

## Motivational Determinants of Water-Based Activity Participation among Kedah Community

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Received Date: 3 November 2025

Accepted Date: 18 December 2025

Revised Date: 31 December 2025

Published Date: 31 January 2026

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### ABSTRACT

*Water-based activities provide diverse opportunities for physical, psychological, and social engagement with nature. Despite their numerous benefits, participation in such activities remains limited across Malaysian communities. This study investigates the intrinsic and extrinsic motivational factors influencing participation in water-based activities among Kedah community, guided by Deci and Ryan's Self-Determination Theory (SDT). A quantitative approach using the Leisure Motivation Scale (LMS-28) was employed, involving a stratified sample of 160 respondents. The findings reveal that "To Experience Stimulation" recorded the highest mean score ( $M = 5.90$ ) for intrinsic motivation, emphasizing excitement and sensory enjoyment as the primary drivers. Meanwhile, "Identified" motivation obtained the highest mean ( $M = 5.77$ ) for extrinsic motivation, indicating that personal significance and goal alignment play crucial roles in engagement. Independent T-Test results showed no significant gender differences ( $p > 0.05$ ) for both intrinsic and extrinsic factors. The results demonstrate that men and women are equally motivated to participate in water-based activities, challenging gender stereotypes and promoting inclusivity. This study contributes to a deeper understanding of motivational determinants that can inform future strategies to enhance community engagement, improve participation rates, and foster healthier, more active lifestyles within Malaysian society.*

**Keywords:** water-based activity, motivation, self-determination theory, outdoor recreation

### INTRODUCTION

Outdoor recreation and adventure-based activities represent one of the most dynamic sectors of the leisure and tourism industry, offering participants opportunities for physical challenge, mental restoration, and emotional fulfilment. These activities take place in a variety of natural settings such as forests, lakes, mountains, and rivers, each providing distinctive environments for recreation and personal development (Lekies et al., 2015). Beyond their recreational appeal, outdoor activities promote valuable educational and psychological outcomes, including self-confidence, teamwork,

environmental awareness, and emotional regulation. Understanding what motivates individuals to engage in such activities is essential for developing strategies that foster sustained participation and maximize their benefits for health and well-being. Water-based activities such as swimming, kayaking, surfing, rafting, snorkelling, and sailing offer unique physical and psychological experiences. They provide participants with direct contact with aquatic environments, which enhances relaxation, social connection, and self-expression (Prangle Mimbs et al., 2020). These activities are not only enjoyable but also inclusive, allowing people of various age groups and skill levels to engage safely. Water-based activities have also been recognized for their therapeutic potential, particularly in the management of chronic diseases and in promoting rehabilitation, coordination, and emotional balance (Cugusi et al., 2023).

However, despite these advantages, participation rates in water-based activities across Malaysia remain relatively low compared to other forms of physical activity and recreation. Limited access to facilities, cultural perceptions, and low motivation levels are among the major barriers that discourage active participation. Motivation plays a central role in determining participation behavior. It can be described as an internal psychological force that directs individuals toward actions that fulfill their personal needs or social expectations (Whiting et al., 2017). In the context of leisure and recreation, motivation shapes how individuals choose, experience, and sustain their involvement in specific activities. The Self-Determination Theory (SDT), introduced by Deci and Ryan, provides a comprehensive framework for understanding the mechanisms of human motivation. SDT distinguishes between intrinsic motivation engaging in activities for enjoyment and satisfaction and extrinsic motivation, which involves external influences such as rewards, recognition, or social approval (Ryan & Deci, 2020). When individuals perceive autonomy, competence, and relatedness in an activity, their intrinsic motivation strengthens, leading to long-term participation and psychological well-being. In recent years, the link between motivation and outdoor recreation has attracted growing research interest (Mackenzie et al., 2018; Lynch & Dibben, 2016). Adventure and nature-based activities promote autonomy and mastery experiences that enhance self-determination and personal growth. However, existing research indicates that motivation levels may vary across demographic variables such as gender, age, and socio-economic background. Understanding these differences is crucial for designing inclusive and effective engagement strategies.

In Malaysia, research focusing on motivational factors toward water-based activities, particularly at the community level, remains limited. According to Liu and Qin (2025), there are limited qualitative research examining how individuals personally experience and perceive the psychological effects of water-based outdoor physical activities. A study analyzing motives for *various types of physical activities* (including activities on water) indicates that different activities should be studied separately to understand their unique motivational profiles, implying that research on water activity motivation is currently less developed. Moreover, there is insufficient evidence examining how intrinsic and extrinsic motivation interact to influence participation among different genders and cultural contexts. This study seeks to address this gap by investigating motivational factors influencing water-based activity participation among the Kedah community, one of Malaysia's states with abundant aquatic resources such as lakes, rivers, and coastal zones. Specifically, the study aims to identify the dominant intrinsic and extrinsic motivational drivers that encourage participation and to determine whether these factors differ between male and female participants. Grounded by Self-Determination Theory, this research offers an analytical perspective on how internal satisfaction and external incentives interact to shape participation behavior. The findings are expected to contribute valuable insights for policy makers, educators, and recreation planners in promoting community-based aquatic programs that emphasize inclusivity, motivation, and well-being.

## LITERATURE REVIEW

### Motivation

Motivation is one of the most essential psychological constructs for understanding human behavior and decision-making, especially in leisure and recreation contexts. It determines why individuals initiate, sustain, or withdraw from activities. Motivation explains direction (choice of activity), intensity (effort), and persistence (duration of engagement) in performing a task (Heckhausen & Heckhausen, n.d.). In the context of recreational participation, motivation acts as a key psychological mechanism that bridges individual needs, environmental influences, and social expectations. According to van Riper et al. (2020), motivations are dynamic and multidimensional, shaped by personal, social, cultural, and situational factors. For instance, an individual may participate in kayaking to relax (psychological motive), to interact socially (social motive), or to maintain fitness (physical motive). Bayyat (2020) further emphasizes that motivation serves as a critical driver of physical activity participation, where individuals are guided by an interplay of intrinsic enjoyment and external reinforcement. Thus, understanding motivation within recreational behavior is vital for promoting long-term engagement, especially in activities requiring continuous effort and exposure to natural environments such as water-based recreation. However, several issues remain to be addressed in the current research. First, the psychological effects of water-based outdoor physical exercises are still underexplored. Although evidence is accumulating on the potential benefits of outdoor sports in natural environments on mental well-being. Most of the available literature is focused on physiological effects, such as the benefits of water-based exercise programs for people with rheumatologic disease, back pain, and chronic diseases Liu, X., & Qin, H. (2025).

### Intrinsic Motivation

Intrinsic motivation refers to engaging in an activity for the inherent pleasure, satisfaction, or interest it provides rather than for any external reward or recognition. It represents the highest form of self-determined motivation, as the behavior stems from internalized goals and genuine enthusiasm (Ryan & Deci, 2020). Individuals driven by intrinsic motivation tend to persist longer, demonstrate creativity, and experience greater satisfaction. In recreation and physical activity, intrinsic motivation often manifests through enjoyment, challenge, curiosity, and personal achievement. When participants find the activity enjoyable or fulfilling, engagement tends to be sustained even without external incentives. Liu et al. (2020) highlight that intrinsic motivation is strongly linked to personal growth, well-being, and competence perception. Similarly, Jakobsen (2023) found that individuals who perceive themselves as competent in outdoor activities demonstrate higher intrinsic motivation, as competence reinforces self-confidence and emotional satisfaction. Within the context of water-based activities, intrinsic motivation is associated with the sensory pleasure of being in the water, the thrill of adventure, and the relaxation it offers. Participants are often drawn by emotional experiences such as excitement, freedom, and connection with nature, all of which contribute to enhanced well-being. Therefore, fostering intrinsic motivation is critical in promoting sustainable engagement in aquatic recreation, as it supports self-driven participation rather than externally imposed involvement.

### Extrinsic Motivation

Extrinsic motivation, in contrast, is influenced by external contingencies such as rewards, recognition, or social expectations. It involves performing an activity to achieve separable outcomes rather than for inherent enjoyment (Ryan & Deci, 2020). Extrinsic motivation can be categorized into varying levels of self-determination which includes external regulation, introjected regulation, identified regulation, and integrated regulation each representing different degrees of internalization (Liu et al., 2020). External regulation involves participation driven by external rewards or avoidance of punishment (e.g., joining water safety programs for certification). Introjected regulation involves

internal pressure, such as guilt or self-esteem maintenance. Identified regulation occurs when individuals value the activity's outcome and see it as personally meaningful, such as engaging in swimming for health benefits. Integrated regulation represents a deeper internalization where the behavior aligns with one's core values and sense of identity.

Extrinsic motivation plays a crucial role in recreational engagement, especially in promoting initial participation. Bayyat (2020) suggests that while intrinsic motivation sustains participation, extrinsic motivation often initiates involvement, especially among beginners who rely on social influence or external recognition. In water-based activities, extrinsic motives may include fitness improvement, social interaction, recognition, or rehabilitation outcomes. When extrinsic motives are internalized into personal goals, they can evolve into intrinsic motivation, leading to more autonomous and sustained participation.

### **Self-Determination Theory (SDT)**

Self-Determination Theory (SDT), developed by Deci and Ryan, serves as a comprehensive framework for understanding human motivation within both educational and recreational contexts. SDT posits that individuals have three innate psychological needs which are autonomy, competence, and relatedness that determine their motivation type and behavioral quality (Ryan & Deci, 2020). When these needs are satisfied, individuals experience enhanced intrinsic motivation, psychological well-being, and performance (Kekäläinen et al., 2022). Motivation under SDT is conceptualized as a continuum, ranging from amotivation (lack of intention) to extrinsic motivation (externally driven behavior) and ultimately to intrinsic motivation (self-driven enjoyment). Lynch and Dibben (2016) and Jakobsen (2023) emphasized that the degree of self-determination determines the quality of engagement of individuals who participate out of genuine interest experience greater satisfaction and persistence than those motivated by obligation or pressure. In outdoor and adventure recreation, SDT is particularly relevant because such environments naturally facilitate autonomy and competence. Participants often face challenges that require problem-solving, perseverance, and skill mastery, which enhance their sense of agency and accomplishment (Mackenzie et al., 2018). As such applying SDT to water-based activities provides valuable insights into how internal psychological needs interact with environmental and social contexts to shape motivation and behavior.

### **Motivation Toward Outdoor Recreation Participation**

Outdoor recreation encompasses any leisure activity that occurs in natural settings, often emphasizing exploration, relaxation, and personal fulfillment. Lackey et al. (2021) describe nature-based recreation as encompassing all leisure activities dependent on the natural environment, such as hiking, camping, fishing, and water sports. These activities contribute not only to physical health but also to psychological resilience and environmental awareness. Research has consistently shown that exposure to nature and participation in outdoor activities enhance mental health, reduce stress, and improve life satisfaction (Puhakka, 2021). Positive experiences in nature strengthen an individual's connection to the environment, fostering greater environmental stewardship and a sustainable attitude toward recreation. Motivation in outdoor recreation is thus multifaceted, it involves psychological restoration, achievement, social bonding, and personal growth (Aşan & Emeksiz, 2018). Gender, age, and cultural background often influence participation patterns. For instance, women may experience social or cultural barriers that limit engagement in physically demanding or water-based activities. However, recent studies have demonstrated increasing female participation in adventure and aquatic recreation, signalling a shift toward inclusivity and empowerment. Understanding these motivational and social dimensions is vital in designing inclusive programs that encourage participation among diverse populations.

## **Water-Based Activity**

Water-based recreation integrates the psychological, physical, and environmental dimensions of leisure participation. Prangle Mimbs et al., (2020) argue that water-based activities offer unique forms of sensory stimulation and emotional engagement not found in terrestrial recreation. Beyond their leisure appeal, they contribute to public health, social cohesion, and tourism development. However, differing motivations and values among participants can lead to disparities in engagement levels and potential conflicts in resource use. Cugusi et al., (2023) highlight that water-based sports and aquatic recreation have gained recognition for their health and rehabilitation benefits, particularly for populations with chronic illnesses. Nevertheless, these activities remain underutilized in many communities, largely due to lack of awareness, limited infrastructure, and sociocultural constraints. Stan (2012) adds that misconceptions about accessibility and physical capability often prevent individuals and particularly those with disabilities or limited swimming skills from participating in water-based programs. The current study builds on this body of knowledge by focusing on motivational determinants of participation among the Kedah community. By examining intrinsic and extrinsic motivational factors across genders, the research seeks to uncover patterns that can guide more inclusive and targeted strategies to promote participation in aquatic recreation. Understanding these motivational constructs not only enriches theoretical perspectives on SDT but also contributes practically to community health promotion and sustainable recreation planning in Malaysia

## **METHODOLOGY**

### **Research Design**

This study employed a quantitative research design to examine the intrinsic and extrinsic motivational factors influencing participation in water-based activities among the Kedah community. The study was guided by Deci and Ryan's Self-Determination Theory (SDT), which emphasizes the interaction of autonomy, competence, and relatedness in shaping human motivation. A survey research method was used to collect primary data through the administration of structured questionnaires. The quantitative design was selected because it allows systematic measurement of motivational factors, enables statistical comparison across demographic groups, and provides objective insights into behavioral patterns. Data were collected using the Leisure Motivation Scale (LMS-28), a validated instrument designed to measure motivation toward leisure participation. The total inner coherency score of the scale is calculated as .77 (Ümit Doğan ÜSTÜN et al., 2013). The study focused on identifying dominant motivational factors influencing engagement in water-based activities and assessing whether gender differences exist in intrinsic and extrinsic motivation among the Kedah community. The data collected were analyzed using descriptive and inferential statistics to determine motivational patterns and significance levels. Ethical approval for this research was obtained from the Research Ethics Committee (REC) of Universiti Teknologi MARA, Perlis Branch, under the approval reference number REC-ERC/48/2024 (PJIM&A/UPK-ERC 48/2024). All participants were informed about the purpose of the study, assured of confidentiality, and provided consent before participation.

### **Research Population and Sampling**

The target population comprised members of the Kedah community who participate or express interest in water-based activities such as swimming, kayaking, rafting, or snorkelling. According to official statistics, the total population of Kedah is approximately 2,187,500 people. However, because the exact number of water recreation participants is unknown, a representative sample was determined using Krejcie and Morgan's (1970) sample size determination table. Based on the total population size, a minimum of 384 respondents was required for a confidence level of 95% and a 5% margin of error. To accommodate potential non-responses, an additional 20% was added,

resulting in a target sample size of 460 respondents. However, due to time constraints and varying response rates, a total of 160 valid responses were collected and analyzed. A stratified sampling technique was employed to ensure representation across different districts of Kedah. This method was chosen because it allows the inclusion of participants from both urban and rural areas, ensuring balanced representation of gender, age, and district distribution. The sampling frame included respondents from ten districts: Kulim, Kuala Muda, Kubang Pasu, Baling, Kota Setar, Sik, Yan, Bandar Baharu, Pendang, and Padang Terap.

## Research Instrument

The study utilized a structured questionnaire divided into two main sections:

Section A: Demographic information of respondents, including gender, age, district of residence, and preferred type of water-based activity.

Section B: Measurement of intrinsic and extrinsic motivational factors using the Leisure Motivation Scale (LMS-28) developed by Pelletier et al., (1991).

The LMS-28 is widely used to assess individual motivations for leisure participation and has demonstrated high validity and reliability across different contexts. It comprises 28 items, equally distributed across seven subscales representing dimensions of intrinsic, extrinsic, and amotivation constructs. Each item is rated on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. The LMS-28 was chosen for this study due to its cross-cultural applicability, clarity, and strong internal consistency. Ümit Doğan Üstün et al., (2013) reported an overall Cronbach's alpha reliability coefficient of 0.77, confirming acceptable internal consistency for psychological research. For this study, the instrument was adapted slightly to fit the Malaysian cultural context by simplifying certain terms and providing bilingual (English–Malay) translations to ensure comprehension among all participants.

## RESULTS

Table 1, 2 and 3 present the percentage of gender, where the participant stays in Kedah, and the preferable water-based activity. Table 1 showed a total of 160 respondents from ten districts across Kedah participated in the study, with an equal gender distribution of 50% male and 50% female, indicating balanced representation.

**Table 1: Percentage of Gender for Total Respondents**

Demographic Variables		Frequency (N)	Percentage of Sample (%)
Gender	Male	80	50.0
	Female	80	50.0
Total (n)		160	100

Table 2 indicated the district-wise distribution revealed that most respondents resided in Kulim (45.6%), followed by Kuala Muda (15.0%) and Kubang Pasu (13.1%). This geographical spread reflects participation from both urban and rural communities, ensuring a diverse sample base.

Table 3 displays the preferable water-based activity and swimming emerged as the most popular water-based activity (42.5%), followed by kayaking (21.9%), snorkeling (13.1%), and water rafting (6.3%). Other activities such as stand-up paddling, parasailing, and windsurfing recorded

lower participation rates (below 5%). These findings indicate that swimming, as a fundamental aquatic skill, remains the most accessible and preferred activity among the Kedah population.

**Table 2: Percentage of Where the Respondents Stay in Kedah**

Demographic Variables		Frequency (N)	Percentage (%)
Kedah District	Baling	10	6.3
	Bandar Baharu	5	3.1
	Kota Setar	10	6.3
	Kuala Muda	24	15.0
	Kubang Pasu	21	13.1
	Kulim	73	45.6
	Padang Terap	1	0.6
	Pendang	2	1.3
	Sik	8	5.0
	Yan	6	3.8
	<b>Total (N)</b>	<b>160</b>	<b>100</b>

**Table 3: Percentage of Preferable Water-Based Activity**

Demographic Variables		Frequency (N)	Percentage (%)
Water-based Activity	<b>Swimming</b>	<b>68</b>	<b>42.5</b>
	Kayak	35	21.9
	Stand Up Paddling	6	3.8
	Snorkeling	21	13.1
	Scuba Diving	7	4.4
	Sailing or Wind Surfing	2	1.3
	Parasailing	4	2.5
	Water Rafting	10	6.3
	Surfing	7	4.4
	<b>Total (N)</b>	<b>160</b>	<b>100</b>

The popularity of swimming may be attributed to its affordability, availability of facilities, and health-related benefits. It also suggests that water-based recreation in Kedah is primarily oriented toward accessible and safe activities rather than high-risk or specialized aquatic sports.

**Table 4: Intrinsic Motivation Factors Between Genders Towards Water-Based Activity Among Kedah Community**

T – test for Equality of Means						
	Group	N	Mean	t	df	p value
To Know	Male	80	5.55	- 0.43	158	0.67
	Female	80	5.61		149.74	
To Accomplish	Male	80	5.64	- 1.43	158	0.15
	Female	80	5.83		154.14	
To Experience Stimulation	Male	80	5.89	- 0.27	158	0.79
	Female	80	5.92		150.03	

In Table 4, it can be concluded that intrinsic motivation reflects the internal satisfaction and enjoyment derived from engaging in an activity. The Independent T-Test results revealed no significant gender differences ( $p > 0.05$ ) across the three intrinsic motivation dimensions: *To Know*, *To Accomplish*, and *To Experience Stimulation*. Both male and female participants reported similarly high levels of intrinsic motivation toward water-based activities. The mean scores demonstrated that the motivation “*To Experience Stimulation*” recorded the highest average ( $M = 5.90$ ), followed by “*To Accomplish*” ( $M = 5.74$ ) and “*To Know*” ( $M = 5.58$ ). This finding indicates that participants primarily engage in water-based activities for the thrill, excitement, and sensory pleasure rather than

for skill mastery or knowledge acquisition. These findings align with previous studies emphasizing the affective dimensions of outdoor recreation (Mackenzie et al., 2018). Water environments provide participants with sensory engagement, coolness, buoyancy, and resistance that contribute to feelings of exhilaration and relaxation. Furthermore, the absence of significant gender differences supports Ryan and Deci's (2020) assertion that intrinsic motivation arises from universal psychological needs such as competence and autonomy, transcending demographic boundaries. This result also mirrors Jakobsen's (2023) findings, which revealed that individuals with higher perceived competence and autonomy in outdoor activities tend to sustain motivation regardless of gender. Hence, both men and women in Kedah appear equally capable and intrinsically driven to participate in water-based recreation, suggesting a gradual shift away from traditional gendered perceptions of aquatic sports.

**Table 5: Extrinsic Motivation Factors Between Genders Towards Water-Based Activity Among Kedah Community**

T – test for Equality of Means						
	Group	N	Mean	t	df	p value
Identified	Male	80	5.73	- 0.62	158	0.54
	Female	80	5.81		145.90	
Introjected	Male	80	5.24	0.17	158	0.87
	Female	80	5.22		157.296	
External Regulation	Male	80	4.94	1.46	158	0.15
	Female	80	4.66		154.229	

Table 5 demonstrates on extrinsic motivation which refers to engagement driven by external influences such as rewards, recognition, or social expectations. The study analyzed three subscales of extrinsic motivation: Identified, Introjected, and External Regulation. The results revealed no significant gender differences across these dimensions ( $p > 0.05$ ), though mean scores varied slightly. Among the extrinsic subscales, Identified Regulation recorded the highest mean ( $M = 5.77$ ), followed by Introjected Regulation ( $M = 5.23$ ) and External Regulation ( $M = 4.80$ ). These results suggest that participants engage in water-based activities primarily because they recognize the personal importance and health benefits associated with such activities, rather than because of external pressures or rewards. This finding corroborates previous studies (Liu et al., 2020; Kekäläinen et al., 2022), which highlight that when extrinsic motives are internalized, meaning individuals perceive the activity as personally valuable, they exhibit greater persistence and satisfaction. The Kedah community's relatively high identified motivation suggests that many participants see aquatic activities as meaningful for health, fitness, or social interaction rather than mere leisure pursuits. Interestingly, lower mean scores for External Regulation imply that external rewards or social approval are not primary motivators. This may reflect increasing self-awareness and health consciousness within the Kedah community. Similar trends have been reported in other Malaysian recreational contexts, where participation is driven by internalized goals related to personal growth and well-being rather than external validation.

## DISCUSSION

The absence of significant gender differences in both intrinsic and extrinsic motivation dimensions underscores the inclusive nature of water-based recreation in Kedah. This challenges the conventional perception that aquatic sports are male-dominated or require high physical strength. The findings are consistent with global trends indicating increased female participation in outdoor and adventure-based activities (Puhakka, 2021; Lackey et al., 2021). The data also affirm the relevance of Self-Determination Theory (SDT) in explaining recreational motivation. Both male and female participants appear to engage in water-based activities due to internalized satisfaction (intrinsic) and personally valued outcomes (identified regulation). When participants' psychological needs for competence and

autonomy are met, they experience enhanced intrinsic motivation, leading to greater persistence in participation (Ryan & Deci, 2020). This study also suggests potential implications for community-based recreation management. Programs promoting water-based activities should focus on experiential enjoyment, self-improvement, and inclusivity rather than competition or external incentives.

Local authorities, recreational planners, and educators could design campaigns emphasizing the mental health, physical fitness, and social bonding aspects of aquatic activities. Encouraging joint participation among family members and mixed-gender groups could further normalize inclusive participation, strengthening social cohesion and community well-being. Moreover, the strong presence of intrinsic motivation indicates that the Kedah community already possesses the foundational psychological drivers for sustained engagement. The challenge lies not in creating motivation but in providing sufficient infrastructure, accessibility, and safety measures to maintain participation. Future strategies could include mobile water safety programs, community-based kayaking clubs, and affordable aquatic training sessions, especially in rural districts.

## **CONCLUSION**

This study examined intrinsic and extrinsic motivational factors influencing participation in water-based activities among the Kedah community. Using the framework of the Self-Determination Theory (SDT), the study found that both men and women are equally motivated to engage in aquatic recreation, with intrinsic factors which particularly were stimulation and enjoyment which had emerging as the dominant drivers. Extrinsic motivation, especially identified regulation, also played an important role, indicating that participants value water-based activities for their personal significance and health benefits. The absence of gender differences in motivation challenges traditional stereotypes surrounding physical activity and suggests that aquatic recreation in Malaysia is evolving toward greater inclusivity. The findings underscore the need for policy makers, local councils, and recreation managers to design inclusive, accessible, and motivationally driven programs that cater to diverse community segments. Promoting awareness about the health, therapeutic, and social benefits of aquatic participation can further enhance engagement. From a theoretical standpoint, this study contributes to the expanding body of knowledge applying Self-Determination Theory to outdoor and aquatic recreation. It demonstrates that motivation among community members is not solely influenced by demographic factors but rather by universal psychological needs for autonomy, competence, and relatedness. This research broadens the application of Self-Determination Theory by examining motivation within community-level water-based activities, a context that has received limited theoretical attention. The results indicate that participation is primarily driven by intrinsic enjoyment and personally meaningful goals, rather than external incentives, underscoring the effectiveness of internalized motivation in aquatic recreation. The lack of gender-based differences further affirms the universal role of psychological needs proposed by SDT. Practically, the results highlight the importance of developing community-based aquatic initiatives that focus on enjoyment, skill development, and safety awareness. Such initiatives could increase participation rates, improve public health, and strengthen the cultural appreciation of Malaysia's natural water resources. While the present study provides valuable insights, several avenues for future research remain. Larger-scale studies involving broader demographic and geographical coverage could offer more generalizable findings. Qualitative research could also explore the deeper emotional and social dimensions of water-based recreation experiences. Furthermore, longitudinal studies could assess how motivational patterns evolve over time in response to policy changes or social trends. Overall, this study affirms that water-based recreation holds immense potential as a sustainable, inclusive, and health-promoting form of community engagement. By understanding and nurturing the motivational factors that drive participation, stakeholders can contribute to a more active, connected, and resilient society that one that embraces both the physical and psychological rewards of life around water.

## ACKNOWLEDGEMENT

The authors would like to express their gratitude to Universiti Teknologi MARA Perlis Branch for providing necessary research resources. Additionally, the authors would also like to extend appreciation to the anonymous reviewers for their valuable suggestions.

## FUNDING

This research did not receive any specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## AUTHORS' CONTRIBUTION

The authors confirm contributions to the paper as follows: study conception and design, data collection, analysis was conducted by Ellail Ain Mohd Aznan and Siti Amalina Mohd Yazid while interpretation of results and draft manuscript preparation were undertaken by Muhammad Aisar Che Rouse and Mohd Khairulanwar Md Yusof. All authors reviewed the results and approved the final version of the manuscript.

## CONFLICT OF INTEREST DECLARATION

We certify that the article is the Authors' and Co-Authors' original work. The article has not received prior publication and is not under consideration for publication elsewhere. This manuscript has not been submitted for publication, nor has it been published in whole or in part elsewhere. We testify to the fact that all Authors have contributed significantly to the work, validity, and legitimacy of the data and its interpretation for submission to Jurnal Intelek.

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