and propose it to the editors. Then I get support from tourist boards, which pay for my facilities and then off I go and write the story.

Journalist) (...) Sometimes they will not pay all, but they will pay some of it. But then, you put a package together, you know? For the journalist it has to be financially viable. If you have to pay a lot of expenses it's not worth going. So you've got to work quite hard to put...but normally you find that the tourist boards or tourist offices are keen to help. Because they know the value of space in a national newspaper, I mean against the cost of advertising. It's very cheap to pay the journalist, travel or accommodation cost so it's a good deal for them.

2. Choosing a story to write about

In order to understand how to manage this source of image creation, it is important to understand the process journalists follow to create and write an article. It is also relevant to understand their sources of information and inspiration. Their stories on destinations emerge from three forces that can work together or individually. These forces can be market-driven, personal-interest-driven or DMO-driven.

2.1. Market driven

Some journalists use tourism industry market trends as a source of information and inspiration for their stories. Moreover, newspaper editors will also take in consideration the profile of the newspaper's readers. There is careful editorial management in order to assure that the stories published are relevant for their readers. Therefore, what is written in the travel section can be dictated by fashion and market trends. Journalist) But also you look for trends in the industry as well. For instances if the ski season ends and in talking with travel agents you find out that there was a huge increase in bookings to North America then you might write something about North America. Interviewer) I guess you get a lot of invitations from too many destinations. How do you decide which destination you should go? Would you go to Costa del Sol?

Journalist) Probably not. You are trying to engage of what your readers would like. In the XXXX we have a committee of readers. They are 5000 readers that subscribe to the surveying XXXX and we ask questions and try to form an idea about our readers says. Market research shows that XXXX core audience is people 20 to 45 earning a decent amount of money, possibly without a lot of time in their hands, and quite adventure travellers looking for something different. So we probably show any trip that is more about that than 2 weeks on a beach in Turkey. Probably those kinds of trips is more the Daily Mirror that write those kind of stories so we need to go probably aspirational we might spend a week on this fantastic beach in Tahiti.

Journalist) But you've got to remember that you are writing to...there is a huge demand for adventure holidays, non-standard, packaged holidays, so I mean I think this is a big growth area. I mean I went to the adventure travel show in Olympia early this year, which is worth being to, you know. I got an all range of brochure from there to follow up ideas. I think people want...they are fed up lying down on the beach, they want to go and do something, you know walking, hiking or golfing.

Interviewer) It seems that for some regions everything has been written. For instance Paris, what will you write about Paris?

Journalist) There are always articles about Paris, because Paris always attracts several types of people. I could write about new exhibitions. There's always interest in Paris so you can have always a new angle about Paris.

Some of the stories written by journalists are inspired by observing trends in the market, therefore they are market driven. Journalists observe the market trends and write about what readers wants to read. In this case places or activities that are seen as unfashionable might have difficulties getting coverage as opposed to others that are seen as fashionable.

2.2. Personal interest

Journalists often write about their own particular interests and hobbies. These stories are personal and are inspired by the journalist's specific interests.

Interviewer) How do you come up with your ideas?

Journalist) There's no formula. It's just things that I am interested in and I care about. Obviously I read a lot, I travel quite a bit, and a lot of things I observe become ideas you know. So there's no simple route.

Journalist) I mean when I went to Australia for example I wrote three articles on different subjects including art and gardens but I didn't follow the tour that they offered. I chased what I wanted.

Interviewer) If you heard that a region or a country has a particularly good writer or other cultural icon. Do you think that affects how you perceive that place?

Journalist) Yes, absolutely. I mean, for example, one of the reasons I went to Mexico City a few years ago was to write about a sculptor who was working at producing the world's largest statue about a man in a horse that would be put on the border between America and Mexico. It was a story about a man doing something extraordinary. So those kinds of individuals, the people related to the story are very good.

It is also evident that the nature and content of the story is dependent on the affective relationship between the reporter and the destination. Journalists will dedicate more time and be more investigative towards destinations they like. In this case, they will be willing to invest time to find new angles and write about particular destinations.

Journalist) I will give you an example. I went to Japan in November to go, you know, hiking in the mountains in a small group, and I wrote about that to the XXXX. Those were some mountains near Kyoto and that was very interesting. But that was something I wanted to do because I'm very interested in Japan so I was looking for angles on Japan.

The personal interest of journalists and their emotional connection with destinations are relevant aspects on the process of story creation. This implies that DMOs should identify and target journalists who are more inclined to write about particular destinations and themes.

2.3. Stories written and influenced by DMOs

DMOs also have an impact on the stories published in the newspapers. This is only possible because newspapers and their journalists are dependent on the support of these organisations to conduct their business. Therefore, DMOs are the third route on the story creation.

Journalist) The third thing is probably stories that are promoted to you by tourist boards or by PR experts that work for the tourist boards. You tend to find two different ways to have that happening: first, the country or destination has their internal PR mechanism or they will have the external agency. When it comes to the PR agency they aren't usually as good or dedicated to a destination as they might have five competing destinations as their clients, so you get people not as dedicated. So normally if you talk with people from the destination it is a better method of approach you will have a better view. Sometimes you get the agency saying that they have a great story and in reality, they do not have any great story. It happens because normally that information is second hand, so by the time that is transmitted to you some of the meaning got lost.

Interviewer) There is a lot of people writing about travelling. I guess it must be difficult to write new stuff about destinations...

Journalist) A lot of people are covering, so yes, if something is well promoted, you'll find people pick up earlier on that and therefore you get a lot of people writing about the same thing, which is good from one point of view. I mean for example, take this idea of the next weekend Amsterdam canal garden. I just discovered that three newspapers are already covering it. Because their promotion PR has basically done a good job or the DMO, I'm not sure.

In certain situations DMOs are the source of information and inspiration, which implies that some of the stories published in the travel section are, in fact, directly controlled by these organisations.

Interviewer) What do you think about those trips? What is your experience?

Journalist) Well it is totally subjective. Some of the people that are working for the PR companies or NTOs are ex-journalists, they know facts about the places and what is relevant to show in order to be published. But it depends. Sometimes I ask them if I can be excused from writing about a particular thing they are promoting. The answer depends. Sometimes will say that is fine other times they will say that we really need to write about that particular thing of the trip.

Stories published in newspapers emerge from three forces. They can originate from the journalist who is pursuing a personal interest, through observation of market trends or from DMOs that promote a particular event. However, a story will only be pursued if the journalist is attracted to the topic and will only be published if the editor thinks the readers will be interested in it. But the journalists still need the DMOs, who influence the story often in a positive and benign nature, to have the story commissioned. Therefore, the creation of a story is dependent on these three forces operating simultaneously.

3. The need for having original stories

As mentioned above, in order to have the story published the journalist not only needs the support from an DMO or other travel and tourism organisations. The journalist must also convince the editor of the travel section that the story is worthy of publication. One of the requirements imposed by editors is that the story is somehow original since editors are reluctant to publish stories that are considered unoriginal. Therefore, journalists must be sure that the story they are submitting to the newspaper is unique.

Journalist) Often I am asked by the editor if anybody else is covering a particular story. They like to think they have an exclusive. The problem of arranged press trips, where a number of journalists come from different newspapers or magazines to cover the same thing, is that, obviously the same story will appear on a number of publications. You see, somehow you have to satisfy newspapers desire to be exclusive...

One of the techniques used to guarantee originality in a story is to write from a personal perspective.

Interviewer) Do you have to be original in terms of what you write? Every main newspaper has a travel section so I guess a lot of things have been written already...

Journalist) Yes, I suppose. But is up to the editor to make sure that what you are offering isn't the same as everybody else. They are looking for something very different, different point of views. I would give my point of view that is very individual because of whom I am. So...but the editor has to make sure that we are not reproducing the same story. Editors are very unhappy with the same possible piece, that's for all newspapers.

Therefore, travel journalists, as opposed to mainstream journalists, write about their own experiences and their stories tend to be self-centred.

Interviewer) In that case you reach a point that you do not write about a place in terms of nice beaches or nice landscape...you will have only articles about experience.

Journalist) Yes, very often the articles are written in the first person. I did this I went there so there's a story line to follow. I think sometimes it might be too much... but they [the editors] like it. For example there're a lot of people that take their children to this sort of...these experiences, there are a lot of people writing about these experiences with children. Because, the people that are aged 60 plus is a major sort of market for travel now. For that sort of market you could perhaps concentrate more on the history and the culture of the region.

Writing stories in the first person assures journalists that their stories have an original component. Thus, the relevance of the article's theme has more to do with the story behind the destination, not with the destination itself. This implies that each destination can have perpetual cover as long as it provides an original theme for story creation. The location itself becomes less relevant and the theme, or the story being pursuit, more relevant. Thus, everything is tailored to create an original story. This is easily achievable since articles in the travel section are stories, not news, and implies that there are infinite ways for a destination to make the pages of a newspaper's travel section.

CONCLUSION

As Bieger and Laesser (2004), Castelltort and Mäder (2010), Pasquinelli and Trunfio (2020) argue, the press has an important role on the destination image formation. It is essential to understand how journalists create their stories and how they can help shape and communicate facets of brand image. At the same time, it is important to understand that the image creation can also be partly controlled by DMOs. In fact, a symbiotic relationship between tourism organizations and newspapers was shown. The travel section of newspapers is only profitable if they are sponsored by travel and tourism organisations, such as airlines, hotels, etc., and organisations such as DMOs and NTOs. Newspapers are unable to bear the costs of the travel section if they do not have the assistance from these organisations. Therefore, the stories published in the travel section have unique characteristics compared to other sections of a newspaper. One characteristic is that travel stories tend to boast a positive outlook of occurrences. This is not only due to the interdependency between newspapers and travel/tourism organisations but also because of the nature and objective of the travel section. Readers of the travel section, journalists defend, only want to read positive stories. Important to note, however, is that journalists don't have an incentive to write negative reviews about a destination either. It's quite the opposite since the journalist's work is dependent on the people and places they write about. Therefore, even if journalists have a negative experience with a destination they have little incentive write about it. Another characteristic of travel stories is that they are often written in the first person.

They tend to be about the journalist's personal experience and that is partly due to the need of fulfilling a basic requirement imposed by the editors - the stories need to be original and different from what is being published in other newspapers. Thus, journalists write about their individual experiences to guarantee that what they are writing is original and unique. Journalists are always seeking new angles for writing new stories which means that a destination brand could potentially always have positive exposure and appear often in the travel section. To ensure a presence in travel sections, DMOs could create and recommend thematic stories to journalists. However, since originality is key, the material supplied by DMOs and PR agencies should be tailor-made for each journalist. Identifying and then targeting individual journalists with a certain theme or particular story is the most efficient way for having an article published in the travel section. This implies that DMOs should build databases to identify and target the journalists who are willing and interested in writing about a specific theme. In conclusion, when creating a story for a travel section of a newspaper there are three main sources: market trends, personal interest and DMOs. However, if the stories are to be published they must have two characteristics: a positive outlook and originality.

The process of story creation and subsequent publishing is the result of the journalist's inspiration but with market and editor restrictions (Figure 1).

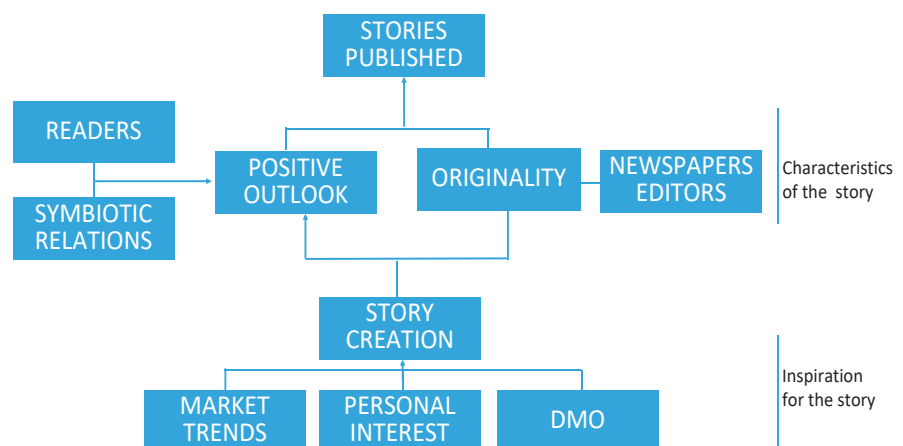


Figure 1 - The Travel News Publishing Process

It should be noted, however, that the travel section of newspapers is not the only source of image creation. Other sources of information, like the organization's blogs, websites and social media platforms, are also relevant in shaping the destination's image (Florek, 2011; Moutinho et al., 2013; Munro and Richards, 2011; Oliveira and Panyik, 2015; Pirolli, 2019). Therefore, as Cocking underlines nowadays "tourism companies are seeing the potential in advertising and sponsoring online spaces" since "blogging platforms offer huge possibilities" (Cocking, 2020:1).

Having this reality in mind, it is critical for destinations to coordinate various sources of information to establish a common identity, which is only possible if destinations take a brand management perspective.

REFERENCES

- Anholt, S. (2014). Afterword. *Place Branding and Public Diplomacy*, 10(2), 167-169. <https://doi.org/10.1057/pb.2014.4>
- Anholt, S. (2007). *Competitive identity: the new brand management for nations, cities and regions*. Basingstoke: Palgrave MacMillan. <https://doi.org/10.1057/palgrave.bm.2550086>
- Attride-Stirling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative research*, 1(3), 385-405. <https://doi.org/10.1177/146879410100100307>
- Belenguer, M. (2002). *Periodismo de viajes. Análisis de una especialización periodística*, Sevilla, Comunicación Social.
- Bieger, T., & Laesser, C. (2004). Information sources for travel decision: Toward a source process model. *Journal of Travel Research* 42(4), 357-371. <https://doi.org/10.1177/0047287504263030>
- Blanke, J., & Chiesa, T. (2013). *The Travel and Tourism Competitiveness Report 2013*. In The World Economic Forum, assessed on January 10th, 2020. http://www3.weforum.org/docs/WEF_TT_Competitiveness_Report_2013.pdf
- Braun, E. (2012). Putting city branding into practice. *Journal of Brand Management*, 19(4), 257-267. <https://doi.org/10.1057/bm.2011.55>
- Castelltort, M., & Mäder, G. (2010). Press media coverage effects on destinations—A Monetary Public Value (MPV) analysis. *Tourism Management*, 31(6), 724-738. <https://doi.org/10.1016/j.tourman.2009.06.007>
- Cho, J., & Trent, A. (2006). Validity in qualitative research revisited. *Qualitative research*, 6(3), 319-340. <https://doi.org/10.1177/1468794106065006>
- Cocking, B. (2020). *Travel Journalism and Travel Media: Identities, Places and Imaginings*. London: Palgrave MacMillan. <https://doi.org/10.1057/978-1-137-59908-7>
- Cocking, B. (2017). News Values Go on Holiday. *Journalism Studies*, 19(9), 1349-1365. <https://doi.org/10.1080/1461670X.2016.1272066>
- Constantinides, E., & Fountain, S.J. (2008). Web 2.0: Conceptual foundations and marketing issues. *Journal of direct, data and digital marketing practice*, 9(3), 231-244. <https://doi.org/10.1057/palgrave.ddmp.4350098>
- Cooper, C., & Hall, M. (2008). *Contemporary tourism: An international approach*. London: Butterworth Heinemann.
- Dore, L., & Crouch, G. (2003). Promoting destinations: An exploratory study of publicity programmes used by national tourism organisations. *Journal of Vacation Marketing*, 9 (2), 137-151. <https://doi.org/10.1177/135676670300900203>
- Duffy, A. (2015). The road more travelled: how user-generated content can lead to homogenized travel journalism. *Continuum, Journal of media and cultural studies*, 29(6), 821-832. <https://doi.org/10.1080/10304312.2015.1073686>
- Duffy, A. (2018). Wherever I Go, There You Are. The mobility/mooring paradigm in travel journalism. *Journalism studies*, 19 (6), 863-880. <https://doi.org/10.1080/1461670X.2016.1238317>
- Echtner, C.M., & Ritchie, J.R. (1991). The measurement of destination image: an empirical assessment. *Journal of Tourism Studies*, 2(2), 2-12. <https://doi.org/10.1177/004728759303100402>
- Ezzy, D. (2010). Qualitative interviewing as an embodied emotional performance. *Qualitative Inquiry*, 16(3), 163-170. <https://doi.org/10.1177/1077800409351970>
- Florek, M. (2011). Online city branding. In *City branding*, 82-90, Palgrave Macmillan, London. https://doi.org/10.1057/9780230294790_10
- Freire, J.R., & Gertner, R.K. (2021). The relevance of food for the development of a destination brand. *Place Branding and Public Diplomacy*, 17(2), 193-204. <https://doi.org/10.1057/s41254-020-00164-5>
- Fürsich, E. (2002). How can global journalists represent the 'other'? A critical assessment of the cultural studies concept for media practice. *Journalism*, 3, 57-84. <https://doi.org/10.1177/146488490200300102>
- Fürsich, E. (2003). Between credibility and commodification: nonfiction Entertainment as a Global Media Genre. *International Journal of cultural studies*, 6 (2), 131-153. <https://doi.org/10.1177/13678779030062001>
- Fürsich, E. (2012). Lifestyle journalism as popular journalism: Strategies for evaluating its public role. *Journalism Practice*, 6 (1), 12-25. <https://doi.org/10.1080/17512786.2011.622894>
- Fürsich, E., & Kavoori, A. (2001). Mapping a critical framework for the study of travel journalism. *International Journal of Cultural Studies*, 4 (2), 149-171. <https://doi.org/10.1177/136787790100400202>
- Gallarza, M.G., Saura, I.G., & García, H.C. (2002). Destination image: Towards a conceptual framework. *Annals of Tourism Research*, 29(1), 56-78. [https://doi.org/10.1016/S0160-7383\(01\)00031-7](https://doi.org/10.1016/S0160-7383(01)00031-7)
- Gartner, W.C. (1994). Image formation process. *Journal of Travel and Tourism Marketing*, 2(2-3), 191-216. https://doi.org/10.1300/J073v02n02_12
- Gartner, W.C., & Bachri, T. (1994). Tour operators' role in the tourism distribution system: an Indonesian case study. *Journal of International Consumer Marketing*, 6(3-4), 161 - 179. https://doi.org/10.1300/J046v06n03_09
- Gertner, R.K., & Freire, J. (2018). Impact of place brand names on destination image. *International Journal of Leisure and Tourism Marketing*, 6(1), 39-50.
- Gunn, C.A. (1988). *Vacationscape: Designing Tourist Regions*. Van Nostrand Reinhold. ISBN: 9780442226794.
- Hanusch, F. (2009). Taking travel journalism seriously: Suggestions for scientific inquiry into a neglected genre. In *Communication, creativity and global citizenship: Refereed proceedings of the Australian and New Zealand communication association conference 2009*, 623-636, Australian and New Zealand Communication Association.
- Hanusch, F. (2010). The dimensions of travel journalism. *Journalism Studies*, 11(1), 68-82. <https://doi.org/10.1080/14616700903290569>
- Hanusch, F. (2012). Broadening the focus: the case for lifestyle journalism as a field of scholarly inquiry. *Journalism Practice*, 6 (1), 2-11. <https://doi.org/10.1080/17512786.2011.622895>
- Hanusch, F. (2012a). A profile of Australian journalist's professional views and ethical standards. *Journalism*, 13 (5), 668-686. <https://doi.org/10.1177/1464884911398338>

- Lewis, J.M.W., Williams, A., Franklin, R.A., Thomas, J., & Mosdell, N.A. (2008). *The quality and independence of British journalism: Tracking the changes over 20 years*. <http://www.mediawise.org.uk/wp-content/uploads/2011/03/Quality-Independence-of-British-Journalism.pdf>
- Lincoln, Y.S., & Guba, E. (1985). *Naturalistic Inquiry*, SAGE Publications, Beverly Hills, CA.
- Merriam, S.B. (1988). *Case study research in education: A qualitative approach*. Jossey-Bass.
- McGaurr, L. (2010). Travel journalism and environment conflict. *Journalism Studies*, 11(1), 50-67. <https://doi.org/10.1080/14616700903068924>
- McGaurr, L. (2012). The devil may care. Travel journalism, cosmopolitan concern, politics and the brand. *Journalism Practice*, 6(1), 42-58. <https://doi.org/10.1080/17512786.2011.622907>
- McGaurr, L. (2013). *Travel journalism, cosmopolitan concern and the place-branded environment*. Doctoral dissertation, University of Tasmania.
- McGaurr, L. (2015). *Environmental Communication and Travel Journalism, Conflict and Concern*. London: Routledge. <https://doi.org/10.4324/9781315773902>
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook*. sage.
- Moss, C. (2008). Travel Journalism: The road to nowhere. *British Journalism Review*, 19 (1), 33-40. <https://doi.org/10.1177/0956474808090193>
- Moutinho, L., Rate, S., & Ballantyne, R. (2013). Futurecast: an exploration of key emerging megatrends in the tourism arena. *Trends in European Tourism Planning and Organisation. Bristol/Buffalo/Toronto: Channel View Publications*, 313-325.
- Munro, J., & Richards, B. (2011). The digital challenge. In *Destination brands: Managing Place Reputation*, 3rd ed., N. Morgan, A. Pritchard, A., & R. Pride, 141-154. Oxford: Butterworth-Heinemann.
- Ninemeier, J.D., & Perdue, J. (2005). *Hospitality Operations: Careers in the World's Greatest Industry*. Upper Saddle River, NJ: Prentice-Hall.
- Oliveira, E., & Panyik, E. (2015). Content, context and co-creation: Digital challenges in destination branding with references to Portugal as a tourist destination. *Journal of Vacation Marketing*, 21(1), 53-74. <https://doi.org/10.1177/1356766714544235>
- Page, S. (2009). *Tourism Management. An Introduction*. 4th ed. Oxford: Elsevier Ltd. <https://doi.org/10.4324/9781315768267>
- Pan, S., Santos, C., & Kim, S. (2017). Promoting Tourism, Projecting Power: The Role of Television Commercials. *Journal of Travel and Tourism Marketing*, 34(2), 192-208. <https://doi.org/10.1080/10548408.2016.1156610>
- Pasquinelli, C., & Trunfio, M. (2020). Overtouristified cities: an online news media narrative analysis. *Journal of Sustainable Tourism*, 28(11), 1805-1824. <https://doi.org/10.1080/09669582.2020.1760871>
- Patton, M.Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques*, 1-312, Thousand oaks, CA: Sage publications.
- Pike, S., & Page, S. (2014). Destination marketing organizations and destination marketing: A narrative analysis of the literature. *Tourism Management*, 41, 202-227. <https://doi.org/10.1016/j.tourman.2013.09.009>
- Pike, S., Jin, H.S., & Kotsi, F. (2019). There is nothing so practical as good theory for tracking destination image over time. *Journal of Destination Marketing and Management*, 14. <https://doi.org/10.1016/j.jdmm.2019.100387>
- Pirolli, B. (2017). Travel Journalists and Professional Identity. *Journalism Practice*, 11(6), 740-759. <https://doi.org/10.1080/17512786.2016.1193821>
- Pirolli, B. (2019). *Travel Journalism. Informing Tourists in the Digital Age*. London: Routledge. <https://doi.org/10.4324/9781315110738>
- Pokazanyeva, I. (2013). Aspects of Travel Journalism. *Современная медиасреда: функциональные, тематические, профессиональные аспекты: межвуз. сб. науч. работ студентов и аспирантов. СПб.* 199-205
- Pulizzi, J. (2012). The rise of storytelling as the new marketing. *Publishing research quarterly*, 28(2), 116-123. <https://doi.org/10.1007/s12109-012-9264-5>
- Reynolds, W.H. (1965). The role of the consumer in image building. *California Management Review*, 7(3), 69-76. <https://doi.org/10.2307/41165634>
- Rapley, T.J. (2001). The art (fulness) of open-ended interviewing: some considerations on analysing interviews. *Qualitative research*, 1(3), 303-323. <https://doi.org/10.1177/146879410100100303>
- Rosenkranz, T. (2015). *Becoming entrepreneurial: crisis, ethics and marketization in the field of travel journalism*. *Poetics*, 1-12. <https://doi.org/10.1016/j.poetic.2015.09.003>
- Santos, C. (2004). Perception and interpretation of leisure travel articles. *Leisure Sciences* 26, 393-410. <https://doi.org/10.1080/01490400490502462>
- Schellhorn, M., & Perkins, H.C. (2004). The stuff of which dreams are made: Representations of the South Sea in German-language tourist brochures. *Current Issues in Tourism*, 7(2), 95-133. <https://doi.org/10.1080/13683500408667975>
- Shiner, M., & Newburn, T. (1997). Definitely, maybe not? The normalisation of recreational drug use amongst young people. *Sociology*, 31(3), 511-529. <https://doi.org/10.1177/0038038597031003008>
- Wolcott, H.F. (1990). Making a study "more ethnographic". *Journal of contemporary Ethnography*, 19(1), 44-72. <https://doi.org/10.1177/089124190019001003>
- Zenker, S., Eggers, F., & Farsky, M. (2013). Putting a price tag on cities: Insights into the competitive environment of places. *Cities*, 30, 133-139. <https://doi.org/10.1016/j.cities.2012.02.002>
- Zerfass, A., Verci, D., & Wiesenber, M. (2016). The dawn of a new golden age for media relations? How PR professionals interact with the mass media and use new collaboration practices. *Public Relations Review*, 42(4), 499-508. <https://doi.org/10.1016/j.pubrev.2016.03.005>
- *** UNWTO (2021). 2020, Worst Year in Tourism History with 1 Billion Fewer International Arrivals, assessed February 5th 2021 <https://www.unwto.org/taxonomy/term/347>
- *** WTTC (2019). Economic Impact Reports'. <https://wtcc.org/Research/Economic-Impact>, assessed on 5 February 2021.

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