Examining the Relationship Between Sports Participation and Student Motivation: Testing the Mediation of Resilience among University Students in Bahrain

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Abstract

This study examines the interplay between sports participation, resilience, and academic motivation among Bahraini university students. Employing a robust theoretical foundation rooted in Self-Determination Theory (SDT), Broaden-and-Build Theory, and the Stress-Buffering Hypothesis, the research explores how sports participation fosters resilience, which in turn mediates its effect on student motivation. Data were collected from 153 university students through validated scales measuring sports participation, resilience, and academic motivation. Structural equation modelling revealed that while sports participation alone did not significantly influence student motivation, its indirect effect through resilience was substantial. The findings underscore resilience as a critical psychological asset that bridges the relationship between sports engagement and academic outcomes. The study highlights the cultural and educational relevance of integrating sports into academic settings to enhance resilience and motivation. Recommendations are provided for policymakers and educators to design resilience-focused interventions leveraging sports participation to optimize academic success. Limitations and directions for future research are also discussed.

Keywords: Sports Participation, Resilience, Academic Motivation, Academic Success.

Introduction

Background and Significance

Sports engagement is widely recognised as a fundamental pillar of comprehensive development, significantly contributing to both physical health and psychological resilience. Participation in sports fosters essential attributes such as discipline, teamwork, and goal-setting, all of which are integral to both academic and personal success (Bailey et al., 2013). Within the context of higher education, involvement in sports has been positively linked to heightened motivation and improved academic performance, equipping students with the necessary skills to navigate challenges and sustain concentration (Aquilina, 2013; Mahoney, Cairns, & Farmer, 2003). Motivation serves as a crucial determinant of academic success among university students, particularly as they adapt to the rigorous transition from secondary education to university life. This motivation is not solely intrinsic but is also shaped by external factors, including encouragement from others, structured daily routines, and recognition. Sports participation has been identified as a key external factor that cultivates intrinsic motivation by self-confidence, fostering strengthening connections, and reinforcing a sense of purpose (Deci & Ryan, 1985).

Resilience, defined as the capacity to adapt and recover

from setbacks, enables students to apply the life skills acquired through sports to foster academic persistence and motivation. Research consistently indicates that participation in sports strengthens resilience by exposing individuals to structured challenges, such as competition and goal-driven training, which parallel difficulties encountered in academic and personal contexts (Howells & Fletcher, 2015). Bahraini university students navigate distinct challenges, including cultural expectations, academic pressures, and social transitions. Although Bahrain has actively promoted sports through national initiatives, such as those led by the Bahrain Olympic Committee, limited research has examined the psychological effects of sports participation within this specific demographic. Investigating how resilience mediates the link between sports engagement and academic motivation can offer deeper insights into the ways these factors interact to support student achievement. This study seeks to address a critical gap in the literature by exploring the relationship between sports participation and academic motivation, with resilience as a mediating factor, among Bahraini university students. By identifying the pathways through which sports contribute to resilience and motivation, the research provides valuable implications for educational policymakers, sports organisations, and university administrators seeking to enhance student outcomes through targeted interventions.

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Objectives of the Study

This study aims to examine the relationship between sports participation and academic motivation among Bahraini university students, with a particular focus on the mediating role of resilience. It seeks to address notable gaps in the existing literature regarding the psychological and academic benefits of engaging in sports within Bahrain's higher education setting. The research is guided by the following objectives:

- Sports engagement has been linked to increased motivation by promoting self-discipline, goalsetting, and intrinsic fulfilment (Bailey et al., 2013; Deci & Ryan, 1985). This study seeks to determine whether these effects are evident among Bahraini university students within their specific cultural and educational framework.
- Resilience contributes to academic motivation by fostering psychological strength, self-efficacy, and adaptive coping mechanisms. This research explores how resilience enables Bahraini university students to remain focused and achieve academic success despite various challenges.
- This study aims to assess whether resilience serves as a crucial mediating factor in the relationship between sports participation and academic motivation, offering valuable insights into how sports engagement can be leveraged to improve student outcomes.

Resilience is a fundamental psychological attribute that enables individuals to navigate challenges and remain focused on their objectives. Prior research has identified resilience as a significant mediating factor in both academic and athletic settings (Howells & Fletcher, 2015; Martin & Marsh, 2006). This study aims to explore the mediating role of resilience in the relationship between sports participation and student motivation. By analysing the processes through which sports engagement fosters both motivation and resilience, this research offers valuable insights for developing initiatives that enhance students' academic performance and psychological well-being. The findings hold particular significance for universities and policymakers seeking to integrate sports as a strategic component of student development.

Rationale for the Objectives

The study's objectives are informed by psychological theories and existing empirical evidence. SDT posits that intrinsic motivation arises from experiences that fulfil psychological needs. essential namely competence, autonomy, and relatedness (Deci & Ryan, 1985). Participation in sports inherently supports the satisfaction of these needs, potentially enhancing students' academic motivation. Furthermore, resilience is instrumental in enabling students to cope with academic pressures and adapt to challenges. Martin and Marsh (2006) identified resilience as a protective factor against academic stress, allowing students to maintain motivation even in demanding situations. Examining resilience as a mediating factor offers valuable insights for developing culturally responsive interventions tailored to the specific needs of Bahraini students.

Literature Review

Sports Participation and Student Motivation

Sports participation has long been recognised as a crucial factor in promoting both physical and psychological development among students. While its positive impact on physical well-being is well documented, involvement in sports also cultivates essential psychological attributes such as self-confidence, discipline, and intrinsic motivation—qualities that are integral to academic success (Bailey et al., 2013). Within this context, educational motivation refers to a student's drive and commitment to completing academic tasks and pursuing personal and academic goals (Deci & Ryan, 1985). The link between sports participation and academic motivation is well-supported by various psychological and educational theories, as well as empirical research.

Theoretical Foundations

Deci and Ryan (1985)'s SDT provides a comprehensive framework for understanding how sports boost motivation. This idea states that intrinsic motivation is the most enduring and influential but ranges from extrinsic to intrinsic. Sports serve three psychological needs—competence, autonomy, and relatedness—which boost intrinsic motivation (Vallerand, 2001). Research reveals that children who are secure in their athletic talents, actively engage with classmates, and take responsibility for their activity are more motivated, including academically.

Empirical Evidence

Extensive research underscores the positive correlation between sports participation and student motivation. Prior literature found that engagement in sports significantly enhances intrinsic motivation by fostering enjoyment and personal development. Similarly, Chen, Wang and Lin (2008) reported that students involved in sports activities displayed greater motivation in their academic pursuits compared to those who did not participate. Within the Bahraini context, sports play a vital role in personal development, reflecting the cultural emphasis on collective activities and community values. Prior literature observed that Bahraini university students who regularly engaged in sports demonstrated higher motivation improved academic and management, indicating a strong connection between physical activity and psychological resilience.

Mechanisms of Influence

Sports participation impacts motivation through various mechanisms. Firstly, it fosters the development of goal-setting and perseverance, which are crucial for

success in academic tasks (Mahoney et al., 2003). Secondly, it promotes social connections and the receipt of support, both of which are essential for maintaining motivation in challenging or adverse environments (Holt et al., 2009). Finally, involvement in sports provides structured opportunities for success and recognition, which in turn boosts students' self-esteem and their motivation to excel in other areas, particularly within their academic studies.

Contextual Factors

The relationship between sports participation and motivation is influenced by both cultural and environmental factors. In Bahrain, the emphasis on utilising sports for youth development is prominently reflected in policies such as Bahrain Vision 2030, which recognises physical activity as a key component of community advancement (Bahrain Committee, 2020). However, limited attention has been given to the impact of these initiatives on university students' motivation, highlighting the need for research specifically targeting this demographic. While there have been numerous studies on student outcomes (Ahmed et al., 2018; Fati et al., 2019), significant gaps remain in relation to sports. Consequently, drawing on the preceding discussion, it is hypothesised that:

H1: Sports participation has a positive and significant impact on the academic motivation of Bahraini university students.

Resilience Impacting Student Motivation

Resilience—the ability to overcome obstacles—is essential to student motivation. It helps students overcome classroom problems and stay focused. Environment, society, and personality shape resilience (Ungar, 2012). It's especially important in schools, where adolescents confront stressors like exams, peer competition, and balancing academic and personal obligations.

Psychological resilience boosts self-efficacy—the feeling that one can complete activities and reach goals. Self-confidence is key to intrinsic motivation, since students who believe they can overcome obstacles and perform better are more inclined to do so (Alva, 1991). Resilience also promotes adaptive coping strategies like problem-solving and social support, which reduce stress's negative impacts on motivation. Reframing stressful events or seeking support during challenging times might help students stay motivated and succeed academically. Two psychological theories shed light on resilience and motivation. The Stress-Buffering Hypothesis (Cohen & Wills, 1985) indicates that resilience protects focus and motivation against stress. Effective psychological methods help resilient kids handle challenging academic circumstances. According to the Broaden-and-Build Theory (Fredrickson, 2001), resilience-cultivated positive emotions expand cognitive and behavioural repertoires, creating persistent psychological resources like optimism and hope. Positive emotions boost motivation by helping students see hurdles as problems to solve rather than insurmountable tasks.

Research consistently shows that resilience sustains motivation. Martin and Marsh (2006) defined academic buoyancy as a student's ability to handle academic obstacles like poor performance or increasing workload. Strong correlation between resilience and academic buoyancy suggests resilient students are better at staying motivated despite daily challenges. According to the prior literature resilience fosters intrinsic motivation and tenacity, enabling pupils to stay focused on academic goals despite significant challenges. Masten and Tellegen (2012) also showed that pupils with more resilience have better motivating outcomes regardless of their circumstances.

The implications of the conclusions drawn here are particularly significant for educators and policymakers alike. Interventions designed to enhance resilience, such as mindfulness training, stress management workshops, and peer support programmes, can help students maintain their motivation and attain academic success. Additionally, fostering positive and supportive learning environments is crucial in nurturing resilience, as it reduces stress and promotes psychological well-being. By incorporating resilience-building strategies into educational frameworks, institutions can better equip students to overcome academic challenges, sustain their motivation, and achieve sustained success. Hence, it is hypothesised that:

H2: Resilience positively influences student motivation.

The Mediating Role of Resilience between Sports Participation and Student Motivation

Sports participation exposes individuals to various challenges that help develop their ability to manage everyday issues, such as competition, performance pressure, and teamwork. These stressors require individuals to strengthen their capacity to handle psychological difficulties. Fletcher and Sarkar (2013) discuss how balancing the demands of sportstraining, competing—alongside academic and other responsibilities, creates significant stress. They argue that the structure of sports fosters psychological resilience, helping individuals cope with pressures not only in sports but also in other areas of life, including education. The experience and determination developed through sports serve as a link between the positive psychological outcomes of sports participation and, consequently, the motivation of students.

The mechanism through which sports' psychological and social factors enhance motivation is through the development of resilience. For example, Eime et al. (2013) found that team sports increase resilience by encouraging players to engage with others, feel accepted, and learn to cope with adversity. These experiences also boost motivation, as they provide individuals with tools to succeed in academic or

personal tasks. Participation in sports strengthens resilience, which in turn enhances self-efficacy and intrinsic motivation, ultimately supporting future academic success. This relationship demonstrates how sports foster the physical and psychological capital necessary for students' performance.

The significance of sports participation in the Bahraini context is particularly notable due to its alignment with cultural community-related objectives. Researchers also explored the experiences of Bahraini students with sports and found that their involvement in physical activities led to increased resilience. This enhanced resilience improved their approaches to stress learning motivation and management. highlighting the culturally inclusive values of sports. The study demonstrates that the relationship between sports participation, resilience, and motivation is influenced by societal expectations and community norms. This cultural perspective emphasises how engagement in sports can foster both personal and academic success within a specific cultural framework. By mediating the link between sports participation and motivation, these findings shed light on the intermediate pathways that lead to motivational states and academic outcomes. They highlight the importance of psychological and social resources, such as resilience, in this process. Based on the preceding discussion, it is hypothesised that:

H3: Resilience mediates the relationship between sports participation and student motivation, such that higher levels of sports participation enhance resilience, which in turn positively influences student motivation.

Theoretical Framework

The analysis of the relationship between sports participation, inclusivity, and student motivation is grounded in psychological and educational theories. This section outlines the theoretical frameworks that explain how sports involvement influences student motivation through resilience, specifically within the context of Bahraini university students.

Self-Determination Theory (SDT)

According to Deci and Ryan (1985), SDT is the main theory of student motivation. SDT suggests that intrinsic motivation—doing things for their own sake—improves performance, well-being, and persistence. Sports satisfy SDT's three psychological demands, boosting intrinsic motivation:

- Autonomy: Individuals have the freedom to choose their level of engagement in sports, taking ownership of their participation and the benefits it brings.
- Competence: Success in sports enhances selfefficacy, thereby strengthening one's ability to manage stress and increasing the drive to exert effor t (Ryan & Deci, 2000).
- 3. Relatedness: Social connections within teams foster motivation, as they provide individuals with a sense of belonging and community.

Research indicates that students engaged in sports tend to exhibit a high level of intrinsic motivation and perseverance in academic tasks, as these essential psychosocial needs are met through participation (Vallerand, 2001). Resilience plays a crucial role in strengthening the psychological link between a student's coping strategies and their sustained motivation, both in sports and academic activities.

The Broaden-and-Build Theory

Fredrickson's Broaden-and-Build Theory, proposed in 2001, highlights the role of positive emotions generated through sports participation in expanding an individual's behavioural repertoire, ultimately building lasting resources such as resilience. The enjoyment and satisfaction derived from engaging in sports activities enhance coping abilities, emotional regulation, and adaptability—key components of resilience. These positive emotions, in turn, promote academic motivation by encouraging persistence and a positive outlook, particularly when students face academic challenges (Fredrickson, 2001).

Stress-Buffering Hypothesis

The Stress-Buffering Hypothesis provides a valuable framework for understanding how resilience, as a moderating factor, influences the relationship between motivation and sports participation (Cohen & Wills, 1985). In this study's hypothesis, resilience is viewed as a protective mechanism that mitigates the effects of stress on psychological well-being. Participation in sports exposes individuals to various stressors, such as competitive and situational challenges, which help build tolerance and adaptability. As a result, students who develop effective coping strategies through sports are better equipped to manage academic demands and maintain their learning progress, even in the face of adversity, as highlighted by Fletcher and Sarkar (2013).

Application to the Bahraini Context

The aforementioned social theories align with the cultural and educational context of Bahraini universities. Enhancing resilience within Bahrain's higher education system is particularly crucial due to the competitive nature of higher education and the collectivist orientation of Bahraini society. The integration of sports participation into academic life offers a dual benefit: fostering psychological recovery and boosting students' physical activity levels. The combination of the theoretical frameworks of Self-Determination Theory, the Broaden-and-Build Theory, and the Stress-Buffering Hypothesis provides a solid foundation to explain how resilience mediates the relationship between these concepts in the Bahraini context (Alkashami et al., 2024).

Conceptual Framework

Building on these theoretical foundations, the study proposes a model where sports participation influences student motivation both directly and indirectly through the mediating role of resilience. The theoretical framework posits that:

- 1. Sports participation has a significant and positive effect on the academic motivation of Bahraini university students.
- Resilience boosts student motivation by promoting persistence, self-efficacy, and a constructive attitude towards academic challenges.
- Resilience serves as a mediator in the relationship between sports participation and student motivation.



Figure 1: Research Framework.

Research Methodology

Participants and Sampling

The study focused on Bahraini university athletes actively involved in sports. A total of 200 students were surveyed, with participants randomly selected from a diverse range of universities and sports disciplines. After excluding 12 invalid and 2 irrelevant responses, 153 valid responses were retained for analysis from the original 165. Following the guidelines of Hair et al. (2019), which recommend a sample size at least ten times the most complex construct in terms of indicators, this study ensures an adequate sample for robust analysis. To achieve a balanced representation by gender and sport type, a stratified random sampling technique was employed. This approach not only enhances the generalisability of the findings to the wider population but also ensures each group within the sample has an equal chance of being represented (Creswell & Creswell, 2017).

Instruments and Measures

For this study, a carefully designed structured questionnaire served as the primary tool for data collection, incorporating established scales to assess

Demographics (Age)

Table 1

sports participation (SP), resilience (Rsl), and student motivation (StMot). The sports participation scale, consisting of 8 items, was adapted from the Physical Activity Questionnaire for Adolescents (PAQ-A) (Kowalski, Crocker, & Donen, 2004), providing a reliable measure of students' engagement in physical activities. Resilience was evaluated using the Connor-Davidson Resilience Scale (CD-RISC), a 6-item tool that measures an individual's ability to bounce back from adversity (Connor & Davidson, 2003). To capture the level of academic motivation, 7 items from the Academic Motivation Scale (AMS) developed by Vallerand (2001) were used. Each of these constructs was rated on a 5-point Likert scale, ranging from Strongly Disagree to Strongly Agree, allowing for a nuanced understanding of participants' attitudes and behaviours. These scales have been widely utilised in previous research, confirming their robustness, reliability, and validity in capturing the relevant psychological constructs.

Data Analysis

Data analysis was performed using statistical techniques, including regression analysis, investigate the direct and mediating effects of the study variables. Statistical software such as SPSS_29 and Smart_PLS_4 were employed for hypothesis testing and structural modelling, ensuring the robustness and accuracy of the findings. The gender distribution of the participants who completed the study is presented in Table 1. Among the 153 university students in Bahrain, 96 (62.75%) were male, while 57 (37.25%) were female. This indicates that the sample was predominantly male, reflecting the gender distribution of students currently involved in sports activities at Bahraini universities. The cumulative percentage shows that all respondents were included in the study analysis. This gender distribution ensures adequate representation of the target population and allows for a comprehensive exploration of the impact of sports participation on resilience and student motivation.

| Demographies (rige) | | | | | | |
|---------------------|--------|--------|---------------------|--|--|--|
| Gender | Number | % | Cumulative % | | | |
| Female (F) | 57 | 37.25% | 37.25% | | | |
| Male (M) | 96 | 62.75% | 100% | | | |
| Total | 153 | 100% | 100% | | | |

The distribution of respondents based on their participation in individual and team sports is shown in Table 2. Of the participants, 28.10% were involved in team sports such as football, basketball, and volleyball, while the majority, 71.90%, participated in individual sports like athletics, swimming, and tennis. The

remaining 28.10% engaged in team sports, suggesting a notable, though smaller, preference for collaborative and group-based activities. This demographic distribution is appropriate for the study, as it allows for an exploration of the impact of both individual and team sports on resilience and student motivation.

Table 2

Distribution of Respondents by Type of Sport

| Type of Sport | Number of Respondents | Percentage | Cumulative Percentage | |
|-------------------|-----------------------|------------|------------------------------|--|
| Individual Sports | 110 | 71.90% | 71.90% | |
| Team Sports | 43 | 28.10% | 100% | |
| Total | 153 | 100% | 100% | |

Data Normality Assessment

Table 3 and Figures 2 and 3 demonstrate the appropriateness of the dataset for subsequent analysis based on established statistical criteria. The results for all items relating to the constructs of Sports Participation (SP), Resilience (Rsl), and Student Motivation (StMot) show skewness and kurtosis values within acceptable ranges, indicating normal distribution. Specifically, skewness values range from -0.270 to 0.093, suggesting no significant positive or negative skew. The kurtosis values range from -1.131 to -1.435, indicating that the distribution is flatter than the normal distribution, which is a sign of a more uniform spread of responses across the Likert scale items. The histogram Figure 2 of the regression-standardised residuals for the dependent variable (M_StMot) further supports these findings, exhibiting a bell-shaped curve that aligns with a normal distribution. The mean residual value is close to zero, and the standard deviation (0.993) remains within acceptable limits, indicating no significant deviations or biases in the residuals. These analyses confirm the suitability of the dataset for parametric statistical analysis and support its appropriateness Table 3

for producing valid and interpretable results in future research.

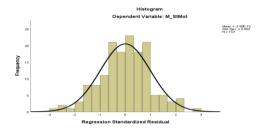


Figure 2: Histogram.

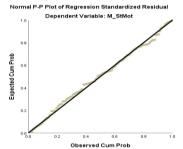


Figure 3: PP Plot.

Descriptive Statistics of Skewness and Kurtosis

| Statistics | | | | | | | |
|------------|-------|--------------|----------|------------------------|----------|------------------------|--|
| | Valid | N Missing | Skewness | Std. Error of Skewness | Kurtosis | Std. Error of Kurtosis | |
| SP1 | 153 | 0 | 159 | .196 | -1.277 | .390 | |
| SP2 | 153 | 0 | 007 | .196 | -1.295 | .390 | |
| SP3 | 153 | 0 | .035 | .196 | -1.387 | .390 | |
| SP4 | 153 | 0 | 088 | .196 | -1.435 | .390 | |
| SP5 | 153 | 0 | .055 | .196 | -1.335 | .390 | |
| SP6 | 153 | 0 | .087 | .196 | -1.305 | .390 | |
| SP7 | 153 | 0 | 025 | .196 | -1.361 | .390 | |
| SP8 | 153 | 0 | .085 | .196 | -1.257 | .390 | |
| Rsl1 | 153 | 0 | .090 | .196 | -1.342 | .390 | |
| Rsl2 | 153 | 0 | .093 | .196 | -1.253 | .390 | |
| Rsl3 | 153 | 0 | 027 | .196 | -1.302 | .390 | |
| Rsl4 | 153 | 0 | 069 | .196 | -1.368 | .390 | |
| Rsl5 | 153 | 0 | .023 | .196 | -1.379 | .390 | |
| Rsl6 | 153 | 0 | .016 | .196 | -1.319 | .390 | |
| StMot1 | 153 | 0 | 270 | .196 | -1.317 | .390 | |
| StMot2 | 153 | 0 | 004 | .196 | -1.329 | .390 | |
| StMot3 | 153 | 0 | .053 | .196 | -1.393 | .390 | |
| StMot4 | 153 | 0 | 168 | .196 | -1.131 | .390 | |
| StMot5 | 153 | 0 | 150 | .196 | -1.314 | .390 | |
| StMot6 | 153 | 0 | 018 | .196 | -1.288 | .390 | |
| StMot7 | 153 | 0 | 128 | .196 | -1.241 | .390 | |

Assessment of Measurement (Outer) Model

The empirical results Table 4 presented in this study indicate acceptable reliability and validity coefficients for the constructs of interest – Sports Participation (SP), Resilience (Rsl), and Student Motivation (StMot) – suggesting that the collected dataset is suitable for further statistical analysis. All three constructs demonstrate an adequate level of internal consistency, with Cronbach's alpha values exceeding the threshold of 0.7: for SP, Rsl, and StMot, the values were 0.872, 0.831, and 0.823, respectively (Hair et al., 2019). Similarly, the composite reliability (CR) for Sports Participation (0.897), Rsl (0.880), and StMot (0.868) all exceeded the minimum acceptable standard of 0.7 established by Fornell and Larcker (1981) for

reliability. The results for convergent validity suggest moderate construct reliability, with the average variance extracted (AVE) values ranging from 0.522 for SP to 0.561 for RSL, both exceeding the 0.5 threshold for validity. However, Student Motivation exhibited a slightly lower AVE value of 0.487, which, although lower, remains acceptable for social science research, given that the CR and factor loadings are strong (Naresh, Daniel, & David, 2017). The path diagram also supports construct validity, with all factor loadings for SP, Rsl, and StMot exceeding 0.6. Overall, the model demonstrates measurement satisfactory reliability and validity, providing a solid foundation for the analysis of structural relationships within the framework.

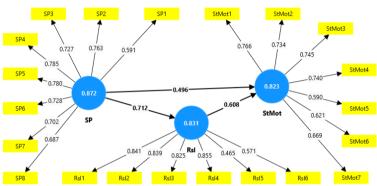


Figure 4: Measurement Model.

Table 4Reliability and Validity Assessment of Constructs

| | CA | CR (rho_a) | CR (rho_c) | AVE |
|-------|------|------------|------------|------|
| Rsl | .831 | .856 | .880 | .561 |
| SP | .872 | .880 | .897 | .522 |
| StMot | .823 | .831 | .868 | .487 |

Assessment of Structural (Inner) Model

The structural model analysis in Table 5 confirms the hypothesised correlations between SP, Rsl, and StMot among Bahraini university students. Athletic activity does not directly improve student motivation; resilience mediates this relationship, showing that psychological aspects are key to linking sports engagement to academic accomplishment. The significant link between sports participation and resilience (coefficient = 0.712, t = 15.764, p < 0.05) supports the hypothesis that sports engagement favourably impacts resilience. Prior research shows that athletics improve psychological attributes including tenacity, flexibility, and problem-solving, which boost resilience (Martin & Marsh, 2008; Ungar,

2013). Sports help people overcome obstacles, adapt, and bounce back. Additionally, resilience significantly impacts student motivation (Rsl → StMot) with a coefficient of 0.608, T-statistic of 6.068, and p < 0.05. Resilience improves motivation, academic persistence, self-efficacy, and coping methods (Bandura, 1997; Luthar, Cicchetti, & Becker, 2000), supporting Hypothesis 2. More resilient students can handle academic stress and stay engaged in school. With a coefficient of 0.063, a T-statistic of 0.558, and a p-value of 0.577, the straight path from SP to StMot was not significant in the sports sub-theory. Hypothesis 1 is rejected because sports participation does not directly motivate students. However, resilience mediates the link, as shown by the large indirect effect. Resilience was revealed to play a mediating role (SP \rightarrow Rsl \rightarrow StMot) with a coefficient of 0.433 (t = 4.852, p = 0.000). Sports engagement boosts resilience and student motivation, supporting Hypothesis 3. These findings support the theory that resilience mediates the effect of sports engagement on academic and motivational outcomes (Clough, Strycharczyk, & Perry, 2012).

Table 5Path Coefficient of Direct and Mediating Effects

| | 0 33 | | | | |
|--------------------|-----------------|------|-------|--------------|----------|
| | Original Sample | Mean | STDEV | T Statistics | P values |
| Rsl -> StMot | .608 | .624 | .100 | 6.068 | 0.000 |
| SP -> Rsl | .712 | .720 | .045 | 15.764 | 0.000 |
| SP -> StMot | .063 | .054 | .112 | 0.558 | 0.577 |
| SP -> Rsl -> StMot | .433 | .451 | .089 | 4.852 | 0.000 |

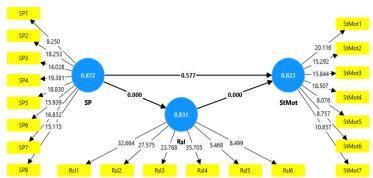


Figure 5: Structural Model.

Conclusion

This study sought to determine whether sports participation and student motivation are positively correlated, the role of resilience in this relationship, and how resilience moderates this relationship among Bahraini university students. Structured sports activities did not directly affect motivation, suggesting secondary or mediating effects. This contradicts earlier findings that sports involvement motivates for utilitarian reasons (Bailey et al., 2013; Deci & Ryan, 1985). However, the study found that resilience positively affects student motivation, indicating its role as a psychological asset that promotes academic problem-solving. persistence. self-belief. and Resilience mediated the association between sports participation and motivation, suggesting that more athletics leads to more resilience and academic motivation.

While sports engagement may not immediately motivate, its ability to boost resilience makes it crucial to academic performance. The study's aims were mostly met; however, resilience was found to mediate the sports participation-motivation hypothesis. This study supports the expanding body of evidence that sports engagement improves academic performance in Bahraini university students, with resilience as a mediator. These findings suggest resilience-based interventions are needed to enhance sports participation's motivational effects on students. This research validated all hypotheses, meeting its key goals.

Limitations of the Study

This study presents several implications that warrant consideration. First, it is a cross-sectional analysis, which, in many cases, limits the ability to draw definitive conclusions about the causal relationships between the

variables. While structural equation modelling provided insights into directional associations, longitudinal studies are needed to confirm the temporal sequence of sports participation, resilience, and motivation. Second, the study focused solely on university students in Bahrain, meaning its findings cannot be generalised to other settings or regions. The cultural, social, and educational dynamics in Bahrain may differ significantly from those in other areas, potentially affecting how sports participation and resilience interact. Lastly, all constructs were measured using self-report instruments, which may have introduced biases, as participants might have provided socially desirable answers or distorted their self-perceptions. Future research could benefit from using objective measures, or at least incorporating quantitative and qualitative approaches, to enhance the reliability of the results.

Recommendations for Future Study

Based on this research, future studies should examine mediating elements like self-efficacy, grit, and emotional intelligence to better understand sports involvement and academic motivation. Demographic characteristics including gender, age, and sport type (individual vs. team) may alter subgroup dynamics. A cross-sectional design with alternating time points would also allow researchers to study resilience and motivation across time, improving their understanding of relationship lifespan. Expanding the study to additional sites and comparing across educational systems or regions might improve generalisability and reveal factors that may amplify or attenuate the observed relationships between variables. Such research would add to the growing body of information on the interactive impacts of organised sports, resilience, and motivation, influencing interventions to improve student results, an underexplored topic.

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