EVALUATION OF THE ATTRACTIVENESS OF TOURISM IN ALGERIA: MULTICRITERIA METHOD APPLIED TO AREAS OF TOURIST EXPANSION

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Abstract: Tourist attractiveness is the ability of a destination to generate towards itself tourist flows. Its evaluation is crucial for the success of tourism development. The objective of this research is to develop a model for evaluating the attractiveness of tourist destinations to assess the attractiveness of the Larbi Ben M'Hidi tourist expansion area in Skikda, Algeria. The applied method uses both a qualitative diagnosis of the destination's tourist resources and a quantitative visitor questionnaire survey to inventory, consolidate and evaluate the existing attraction portfolio from a supply and demand perspective. The results show that the landscape and climate are the elements of attraction. They identified the factors perceived as most important for the destination, its strengths and the weak indicators on which to act. Differences in evaluation have emerged between demand and supply, which shows that there are differences between the subjective and objective measure of tourist attractiveness. The proposed framework complements the body of theoretical knowledge on assessing the attractiveness of tourist destinations. In addition, by assessing and matching the differences between the reality of a destination and the perception of a visitor, they can help tourist destinations and their managers guide the development of their tourist areas.

Key words: tourist attractiveness, tourist expansion area, multi-criteria method, supply, demand, Skikda

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INTRODUCTION

Tourist attractiveness is defined as the ability to attract and satisfy potential tourists (Medina-Muñoz and Medina Muñoz, 2014). This capability is enhanced by providing a range of destination attributes (Lee and King, 2019). In this sense, it has the particular characteristics of a destination that make it attractive to tourists (Cho, 2008). The attractiveness of a tourist destination also reflects the feelings, opinions and perceptions of tourists about the destination's perceived ability to satisfy a vacation need (Hu and Ritchie, 1993; Mayo and Jarvis, 1981). Researchers have found that it depends on the availability of resources and the perceived value of those resources (Edward and George, 2008; Formica and Uysal, 2006). In addition, attracting tourists and meeting their demand is an important economic challenge and tourist destinations are now under extreme pressure to rejuvenate and strengthen their attractiveness. Competitive pressure forces international, national, state and local governments to re-evaluate existing tourism resources and take advantage of them to reposition and attract more visitors (Formica and Uysal, 2006). In this context, Algeria has low tourist flows despite a recognized tourist potential. With the aim of reversing this trend and moving Algeria from an issuing country to a receiving country of tourists, the Algerian state has defined five actions called the five dynamics of putting Algeria in tourism by 2030. This is the biggest challenge facing the Algerian economy today (Rahal et al., 2020). These dynamics are identified in the National Tourism Development Plan (SDAT), which focuses on the establishment of tourist expansion zones (T.E.Z "ZET"). The Tourist Expansion Zone is "a region or area of territory enjoying natural, cultural, human and creative qualities or peculiarities conducive to tourism, suitable for the establishment or development of a tourism infrastructure that can be exploited for the development of at least one or more profitable forms of tourism" (JORA n°11, 19 February 2003). Two instruments govern the ZET, the local Tourism Development Master Plan (SDATW) and the Tourist Development Plan (PAT). Since 2014, Algeria has 205 Zones declared and classified, massively located on the coast.

It is clear that the issue of tourist expansion zones has been debated. Many research projects have attempted to set out the rules for the promotion, management and development of these areas, as well as the measures implemented to control tourist land (Ghodbani et al., 2016; Mebirouk and Hacini-Chikh, 2019; Metlef, 2019; Ould Taleb and Tessa, 2020; Yahiaoui and Bouhdid, 2015). To contribute to this debate, we will focus on the ZETs of the wilaya of Skikda. A Mediterranean wilaya located in the east of Algeria. With its 250 km coastline, it holds important and diversified tourist resources and potential. These riches are concentrated in eleven (11) ZETs all coastal. They occupy an area of 2082 ha and

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are a major asset for tourism development. Despite its potential, the wilaya of Skikda is far from being a tourist destination that can accommodate a large influx of tourists. Based on the results of research carried out on tourism in Skikda (Meghzili, 2015), the various tourist destinations called tourist expansion zones have several handicaps that hinder the development of Skikda's tourist attractiveness. Hotel infrastructure is still inadequate and of poor quality. The transportation system is failing, and public spaces need to be requalified. The prices of the stays and the quality of the services do not respond to a certain clientele preferring to abstain and choose another destination, despite the improvement of the security situation (moreover, Algerians ignore these infrastructures and prefer to stay in Tunisia). Additionally, the SDATW of Skikda and the PAT are characterized by traditional approaches that do not reflect the challenges of national tourism policy. Thus, we note the lack of measurement tools to assess the attractiveness of tourist expansion zones.

The main question that this research will try to answer is how to develop the tourist attractiveness in the tourist expansion zones of the wilaya of Skikda? The hypothesis is focused on the construction of a tool to assess the attractiveness of tourist expansion areas that takes into account both supply and demand, this will help managers and decision makers to consider possible actions to improve their attractiveness. This research document is therefore an attempt to establish a model for assessing the attractiveness of Tourist Expansion Zones from the point of view of supply and demand, based on a grid of criteria and indicators that are scientifically valid and capable of helping decision-makers and managers of these destinations to implement the tourism strategy for 2030. It is supposed to assess and match the differences between destination reality and visitor perception. It is worth mentioning that the proposed framework is being tested in the context of the ZET of Larbi Ben M'Hidi (Figure 1) which is a popular tourist venue located in the northeast of Skikda. This destination was selected from among the eleven ZETs of Skikda (Figure 2) taking into account several criteria (geographical criteria, urban criteria, administrative criteria, planning criteria).

Figure 1. Geographical Situation of the Larbi Ben M'Hidi Destination in Skikda (Algeria) (Source: authors, 2022)

LITERATURE REVIEW

The attractiveness of destinations influences the choices of tourists and may be the most decisive factor for visiting or revisiting a destination (Pompurová et al., 2023). Researchers agree that the term tourism attractiveness cannot be defined unequivocally and that each tourist arriving at a given destination may consider its attractiveness differently (Roman and Bury, 2022). The tourism literature considers it a relative, multidimensional and complex concept. It depends on quantitative and qualitative variables (Montargot and Ouchen, 2018). Several researchers have explored the dimensions of tourist attractiveness and identified its indicators (Buhalis, 2000; Cooper et al., 2005; Decrop, 2006; Dwyer and Kim, 2003; Gagnon, 2007; Galarneau, 2015; Gearing et al., 1974; Zerouali Ouariti and Jebrane, 2019; Jafari, 1979; Laws, 1995; Lew, 1987; Ritchie and Crouch, 2000; Ritchie and Zins, 1978; Van Raaij, 1986). Gearing et al. (1974) grouped these indicators into five broad categories: natural factors,
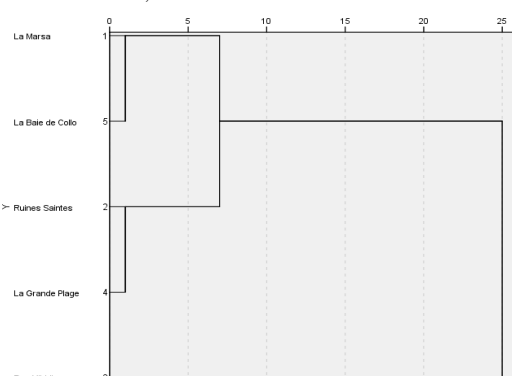

Figure 2. Selection of the Tourist Expansion Zones Studied (Source: authors, 2022)

social factors, historical factors, recreational facilities, and infrastructure. They were then expanded to seven dimensions with the addition of price levels and visitor satisfaction (Dupeyras and MacCallum, 2013; Ritchie and Zins, 1978). Kim and Song (1998) lists several other factors that affect a destination's attractiveness. These are clean and peaceful environments, the quality of accommodation facilities, family amenities, safety, accessibility, reputation, entertainment and leisure activities. Based on the synthesis of the different attributes of tourist attractiveness elaborated from twenty works by Galarneau (2015), nine attributes recur in eight works, namely: season-climate, natural places, infrastructure of reception, accessibility-transport, cultural and historical places, entertainment, culture and hospitality, events and safety.

Three approaches have been adopted to understand the dimensions of the attractiveness of a tourist destination. The first concerns the evaluation of tourist attractiveness based on demand. This approach focuses on consumer psychology (Ariya et al., 2017; Backman and Crompton, 1991; Blazeska et al., 2015; Hu and Ritchie, 1993; Kim and Song, 1998; Mayo and Jarvis, 1981; Nasir et al., 2020; Pompurová et al., 2023; Vengesayi et al., 2009). Destination attractiveness is often measured by tourists' perceptions of the destination's perceived ability to meet their needs (Mohanty et al., 2021). The demand outlook is based on tourist perceptions and interests about destination attributes (Li et al., 2023).

This is a subjective measure often referred to as perceived attractiveness (Giambona and Grassini, 2019; Musolino and Volget, 2018; Szubert et al., 2021). It is based on the assumption that a travel destination is attractive if tourists who visit it consider it an attractive destination (Hu and Ritchie, 1993). In addition, the success of the tourism industry depends on the satisfaction of tourists (Mohanty et al., 2021). Improving this satisfaction should be the primary function of a destination management organization (Biswas et al., 2020). From a supply perspective, the quantity and quality of the tourist attractions of the destinations are measures of the attractiveness of the destinations (Li et al., 2023). The second approach (Gunn, 2014; Kaur, 1981; Leiper, 1990; Smith, 1983; Walmsley and Jenkins, 1992; Young, 1999) is better defined by Kaur considering tourist attraction as the attraction generated by all the existing attractions in a given place at a given time (tourist attractiveness is an objective quality possessed by the destinations). It focuses on the identification of the physical characteristics of the destination and the analysis of its tourist resources as an essential step in the assessment of tourist attraction potential (Gunn, 1988). We speak of attractiveness expressed by the material and intangible resources of the destination (Musolino and Volget, 2018).

Being a mixed approach, the third focuses on the interaction between supply and demand (Edward and George, 2008; Formica and Uysal, 2006; Gu et al., 2022; Liu et al., 2016). It is developed as a result of criticism of the two previous approaches because of the systematic disregard of supply and demand. Some researchers say that without attractions tourism is impossible (Gunn, 2014), while others believe that demand drives tourism (Dale, 2000). The reality lies in the reciprocal relationship between these two key elements, which is essential to the very existence of tourism (Formica, 2000; Formica and Uysal, 2006). Edward and George (2008) treat the gap between the personal benefits of visitors and the perceived benefits as a better indicator of destination attractiveness. The attractiveness of tourist destinations depends on the availability of resources and the perceived values of those resources (Formica and Uysal, 2006).

Even before the work of formica and Uysal (2006), Edward and George (2008), Lew's research (1987) proposes a typology in three categories to circumscribe the attractive value of tourist sites: idiographic perspective; organizational perspective; and cognitive perspective. The first concerns natural qualities (panorama, fauna, flora, climate, etc.) and cultural qualities (history, population, monument, institution, etc.).

The second approach refers to conditions of possibility or even to contexts: originality, accessibility, positioning with regard to the comparable offer, layout, planning, capacity to support the environment, availability of services, etc. The first two are related to the tourism offer component. The third type of approach refers to visitor perceptions and experiences. This approach is linked to the tourism demand component.

The plurality of evaluation approaches can be explained by the plurality of disciplines that have addressed the issue of assessing tourist attractiveness (geography, economy, urban planning, management, society, etc.). Based on the above, researchers who view tourism as a landscape industry have spatial analysis and planning perspectives. Those who are more interested in demand or in the results of market attractiveness have borrowed knowledge from marketing, management science and operational research. For this research work and in view of our profile, we have chosen the mixed approach which is part of an overall logic. The overall attractiveness of a tourist destination must combine the assessment of existing resources or attractions with their perceived attractiveness (Gu et al., 2022). This leads us to apply a methodology combining the two aspects of supply and demand in order to arrive at an overall and general assessment of tourist attractiveness where the objective and the subjective complement each other.

METHODS

The tourist attractiveness of the *Larbi Ben M'Hidi* area was assessed on the basis of an examination of tourist resources (attractions) and perceptions of tourists during their stay in Skikda using a multi-criteria evaluation grid (Figure 3) structured around selected dimensions of tourist attractiveness. These dimensions were identified through previous studies (Buhalis, 2000; Cooper et al., 2005; Decrop, 2006; Galarneau, 2015; Gearing et al., 1974; Jafari, 1982; Kim and Song, 1998; Lew, 1987; Ritchie and Crouch, 2003; Van Raaij, 1986) and interviews with tourism industry experts and tourists as part of the knowledge of the various elements of attraction and experience in Skikda. A total of 30 indicators organized in 06 dimensions were selected: landscape dimension; social dimension; recreational dimension; infrastructure, environment and urban setting. The selected indicators will be scored on a balanced scale of 5 (based on the Likert scale), with no weighting to assign a specific weight or value to the different indicators:

1- Very unfavourable to attractiveness

2- Unfavourable to attractiveness
3- Moderately favourable to attractiveness
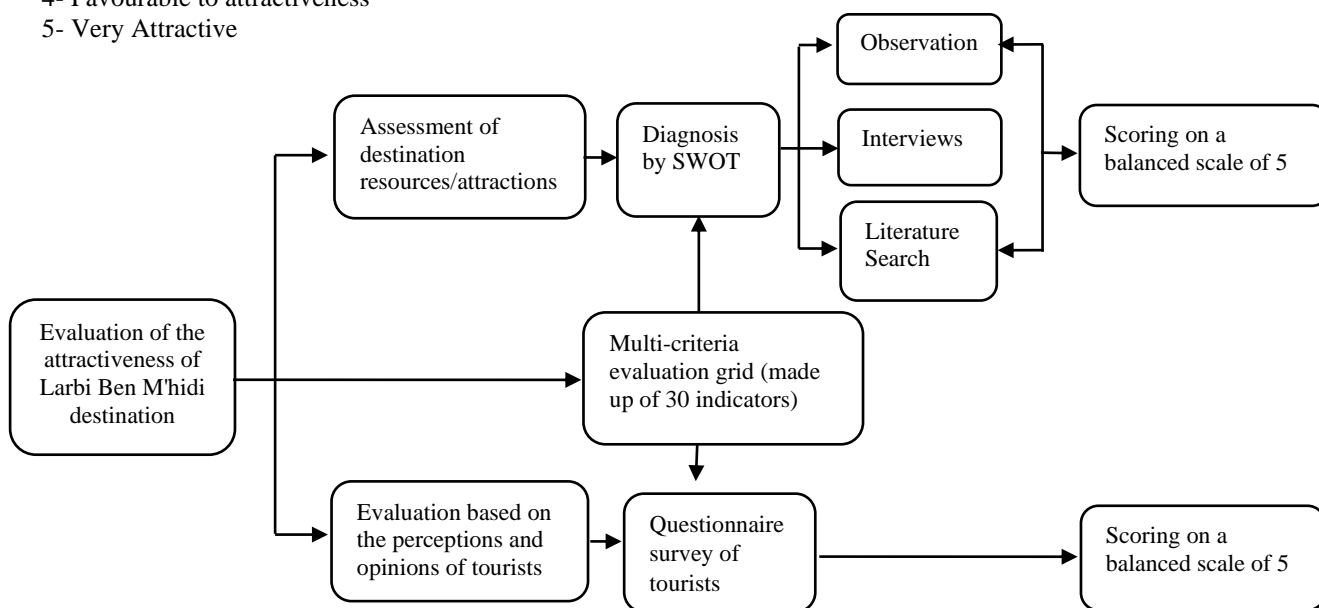4- Favourable to attractiveness
5- Very Attractive

Figure 3. Methodological Steps (Source: authors, 2023)

The examination of the tourist resources of the destination is entered through a diagnosis using the SWOT matrix (Strengths, Weaknesses, Opportunities, Threats) on the dimensions of tourist attractiveness already selected in the evaluation grid. To validate our diagnosis, we used documentary research (consultation of various reports, maps, photos, history books, press articles, statistical data, urban planning instruments, and territorial diagrams), observation and exploratory conversations. We asked the different categories of actors around our subject of study (decision-makers, tourists, residents and professionals) and who should be or are involved in the development of tourism in Skikda.

Based on the confrontation of internal and external factors of development (Laïfa and Mebirouk, 2021), the SWOT analysis can detect factors that are favorable, useful for tourist attractiveness and those that are unfavourable. Indeed, the attributes of the destination presented as strength should be the subject of initiatives (triggers) of an attractiveness strategy, while the attributes presented as weaknesses serve as a starting point for developing an attractiveness strategy. This qualitative analysis gives us an overall, brief and summary picture of the area of *Larbi Ben M'Hidi*, an approach considered as a support and source of information for the evaluation and rating of criteria and indicators of tourist attractiveness from the point of view of supply.

Furthermore, tourist perceptions were captured through data collected using the questionnaire on the same dimensions and indicators selected in the multi-criteria grid. Tourist responses are used to assess the attractiveness of the studied zone in terms of demand. The sample of this study was composed of national and international tourists who visited the tourist destination chosen for this study. In total, we interviewed 200 tourists. The questionnaire is self-administered and indicators are measured using a 5-point scale (based on the Likert scale), ranging from 1: very satisfied to 5: very dissatisfied. At the end of this stage, we obtain the ratings of the users on the performance of the destination in each of its attributes: A satisfied tourist = a powerful attribute and therefore favorable to the attractiveness.

Table 1. The Multicriteria Grid (Source: authors, 2023)

Dimensions	Indicators
Landscape dimension	-Climate; -Topography; -Fauna and flora; -Thermal and mineral springs; -Natural beauty
Social dimension	-Fairs and exhibitions; -Reception of the local population; -Feeling of security; -Local cuisine
Recreational dimension	-Sports activities; -Educational resources; -Resources for health, rest, tranquility and relaxation -Shopping Resources; - Night entertainment; -Equipment for families
Environmental dimension	-Presence of green space; - Possibilities of natural hazards in or around the destination; -Miscellaneous pollution - Possibilities of technological risks in the nearby destination or surroundings; -Cleanliness of public spaces
Infrastructures	-Accommodation; -Catering; -Road infrastructure; -Public transport; -Parking facility
Urban dimension	-Accessibility to destination; -Development and diversity of public spaces -Development and equipping of beaches; -State of the built environment; -Architectural quality

RESULTS AND DISCUSSION
1. SWOT analysis: For a qualitative diagnosis of studied zone
We first present the results of the diagnosis of tourist resources that was done using the SWOT matrix (Table 2), these results will be used to score the multi-criteria grid indicators from a supply perspective.

The region of *Larbi Ben M'Hidi* is characterized by diverse natural attractions and has an 8700 m seafront forming an uninterrupted bay on the Mediterranean. These tourist potentialities allowed it to be classified among the tourist expansion areas of Skikda. Despite this profile, its territory was used for other non-tourism purposes in the absence of a tourism development plan. Since the year 2000, the area is equipped with a tourist development plan and is undergoing major development with the aim of enhancing the existing natural potential and developing its attractiveness.

These facilities are large projects and luxurious tourist complexes that offer services with unaffordable prices for the majority of Algerian citizens. With regard to outdoor spaces, their development remains minimal or even below the requirements of a tourist area where quality public and outdoor spaces are a strong indicator of its attractiveness. Finally, we cannot ignore the presence of a large industrial area near the region of *Larbi Ben M'Hidi*, which constitutes a major risk and may compromise the development of tourism in the region.

Table 2. The SWOT table of studied zone (Source: authors)

Strengths	Weaknesses
-A rich and diverse natural heritage (Sea, forest, fauna, flora, mineral springs...) -An uninterrupted bay with a fringe of 8700 m -Good bathing ability both in terms of the quality of the sand and in terms of the width of the sandy strip -Beaches monitored thanks to the presence of a military barracks and the displacement of foreigners working on the petrochemical platform -A population favourable to tourist hospitality. -Restaurants that offer local cuisine and help promote Skikdi culinary art -A semi-Olympic swimming pool that offers several sports and leisure activities -Private beaches of the study area offer a place of relaxation, rest and tranquility -Attractive projects such as water parks: Marina d'or water park (other parks have just been added) -A good commercial offer that meets the needs of tourists -A capacity of reception strengthened by the presence of holiday camps belonging to the different companies and national companies -A territory with an ancient tourist past (colonial period) -Membership of the first Tourism Excellence Cluster -A strategic location at the scale of Skikda Satisfactory accessibility	-An abandoned forest area -Lack of night entertainment -Low recreational activity -Pollution caused by the presence of a petrochemical industrial activity next to the study area -Presence of bathing beaches on the study area -Degraded appearance of vegetation cover -Limited infrastructure for tourism exploitation of natural heritage -Lack of high capacity accommodation structures -Low hotel services and their cost too expensive for the majority of Algerian citizens -Accommodation facilities do not meet current tourism demand -Road degradation -Transportation system fails -Degradation of the urban environment of the studied zone -Degraded public space not reflecting a seaside tourist destination. -Degradation of the façade, which largely furnishes the coastal promenade buildings in poor condition are on the coastal strip -Poverty of public space in urban furniture Soil degradation in several parts of the coastal parkway -Insufficient supply in quality public spaces -Timid development of outdoor spaces that do not reflect a tourist area -Lack of beach equipment -Lack of accessibility: Insufficient road access for future the study area tourism program -Presence of several unfinished constructions.
Opportunities	Threats
-Active participation of the associative movement in Skikda in tourism through the initiation of leisure activities and sports: "Blue Planète Skikda" club for the promotion of various sports in natural environments and "Alto Sportif Skikda" association for aerial sports (paragliding, surfing, climbing and hiking) -A strong will on the part of local officials to develop the Tourist Expansion Zone	-Risk of weakening the natural maritime landscape and artificialization of the coastline due to urban agglomerations surrounding the study area -Air pollution that risks compromising the development of tourism in Skikda and especially in the Tourist Expansion Zones -Increase in accidents at the petrochemical industrial complex (1980 and 2003) -Erosion of the beach due to lack of maintenance and protection. -Discharges of waste water into the sea which may render parts of the beach inoperative because of the odours which may emanate

2. The Results of the Evaluation of the Attractiveness of the Study Zone According to the Multicriteria Grid

The two radar profiles in the figure below (Figure 4) present the final results of the evaluation of the attractiveness of the study zone, the first with the blue colour represents the supply and the second with the orange colour indicates the demand. The objective is to match the differences between the reality of the destination and the tourist's perception and finally to highlight the areas of tourist attractiveness that register a deficit and require an upgrade, that is, it would be necessary to identify the issues on which priority must be given to action and those that present opportunities for a future development of the attractiveness of the study tourist zone.

2.1. Recreational Dimension, Urban Dimension and Infrastructures

Differences in the assessment of tourism attractiveness emerged between supply and demand for the following three dimensions: "recreational dimension", "urban and architectural setting", and "infrastructure". These dimensions are considered to be non-performing from a supply perspective because they are below the tourism attractiveness performance threshold whose value is equal to 3. Moreover, from a demand perspective, these areas of attractiveness are in a medium range from the scale of assessment (urban and architectural dimension 3.2; infrastructure, 3.2 and recreational dimension, 3.3).The evaluation results from a supply perspective reflect the lack of educational resources such as botanical gardens, zoos and/or aquariums. Additionally, they display: the weakness of recreational activities and

the lack of night time entertainment; the deterioration of roads and the inefficiency of the transport system; the lack of high-capacity accommodation structures and the weakness of hotel services and their cost to the majority of visitors.

The lack of quality public spaces as well as the inadequacy of the coastal promenade are far from being the markers of a seaside tourist destination furnished by a facade lacking in architectural quality (unfinished buildings and buildings in poor condition); and finally, a simplistic layout of outdoor spaces. Moreover, from the point of view of demand, the results are indicative of the efforts made on the one hand by the associative movement in the promotion of water sports and the presence of attractive projects (water parks and semi-Olympic swimming pool); and on the other hand by the public authorities who have facilitated the accessibility of the study zone (through certain projects such as the East/West motorway) and encouraged private investment within the study zone.
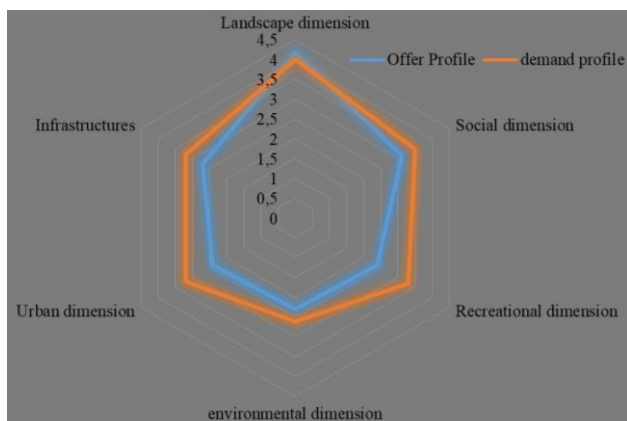
Figure 4. General Evaluation Profiles of the Attractiveness of the Tourist Zone (Source: authors, 2022)
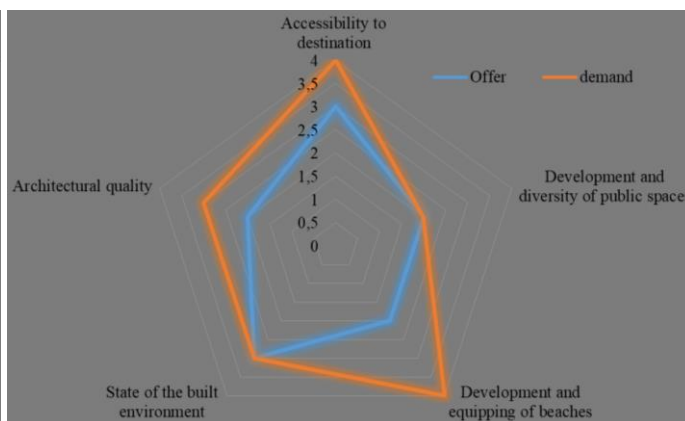
Figure 5. Evaluation Profiles of the Urban Dimension (Source: authors, 2022)

On a more detailed scale, the evaluation of the dimensions indicators cited above showed differences between the results of supply and demand but also some correlations were noted (Figures 5 and 6). The diagnosis of the state of public spaces and the state of the built environment correspond to the perceptions of visitors. The built environment is in a medium range from the scale of assessment. The development of public spaces is considered inefficient and unfavourable to attractiveness, which explains why the tourist destination has not been able to offer what is really perceived by the tourist demand. The SWOT diagnosis of the attributes of the study zone revealed a shortage of quality public spaces; a poverty of public spaces in urban furniture and soil degradation in several parts of the coastal promenade. Accessibility is considered to be efficient from the point of view of demand, and is in an average range from the scale of assessment from the point of view of supply for the lack of visibility of the road leading to the tourist area.

In terms of architectural quality, we found several buildings in poor condition and others unfinished on the coastal strip from the point of view of the application the assessment is average. On the other hand, the diagnosis found that the layout and equipment of the beaches were not conducive to the attractiveness of the study zone (lack of beach equipment), whereas the majority of users (70) are satisfied, which explains why tourism demand does not give importance to the development and equipment of beaches and prefers to see them in their natural state.
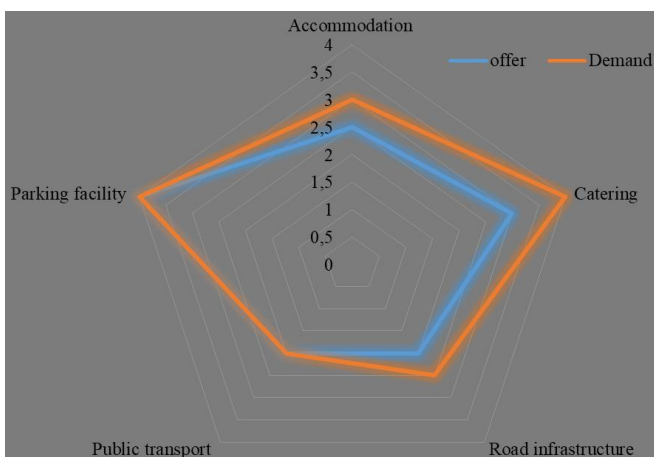
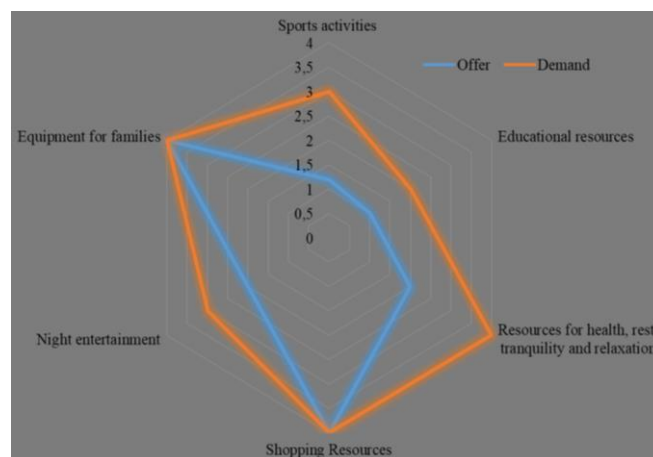Figure 6. Infrastructure Dimension Assessment Profile (Source: authors, 2022)

Figure 7. Recreational Dimension Assessment Profile (Source: authors, 2022)

The results of the evaluation of road infrastructure, transport and parking in the study zone from the point of view of supply are consistent with those from the point of view of demand. Road infrastructure and public transport are unfavourable to attractiveness, this result is due to the deterioration of roads and the lack of efficiency of public

transport (lack of comfort, very slow transport, etc.). The parking is considered efficient therefore favorable to the attractiveness thanks to the availability of areas dedicated to the parking. Accommodation is considered to be moderately attractive from a demand perspective and unfavourable from a supply perspective, as it does not meet current tourism demand. In this sense, we noted the lack of large capacity accommodation structures (the largest capacity is that of the Royal Tulip Hotel estimated at 318 beds). The weakness of hotel services and their costs are too expensive for the majority of visitors to the study zone (In summer 2022, the price of a night in half board in a single room is estimated at 188, 22 euro and in a double room is estimated at 243, 17 euro). In terms of catering, the study zone has several restaurants offering dishes of local cuisine and participating in the promotion of culinary art.

The equipment for families and the shopping resources are considered efficient from the point of view of supply and demand, they constitute two indicators favorable to the attractiveness of the study zone. This result (Figure 7) is due in particular to the presence of several leisure facilities: existing and being realized (semi-olympic pool, Marina d'or Water Park). Moreover, the study zone is characterized by a good commercial offer concentrated in the surrounding urban agglomerations. The study zone was able to offer what is actually perceived by the demand. Educational resources are very unfavourable to the attractiveness of the study zone, the results of evaluation of this indicator from the point of view of supply coincide with those from the point of view of demand because totally absent in the study zone. Moreover, sports activities and night entertainment are considered unfavourable to the attractiveness of the study zone in terms of supply but moderately favourable in terms of demand. About these sports activities, we noted an active participation of the associative movement in tourism through the initiation of leisure activities and sports: let us quote as an example the club "Blue Planète Skikda" for the promotion of various sports in natural environments and the "Alto Sportif Skikda" association for aerial sports (paragliding, surfing kit, climbing) and hiking. However, by referring to interviews with visitors and citizens of Skikda, these associations and their activities are unknown to them.

Finally, it should be pointed out that the visitors considered the resources for health, rest, tranquility and relaxation favorable, despite the lack of structures that meet this indicator within the study zone.

2.2. Landscape Dimension
The criteria composing the «landscape dimension» are considered efficient, and are important assets for the development of the tourist attractiveness of this study zone. The landscape of the study zone is the most attractive area from the point of view of demand and supply with a value of 4. The sea is the main object for which tourists move towards Larbi Ben M'Hidi. Thanks to an uninterrupted bay (more than eight kilometers), Larbi Ben M'Hidi offers a good bathing ability perceived through the quality of its sand as well as the width of its sandy strip. To maintain the existing tourist flow at Larbi Ben M'hidi, this natural element of the sea should be preserved, protected and enhanced against the continuous artificialization of the coastline and from existing sources of pollution. This area is rated as performing but requires more development to achieve the highest performance value.

2.3. Social Dimension
The results of the evaluation of social indicators from the supply point of view intersect with those from the point of view of demand and are in a medium range from the scale of evaluation, whose value is equal to 3. The tourist region offers what is actually perceived by the demand. The attitude of residents reflects the mindset or disposition of residents towards a tourist destination and can be defined as hostile, indifferent or supportive (Alloui-Ami Moussa, 2021). According to the results, the population of Skikda is favorable to the tourist reception. Since the improvement of the security of the country in Algeria, the company has become very favorable to the creation of tourist infrastructure and leisure. The inhabitants of Skikda, like all Algerians, are hospitable in nature and aspire to introduce the visitors of their city to their culture. Hospitality is a key factor in destination selection (Kelfaoui et al., 2021). The feeling of security is considered to be efficient, that is to say favourable to attractiveness. The beaches of the destination are the most guarded of the wilaya thanks to fixed stations of the gendarmerie or the police. This interest is mainly due to the presence of a military barracks and the displacement of foreigners working on the petrochemical platform. "Fairs and exhibitions" are an indicator against attractiveness. The ZET does not host exhibitions or events.

2.4. The Environment
As for the environmental dimension, this is a major weakness for the study zone, which is exposed to air pollution caused by the release of black gas and smoke from continuously lit torches. The cleanliness of public spaces, the possibilities of technological and natural risks have similar results both in terms of supply and demand. While the indicators "presence of green spaces and various pollutions" present contradictory results. The cleanliness of public spaces is considered inefficient and unfavourable to attractiveness. The possibilities of natural risks, constitute an effective indicator therefore favorable to the tourist attractiveness. The area where the study zone is located is stable and has not previously experienced flooding or earthquakes. On the other hand, technological risks threaten the study zone in view of the countless accidents at the petrochemical complex (1980 and 2003). From a supply perspective, "the green space" indicator is within a mean range from the scale of assessment. This result is due to the presence of significant vegetation cover. On the other hand, visitors are not satisfied. Their dissatisfaction is justified by the absence of public gardens or other public green space, the vegetation cover is abandoned without any maintenance. Visitors were moderately satisfied with the "miscellaneous pollution" indicator. From the point of view of supply, this indicator is very unfavourable to the attractiveness, it constitutes a weakness and risks to the development of tourism in Skikda and

especially the study zone. Pollution caused by the petrochemical complex by fumes, sometimes creating a veiled screen on a large part bordering the industrial area. In addition, discharges of waste water into the sea can make some parts of the beach unserviceable due to odours. Recalling that two beaches located on the study zone are prohibited to swim.

In short, this study looked at the diagnosis of the state of a tourist destination and its available resources in conjunction with demand preferences. Through the results obtained, the evaluation from the point of view of demand was different from that from the point of view of supply for several dimensions or indicators. It states that in considering a tourism project or developing a tourism region, we should not simply rely on the opinions of users or the evaluation of tourism resources. It is important to consider both supply and demand (Gu et al., 2022). The interaction between demand and supply is central to distinguishing the attractiveness of a tourist destination from others (Liu et al., 2016).

People travel or participate in leisure activities because they are driven or driven by travel motivations and destination attributes (Formica and Uysal, 2006). Analytical techniques to measure attractiveness should aim to combine the assessment of existing resources with their perceived attractiveness (Formica, 2000; Formica and Uysal, 2006). Echtner and Ritchie (1991) argue that the analysis of attributes and holistic impressions of tourists must be taken into account as the omission of either aspect will result in incomplete measurement. At the end of this research, it can be argued that the objective of this study was achieved by studying the attractiveness of the tourist area of *Larbi Ben M'hidi* and proposing a model of attractiveness of seaside tourist destinations. The proposed methodology has built on previous studies. It used different theoretical and analytical models known for their simplicity of use and flexibility to identify the dimensions of tourist attractiveness, to note, evaluate and compare simultaneously the attractiveness of supply and demand. The process allowed an objective comparison of the assessments of the attractiveness of supply and demand. The possibility of obtaining scores from two different perspectives offered an opportunity to study the interaction between demand and supply in determining the attractiveness of tourism.

CONCLUSION

In conclusion, it can be said that the results of the model presented in this research allow tourist expansion zone to design and develop more effective planning and marketing programs using an integrative or systemic approach. Thus the hypothesis of this work, which is concerned with the construction of a tool for assessing the attractiveness of tourist expansion areas which takes into account both supply and demand in order to help managers and decision-makers to consider possible actions to improve attractiveness is confirmed. It is necessary to understand the tourist and his motivations (Gemar et al., 2022). It is also important to explore the inventory of existing resources and attractions of the tourist destination (Backman et al., 1991; Ferrario, 1979).

This model, which takes into account the tourist and attractions, reduces the time taken by decision-makers to reflect by targeting the weak indicators on which to act. Its application leads to the formulation of recommendations and the planning of actions concerning the development, redevelopment, requalification or rehabilitation of the sub-systems of the destination in question. By applying this approach, Tourist Expansion Zone will be able to maximize the potential of its attractions and optimize the efficiency of its resource allocation. However, it has limitations in view of the degree of subjectivity included in the rating of attractiveness indicators from the point of view of supply (the transition of the data collected and analysed by SWOT to their rating). The results of this study help to broaden current knowledge on assessing the attractiveness of tourist destinations and the interaction between supply and demand. It may also be applied to other destinations taking into account and taking into account the specificities and characteristics of those destinations.

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