

Motivation for Sports Participation and its Relationship with Academic Performance among Malaysian Higher Education Students

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Abstract

This study aims to explore the relationship between motivation for sports participation and academic performance among higher education students in Malaysia. A total of 225 participants (118 male, 107 female) completed structured, bilingual questionnaires assessing multi-faceted motivations for sports participation—including friendship, physical fitness, activity, achievement status, team affiliation, competition, and skill development—using adapted instruments from the Sport Participation Motivation Questionnaire (PMQ; Gill et al., 1983) and the Academic Performance Scale (APS; Birchmeier et al., 2015), grounded in student involvement theory. Data analysis revealed that the 'being active' motivation domain had the strongest positive correlation with academic performance ($r = 0.818$, $p < 0.01$), while 'fun' as a motivational driver showed a significant negative correlation ($r = -0.707$, $p < 0.01$). Friendship and achievement motivations also supported positive academic outcomes. In contrast, team competition and other affiliation development factors did not show significant effects. The findings underscore that appropriate levels of sports involvement promoting physical activity and social interaction are vital for students' academic achievement. The study highlights the need for integrated sports programs that support both physical health and academic success, recommending that higher education institutions adopt such approaches for comprehensive student development. Future research should employ longitudinal designs to more effectively explore the links between sport motivation and academic performance.

Keywords: Sports Participation, Motivation, Academic Performance, Higher Education, Student Development, Malaysia

Introduction

In recent years, the role of sports in higher education has gained increasing attention, not merely for physical well-being but as a vital contributor to academic and psychological development. With rising academic demands and mental health concerns among university students, integrating physical activity as part of student life has become more than a co-curricular luxury—it is a strategic necessity. Empirical evidence suggests that participation in physical activity enhances cognitive performance, improves stress regulation, and fosters

time management and goal-setting skills (Smith et al., 2022; Hillman et al., 2008). However, the effectiveness of sports participation on academic outcomes is largely dependent on the underlying motivation for engagement.

In Malaysia, where academic competition is intense and dropout rates are a persistent concern, understanding how and why students engage in sports is critical to optimizing educational outcomes. While universities increasingly promote active lifestyles through institutional sports programs, little is known about how different motivational domains—such as achievement, fun, friendship, or fitness—translate into academic success. Most available studies focus on either the psychological or physical benefits of sports, but few explore how students' intrinsic or extrinsic sport-related motivations relate specifically to academic performance, particularly in the Malaysian context (Zhang & Wang, 2021; Mohd Amirul Syafiq et al., 2023).

The significance of this study lies in its practical implications for universities, educators, and policy makers. Understanding which types of sports motivation are academically beneficial allows higher education institutions to tailor co-curricular programs that do more than promote health—they can be designed to reinforce academic discipline, peer collaboration, and resilience. For student affairs departments, such insights provide a roadmap for advising students on how to engage in campus life without compromising academic goals. For students themselves, it offers a clearer understanding of how their sporting motivations can either align with or hinder academic performance.

Therefore, this study aims to explore the relationship between specific motivational factors for sports participation and academic performance among Malaysian university students. By identifying which motivations are positively or negatively associated with academic outcomes, the study offers evidence-based recommendations for designing university sport programs that serve both physical and intellectual development.

Methods

Design and Participants

A cross-sectional survey was conducted with 225 students (118 male, 107 female) from various Malaysian public universities, aged 18–26. Participation was voluntary, and data confidentiality was ensured.

Instruments

The instruments used in this study were carefully selected to ensure comprehensive and reliable measurement of the variables of interest. The structured questionnaire comprised three main sections. The first section gathered demographic information, including gender, age, latest level of study, types of sports involvement, the specific sport participated in, level of involvement, level of performance, and current cumulative grade point average (CGPA). This demographic data provided a contextual background for interpreting the results and allowed for subgroup analyses.

To assess students' motivation for sports participation, the study employed the Sport Participation Motivation Questionnaire (PMQ) developed by Gill et al. (1983). PMQ consists of 30 items designed to capture a broad range of motivational constructs relevant to sports

engagement, such as friendships, physical fitness, activity, achievement status, team affiliation, competition, skill development, and fun. Respondents rated each item on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), indicating the extent to which each motive applied to their participation in sports. The PMQ is widely recognized in sport psychology research for its robust psychometric properties and has been validated across diverse populations. For this study, the questionnaire was adapted to a bilingual format (Malay and English) to ensure clarity and accessibility for Malaysian university students.

Academic performance was measured using the Academic Performance Scale (APS) adapted from Birchmeier et al. (2015). The APS comprises 8 items, each rated on the same 5-point Likert scale as the PMQ. This scale evaluates students' self-perceived academic behaviors and outcomes, including aspects such as study habits, class participation, effort, and problem-solving skills. The APS has demonstrated strong reliability, with reported internal consistency and test-retest reliability coefficients above 0.85, making it suitable for use in higher education contexts. The use of self-reported academic performance, while subject to certain limitations, was deemed appropriate for capturing students' perceptions of their own academic engagement and success.

All questionnaire items were administered online, allowing for efficient data collection from a geographically diverse sample. The structured and validated nature of both the PMQ and APS ensured that the data collected were both reliable and relevant to the study's objectives.

Procedure

Questionnaires were distributed online and completed in both Malay and English. Data were analyzed using SPSS v29, with Spearman's rho correlation to examine relationships between motivational factors and academic performance.

Results

Descriptive Statistics

All 225 responses were complete and included in the analysis. Table 1 presents the correlation coefficients and significance levels for each motivational domain.

Table 1

Correlation Between Sports Motivation Domains and Academic Performance

| Motivation Domain | Correlation (r) | p-value | Strength/Direction |
|--------------------|-----------------|---------|----------------------------|
| Being Active | 0.818** | 0.007 | Strong Positive |
| Team Affiliation | 0.785** | 0.025 | Moderate Positive |
| Friendship | 0.665** | 0.004 | Moderate Positive |
| Achievement Status | 0.480* | 0.025 | Weak Positive |
| Fun | -0.707** | 0.001 | Strong Negative |
| Physical Fitness | -0.265* | 0.004 | Moderate Negative |
| Competition | -0.698 | 0.486 | Strong Negative (Not Sig.) |
| Skill Development | -0.168 | 0.867 | Very Weak (Not Sig.) |

*Note: N = 225; Spearman's rho correlation used. *p < 0.05, **p < 0.01

Main Findings

The analysis revealed significant relationships between several sport motivation domains and students' self-reported academic performance. The strongest positive association was observed for the "being active" domain, which had a correlation coefficient of $r=0.818$ ($r = 0.818$, $p=0.007$), indicating that students who are motivated to participate in sports to stay active tend to perform better academically. This could be attributed to improved energy levels, better time management, and enhanced focus that physical activity brings.

Motivations related to social interaction, such as "friendship" ($r=0.665$ ($r = 0.665$, $p=0.004$)) and "team affiliation" ($r=0.785$ ($r = 0.785$, $p=0.025$)), also showed moderate positive correlations with academic performance. These findings suggest that the sense of belonging and peer support gained through team or peer-based sports activities might positively influence students' academic motivation and persistence.

"Achievement status" motivation had a weaker but still significant positive correlation ($r=0.480$ ($r = 0.480$, $p=0.025$)), implying that students driven by recognition or success may channel their competitiveness into academic domains. Conversely, motivations such as "fun" ($r=-0.707$ ($r = -0.707$, $p=0.001$)) and "physical fitness" ($r=-0.265$ ($r = -0.265$, $p=0.004$)) were negatively correlated with academic performance. This could indicate that students primarily engaged in sports for enjoyment or fitness may not prioritize academic tasks, potentially due to time conflicts or differing personal goals.

"Competition" and "skill development" domains did not show significant correlations, with coefficients of $r=-0.698$ ($r = -0.698$) and $r=-0.168$ ($r = -0.168$), respectively, both failing to reach statistical significance. These results suggest that these motivations may not directly influence academic performance in the studied population.

Discussion

The findings underscore the complex interplay between sport motivation and academic performance. Not all motivations to participate in sports have equal academic consequences. The strongest predictor of academic success was the motivation to be active, reinforcing previous findings that regular physical engagement enhances cognitive function and discipline (Anuar & Bahar, 2023). Students who stay physically active likely benefit from improved mental clarity, energy levels, and structured daily routines.

Socially driven motivations, particularly friendship and team affiliation, were also positively associated with academic outcomes. These results align with research highlighting how social interaction through sport can foster resilience, reduce anxiety, and build psychological confidence in athletes (Mohd Kassim et al., 2024; Anuar et al., 2024a). Group sports may foster soft skills such as communication and cooperation, which can transfer positively to academic settings.

On the other hand, the negative association between fun-driven motivation and academic performance suggests that when enjoyment is the primary reason for sports involvement, academic priorities may be compromised. Students focused on leisure or recreation might spend less time on academic responsibilities. Similarly, fitness-driven

motivations, while beneficial for health, may not always align with academic success unless coupled with academic discipline (Gunasaekaran et al., 2023).

The lack of significant correlation for competition and skill development suggests that these motivators do not directly enhance or impede academic achievement. These findings may reflect individual differences in how students translate competitive or skill-building experiences from sports to academic contexts. It also implies that simply being goal-oriented or focused on improvement in sports may not be sufficient to boost academic results without broader integration of those traits into study habits.

Strengths and Limitations

A major strength of this study lies in its use of validated instruments—the Participation Motivation Questionnaire (PMQ) and Academic Performance Scale (APS)—which provide reliable constructs for analyzing the sport-academic performance relationship (Gill et al., 1983; Birchmeier et al., 2015). The sample size of 225 students, drawn from multiple public universities, enhances the generalizability of the findings within the Malaysian context.

However, several limitations must be noted. The cross-sectional design restricts the ability to infer causal relationships between motivational factors and academic performance. Self-reported academic data, such as CGPA, may be subject to social desirability bias or recall errors. Moreover, the study focused only on public universities, limiting the applicability of findings to students from private or technical institutions.

Implications

This study has practical implications for policy makers, educators, and student affairs departments in Malaysian higher education. First, structured sports programs that encourage physical activity and social engagement should be prioritized. These initiatives can serve dual functions—enhancing student well-being while also supporting academic achievement.

Second, co-curricular programming should deliberately frame sports as vehicles for leadership development, teamwork, and self-regulation. Interventions should emphasize intrinsic motivations and collaborative experiences rather than solely promoting fun or physical conditioning. Such alignment ensures that students' participation in sports complements, rather than detracts from, their academic responsibilities (Anuar et al., 2024b).

Finally, academic advising and university policies should consider integrating sport-related activities into broader student development frameworks. This includes adjusting timetables, recognizing co-curricular credits, and creating platforms for academically focused athletic engagement.

Conclusion

This study reveals that the motivations behind sports participation significantly influence academic performance among Malaysian university students. Motivations centered on being physically active and socially engaged—such as friendship and team affiliation—are positively associated with better academic outcomes. In contrast, motivations primarily related to fun or fitness may negatively affect academic achievement.

The results highlight the need for universities to design sport programs that go beyond recreation. Structured, purposeful sports engagement should be promoted, especially those that foster physical activity and positive peer interactions. Institutions should recognize that the type of motivation behind sport involvement matters and that interventions should aim to reinforce those forms of motivation that align with academic success.

Future research should adopt longitudinal approaches and include objective academic performance data such as GPA. Mixed-method designs could further explore the qualitative dimensions of student motivation, providing a deeper understanding of how sports engagement interacts with academic life.

By tailoring sport programs to support both personal development and academic growth, universities can more effectively cultivate student success in a holistic manner.

Conflict of Interest

The authors declare no conflicts of interest.

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