

PICTURING TRANSFORMATION THROUGH WELLNESS TOURISM: A QUALITATIVE EXPLANATORY REPORT OF PHYSICAL ACTIVITY PROJECT IN PHUKET, THAILAND

Prawit KHUNNIKOM^{ORCID}

Praboromarajchanok Institute, Faculty of Public Health and Allied Health Sciences, Sirindhorn College of Public Health Trang, Trang Province, Thailand, e-mail: prawit@scphtrang.ac.th

Suvapak BENJATANAWAT^{ORCID}*

Prince of Songkla University, Public Policy Institute, Songkhla Province, Thailand, e-mail: suvapak.b@psu.ac.th

Yuttipong KAEWTONG^{ORCID}

Prince of Songkla University, Public Policy Institute, Songkhla Province, Thailand, e-mail: Yuttipong.k@psu.ac.th

Nuttawit VISESHASINDHU^{ORCID}

Prince of Songkla University, Public Policy Institute, Songkhla Province, Thailand, e-mail: nuttawittv@gmail.com

Pundita HAETANURAK^{ORCID}

Healthy Space Forum, Bangkok Province, Thailand, e-mail: pundita.h@healthyspaceforum.org,

Tanawat WONGLUKSANAPAN^{ORCID}

Prince of Songkla University, Phuket Campus, Phuket Province, Thailand, e-mail: tanawat.w@phuket.psu.ac.th

Citation: Khunnikom, P., Benjatanawat, S., Kaewtong, Y., Viseshasindhu, N., Haetanurak, P., & Wongluksanapan, T. (2025). Picturing transformation through wellness tourism: A qualitative explanatory report of physical activity project in Phuket, Thailand. *Geojournal of Tourism and Geosites*, 58(1), 386–395. <https://doi.org/10.30892/gtg.58135-1420>

Abstract: Creating engaging physical activity opportunities for health-promoting cities is a unique challenge amidst wellness tourism transformation. This qualitative study explained the determinants of physical activity within the context of wellness tourism in Phuket, Thailand. Data were gathered through in-depth interviews, group discussions, and brainstorming sessions with 57 key informants, including academics, residents, tourists, and government officials. Content analysis was applied. Results showed tactics to redesign healthy spaces, i.e., 1) a city lab integrating tourism with activity zones, utilizing innovative urban design to create active spaces within a limited area; 2) walking routes for cultural exploration, encouraging physical activity while finding the local traditions via buildings, food, and apparels; and 3) connecting the university-community space for enhancing accessibility of communities, promoting active lifestyles among students and fostering community engagement through physical activity. Six key determinants influencing physical activity promotion were: 1) motivation: Engaging activities that inspire physical activity; 2) participation: Community involvement in design and implementation; 3) infrastructure: Supporting infrastructure, i.e., walking routes, parks with activity zones, and accessible public spaces, was essential; 4) networks and social mechanisms: Collaboration among stakeholders (government, community, academics, tourists); 5) public relations: Promoting physical activity through various channels like social media, local media to increase awareness and engagement; and 6) area accessibility: Convenient access to activity opportunities. Findings highlight the potential of integrating physical activity into tourism initiatives by leveraging existing cultural and environmental assets, and the importance of context-specific strategies tailored to the unique needs and characteristics of each setting. This study provides valuable insights for policymakers and stakeholders seeking to create sustainable and engaging physical activity opportunities within a dynamic wellness tourism environment.

Keywords: physical activity, wellness tourism, health-promoting city, picturing transformation, Phuket, qualitative explanatory report, Thailand

* * * * *

INTRODUCTION

Wellness tourism is a form of tourism that prioritizes holistic well-being by integrating physical health with social, personal, and lifestyle considerations. This tourism affects the health benefits in 4 dimensions: physical fitness, psychological fitness, quality of life, and environmental health (Liao et al., 2023). In line with this, the concept of Transformative Tourism, which emphasizes inner transformation in travelers (Nandasena et al., 2022; Pung et al., 2020; World Tourism Organization, 2016), suggests that Wellness Tourism can facilitate transformative experiences through health-promoting activities. Here, ‘physical activity’ is defined as all body movement produced by skeletal muscles that requires energy expenditure (WHO, 2024). Promoting physical activity is a highly effective way to improve public health, prevent chronic diseases like obesity, and reduce healthcare costs (Oldridge-Turner et al., 2022). Integrating physical activity as part of wellness tourism could maximize the positive impacts of tourism and lead to a more beneficial

* Corresponding author

experience for these tourists. In Thailand, the National Physical Activity Promotion Plan 2018-2030 has the vision that “people should have active ways of life by physical activity in a suitable environment”. Two objectives have been set, namely 1) people have sufficient physical activity, and 2) an appropriate environment is provided to facilitate physical activity (Benjatanawat et al., 2023; Topothai et al., 2019). In 2022, the promotion of physical activity focused on walking and cycling in several settings, i.e., workplaces, childcare settings, community sports, and public open spaces.

However, of total deaths still 77% were due to noncommunicable diseases (NCDs), such as cardiovascular diseases, cancer, diabetes, and chronic respiratory disease, among other NCDs in Thailand. The prevalences of physical inactivity in adolescents aged 11-17 were 70% in male and 85% in female, in adults aged 18+ these were 22% in male and 27% in female, and in adults aged 70+ they were 34% in male and 42% in female (WHO, 2022). Besides, the study to assess physical activity promotion in 12 local administrative organizations of Thailand (Topothai et al., 2022), showed gaps in the operation of active environments (such as places, exercise equipment, and appropriate time for exercise), and in active systems (such as policies, budget, personnel, and facilities).

Physical Activity Promotion Project in Phuket Wellness Area was purposed to 1) support wellness tourism by promoting sufficient physical activity for local people and tourists in the area, and 2) support Phuket to be a city with an active environment, following the concept “Healthy City is an Active City”. This project was done in 3 settings on Phuket Island, which were areas of a beach, the old town, and a university. Public spaces in these settings can be developed to be healthy spaces along with physical activity promotion activities for local people and tourists. This study aimed to explain the physical activity experiences of project participants and analyze the transformative determinants that influenced physical activity promotion. Phuket with healthy spaces could support wellness tourism and encourage residents and tourists to be active people, and eventually to support active societies.

LITERATURE REVIEW

Physical Activity refers to the body movement, actions, and practices within a specific context and culture, influenced by individual interests, emotions, thoughts, and suggestions. This includes housework, occupational tasks, commuting, cycling, exercising, and engaging in recreational activities for relaxation (Piggin, 2020; Waraphan et al., 2023)

Despite the numerous benefits of physical activity, global rates of insufficient physical activity among adults have risen, increasing from 23.4% in 2000 to 31.3% in 2022. This trend is observed in a majority of countries, with 103 out of 197 countries (52%) and 6 out of 9 regions (67%) showing an increase in insufficient physical activity. This upward trend contradicts the global target of reducing insufficient physical activity by 15% by 2030 (Strain et al., 2024; WHO, 2018). However, studies on facilitating factors related to physical activity management highlight the importance of the physical environment (Giles et al., 2021), such as suitable locations, exercise equipment, and appropriate exercise times. Additionally, supportive policies concerning budget, personnel, and facilities are crucial for promoting exercise (Ablah et al., 2019; Zhang et al., 2024). Furthermore, reinforcing factors, such as support from surrounding individuals and access to information, also affect exercise behavior and physical activity engagement (Lapratthanathong et al., 2022).

Recent research emphasizes the critical role of the built environment in promoting physical activity, particularly in suburban areas where urban sprawl can limit access to activity opportunities. The study by Iamtrakul & Chayphong (2024) indicates that the built environment plays a crucial role in promoting physical activity in suburban areas. Urban planning and design should focus on optimizing infrastructure for active travel, increasing access to urban activity nodes, and distributing physical activity opportunities evenly across all age groups. Xu et al. (2024) explain that physical activity mediates the relationship between the urban community environment and physical health in older adults. Xie et al. (2024) highlight the neighborhood environment as a critical factor influencing children's physical activity. While promoting physical activity through the built environment holds significant promise, interventions must be tailored to the specific economic, social, and cultural context of the target population. Future research should further investigate the complex interplay of these factors to develop effective and sustainable strategies for promoting physical activity.

Wellness Tourism is a form of tourism that focuses on health in a holistic way, considering physical, mental, emotional, social and environmental health (Kotur, 2022; Liao et al., 2023). It aims to improve health, promote relaxation, reduce stress, and enhance personal happiness. Wellness tourism is often associated with natural places, i.e. forests, seas, and hot springs. These natural environments have a positive effect on physical and mental health. Various activities in wellness tourism include relaxing at the spa, practicing yoga, meditating, hiking, eating healthy food, and learning about the local culture (Liao et al., 2023; Liu et al., 2023). These activities motivate tourists to participate (Liu et al., 2023) and create memorable experiences. They are also useful in helping to promote physical fitness, prevent disease, relieve stress, restore mental health (Liao et al., 2023), and improve the quality of life (Liao et al., 2023; Liu et al., 2023). Driven by increasing awareness of health and well-being, wellness tourism has gained significant traction, particularly in destinations like Thailand. The holistic nature of wellness tourism is instrumental in integrating healthcare and medical services to cater to the comprehensive needs of patients (Pilelienė et al., 2024) alongside tourists. Lukose et al. (2024) emphasize the importance of interdisciplinary research in combining wellness and medical services to provide a more comprehensive approach to health tourism. This approach is crucial for building resilience and adaptability to global health crises and ensuring sustainability.

MATERIALS AND METHODS

This qualitative study was conducted using multiple case studies according to Grounded Theory (Strauss & Corbin, 1998). The data were collected between October and December 2023. This research was certified for ethics in social and human research by the Public Policy Institute, Prince of Songkla University (certification no. EC 006/66 issued on 6th October 2023).

Study Area

This study was conducted to explain the Physical Activity Promotion Project in Phuket Wellness Area, which was operated in 3 settings, namely on a beach, in the old town, and in the university campus. These were the pilot areas to promote healthy spaces for physical activity (Figure 1) as per the following details.

Setting A = the area on Patong Beach, Patong Municipality;
Setting B = the old town area, Phuket City Municipality
Setting C = the area of Prince of Songkla University, Phuket Campus (PSU Phuket)

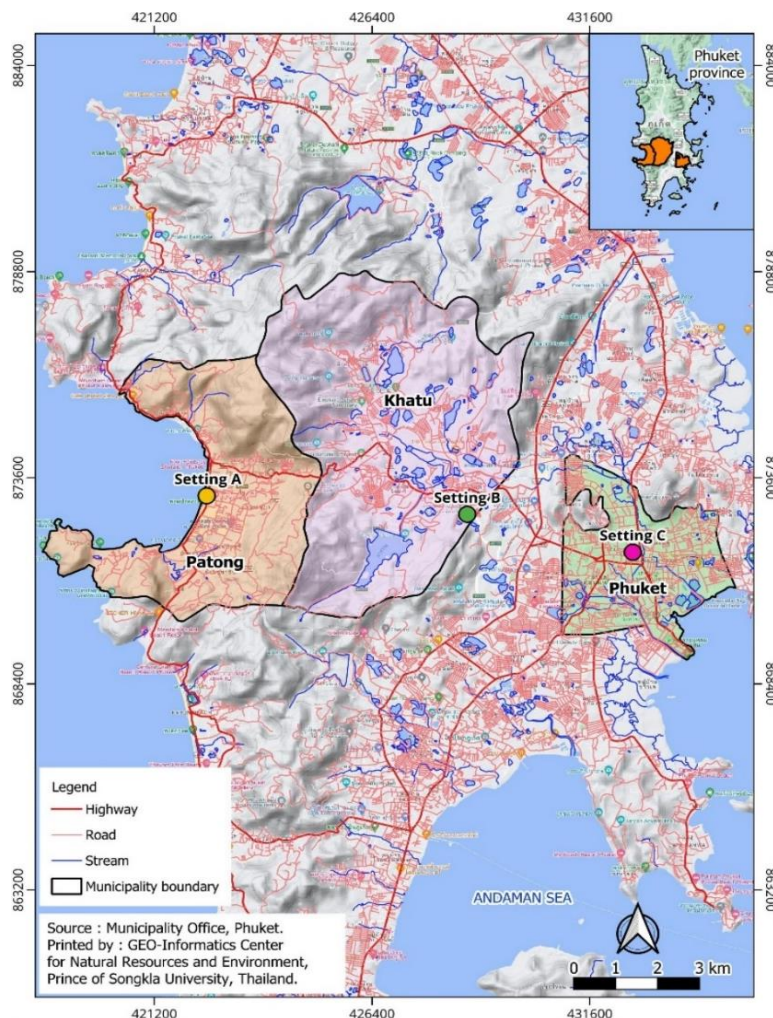


Figure 1. Study Areas (Source: GEO-Informatics Center for Natural Resources and Environment realized by authors)

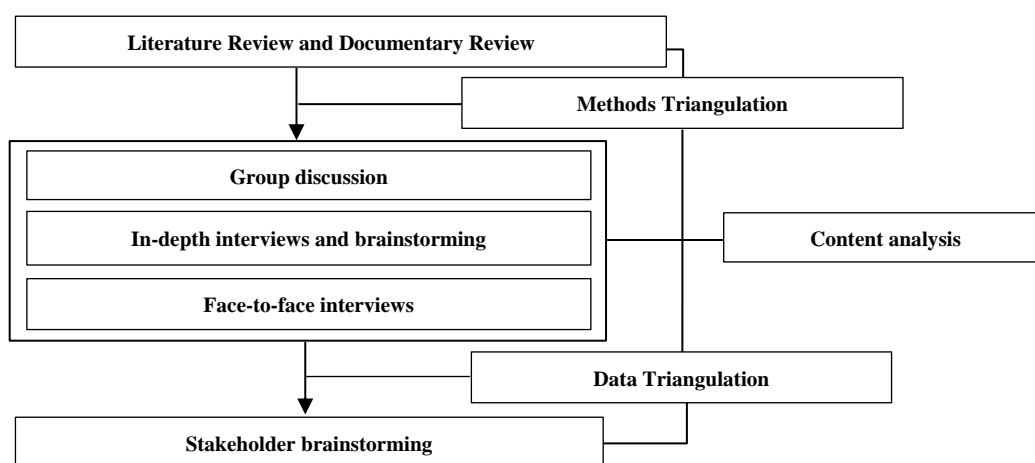


Figure 2. Scheme of research methodology (Source: The authors' elaboration)

Data collection

Qualitative approaches were implemented to gather the data, as follows (Figure 2).

1. Reviewing the literature, and secondary data, including

a) the Physical Activity Promotion Project in Phuket Wellness Area, and the final report of this project. These data were input for project operation, processes related to project activity, and outputs, which are relevant to the project objectives in order to basically identify the preliminary project effectiveness.

b) The literature related to situation of physical activity operation in Phuket, factors affecting the project success or failure, social needs, economic conditions, politics and environment, and policies and related organizations. Then, the gathered data were entered into the Data Extraction Sheet and analyzed.

2. Group discussions were held to explore the opinions related to the wellness area and physical activity operation. The ten participants were community leaders and local people who lived in the 3 settings of Phuket and joined the physical activity or the project.

3. In-depth interviews with 3 project managers and a brainstorming with them and 7 persons in the working team were also conducted, to investigate the consistency of the results.

4. Face-to-face interviews were additionally done to ask for more opinions on healthy spaces and physical activity. Nine tourists from the 3 settings were interviewed.

5. Stakeholder brainstorming was carried out to jointly validate the results. The forty participants comprised 4 private organizations representatives (Andaman and Thai Gulf Wellness Hotel Association, Phuket Tourism Association, and Southern Thai Hotels Association), 9 government and local organization officers (Phuket Provincial Public Health Office, Phuket Provincial Administrative Organization, Phuket City Municipality, Patong Municipality, and Kathu Municipality), 25 community representatives from three settings, and 2 academics of working team.

Key Informants

Fifty-seven key informants in this study were stakeholders involved in the project, including 4 private organizations' representatives (Andaman and Thai Gulf Wellness Hotel Association, Phuket Tourism Association, and Southern Thai Hotels Association), 9 government and local organization officers (Phuket Provincial Public Health Office, Phuket Provincial Administrative Organization, Phuket City Municipality, Patong Municipality, and Kathu Municipality), 25 community representatives (the Old Town, 19 communities around PSU Phuket, and Patong), 9 tourists, and 10 academics of project working team (PSU Phuket, and Health Space Forum). The informants chosen (Table 1) represented:

1. Academics in the working team of the Physical Activity Promotion Project in Phuket Wellness Area.
2. People in networks and social mechanisms for enforcing Phuket to be a healthy city with healthy spaces for physical activity promotion, including government, private, local, and educational sectors.
3. People living in Phuket for at least 6 months and doing physical activity in the 3 settings of this project.
4. Tourists who were travelling in Phuket and joining physical activity in the 3 settings.
5. People who volunteered to participate in this study.

Table 1. Key Informants of the study (n = 62) (Source: The authors' elaboration.)

No	Code	Data collection	Position	Number of informants at provincial level	Number of informants in each area			Total participants	Dates of data collection
					A	B	C		
1	A1-A10	Group discussion	Community representatives	-	2	4	4	10	2023-10-9
2	B1-B3	In-depth interview	Project Manager	3	-	-	-	3	2023-10-16 2023-10-17
3	B1-B3	Brainstorming	Project Manager	3	-	-	-	3	2023-10-18
	B4-B10		Working team	-	1	2	4	7	
4	C1-C9	Face-to-face interview	Tourists	-	3	3	3	9	2023-10-21 2023-10-22
5	A1-A25	Brainstorming	Communities	-	3	8	14	25	2023-11-30
	D1-D4		Private	4	-	-	-	4	
	E1- E9		Government/Local	3	2	2	2	9	
	B1-B2		Working team	2	-	-	-	2	

Research Tools

The tools for this study were data extraction sheet and questions for interview and group discussion, as per the following details.

1. Data extraction sheet was used at the first step of reviewing the literature, namely names of strategies/plans, responsible organizations, operation years, objectives, and vision. These details were also considered for their consistency with the policy in each level and related organizations, connections among policies, or the implementation of physical activity linked to the health equity.

2. Questions for interview and group discussion were conducted to investigate the situation of the project operation, and the factors related to promoting physical activity to the operation. The main questions were “**which activity affected the project operation?**” and “**how did this mentioned activity lead to physical activity in the area?**”. Meanwhile, participants could voice their opinions to promote healthy spaces for promoting physical activity in Phuket.

Data Analysis and Verification

The collected data were analyzed by content analysis and verified for accuracy by data and methods triangulation. Three approaches, namely documentary review, group discussions, and in-depth interviews, were pursued to validate the data. After that, the analyzed data were reflected to stakeholders in the area again to consider the consistency of the results.

RESULTS

The results of the Physical Activity Promotion Project in Phuket Wellness Area can be split into two parts: 1) the general conditions of the area; and 2) transformative determinants of physical activity in wellness tourism, per the following details.

1. The general conditions of the area

Setting A (Figure 3) is an open space for tourism along the beach in the municipality. It was selected to conduct a City Lab, as a public space model for promoting physical activity. This setting was designed to be “Patong City Lab”, using the integration concept of the beach area and physical activity types. A public space was temporarily improved according to the concept 'rak (conserve), lae (watch), len (play)' for the community and tourists in three zones; activity (waste collection by biking, waste sorting to colored bins), exhibition, and recreation (using physical activity equipment).

Setting B (Figure 4) is the old town located in the city center, including residences, tourist attractions, and the trade center, which are easily accessible to people in the communities and tourists. It is also a place for food culture, unique apparels, and Sino-Portuguese buildings, which represent a culture mixing western and eastern arts. Therefore, use of the Old Town as a model area was designed using the concept of “Pop-up Park” with the vision of “Old Town Pop-up Park Journey”. Then the activity of “Finding Pattern in Phuket Old Town” was held by the community and Children and Youth Council of Phuket City. This activity was used to promote walking as physical activity, which is in accordance with the community’s way of life and support to tourism. In the Old Town, 3 routes were designed regarding the city’s main parts: buildings, food, and apparels. The first route includes viewing buildings and being informed of the history of the Old Town through Phuket Thai Hua Museum. The second route was designed for viewing landmarks that people visit, take photos of, and share about on online social media. The third route was for visiting morning markets, tasting local desserts, and observing ingredients for food.

Setting C (Figure 5) is in a university environment with trees, roof-covered walkways, water reservoir, sports center, and surrounding communities. The setting was designed by connecting the university space to the communities in order for people in the communities to access the setting and gain the most benefit from it. This view is also consistent with the university’s motto “Our Soul is for the Benefit of Mankind”. The vision of the design was “Healthy Space makes good belief” together with having activities to increase physical activity. First, the design for physical space was completed to have an effective space, and then improved to be more attractive to people. Second, there have been some activities to promote physical activity (walking, running, basketball, and Zumba dance) and the university space, such as at PSU Phuket Bazaar, including playgrounds for physical activity in the market together with healthy food.

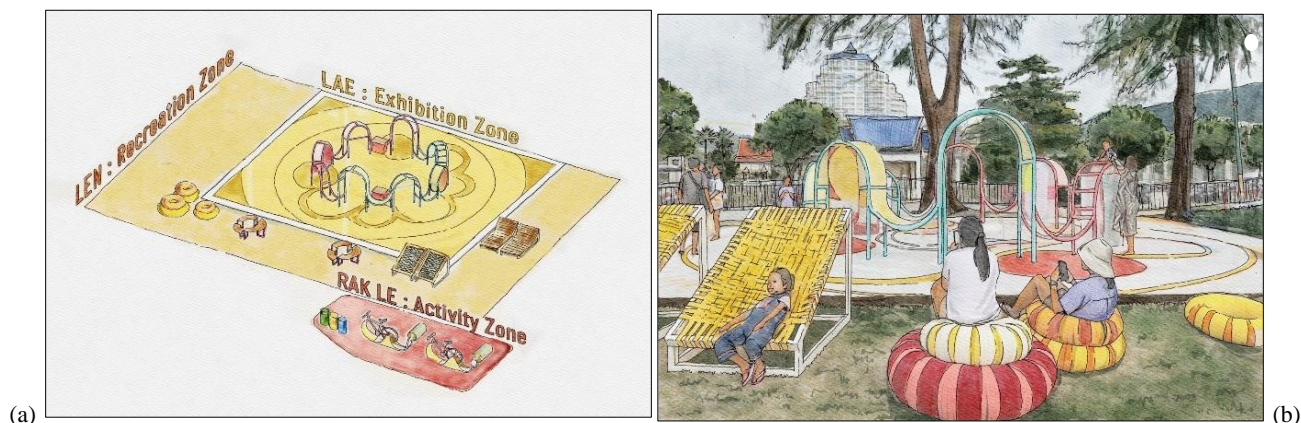


Figure 3. Picturing transformation to Patong City Lab (a) Map of Patong City Lab; (b) Patong City Lab from street view along the beach (Source: Original Sketch by authors, 2024)

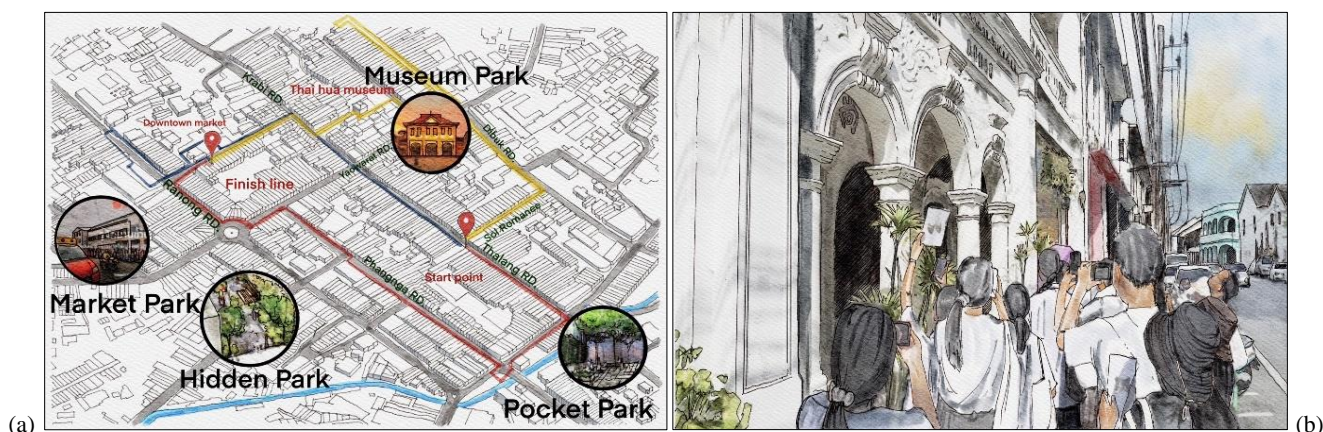


Figure 4. Picturing transformation to Old Town Pop-up Park Journey (a) Map of Walking Routes and Public Spaces; (b) Old Town Pop-up Park (Source: Original Sketch by authors, 2024)



Figure 5. Picturing transformation to Banzaan Market (a) Covered Walkway in PSU University Space;
(b) PSU Phuket Banzaan (Source: Original Sketch by authors, 2024)

2. Transformative Determinants of Physical Activity in Wellness Tourism

The operation of the Physical Activity Promotion Project in Phuket Wellness Area in 3 settings revealed six key determinants for promoting physical activity: 1) motivation for physical activity; 2) participation in physical activity promotion; 3) infrastructure supporting physical activity; 4) networks and social mechanisms; 5) public relations; and 6) area accessibility by people and tourists; per the following details.

2.1 Motivation for physical activity was what makes people understand and do physical activity in Phuket Wellness Area. This motivation came from exhibitions providing activities among the audience. The settings with flexible utilization by every age group of people can create value, as in the Old Town, in the public space on the beach, and so on. This project could actually encourage more young children, local people in the settings, and tourists to participate in physical activity. In Setting A, the public space along the beach was created to be a City Lab as a playground, and it was designed with an Exhibition Zone giving lively knowledge. Therefore, it could positively affect young children to be motivated for physical activity and encourage tourists to take part in the setting. In Setting B, it was found that Pop-up Park was creating a public space that was flexible for the town's events, together with the activity of "Old Town Pop-up Park Journey". It also affected young children and people in the communities helping them understand the Old Town's characteristics and physical activity. One informant said that

"We think that this activity was not spent with high budget, but it had a lot of impacts. Many young people told me that they wanted to join this activity again, so it was the fresh beginning to see smiles of these young people in the activity. It did not just impact physical activity, but it could also impact on this setting as one tourist attraction. We can have more activities." (B1)

Regarding Setting C, it was found that the space improvement was completed to promote walking, so it positively affected young people and people in the communities to understand and utilize the setting. In addition, activities held to promote exercise could create motivation for children and people in the communities to exercise. Besides, giving rewards for exercise motivated every group of people to join the activities. Although the activities were organized for students and staff in the university and people in the communities, some activities such as Zumba dance were of interest only to some people, especially young people and working adults. One informant informed that

"Even though the project was finished, the dancing activity is still going on. It worked when people were willing to group to do activities, and an event was considered a fun center for gathering people. People's behavior can change, but it did not change a lot. I think that it was an activity to gather people who like the same thing." (A1)

However, this physical activity promotion was still not in accordance with every group of people and the area utilization. It interested only some people.

2.2 Participation in physical activity promotion was a process happening at start, during, and after the project operation. People in the communities and representatives from local organizations played their roles and participated in designing the settings and the activities at the beginning of the project. Setting A was a tourist attraction, and there were various types of people living in the area, most of them running businesses. Therefore, in the area development step, many local people in the area could not take part in the project, and the representatives from the local organizations participated in the project, affecting the design to meet the real needs. One informant said that

"The community is not so united because people are in a business sector. These entrepreneurs are ready for the development, but in the business way. It is hard to have public space." (B2)

However, City Lab in Setting A was well accepted by local people in the area and tourists. In Setting B, people in the communities took part in designing the area and promoting physical activity. The area improvement in the Old Town was focused on walking for people of every age, and the museum setting gained a lot of interest and induced learning together. One interviewee said that

"Participants were happy. Everyone tried to keep connected. For example, staff at Phuket Thai Hua Museum cooperated as speakers to explain everything. It is a fresh start to give them more ideas, to not only be the old version of the museum. They can do this to draw tourists' attention to come to their museum." (B1)

In Setting C, it emerged that students and staff in the university and people living around the university took part in giving opinions. In consequence, they understood and joined physical activity for their health, even if some activities, such as basketball and Zumba, drew only some people's attention. Moreover, Setting C was a university area where some rules and regulations were set, which had an effect on people's belief about using the area. However, PSU Phuket BanZaan Market and a playground were known by people outside the university and attracted more of them to use the area.

2.3 Infrastructure supporting physical activity was a factor facilitating physical activity by people in the Wellness Area. The scope in which the environment benefits physical activity was found as follows.

Setting A was designed to be the playground City Lab for promoting physical activity which got attention from children and tourists, and it was colorful and made from reused materials. However, this City Lab was not appropriate for people of every age: it was useful only for young children and young people. After the project was completed, this setting was given to the local government office to take care of. Nevertheless, the setting was temporarily improved to be the City Lab focused on fast, easy, and low-cost construction in order to experiment for some period of time; therefore, limitations in long-term durability were found. In addition, the results revealed that the overall condition of the setting changed, since some materials and equipment were not ready to use and caused risk of accidents to children, people, and tourists, as in the following interview note.

"Many children come here to play and use equipment, but it was dangerous. When children climbed up to play on some equipment, a lot of them fell down." (C2)

Although tourists thought they realized the importance of this City Lab, which was built to be a public space for children, family members, and tourists with their families, allowing some activities, the setting needed fixing and improving continuously. Its concrete floor should be changed to be a cushioning rubber floor, and a fence should be built to reduce the risk of accidents to children, because the setting is located along the main road with congested traffic.

"I do the building work. I think too many much modify. Too much improve like this. This one is very dangerous for children. And the main road is there, this should have the barriers to be the safe place for children. The floor must improve to the rubber floor. I think because this is Phuket, so many families and other countries come. And there is no rest area around here. So, this place must improve." (C3)

In Setting B, walking as physical activity and Pop-up Park were promoted, and the activity of "Finding Pattern in Phuket Old Town" was organized to promote walking in the Old Town and the tourist city, so all events gained attention from local residents, especially young people. However, since the Old Town has limited ways to improve, and some areas in the center of the town are private and tourist attractions, opinions from various sectors are still necessary. This setting could not be changed in a short time. In Setting C, the university area is shaded and green enough for physical activities such as walking and jogging. However, its location was not suitable for shopping activities such as PSU Phuket Bazaar Market. The equipment in the playground was also insufficient for children.

2.4 Networks and social mechanisms

Setting A was a tourist area mostly inhabited by various tourism entrepreneurs and tourists. There was no social mechanism in the community, resulting in no harmony. Therefore, the government office played a role in and were responsible for promoting the healthy space for physical activity as indicated by this comment.

"We can't still find a group of people in the community to promote this activity, so we went to the municipality for this matter." (B2)

In Setting B, it was found that the strong networks and social mechanisms were from people at various ages in several communities. At the beginning of the project, the networks were created from the community leaders, Children and Youth Council of Phuket City, and then they were linked to both private and state organizations in order to mutually participate in the project. Similar to Setting C, the project operation in the institute area was participated in by the residents nearby. The management in the university was comprehensive even if its assigned duties were not tight.

2.5 Public relations

In Setting A, it was found that public relations had not informed well people in the community and some tourists. They thought that this CityLab was held as an exhibition, so only a small number of people, especially Thai people, joined the activities in the City Lab. Unlike foreign tourists, they knew what City Lab was for.

In Setting B, the results revealed that public relations were pursued online by people in the area, government organizations, and the private sector. Therefore, it became a trend for people and tourists to be alert for physical activity together with learning the cultures of the area (food, apparels, and buildings).

In Setting C, the findings showed that public relations to people around the university and tourists did not cover enough in the area. However, some activities such as Walking, Running, and PSU Sightseeing were organized to encourage people in and around the university to be more physically active. People of every age, especially the elderly had an opportunity to join the activity and use the area. Due to PSU Phuket Bazaar Market, more people knew the university; consequently, economic transactions occurred between people in the university and people in the communities. However, the market area was not large enough, inadequate products available, and there were insufficient public relations, so students, working people, and residents nearby who were candidate consumers did not attend that much. Meanwhile, the playground next to that market got attention from young children and youth to do physical activity.

2.6 Area accessibility by people and tourists

Regarding access to Setting A, local people and tourists had convenient access to the setting that was next to the beach and along the main road. However, Thai tourists and others in the setting were not accustomed to the types of playthings that had been specially designed.

In Setting B, cooperative support by local people, entrepreneurs in the communities, and organizations in the area, and interaction among tourists through the cultural capital in the area, promoted walking as a physical activity.

In Setting C, only people around the university and students and staff in the university accessed the setting. This was because of a general belief that the institute had set strict rules and regulations that would restrict entering and exiting the area.

DISCUSSION

The qualitative exploration of the Project of Promoting Wellness Area to Phuket City's Physical Activity Model was done using qualitative approaches in 3 settings: the beach, the Old Town, and the university. Various approaches and tools were used to design public spaces to promote physical activity, such as City Lab, Pop-up Park, Walking linked to cultural capital, and local market. Physical environmental design is an effective way to promote a healthy community (Fathi et al., 2020), and urban interventions, such as park renovations, exercise equipment installations, new pocket parks, improved cycling and walking environments, and multi-component initiatives; these have the power to transform cities into more active places (Zhang et al., 2022).

The transformative determinants that influence physical activity can be discussed based on determinants of health (Dahlgren & Whitehead, 2007; Eikemo et al., 2017; Sohn et al., 2018; Tzenios, 2019). The three most important types of health determinants were 1) individual determinant including motivation and participation in promoting physical activity; 2) structural determinant meaning the environment supporting physical activity; and 3) systematic determinant including networks and social mechanisms, public relations, and area accessibility to people and tourists. Studies by Sallis et al. (2006) and Tuangratananon et al. (2022) were conducted to explain 4 groups of ecological approaches for sustainable changes in physical activity, which were related to the 3 determinants in the current study. 1) A group of individual factors was defined for population, physiological, and biological characteristics. 2) A group of interpersonal factors included family status, social activities with neighbors, interaction, modeling, and social support. 3) A group of environmental factors related to physical activity: the environment should be attractive, relaxing, safe, and convenient. 4) Various policies to support physical activity should be integrated with outcomes in order to develop a healthy space.

When considering each setting, the City Lab in Patong Beach was developed to be a public space and environmentally friendly in a form of a temporary playground. This playground was in accordance with the concept of "CityLab Patong", in which people in the community, especially children and tourists could access the space for physical activities. Accessibility is essential for creating positive experiences and fostering a sense of belonging among children (Liu et al., 2024). This result corroborates a relevant study by Salvo et al. (2017) on creating a temporary public park in Los Altos, California, with limited space. After data on using the public park and doing physical activity there were collected, the findings revealed that public park users were of various ages and accessed the park all day. The largest number of children and teenagers tended to go for a walk and do vigorous physical activity. Having a public park in the city could encourage people to access the area for physical activity, do recreational activities, visit the business area in the city, learn about different area conditions, and have a green space affecting physical and mental health (Hoa, 2024; Kondo et al., 2020).

Although designing a temporary public park along the beach could be interesting and aesthetic for both local people in the city and tourists, the playground was designed only for children, not for people of all ages. The area utilization should be for people of various ages. After the area was transferred to the care of a local government organization, it was found that the conditions of the setting changed. The materials and the equipment were not available for use, and risk of accidents to children, people, and tourists increased. Therefore, the equipment need repairing, and the local organization should play a role in providing facilities and infrastructure to support this active community (Sobczyk et al., 2022; Steele & Caperchione, 2005).

Regarding the Old Town area, under the vision of "Old Town Pop-up Park Journey", walking as physical activity and a Pop-up Park were organized. The youth, people in the communities, and tourists as the participants could learn about the values and the culture in the area, including buildings, food, and apparel. Fathi et al. (2020) found that streets with higher connections to surrounding areas and complex spatial patterns tended to encourage more physical activity, particularly walking, and contribute to a greater sense of public health and happiness. So, these events should be expanded to other areas, raising awareness should be pursued actively, and people's lifestyle behaviors should be monitored with follow-up, especially of teenagers (Pippi et al., 2024). Networks of cooperation among government organizations, private sector, and academics should be developed to support people's physical activity. Salvo et al. (2017) mentioned that a strategy to promote physical activity in an urban area was adjustment of the physical conditions in the area, in order to make areas for physical activity conveniently and fairly accessible. Recreation locations, such as public parks, should play an important role in physical activity and be an essential component of livable cities.

Regarding the university area, under the vision of "Healthy Space makes good belief", the area was designed to link to people's beliefs in order to have the university become the area for people of all ages and provide facilities, equipment, and support to various activities. However, while several activities were operated by some groups of people, the public relations were insufficient, and motivating people in the university and the communities was not successful; these issues need to be addressed. There is a relevant study by Goodyear et al., 2021 revealing that social media positively influenced changes in physical activity and behaviors related to food consumption. Social media platforms were developed to connect to daily routines of people at any age, for example by designing games to promote physical

activity, using social media to encourage and motivate conversation groups, and giving information to persuade conversation groups to support physical activities (Goodyear et al., 2021; Wibowo et al., 2024). Therefore, policymakers could design activities for social movement in the future (Ge & Chen, 2024; WHO, 2018).

CONCLUSION

This qualitative study explored the transformative determinants of physical activity within the context of a wellness tourism project in Phuket, Thailand. The project utilized three distinct settings: a beachside public space (Patong City Lab), the historic Old Town (Pop-up Park Journey), and a university campus (Banzaan Market). Each setting provided unique opportunities and challenges for promoting physical activity among both locals and tourists.

The physical activity promotion project in Phuket wellness area demonstrated the potential of integrating physical activity into tourism initiatives. The project's success was contingent on several factors, including motivation for physical activity, participation in physical activity promotion, infrastructure supporting physical activity, networks and social mechanisms, public relations, and area accessibility. The study highlights the importance of tailoring interventions to specific contexts and demographics to ensure their long-term sustainability and impact. Future research could explore the long-term health outcomes of such initiatives and investigate strategies for overcoming barriers to participation.

Author Contributions: Conceptualization, P.K. and S.B.; methodology, P.K. and S.B.; software, P.K. and S.B.; validation, P.K. and S.B.; formal analysis, P.K. and S.B.; investigation, P.K., S.B., and Y.K.; data curation, P.K. and S.B.; writing - original draft preparation, P.K. and S.B.; writing - review and editing, P.K. and S.B.; visualization, P.K., S.B., Y.K., N.V., P.H. and T.W.; supervision, P.K. and S.B.; project administration, P.K., S.B., and Y.K. All authors have read and agreed to the published version of the manuscript.

Funding: Not applicable.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study may be obtained on request from the corresponding author.

Acknowledgments: This contribution presents some results from research projects supported by Thai Health Promotion Foundation, through the Phuket Model Project for Promoting Healthful Spaces and Physical Activity [Project Code: 65-00-0156]. The authors extend their gratitude to the anonymous reviewers for their insightful suggestions and comments.

Conflicts of Interest: The authors declare no conflict of interest.

REFERENCES

- Ablah, E., Lemon, S. C., Pronk, N. P., Wojcik, J. R., Mukhtar, Q., Grossmeier, J., Pollack, K. M., & Whitsel, L. P. (2019). Opportunities for Employers to Support Physical Activity Through Policy. *Preventing Chronic Disease, 16*, E84. <https://doi.org/10.5888/pcd16.190075>
- Benjatanawat, S., Sutheravut, P., Hongchayangkool, K., & Kaewthong, Y. (2023). Lessons Learned on Area - Based Promoting Physical Activity for Healthy Public Policy. *Journal of MCU Nakhondhat, 10*(2), 213–231.
- Dahlgren, G., & Whitehead, M. (2007). *Policies and strategies to promote social equity in health*. <https://core.ac.uk/download/pdf/6472456.pdf>
- Eikemo, T. A., Bambra, C., Huijts, T., & Fitzgerald, R. (2017). The First Pan-European Sociological Health Inequalities Survey of the General Population: The European Social Survey Rotating Module on the Social Determinants of Health. *European Sociological Review, 33*(1), 137–153. <https://doi.org/10.1093/esr/jcw019>
- Fathi, S., Sajadzadeh, H., Mohammadi Sheshkal, F., Aram, F., Pinter, G., Felde, I., & Mosavi, A. (2020). The Role of Urban Morphology Design on Enhancing Physical Activity and Public Health. *International Journal of Environmental Research and Public Health, 17*(7), 23-59. <https://doi.org/10.3390/ijerph17072359>
- Ge, H., & Chen, X. (2024). Research on Tourist Satisfaction and Behavioral Intention in Ecological Health Tourism Activities in Bama, Guangxi Based on Structural Equation Model. *GeoJournal of Tourism and Geosites, 52*(1), 221–230. <https://doi.org/10.30892/gtg.52121-1198>
- Giles, L. V., Koehle, M. S., Saelens, B. E., Sbihi, H., & Carlsten, C. (2021). When physical activity meets the physical environment: Precision health insights from the intersection. *Environmental Health and Preventive Medicine, 26*, 68. <https://doi.org/10.1186/s12199-021-00990-w>
- Goodyear, V. A., Wood, G., Skinner, B., & Thompson, J. L. (2021). The effect of social media interventions on physical activity and dietary behaviours in young people and adults: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity, 18*(1), 72. <https://doi.org/10.1186/s12966-021-01138-3>
- Hoa, L. T. H. (2024). Unlocking Sustainable Tourism Growth in Ho Chi Minh City: A Multi-Factor Investigation. *Journal of Logistics, Informatics and Service Science, 11*(3), 412–425. <https://doi.org/10.33168/JLISS.2024.0327>
- Iamtrakul, P., & Chayphong, S. (2024). Analyzing the link between built environment and physical activity: A spatial study in suburban area. *Frontiers in Built Environment, 10*. <https://doi.org/10.3389/fbuil.2024.1420020>
- Kondo, M. C., Mueller, N., Locke, D. H., Roman, L. A., Rojas-Rueda, D., Schinasi, L. H., Gascon, M., & Nieuwenhuijsen, M. J. (2020). Health impact assessment of Philadelphia's 2025 tree canopy cover goals. *The Lancet Planetary Health, 4*(4), e149–e157. [https://doi.org/10.1016/S2542-5196\(20\)30058-9](https://doi.org/10.1016/S2542-5196(20)30058-9)
- Kotur, A. S. (2022). Exploring the wellness dimensions of wine tourism experiences: A netnographic approach. *International Journal of Wine Business Research, 34*(4), 608–626. <https://doi.org/10.1108/IJWBR-07-2021-0040>
- Laprattanathong, P., Suksai, P., Sungkawadee, P., & Sawangmek, T. (2022). Factors Affecting on Physical Activity Management of Students at Rajamangala University of Technology. *Journal of Education Naresuan University, 24*(3), 244–253.
- Liao, C., Zuo, Y., Xu, S., Law, R., & Zhang, M. (2023). Dimensions of the health benefits of wellness tourism: A review. *Frontiers in Psychology, 13*, 1071578. <https://doi.org/10.3389/fpsyg.2022.1071578>

- Liu, J., Aziz, N. F., Shen, H., Rong, W., & Huang, M. (2024). Assessment of Child-Friendliness in Neighbourhood Street Environments in Nanchang, China: An Intersectional Perspective of Affordability, School Trips and Place Identity. *International Journal of Sustainable Development and Planning*, 19(9), 3311–3320. <https://doi.org/10.18280/ijstdp.190904>
- Liu, L., Zhou, Y., & Sun, X. (2023). The Impact of the Wellness Tourism Experience on Tourist Well-Being: The Mediating Role of Tourist Satisfaction. *Sustainability*, 15(3), Article 3. <https://doi.org/10.3390/su15031872>
- Lukose, A., Thomas, S. N., Ks, S., Bose, J., Jacob, G., & Simon, B. (2024). Exploring the Frontiers of Health Tourism: A Bibliometric Analysis of Research Themes and Trends. *Cureus*, 16(8), e66832. <https://doi.org/10.7759/cureus.66832>
- Nandasena, R., Morrison, A. M., & Coca-Stefaniak, J. A. (2022). Transformational tourism – a systematic literature review and research agenda. *Journal of Tourism Futures*, 8(3), 282–297. <https://doi.org/10.1108/JTF-02-2022-0038>
- Oldridge-Turner, K., Kokkorou, M., Sing, F., Klepp, K. I., Rutter, H., Helleve, A., Sinclair, B., Meincke, L., Mitrou, G., Wiseman, M., & Allen, K. (2022). Promoting Physical Activity Policy: The Development of the MOVING Framework. *Journal of Physical Activity & Health*, 19(4), 292–315. <https://doi.org/10.1123/jpah.2021-0732>
- Piggin, J. (2020). What Is Physical Activity? A Holistic Definition for Teachers, Researchers and Policy Makers. *Frontiers in Sports and Active Living*, 2. <https://www.frontiersin.org/articles/10.3389/fspor.2020.00072>
- Pilelienė, L., Grigaliūnaitė, V., & Bogoyavlenska, Y. (2024). A Bibliometric Review of Innovations in Sustainable Tourism Research: Current Trends and Future Research Agenda. *Sustainability*, 16(16), 7124. <https://doi.org/10.3390/su16167124>
- Pippi, R., Mortati, A., Fruttini, D., Pasqualini, L., Gatti, A., Vandoni, M., Mascherini, G., Musumeci, G., & Giuseppe Fanelli, C. (2024). *Physical activity, sedentary time and motivation to change: An Italian survey*. 1(12), 161–175.
- 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>
- Sallis, J. F., Certero, R. B., Ascher, C., Henderson, K. A., Kraft, M. K., & Kerr, J. (2006). An Ecological Approach to Creating Active Living Communities. *Annu. Rev. Public Health*, 27(1), 297–322.
- Salvo, D., Banda, J. A., Sheats, J. L., Winter, S. J., Lopes Dos Santos, D., & King, A. C. (2017). Impacts of a Temporary Urban Pop-Up Park on Physical Activity and Other Individual- and Community-Level Outcomes. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 94(4), 470–481. <https://doi.org/10.1007/s11524-017-0167-9>
- Sobczyk, K., Grajek, M., Rozmiarek, M., & Sas-Nowosielski, K. (2022). Local Governments Spending on Promoting Physical Activity during 2015–2020: Financial Data and the Opinion of Residents in Poland. *International Journal of Environmental Research and Public Health*, 19(19), 12798. <https://doi.org/10.3390/ijerph191912798>
- Sohn, E. K., Stein, L. J., Wolpoff, A., Lindberg, R., Baum, A., McInnis-Simoncelli, A., & Pollack, K. M. (2018). Avenues of Influence: The Relationship between Health Impact Assessment and Determinants of Health and Health Equity. *Journal of Urban Health*, 95(5), 754–764. <https://doi.org/10.1007/s11524-018-0263-5>
- Steele, R., & Caperchione, C. (2005). The role of local government in physical activity: Employee perceptions. *Health Promotion Practice*, 6(2), 214–218. <https://doi.org/10.1177/1524839903260690>
- Strain, T., Flaxman, S., Guthold, R., Semenova, E., Cowan, M., Riley, L. M., Bull, F. C., & Stevens, G. A. (2024). National, regional, and global trends in insufficient physical activity among adults from 2000 to 2022: A pooled analysis of 507 population-based surveys with 5.7 million participants. *The Lancet Global Health*, 12(8), e1232–e1243. [https://doi.org/10.1016/S2214-109X\(24\)00150-5](https://doi.org/10.1016/S2214-109X(24)00150-5)
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*, 2nd ed (pp. xiii, 312). Sage Publications, Inc.
- Topothai, T., Topothai, C., Tangcharoensathien, V., Waleewong, O., & Putthasri, W. (2022). The Assessment of Physical Activity Programs Implementation in the Thai Urban-Setting against the Global Action Plan on Physical Activity Strategic Actions. *Journal of Health Systems Research*, 16(1), 69–84.
- Topothai, T., Khamput, T., Kamonrungsan, J., Sakolnakorn, P. P. N., & Asawutmongkul, U. (2019). Lessons Learnt from Developing the 2018–2030 National Physical Activity Plan in Thailand. *Journal of Health Systems Research*, 13(4), 442–456.
- Tuangratananon, T., Topothai, T., Topothai, C., & Tangcharoensathien, V. (2022). Thailand Environmental and Policy Level Physical Activity Interventions: A Critical Review. *Journal of Health Systems Research*, 16(3), 319–343.
- Tzenios, N. (2019). The Determinants of Access to Healthcare: A Review of Individual, Structural, and Systemic Factors. *Journal of Humanities and Applied Science Research*, 2(1), 1–14.
- Waraphan, C., Wattanakitkriert, D., Sriprasong, S., & Kongpolprom, N. (2023). Factors Predicting Physical Activity Adherence in Patients with Chronic Obstructive Pulmonary Disease. *Nursing Science Journal of Thailand*, 41(1), 59-72.
- WHO. (2018). *Global action plan on physical activity 2018–2030: More active people for a healthier world*. World Health Organization.
- WHO. (2022). *The Global Status Report on Physical Activity 2022*. <https://www.who.int/teams/health-promotion/physical-activity/global-status-report-on-physical-activity-2022>
- WHO. (2024). *Physical activity*. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>
- Wibowo, V., Gautama, I., Bandur, A., & Furinto, A. (2024). Enhancing Creative Performance in Indonesian Universities: Exploring the Impact of Distributed Leadership, Organizational Citizenship Behavior, and Supportive Creative Working Environment on Lecturers' Creative Performance. *Journal of System and Management Sciences*, 14(1), 249–274. <https://doi.org/10.33168/JSMS.2024.0115>
- World Tourism Organization. (2016). *Affiliate Members Global Reports, Volume fourteen – The Transformative Power of Tourism: A paradigm shift towards a more responsible traveller*. World Tourism Organization (UNWTO).
- Xie, Y., Ma, M., Xu, J., & Zhou, J. (2024). Research Advances of Urban outdoor environment (UOE) and Children' Physical Activity. *Frontiers in Humanities and Social Sciences*, 4(7), 310-332. <https://doi.org/10.54691/wx7v3f71>
- Xu, Y., Pan, C., Yu, H., & Zhan, B. (2024). Correlation analysis of the urban community environment and health promotion among adults aged ≥ 55 years: The mediating role of physical activity. *BMC Public Health*, 24(1), 2790. <https://doi.org/10.1186/s12889-024-20303-4>
- Zhang, Y., Koene, M., Chen, C., Wagenaar, C., & Reijneveld, S. A. (2024). Associations between the built environment and physical activity in children, adults and older people: A narrative review of reviews. *Preventive Medicine*, 180, 107856. <https://doi.org/10.1016/j.ypmed.2024.107856>
- Zhang, Y., Koene, M., Reijneveld, S. A., Tuinstra, J., Broekhuis, M., van der Spek, S., & Wagenaar, C. (2022). The impact of interventions in the built environment on physical activity levels: A systematic umbrella review. *International Journal of Behavioral Nutrition and Physical Activity*, 19(1), 156. <https://doi.org/10.1186/s12966-022-01399-6>