

Assessing The Impact of TikTok-Based Promotions on Students' Participation in Outdoor Activities at Malaysian Public University

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ABSTRACT

The COVID-19 pandemic has significantly altered student lifestyles, underscoring the importance of digital platforms in promoting health and physical activity. This research examines the effectiveness of TikTok-based promotion in influencing student participation in outdoor activities at Universiti Teknologi MARA (UiTM) Shah Alam. The research focuses on three TikTok engagement variables: identity, sharing, and reputation as constructs of students' participation in outdoor activities. A quantitative method was used, consisting of a structured questionnaire distributed to 74 sports students. Data were analyzed using SPSS version 29.0 to conduct the multiple regression analysis. Results indicated that reputation had the strongest positive contribution to students' participation ($\beta = 0.557$, $p < 0.05$), followed by identity ($\beta = 0.217$, $p < 0.05$), while sharing had a smaller and insignificant effect ($\beta = 0.129$, $p > 0.05$). The overall multiple linear regression model was statistically significant ($F(3,75) = 40.823$, $p < 0.05$), explaining 62% of the variance in students participating in outdoor activities ($R^2 = 0.620$). These findings confirm that TikTok is one of the social media platforms that may effectively promote outdoor activities, especially through reputable content and influencer credibility. The study offers practical guidance for universities and sports organizations on utilizing TikTok as a strategic platform to promote physical activity and enhance student well-being.

Keywords: *Malaysian public university, outdoor activities, students' participation, TikTok promotion*

INTRODUCTION

The COVID-19 pandemic profoundly altered young people's lifestyles, resulting in increased screen time and reduced physical activity among students worldwide. A meta-analysis showing a substantial increase (52%) in screen time among adolescents during the COVID-19 pandemic (Madigan et al., 2022). Therefore, university students were unable to participate in outdoor activities due to mobility restrictions and the closure of recreational facilities during lockdown periods. As the nation transitions into the post-pandemic era, greater emphasis has been placed on health, well-being, and the importance of physical activity among young people. At the university level, outdoor activities are increasingly valued for their numerous benefits, including improved cardiovascular health, enhanced mental well-being, and stronger social connections among students. Recent studies conducted during and after the COVID-19 pandemic have demonstrated that participation in outdoor and nature-based activities has a significant positive impact on human well-being and perceived stress, particularly when dealing with psychological distress, anxiety, and emotional fatigue during periods of social restriction and heightened academic pressure (Parkinson et al., 2025; Pouso et al., 2021). Therefore, outdoor activities can be considered a healthy means of addressing both psychological and physical challenges - one that requires effective promotion through digital platforms.

Digital communication has evolved rapidly, and young people's lifestyles now largely revolve around social media, which influences their behavior, communication styles, and lifestyle choices. Among the various digital platforms, TikTok has emerged as one of the most popular due to its engaging community tools, short-form video format, and personalized algorithms. The application currently boasts 1.6 billion monthly active users globally and continues to grow rapidly across the Asia-Pacific region, generating approximately USD 23 billion in revenue in 2024 - a 42.8% year-over-year increase (David, 2025). These figures illustrate TikTok's unique potential to promote positive behavioral change in a visually engaging and meaningful manner.

In Malaysia, TikTok has become one of the leading social media platforms alongside Instagram and Facebook, driven by its extensive engagement and advertising reach. Meltwater 2025 reported that TikTok has the highest average monthly usage time among other social platforms, with users spending more hours per month on TikTok than on other social media networks (Scott S., 2025). For students, TikTok represents more than mere entertainment - it is a platform where social values are shaped, trends are created, and participation is encouraged. The platform frequently showcases uplifting and viral content related to travel, fitness, leisure, and community service. However, its influence can vary depending on demographics such as gender, educational background, and academic program, which may affect students' engagement levels and perceptions (Kutip et al., 2024). This suggests that TikTok has the capacity to shape opinions and inspire real-world behavior, particularly in motivating students to participate in outdoor activities.

TikTok has quickly become a popular tool for engaging students in outdoor activities, particularly at public universities. Exposure to nature content through TikTok influences young people's perception and behaviors toward outdoor environments, suggesting that digital media can shape offline outdoor engagement (Maddern K., 2022). Its vivid and inventive format encourages creativity, while its unique features enable students to showcase their experiences and express themselves in compelling ways. The platform captures the energy of outdoor events and promotes participation through short, vibrant videos that are difficult to ignore. It also has the potential to reach a wide range of students, including those who might not otherwise engage in these activities.

A standout feature of TikTok is its ability to foster a sense of community. Likes, comments, and challenges create connections among students and motivate them to get involved when they see their peers enjoying similar activities. TikTok not only allows users to express their creativity through discussions, collaborations, and feedback, but also enables them to comment on videos, tag others, and

share their insights, exposing them to dialogue and knowledge exchange. TikTok's short-form user-generated video content has redefined expression and engagement by creating content and encouraging active participation through trends and challenges (Huttayavilaiphan, 2024). Therefore, its effectiveness stems from the platform's capacity to blend entertainment and information, making promotional messages more relatable and authentic to younger audiences.

The influence of social media extends beyond the academic context. Research indicates that social platforms significantly shape students' decisions regarding extracurricular and outdoor activities (Hung & Liou, 2023). Additionally, TikTok's strong storytelling capabilities enhance its effectiveness in shaping users' perceptions and influencing their behavior (Dao, 2025). Moreover, TikTok has proven to be an effective medium for promoting and increasing student participation in outdoor activities by merging social engagement, entertainment, and education in a visually compelling format.

In recent years, universities have increasingly emphasized the importance of holistic student engagement that extends beyond classroom learning. Student participation in outdoor activities is essential for comprehensive development, as it promotes emotional stability and psychological well-being, which both are vital components of a complete educational experience (Mutz & Müller, 2016). Educational institutions are progressively recognizing these benefits and highlighting the value of engaging students in outdoor environments.

Such activities provide students with a reprieve from conventional classroom settings, offering opportunities to connect with nature and their peers in interactive and meaningful ways. Research indicates that participation in outdoor pursuits enhances communication, teamwork, and leadership skills (Azhari et al., 2025). Through activities such as hiking, sports, and ecological projects, students cultivate life skills like problem-solving and resilience - qualities that are often more difficult to develop indoors. Furthermore, these experiences foster physical fitness and mental well-being, both of which are critical to academic success and personal growth. Several studies show that regular engagement in outdoor activities is linked with improved physical health, reduced anxiety and stress, and greater emotional stability, as well as life satisfaction and psychological well-being through interaction with natural environments (Nugraha et al., 2024; Parkinson et al., 2025). For example, university students' participation in outdoor recreation is associated with positive mood, social connectedness, and relief from academic pressures, highlighting its role in supporting students' emotional and cognitive functioning (Puhakka, 2021). Therefore, by integrating outdoor activities into students' routines, students support a well-rounded approach to education, preparing them with the skills and experiences necessary for academic excellence and lifelong development.

Focusing on students from Universiti Teknologi MARA (UiTM) Shah Alam, this study aims to evaluate the effectiveness of TikTok marketing in promoting student participation in outdoor activities. Specifically, it examines how three TikTok engagement metrics - identity, sharing, and reputation that influence students' motivation and behavior toward improving their health, social engagement, and overall well-being.

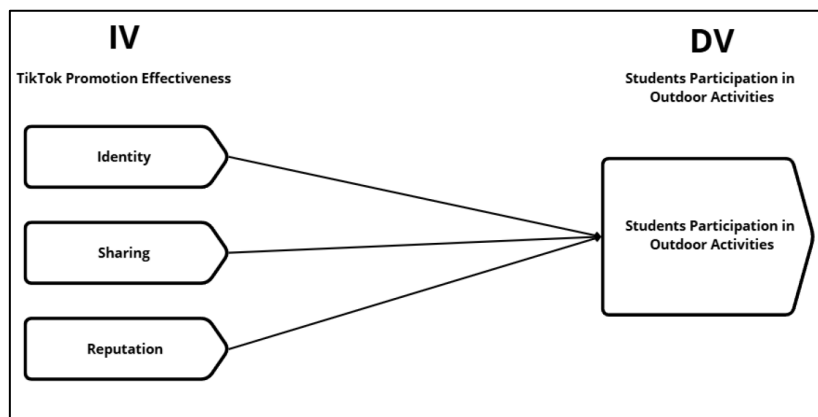


Figure 1. Conceptual Framework of the study

Figure 1 illustrates the conceptual framework, proposing that identity, sharing, and reputation function as independent predictors influencing students' participation in outdoor activities.

METHODOLOGY

This study employed a quantitative cross-sectional survey design to analyze the effectiveness of TikTok promotions in encouraging student participation in outdoor activities at UiTM Shah Alam. A cross-sectional approach was appropriate as data was collected at a single point in time to capture students' perceptions and behavioral responses towards TikTok-based promotional content. Quantitative methods were chosen for their ability to provide objective measurements and statistical analysis (Bryman, 2016; Cohen et al., 2018; Ishtiaq, 2019). The target population comprised undergraduate students from the Faculty of Sports Science and Recreation, UiTM Shah Alam, as this group is directly exposed to outdoor recreational activity programs and sport-related promotional content. A total of 74 respondents participated in this study.

A stratified random sampling approach with voluntary response within strata was applied based on key demographic characteristics (gender and academic program) to ensure representation across subgroups within the faculty. Within each stratum, respondents were selected voluntarily via an online survey link, reflecting practical constraints while maintaining proportional representation.

The sample size of 74 was deemed adequate for statistical analysis based on several considerations. Firstly, according to Krejcie & Morgan (1970), smaller populations require proportionally smaller sample sizes to achieve sufficient representativeness. Second, the study employed multiple regression analysis with three predictor variables. For which sample sizes exceeding 50 are generally considered acceptable to obtain stable estimates and sufficient statistical power (Green, 1991).

Data were collected using a structured bilingual (Malay and English) questionnaire adapted from previous studies to meet the research objectives. The instrument contained three sections: demographic information, effectiveness of TikTok promotion, and student participation in outdoor activities, with attitudinal items measured on a 5-point Likert scale (DeVellis, 2017; Joshi et al., 2015; Koo & Yang, 2025).

Table 1: Questionnaire structure

Section	Details
Section A	Demographic information
Section B	Effectiveness of TikTok promotion <ul style="list-style-type: none"> • Identity • Sharing • Reputation
Section C	Student participation in outdoor activities

A pilot study was conducted with 30 students from the same faculty to assess the clarity, relevance, and reliability of the instrument (Teijlingen & Hundley, 2001; Ismail et al., 2017). Reliability testing yielded a Cronbach’s Alpha coefficient of 0.935, indicating excellent internal consistency (Nunnally, 1978; Salkind, 2017). Feedback from the pilot study informed refinements to ensure that respondents could understand the questions clearly and answer accurately.

Table 2: Reliability Analysis of TikTok Promotion Effectiveness Towards Students' Participation in Outdoor Activities in UiTM Shah Alam

Serial	Construct	Cronbach's Alpha
1	Identity	.814
2	Sharing	.877
3	Reputation	.830
4	Students Participation	.895

All data were collected through a Google Form to ensure voluntary participation and anonymity. The survey link was distributed electronically to undergraduate students of the Faculty of Sports Science and Recreation, UiTM Shah Alam, through official WhatsApp and Telegram student groups. Data collection was conducted over a two-week period. The data were analyzed using SPSS version 29.0 to measure the impact of TikTok promotion effectiveness, focusing on identity, sharing, and reputation on students’ participation in outdoor activities. Ethical approval for this study was obtained from the faculty ethics committee (Approval No.: ERC/FSR/UG/MR/2025/APRIL/94). All procedures involving human participants were conducted in accordance with established ethical standards. The participation was entirely voluntary, informed consent was obtained from all respondents, and anonymity was assured throughout the research process.

FINDINGS

Analysis in Table 2 shows a multiple regression that TikTok involvement significantly contributes to the participation rate in outdoor activities among UiTM Shah Alam students. The generated regression model is significant with $F(3, 75) = 40.823, p < .05$ and an R^2 value of .620, indicating that 62% of the variance in student participation rates can be explained by the independent variables identity, sharing, and reputation. The obtained regression equation is $y = 1.265 + 0.217(\text{identity}) + 0.129(\text{sharing}) + 0.557(\text{reputation})$. Among the three variables, reputation was found to have the strongest and statistically significant contribution to student participation in outdoor activities ($p < .05$), followed by identity, while sharing showed a smaller and insignificant effect ($p > .05$). This suggests that the reputation element in TikTok usage plays an important role in encouraging student participation in outdoor activities, while the remaining 38% of the variance may be due to other factors not examined in this study.

Table 3: Model Summary of Multiple Regression Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778a	.620	.605	1.29149

- a. Predictors: (Constant), Identity, Sharing, Reputation
- b. Dependent Variable: Students' Participation

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	204.272	3	68.091	40.823	<.001 ^b
	Residual	125.095	75	1.668		
	Total	329.367	78			

- a. Dependent Variable: Students' Participation
- b. Predictors: (Constant), Identity, Sharing, Reputation

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)					
		1.265	1.071		1.181	.241
	Identity	.217	.137	.197	1.582	.118
	Sharing	.129	.149	.114	.866	.389
	Reputation	.557	.123	.534	4.456	<.001

- a. Dependent Variable: Students' Participation

DISCUSSION

Based on the findings, TikTok is one of the most effective social media platforms for attracting and engaging students to participate in outdoor activities. The sharing dimension includes aspects such as the use of hashtags and the creation of unique videos, which make TikTok an effective medium for capturing students' interest in outdoor recreation. The focus of this study is to understand how TikTok engagement metrics, specifically identity, sharing, and reputation, influence UiTM Shah Alam students' participation in outdoor activities.

The results of the multiple regression analysis indicate a statistically significant model, showing that the three components of engagement account for 62% of the variation in outdoor activity participation. Among these, reputation emerged as the most influential independent variable, followed by identity, while sharing showed the least statistically significant effect. These findings suggest that TikTok is not only one of the most popular social media platforms but also a key source of information and knowledge about outdoor recreation, thereby influencing students' behavior and motivation to participate in such activities.

Hung and Liou (2023) suggest that utilizing social media to obtain information about outdoor leisure - such as professional guidance, practitioners' experiences, and promotional offers enhances individuals' interest and likelihood of participating in outdoor activities. This information is essential to ensure that promotional initiatives are implemented effectively.

The reputation variable was found to be a particularly strong predictor of student behavior, indicating that students are more inclined to engage in outdoor activities when such participation enhances their

social image and visibility. In the contemporary TikTok environment, outdoor activities are increasingly framed as performative practices, where physical engagement is evaluated not only for health or leisure benefits but also for its potential to generate social validation through likes, comments, and algorithmic exposure. This pattern reflects a broader digital trend in which students curate activities that are visually appealing and socially rewarding, aligning behavior with platform norms that prioritize visibility and peer recognition. This finding is explained by Social Cognitive Theory, which posits that individuals learn and adopt behavior through observation and imitation, particularly when those behaviors are publicly rewarded (Bandura, 1986).

In contrast, the sharing dimension did not exhibit a statistically significant relationship with students' participation in outdoor activities. The finding suggests that the exposure to shared content, hashtags strategy, or interactive features may be insufficient to motivate engagement unless it is accompanied by credible or reputable sources. The source of credibility and perceived trustworthiness play a critical role in transforming online exposure into behavioral intention and action (De Veirman et al., 2017; Ohanian, 1990; Sun et al., 2009). In the context of TikTok's highly saturated content environment, students may encounter an abundance of outdoor-repeated posts, reducing the persuasive impact of sharing alone. The result also reflects a shift toward more selective engagement patterns, where students prioritize content endorsed by influential or trusted creators rather than peer-generated sharing.

In TikTok's context, algorithmic arrangement intensifies this process by repeatedly exposing users to highly engaged content, thereby accelerating imitation cycles beyond traditional offline social learning mechanisms. Supporting this perspective, Omar & Dequan (2020) found that TikTok facilitated social interaction by fulfilling users' needs for communication, relaxation, and social connection, thereby motivating content consumption and engagement.

CONCLUSION

Data analysis from students in the Faculty of Sports Science and Recreation indicates that TikTok significantly enhances students' interest in outdoor activities. From the students' perspective, this study provides a novel insight: social media, often criticized for its negative effects such as addiction or distraction, can also be leveraged to promote positive behavioral change. When TikTok content is presented in an engaging and interactive format that aligns with students' interests, it can effectively motivate them to participate in healthy and enjoyable outdoor activities. The findings highlight that universities and student organizations should not underestimate the potential of social media as a tool for promoting wellness-oriented initiatives. By adopting appropriate strategies such as establishing credible official accounts and producing captivating content that reflects student identity, TikTok can serve as a powerful bridge between the digital world and real-world physical engagement. Overall, this research contributes valuable insights to the fields of sport administration and digital marketing, particularly within a university context, and the findings are context-specific and may not be generalizable to non-sport students or private universities. Students should recognize the influence of the media they interact with daily and develop the skills to use it purposefully to enhance not only their online presence but also their physical health and social engagement. The present findings extend this work by demonstrating that reputation and social image operate as distinct motivational drivers encouraging students' participation in outdoor activities shared on TikTok. Importantly, this contributes to addressing a gap in outdoor participation research, which has largely focused on health and psychological outcomes while underexploring platform-mediated and reputation-driven motivations. Future research should focus on examining whether reputation-driven outdoor participation leads to sustained behavioral change or remain episodic, as well as investigate the moderating roles of intrinsic motivation, self-esteem, and fear of missing out (FOMO) using other research designs.

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AUTHORS' CONTRIBUTION

Mohamad Khairul Aiman Bin Mohamad Zahir led the research as the first author, contributing to the conceptualization, research design, data analysis, and manuscript writing. Muhammad Faizal Bin Kutip provided supervision, critical review, manuscript editing, and methodological guidance. Muhammad Farid Hilmi Bin Aidit contributed to the literature review, and formatting of the manuscript. Adam Afif Bin Mohamad Azmi assisted with data analysis and interpretation. Mohd Azharul Bin Azemi contributed to proofreading and final manuscript editing.

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