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MOTIVATION OF OUTDOOR RECREATION PARTICIPATION AMONG THE RECREATIONAL USERS: AN STUDY ON THE QUALITIES OF RECREATION AREA

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Abstract

Outdoor recreation has gained popularity worldwide, offering opportunities for people to connect with nature and enhance their overall well-being. Researchers and policymakers have increasingly focused on understanding the factors that influence the use and benefits of outdoor recreational activities. This paper seeks to identify the key qualities of outdoor recreation areas that motivate communities to engage in such activities. The findings indicate that safety is the most crucial factor for most respondents when choosing a recreation area. In addition to safety, the availability of comprehensive sports facilities and visually appealing landscapes are also highly valued. These results underscore the importance of maintaining high-quality recreation areas to ensure that users can enjoy outdoor activities safely and comfortably, ultimately achieving a satisfying experience.

Keywords: Outdoor Recreation, Motivation, Recreation Qualities

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INTRODUCTION

This study contributes uniquely to the outdoor recreation literature by empirically linking recreational area quality with user motivation in a secondary Malaysian city. Such context-specific evidence remains limited in Malaysian planning and urban health research and offers actionable insights for local authorities in promoting active lifestyles and urban well-being (Isa et al., 2022; Ab Dulhamid et al., 2023).

Green spaces are vital components of the natural environment, serving as effective buffers against unhealthy lifestyles and playing a crucial role in stress relief. Within these areas, sports and leisure activities are particularly popular among individuals experiencing high stress levels, showing a positive correlation with serene and natural surroundings (Gao et al., 2024). Recreation, in this context, refers to activities that individuals engage in within accessible natural or green spaces as part of their daily routines (Bell et al., 2007).

Outdoor recreational activities provide opportunities for direct interaction with natural environments and serve as platforms for face-to-face social interactions (Isa et al., 2022) across diverse geographical settings (Zajchowski et al., 2022). The interplay between these factors contributes significantly to psycho-social development, enhancing social skills, self-concept, social adjustment, self-confidence, and tolerance towards others (McAvoy et al., 2006; Dorsch et al., 2016; Gonyo et al., 2024). Engaging in outdoor recreation allows individuals to connect with nature, fulfilling psychological, emotional, and spiritual needs. The presence of natural spaces is a key factor influencing health, happiness, and overall well-being (Chen et al., 2020).

It is customary for outdoor recreational activities to occur in open areas with greenery or surrounded by components or elements of nature (Hayir-Kanat & Breuste, 2020). The involvement of Malaysians in recreational activities is still at a moderate level, with an increase from 59.8% in 2017 to 63% in 2020. This is because it is influenced by several factors, such as the sedentary lifestyle of individuals, time constraints for routine activities, not caring about the importance of an active and healthy life, and limited access to sports and recreation facilities (RMKe12, 2021).

Sedentary lifestyle practices, poor time management, and a lack of awareness of the importance of an active life are among the factors that pose risks and challenges to health and the quality and well-being of life (Li et al., 2016; Siwar et al., 2016; González et al., 2017; Diza-Godiño et al., 2019; Chen et al., 2020). Most individuals spend more than 90% of their time indoors (Klepeis et al., 2001; Chen et al., 2020), and the limited remaining time makes it more difficult for them to engage in outdoor recreational activities (Matthews et al., 2015; Chen et al., 2020). Recreational activity facilities have been developed to

increase individual motivation to visit recreational areas to fill free time (Frochot, 2005; Sari, 2019).

Recreational areas that apply elements of appreciation to nature and recreational activities as a result of the diversity of geographical forms that exist indirectly increase the motivation of an individual's involvement (Goossen & Langers, 2010); there is good potential in producing something that benefits health (Srinivasan et al., 2003), physical, mental, social, community, and environmental benefits (Driver, 1996; Godbey, 2011; Holland et al., 2018). Pietilä et al., (2015) explained that green space access is essential for personal health and physical activity to be self-assessed for the community.

Recreational activities based on natural resources offer individuals the opportunity to fulfill their recreational needs while preserving the diversity of nature, culture, and history (Sari, 2019). As a result, people have begun to shift their priorities when selecting spaces for outdoor recreation, focusing more on areas that balance enjoyment with environmental and cultural preservation.

LITERATURE REVIEW

Over the past 50 years, numerous studies have explored the motivations behind outdoor recreation involvement (Walker et al., 2010; Dillard & Bates, 2011). Motivation plays a crucial role in understanding why individuals choose to engage in recreational activities, the benefits they derive from participation, and how this knowledge can aid in planning and environmental management (Ab Dulhamid et al., 2023a). Motivation consists of three complex components: specific motive activation, motive persistence, and motive intensity (Deci & Ryan, 2000; Ewert et al., 2020).

Research by Fredman and Heberlein (2005) and Kil, Holland, and Stein (2014) has confirmed a significant relationship between motivation and environment-based behavior. Each motivational factor is viewed as a unique concept, shaped by the likelihood of achieving desired outcomes through recreation (Fluker & Turner, 2020). For effective results, communities need to understand the motives behind outdoor recreation participation (Eriksson & Nordlund, 2013). For instance, participation in sports activities is often driven by the pursuit of rewards or recognition (Chantel et al., 1996), while outdoor recreation involvement tends to focus more on personal fulfillment and desired outcomes (Kouthouris & Spontis, 2005; Kyle et al., 2006; White, 2008).

Motivation can be defined as both a reason and an internal drive that inspires individuals to act in a certain way and direction (Sale, 2017). It encompasses passion, determination, and inner strength (Dillard & Bates, 2011). This concept highlights a strong link between motivation and emotion, suggesting that people tend to feel positive if their goals and desires are fulfilled, and

negative if they are not. Motivation can manifest in various situations and conditions, influencing both the direction and intensity of an individual's efforts, which in turn affects the outcomes of their activities. Essentially, motivation is the will, drive, and emotional energy that propel individuals to take action (Sale, 2017).

In addition to personal motivation, other factors such as politics, socio-demographics, technological advancements, education levels, funding for parks, expectations for travel alternatives, new funding structures, and climate change also influence outdoor recreation involvement (Eagles, 2014). In conclusion, the motivations and experiences associated with outdoor recreation largely depend on the natural conditions of the area, the availability of infrastructure, and the presence or absence of other recreationists. As a result, managing outdoor recreation often requires complex trade-offs in planning, adopting new concepts, or implementing new products or regulations (Pröbstl-Haider et al., 2021).

Motivation Theory

According to Maslow (1970), the primary goal of the general motivation theory is to fulfill fundamental human needs from a humanistic perspective. Maslow identified five essential needs organized into a hierarchy: physiological, safety, belonging, self-esteem, and self-actualization. In this hierarchy, physiological needs are considered lower-level, while self-actualization represents higher-level needs. As a result, all lower-level needs must be satisfied before individuals can focus on fulfilling higher-level needs.

The definition of outdoor recreation has evolved over time, influenced by a range of philosophical perspectives. However, one of the most widely accepted definitions describes outdoor recreation as the voluntary participation in activities during one's spare time, typically conducted outdoors and requiring interaction with natural resources and the surrounding environment. Garst et al. (2001) studied adolescents involved in outdoor recreational activities and found that such participation positively influenced their perceptions. This conclusion aligns with the international research findings of Garst, Schneider, and Baker (2001).

Given the limited scope of existing research on recreation in Malaysia, it is essential to prioritize studies that explore the motivations behind participation among Malaysian respondents. According to Berger and Tobar (2007), recreational activities are closely linked to quality of life. Engaging in these activities can help maintain a healthy lifestyle, enhance physical fitness, and foster a sense of spiritual fulfillment, ultimately reducing the risk of physical decline. This assumption is supported by Landers and Arent (2007), who found that being in a positive mood can improve cognitive function, while participation in physical activities can help reduce anxiety.

Motivation can be defined as the will, drive, or emotional force that compels individuals to take action, and it is closely intertwined with emotion (Ab et al., 2023). Therefore, this study aims to examine the characteristics of recreational spaces that encourage people to engage in outdoor activities during their leisure time.

Impact of Recreational Area Quality on Participant Motivation in Outdoor Activities

Extensive research has explored the physiological, psychological, and social benefits of recreational activities (Wolch et al., 2014). Beyond physiological advantages, outdoor recreation has been shown to foster positive psychological effects, such as heightened environmental awareness and opportunities for sociological and spiritual growth (Jenson, 1995). Additionally, studies have highlighted the benefits of high activity levels and active participation for both psychological and biomedical aspects (Longbottom et al., 2010).

Gao et al. (2024) further assert that a harmonious balance between daily life and the environment can serve as a powerful motivator for outdoor recreation. Moreover, natural and green landscapes are recognized as significant contributors to human health and well-being (Stoltz et al., 2024). The correlation between preserving mental well-being and enhancing physical activity has long been acknowledged as beneficial for physiological health (Duvall, 2011; Cai et al., 2022). Various aspects of recreational activities, including challenges, exploration, experiencing nature, rest, and social interactions, have been examined as components of motivation (Graefe et al., 2000). Motivation, in this context, can be understood as an internal force that drives individuals to pursue activities that lead to specific experiences or goals (Whiting et al., 2017).

Recreational quality is a multidimensional concept that largely depends on consumers' subjective perceptions (Dehez and Lyser, 2024). The quality of public spaces or recreational areas plays a crucial role in encouraging outdoor recreation participation (Isa et al., 2022). This quality encompasses factors such as the characteristics of the recreation area, the nature of visitors, social influences, and living conditions that can impact community involvement in outdoor recreation. Additionally, environmental qualities—such as infrastructure, accessibility, safety, congestion, pollution, visual appeal, topography, water sources, and scenic viewpoints—are significant factors contributing to the attractiveness and usability of recreational areas (Frick et al., 2007; Shores et al., 2007).

Numerous studies on outdoor recreation behavior have assessed specific areas and quality aspects, focusing on activities and user segments based on socio-demographic characteristics (Manning, 1999). Typically, the main benefits expected from outdoor recreation include health and well-being (stress

relief), an enhanced and more sustainable environment, aesthetic benefits, and nature-related experiences (Beard & Ragheb, 1983; Jenkins & Pigrans, 2006; Manfredo et al., 1996). However, factors such as safety and companionship during recreation are equally crucial in determining the quality of recreational areas (Manning, 1999; Staats & Hartig, 2004).

For example, older adults may avoid visiting recreational areas due to concerns about safety, accessibility, and a sense of belonging (Crombie et al., 2004; Sugiyama & Ward Thompson, 2005). Similarly, pedestrian recreational users often face conflicts related to environmental factors, such as the threat of wild animals (Arnberger & Haider, 2005; Frick et al., 2007). Families with children, on the other hand, tend to prefer recreational areas equipped with a variety of child-friendly facilities (Frick et al., 2007). Therefore, it is essential to improve outdoor recreation areas based on user preferences, as expressed through demand patterns (Tribe, 2011).

In addition to offering both passive and active recreational activities, recreational areas also serve vital functions in biodiversity conservation, climate change mitigation, and environmental education. They enhance aesthetic value and provide enjoyable outdoor facilities for communities (Li, 2024).

METHODOLOGY

Sampling Technique and Strategy

The study employed a convenience sampling approach with random online distribution of the questionnaire among active recreational users in Ipoh. This method was adopted due to the absence of a comprehensive sampling frame and the exploratory nature of identifying perceived recreation area qualities (Etikan et al., 2016).

The sample size for the focus group was determined using online sample size calculators provided by Calculator.net, Raosoft, and Taro Yamane. Based on a 95% confidence level and a 5% margin of error, the recommended sample size for the study was 384, considering the population size in 2022. All respondents selected for this survey were residents of Ipoh who actively participated in outdoor recreational activities. It is acknowledged that this sampling method limits generalizability beyond the study area; however, the relatively large sample size ($n = 384$) and demographic diversity mitigate potential bias and support meaningful local-level inference (Bornstein et al., 2013). The respondent selection process aimed to identify the characteristics of recreational areas that influence participant motivation and encourage outdoor recreation.

DATA COLLECTION

The questionnaire comprised three sections: (i) socio-demographic characteristics, (ii) outdoor recreation participation patterns, and (iii) perceived importance of eight recreation area quality attributes measured using a five-point Likert scale. Items were adapted from established recreation motivation and quality instruments to ensure content validity (Beard & Ragheb, 1983; Frick et al., 2007). Internal consistency was acceptable for exploratory research (Cronbach's $\alpha > 0.70$).

The study employed a quantitative approach to identify the characteristics of recreation sites that influence the factors motivating people to participate in outdoor activities. This approach enabled detailed data processing and validation, providing new insights to enhance understanding of the subject. Additionally, the quantitative method helped clarify and confirm the validity and quality of the data related to specific aspects of the study.

According to Patton (2002), the quantitative approach was chosen because it allowed researchers to explore the topic in greater depth, ask more probing questions, and understand the factors contributing to the high quality of recreational spaces. The study targeted recreational users aged eighteen and above, with potential respondents selected through convenience random sampling to achieve the desired sample size. Data for the study were collected using a "self-administered questionnaire," which included both open-ended and closed-ended questions in Malay and English. Respondents could complete the online questionnaire in either language, ensuring ease of understanding and accessibility (via Google Forms). The analysis was conducted using a subset of the data collected.

The survey focused specifically on eight key attributes of outdoor recreation that motivated people to participate. These attributes included: the safety of the recreational area, accessibility, affordability, attractive landscapes, facilities for family activities, cleanliness and natural environment, and sports amenities (such as cycling and jogging). Each of these attributes has the potential to influence the expectations of potential users, as well as the aspects that are prioritized and deemed most important. User preferences for these attributes were identified through the questionnaire responses.

The findings revealed that the sample of $n = 384$ respondents effectively represented the communities in Ipoh who actively participate in outdoor recreation. The respondents were selected randomly, ensuring a diverse representation of backgrounds and demographics. Of the total respondents, 220 (57.3%) were female, while 164 (42.7%) were male. In terms of age distribution, 193 respondents (50.3%) were between 18 and 30 years old, whereas 4 respondents (1%) were 61 years or older.

Regarding ethnicity, the majority of respondents were Malays (344 participants or 89.6%), followed by 18 Chinese participants (4.7%), 19 Indian participants (4.9%), and 3 Bumiputera participants (0.8%). In terms of educational background, the respondents were generally well-educated, with 158 (41.1%) holding diplomas and 159 (41.4%) possessing degrees or postgraduate certificates.

The demographic diversity of the sample provided meaningful insights into outdoor recreation participation patterns. Socio-demographic characteristics, particularly age, emerged as significant indicators of the frequency of outdoor recreation activities. For instance, younger individuals aged 18 to 40 were found to be more likely to engage in recreational activities. This correlation between socio-demographic factors and outdoor recreation involvement highlights the importance of considering these characteristics in promoting and managing recreational spaces.

FINDINGS & ANALYSIS

Socio-Economic Analysis

Additional descriptive analysis by gender and age group indicates that female respondents placed greater emphasis on safety-related attributes, while younger users prioritized sports facilities and active-use infrastructure. These patterns align with prior outdoor recreation behaviour research (Arnberger & Haider, 2005; Sugiyama & Ward Thompson, 2006).

The findings indicated that $n = 384$ respondents represented the communities in Ipoh that actively engage in outdoor recreation. Ipoh outdoor recreation consumers are represented in a randomly representative group of respondents with various backgrounds and demographics. 220 (57.3%) of the total were female, and 164 (42.7%) were male. According to the statistics, the age distribution of the study's respondents was as follows: 193 persons (50.3%) were between the ages of 18 and 30, and 4 people (1%) were 61 years of age or older for the two samples of the study region combined. Regarding the study's ethnicity or race, 344 participants or 89.6% were Malays, followed by 18 Chinese participants (4.7%), 19 Indian participants (4.9%), and 3 other participants (Bumiputera) (0.8%). All respondents were viewed as having a high level of education on average; 158 (41.1%) had diplomas, and 159 (41.4%) had degrees and postgraduate certificates. The study's sample yielded nearly equal levels of respondent involvement, yielding a noteworthy result. The greatest indicators of the frequency of outdoor recreation activities are sociodemographic traits, which are also correlated with outdoor recreation involvement. For instance, youths between the ages of 18 and 40 are more likely to engage in recreation activities.

Quality Selection of Outdoor Recreation Areas

Relative Importance Index (RII) Analysis

Figure 1 presents the Relative Importance Index (RII) ranking of recreation area qualities, highlighting safety, facility provision, and sports amenities as the most influential factors. The Relative Importance Index (RII) is used to determine the quality of recreational areas prioritized by the community. A higher RII value indicates the aspects of recreational quality that respondents consider most important. In this study, the RII was calculated using the following formula:

:

$$RII = \frac{\sum W}{(A * N)}$$

‘W’ is the weight given to each statement by the respondent from 1 to 5,

‘A’ is the height of the integer response (5), and while

‘N’ is the number of respondents

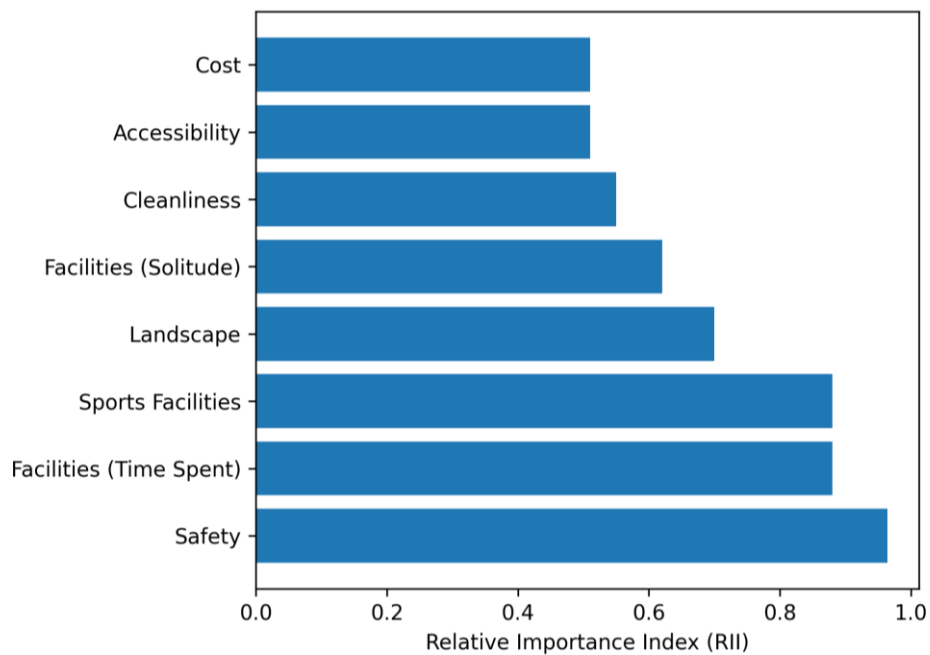


Figure 1: Relative Importance Index (RII) of Recreation Area Qualities

Table 1: Quality Selection of Recreational Areas According to Priority

Qualities	The Quality of Preferred Recreation Areas	RII	Rank
Q1	Easy access to recreation areas	0.51	7
Q2	Inexpensive recreational area	0.51	7
Q3	<i>Safety in a recreation area</i>	0.964	1
Q4	The recreation area has a beautiful landscape	0.7	4
Q5	Recreation area facilities that provide opportunities to spend time	0.88	2
Q6	The availability of facilities provides time to be alone	0.62	5
Q7	The recreation area is clean and fresh	0.55	6
Q8	Availability of facilities for sports activities	0.88	2

Every recreation area possesses its own unique character, identity, and image, shaped by the diversity of landscapes, environmental conditions, recreational resources, and geographical location. These distinct elements provide outdoor recreation users with a wide range of options when selecting a recreation destination, allowing them to choose based on the strengths and appeal of each area. Table 2 above shows the value of the RII score and the position of each selection criterion for outdoor recreation locations.

The results of the analysis have shown that outdoor recreation users agree to make the quality of 'Q3', which is a good level of safety, a primary criterion that is considered for every visit with an RII score value of 0.964. The emphasis on this factor is as a preventive measure to reduce any form of risk accidents as well as protection from any form of threat to physical, social, emotional, psychological, and health. Concerns about safety factors (e.g., criminal threats of sexual harassment, kidnapping) are the most worrying and risky things among female visitors (Johnson et al., 2001). This group is seen as more vulnerable to danger and various threats than males.

For the second criterion, outdoor recreation users make quality 'Q5', 'recreation area facilities that provide opportunities to spend time' and 'Q8', and 'availability of sports facilities', each giving an RII value of 0.88. This factor is also given attention because every recreational area that is conducive and better-planned needs to provide a set of facilities and sports equipment that is complete and safe for various ages. However, the lowest criteria and almost not the community's leading choice are the quality 'Q2', which is 'cheap cost' and the quality 'Q1', which is 'access to recreation area', each contributing to the RII value (0.51).

Based on the RII value obtained for the two qualities, it can be concluded that all recreation areas have been provided with excellent and comfortable access facilities, making it easier for users to visit the recreation areas. In addition to that, with the ability to own transport facilities and the availability of various types of public transport facilities, the cost of engaging in outdoor recreational activities is still low in addition to the fact that every sports facility provided can be used without any payment except for certain activities such as the rental of courts, fields, etc. In addition, location selection based on low-cost factors is not a significant obstacle for the community. This is because most public recreational areas and parks still provide facilities for free for users, and it is different compared to recreational parks that are themed to a particular concept that gives financial implications (for example, theme parks). This finding can be interpreted positively, as it highlights the importance of people and communities engaging in outdoor recreation on a regular basis in order to develop self-discipline, moral character, and knowledge that will enable them to make the most of their free time and skills for the rest of their lives.

Regression Analysis of Site Selection Quality for Outdoor Recreation Participation

Linear regression analysis is used to assess whether there is an influence, as well as the extent of that influence, between independent variables and a dependent variable, expressed through mathematical equations (Pallant, 2005). Table 2 presents the regression model summary for the quality factors of recreational areas in relation to their impact on the motivation for outdoor recreational involvement. The table shows a positive linear relationship ($R = .159a$) for the selection of recreational areas.

The criteria for selecting recreational areas account for 2.5% ($R^2 = .025$) of the variance in the dependent variable (motivational factors), while the remaining 97.5% is influenced by other factors affecting outdoor recreational participation. The Adjusted R value reported is .002 or 0.2%, indicating a slight adjustment for the number of predictors in the model. The difference between the R^2 and Adjusted R values is .023 or 2.3%.

Additionally, the Standard Error of the Estimate (SEE) is .500, suggesting that a lower SEE value improves the model's accuracy in predicting the dependent variable. The conclusions drawn from this analysis are based on a significance level of $\alpha = .05$ (5%) or a 95% confidence level.

Table 2: Summary of the Regression Model on Site Selection Quality for Outdoor Recreation

Model Summary			
<i>R</i>	<i>R Square (R²)</i>	<i>Adjusted R Square (R²)</i>	<i>Std. Error of the Estimate</i>
.159 ^a	.025	.002	.500

Table 3 presents the results of the ANOVA analysis, indicating a statistical value of .375, which is greater than the predetermined significance level of $p < .05$. These findings suggest that there is no significant statistical difference between the dependent and independent variables. Overall, the results imply that the independent variables do not have a statistically significant impact on the dependent variable in this context.

Table 3: ANOVA Summary for Site Selection Quality in Outdoor Recreation Participation

<i>Model</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>Regression</i>	2.433	9	.270	1.082	.375 ^b
<i>Residual</i>	93.439	374	.250		
<i>Total</i>	95.872	383			

Furthermore, to complete the regression analysis, Table 4 shows that all the criteria for selecting recreational areas yielded statistically non-significant values. In summary, none of the nine independent variables had a statistically significant effect on the motivational factors for outdoor recreational involvement among recreation users.

Table 4: Regression Coefficient Analysis for Site Selection Quality in Outdoor Recreation

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Variables	3.286	.149	-	22.095	.000
Easy access to recreation areas	-.023	.052	-.042	-.444	.657
Inexpensive recreational area	.085	.051	.156	1.657	.098
Safety in a recreation area	-.005	.061	-.009	-.089	.929
The recreation area has a beautiful landscape	.013	.071	.024	.181	.856

Model	Unstandardized Coeficients		Standardized Coeficients	t	Sig.
	B	Std. Error	Beta		
Recreation area facilities that provide	.040	.062	.074	.650	.516
Opportunities to spend time	.012	.051	.023	.236	.814
The availability of facilities provides time to be alone	-.074	.061	-.133	-1.201	.231
The recreation area is clean and fresh	-.031	.059	-.058	-.521	.603
Availability of facilities for sports activities	.057	.051	.110	1.114	.266

ETHICAL STATEMENT

This study adhered to ethical research standards. Participation was voluntary, informed consent was obtained prior to data collection, and respondent anonymity and confidentiality were assured throughout the research process.

DISCUSSION

The findings underscore the importance of context-sensitive recreational planning in Malaysian cities, demonstrating that safety and facility provision are central to motivating outdoor recreation participation. These insights provide practical guidance for planners and policymakers seeking to enhance urban liveability and public health outcomes.

Outdoor recreation users engage in outdoor activities primarily to enjoy quality time with their families and derive a sense of enjoyment from these experiences. Many respondents also express a desire to try new things, boost their confidence, and improve their fitness levels, which explains their interest in more strenuous outdoor recreation activities. Additionally, they find pleasure in spending time in natural environments. To cater to these preferences, it is essential to provide opportunities for more extreme forms of outdoor recreation. Recreational activities have also been recognized as significant determinants of quality of life and overall well-being for the aging population (Shuvo et al., 2020).

The study's findings highlight that safety is the most crucial quality factor in recreational areas for enhancing motivation to participate in outdoor activities. Safety is a fundamental aspect of recreational activities, particularly for outdoor recreation, where risks and hazards must be carefully managed. Ensuring safety involves preventing and minimizing incidents and accidents, given the complexity of recreational activities, which encompass people, activities, and

locations. To address safety needs, it is vital to consider the interactions between three components: recreation members, activities, and locations (Cheng et al., 2016). Safety concerns are significant psychological factors that can either encourage or deter involvement in outdoor recreation (Anaza & McDowell, 2013). However, the safety standards of recreational areas in Malaysia remain less than satisfactory.

One effective strategy to enhance safety in recreational areas is Crime Prevention Through Environmental Design (CPTED), a place-based approach that has been proven effective in reducing crime rates and is applicable to land-use planning, including outdoor recreation parks (Iqbal & Ceccato, 2019). CPTED is a scientific approach that emphasizes the practical design of recreational areas to reduce the threat and fear of crime (Mihinjac & Saville, 2019). Leveraging the latest advancements in cognitive and behavioral science, CPTED also focuses heavily on environmental factors, providing insights into how individuals perceive and respond to crime and security threats (Gajos et al., 2016; Gilderbloom, 2016).

Key CPTED strategies relevant to recreational areas include providing adequate and clear lighting systems, minimizing isolated or hidden pathways, reducing isolation for specific activities, ensuring a variety of recreational options, maintaining high standards of management and maintenance, offering comprehensive area information, and enhancing the overall design of the recreation space (Hilborn, 2009; Fenelly & Perry, 2020). The challenge lies in managing each park unit and public space as open areas that serve mutual benefits for all users (Iqbal & Ceccato, 2019).

Overall, the quality factors examined in this study align with the findings of previous research, reinforcing the importance of safety, environmental design, and user satisfaction in promoting outdoor recreation.

CONCLUSION

Overall, the approaches used in this study have effectively explained the reasons behind the community's need to engage in outdoor recreation activities. These approaches are aligned with the theory of psychological motivation, which complements the main scope of the study. Recreational motivation is a crucial concept in understanding recreational involvement. If different individuals respond similarly to the same stimuli, it does not necessarily reflect the concept of motivation. However, when individuals are motivated to participate in outdoor recreation for various reasons, exploring these reasons and their origins becomes essential for understanding recreational behavior and effectively managing leisure time and recreation programs.

Differences in stimulation and recreational behavior offer valuable insights into the levels of achievement and satisfaction experienced by each

individual. Understanding the goals of outdoor recreation involvement helps clarify the factors that influence participants' sense of achievement and satisfaction. Recreational activities can be compared to a form of 'manufacturing' with a 'product' to market (McClellan & Medrich, 1969), highlighting the significance of understanding these motivations. Therefore, studying outdoor recreation serves as an effort to encourage community involvement in such activities. Additionally, it acts as a platform to empower outdoor recreation participation among the community, keeping pace with technological advancements and development.

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