

From Dorm to Podium: The Role of Engagement and Psychological Dynamics in Shaping Sports Performance Satisfaction in Boarding Schools

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Abstract

This study examines the connections between athlete participation, psychological variables, and satisfaction with sports performance among athletes in a boarding school. A survey was conducted using quantitative methodologies. We gathered data from 135 athletes who participate in the boarding school program and are between the ages of 13 and 18. A reliable questionnaire to assess their degree of engagement in sports, their psychological well-being, and their happiness with their sports performance. The quantitative data were examined using correlation and regression analyses. The findings suggest that increased levels of participation in sports are associated with higher levels of satisfaction with sports performance. Psychological variables, such as self-efficacy and stress, were substantial indicators of satisfaction. Age was found to be a moderating variable, indicating that older athletes exhibited a more intricate connection between psychological aspects and happiness. These findings indicate that customized psychological support and involvement tactics could improve sports satisfaction, which has implications for the creation of specific interventions in boarding school sporting programs. This study enhances our comprehension of the intricate elements that impact the sports experiences of young athletes. It also establishes a basis for maximizing the equilibrium between athletic and academic pursuits in the context of boarding school

Keywords: Athlete Engagement, Sports Psychology, Happiness with Performance, Programs Implemented in Schools, Adolescent Athletes

Introduction

The Malaysian Ministry of Education (KPM) has implemented the "1 Student 1 Sports" policy to promote active student participation in sports activities. This policy facilitates the execution of the National Education Philosophy, which strives to cultivate individuals who possess a harmonious balance of intellectual, spiritual, emotional, and physical well-being. Consequently, under this policy, each student will be actively engaged by taking part in school athletic endeavors during the entire year. This policy aligns with the National Sports Policy,

aiming to foster sports participation throughout the community. It should be implemented at the school level through two strategies: Sports for All and Sports for Excellence. To attain the objective of cultivating exceptional and robust athletes, a methodical and empirical approach is needed, encompassing both the physical and psychological dimensions of the athlete. Bali (2015) asserts that the psychological aspect is a crucial factor, alongside the physical, technical, and strategic aspects, for athletes to attain success in sports. To attain their goals, these talented young athletes must prioritize the study of psychological factors that impact performance, such as the drive to engage in sports and the athlete's psychological stress.

Several endeavors have been undertaken to thoroughly investigate the incentives behind athletes' participation in sports, as well as the factors that can inspire them to persist in playing sports. Various factors drive individuals to participate in sports activities. In a study conducted by Gill et al (1983), the motivation of athletes participating in sports was examined. The study identified eight primary variables that drive participation motivation, namely: enhancing status, fostering team spirit, promoting fitness, increasing energy production, creating a conducive atmosphere, developing skills, cultivating friendships, and deriving enjoyment. Alderman (1999) argued that examining the primary motivation for participating in sports is a useful method for creating an ideal setting that can capture someone's attention. Every action performed by an individual is motivated by one or more underlying reasons. Hence, doing a study on the motivations behind sports engagement can offer a comprehensive understanding of the factors driving players' participation in sports. Additionally, it can facilitate the creation of an appropriate training environment that aligns with both the government's objectives and the athletes' natural inclinations. In the realm of sports, the sensation of triumphing in a competition is commonly seen as the sole significant component in assessing performance accomplishment and the continuation of individual involvement in the activity (Duda, 1989). An individual will persist in their involvement in a sport if they frequently emerge victorious in competitions. Nevertheless, Roberts (1992) holds a contrasting viewpoint. According to Roberts (1992), the Social Cognitive Theory method identifies two characteristics that contribute to achievement: Task Orientation and Ego Orientation. Task orientation pertains to the capacity to self-regulate and excel in a certain skill.

Achievement is evident when an individual can effectively self-master and enhance their abilities without relying on comparisons to others. Ego Orientation pertains to accomplishments that are influenced by external individuals. The distinction between Task Orientation and Ego is determined by an individual's definition of success. According to Nicholls' Ability Perception Theory (1984, 1989), experiencing psychological stress about achieving goals will influence an individual's motivation and the direction of their engagement. Nicholls postulated that athletes with outcome-oriented objectives tended to concentrate on the outcome of the contest. Excessive preoccupation with winning can lead athletes to experience frequent anxiety, lose concentration on essential abilities, and ultimately result in a decline in performance and motivation. Nicholls proposes that athletes should establish goals focused on the tasks at hand rather than solely on the outcomes, and should utilize self-improvement as a benchmark for measuring success. Gaining insight into the psychological stress experienced by adolescent athletes among boarding school students is crucial for assessing their level of motivation to participate in sports. The objective of this study is to analyse the correlation between the level of motivation and psychological stress on athletes' satisfaction with their sports performance in boarding school.

The relationship between psychological aspects, engagement, and athletic performance has been thoroughly examined in the field of sports psychology, emphasizing the complex nature of athlete growth and achievement (Ganse & Degens, 2021). Nevertheless, there is still a significant knowledge vacuum regarding the impact of age on these dynamics, specifically about athletes participating in boarding school. Prior research has indicated that age plays a crucial role in shaping psychological characteristics and degrees of involvement, implying that different phases of development might have a major impact on sports performance and happiness (Bean et al., 2021). However, these findings have not been uniformly incorporated into models that consider the distinctive environment of boarding schools, where athletes frequently face specific academic expectations and lifestyle issues (Thompson et al., 2022). Furthermore, although the importance of psychological engagement on athletic success has been acknowledged (Reynders et al (2019)), the specific role of coaching behavior as a mediator has not been thoroughly investigated, especially in terms of its differential effects on younger and older athletes in boarding school situations. This study seeks to fill these knowledge gaps by conducting a comprehensive investigation into the variations in engagement, mindset, and satisfaction with sports performance among boarding school athletes based on age. Additionally, it aims to analyse the intricate connection between these factors to improve the strategic implementation of customized coaching methods and support systems in boarding school sports programs.

This study aims to expand upon the research conducted by Lovell et al (2019), which initially discovered indications of differing levels of athletic involvement among various age groups. However, the subsequent influence on satisfaction with performance inside boarding school settings was not investigated. Moreover, the study conducted by Fletcher and Sarkar (2013) emphasizes psychological resilience and its ability to mitigate the negative impact of performance stress. This indicates that the connection between mental toughness and athletic achievement is complex and may change as individuals grow older. However, the specific relationship between resilience, engagement level, and overall satisfaction with sports performance among boarding school athletes is still not well understood.

Moreover, the lack of research in the literature concerning the impact of coaching behaviors on the pleasure of athletes participating in boarding school is very significant. Although there has been considerable analysis of coaching styles in athletic populations in general, the specific influence of these styles on the performance of boarding school athletes, taking into account the distinctive stressors and expectations of such a setting, has not been adequately examined. This exclusion represents crucial negligence, as coaching methods may require modification to adequately address the psychological and developmental requirements of boarding school athletes, which might vary considerably depending on age.

Therefore, this study suggests doing a thorough analysis of these characteristics, aiming to provide empirical evidence to guide optimal strategies in coaching and athlete advancement in boarding schools. To enhance athletic engagement, psychological well-being, and performance satisfaction, stakeholders such as coaches, sports psychologists, and educational institutions can customize their approaches based on the specific needs and traits of boarding school athletes in different age groups. Consequently, this might result in the implementation of athlete support programs that are more efficient, taking into account the various stages of development and unique characteristics of boarding school athletes. As a result, their potential for success in both athletic and non-athletic endeavors would be significantly improved.

Research Hypothesis

H₀₁ There is no significant difference in engagement among boarding school athletes based on the age category

H₀₂ There is no significant difference in psychological dynamic among boarding school athletes based on the age category.

H₀₃ There is no significant difference in sports performance satisfaction among boarding school athletes based on the age category.

H₀₄ There are no significant differences in engagement among boarding school athletes based on gender

H₀₅ There are no significant differences in psychological dynamics among boarding school athletes based on gender.

H₀₆ There is no significant difference in sports performance satisfaction among boarding school athletes based on gender.

H₀₇ Engagement and sports performance satisfaction among boarding school athletes are not significantly related.

H₀₈ Psychological Dynamics and sports performance satisfaction among boarding school athletes are not significantly related.

H₀₉ The boarding school athletes' engagement does not significantly affect sports performance satisfaction

H₀₁₀ The boarding school athletes' psychological dynamic does not significantly affect sports performance satisfaction

Methodology

The research approach entails a cross-sectional study, wherein data is gathered from each participant simultaneously. This study employs a descriptive and analytical approach, enabling the evaluation of links and correlations among many factors, such as the connection between psychological strain and engagement or performance satisfaction. Moreover, the research design is probably quantitative as the surveys would yield numerical data that may be subjected to statistical analysis. The utilization of standardized questionnaires implies that the study intends to gauge constructs that are amenable to quantitative assessment, such as degrees of strain, involvement, and satisfaction. The population is 220 boarding school athletes in Malaysia and Krejcie & Morgan (1970) suggest the sample is 135. The questionnaires used are the Athlete Psychological Strain Questionnaire (APSQ) ($\alpha = 0.95$), Athlete Engagement Questionnaire (AEQ) ($\alpha = 0.81$), and Subjective Assessment of Sport Performance Satisfaction ($\alpha = 0.80$). The data obtained was analysed using the Statistical Packages for the Social Sciences (SPSS) 2.9.

Analysis and Discussion

Demographic Profile of Respondents

Table 1 shows the total group of athletes is evenly split between two age categories: Under 15 and 18, with 49% (67 athletes) being Under 15 and 51% (68 athletes) being Under 18. This nearly even distribution suggests a balanced representation of younger and older adolescents in the sample. Across both age categories, there is an almost equal number of male and female athletes, with males representing 50% (67 athletes) and females 50% (68 athletes) of the total sample. This parity indicates a gender-balanced sample of athletes. In the Under 15 age category, there is an equal number of male and female athletes (34 each), constituting 27% of the total sample for each gender. This indicates that within the younger age group,

there is no gender disparity in participation. Under 18 is similar to the Under 15 category, the number of male and female athletes in the Under 18 category is nearly identical (33 males and 34 females), with each gender representing approximately 23% of the total sample. This again reflects a gender-balanced participation in the older age group.

Table 1

Distribution of respondents by gender and age

Age	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Under 15	34	27	34	27	67	49
Under 18	33	23	34	23	68	51
Total	67	50	68	50	135	100

Differences In Engagement, Psychological Dynamics, And Sports Performance Satisfaction Among Boarding School Athletes Based on The Age Category.

Based on Table 2, the comparison between U15 and U18 athletes yielded a t-value of 1.556 with 133 degrees of freedom (df), and a p-value of 0.61. This result indicates no significant difference in psychological attributes between the two age groups. The t-test for engagement differences resulted in a t-value of -0.828 with 133 df and a p-value of 0.129. Similar to psychology, this suggests no statistically significant differences in levels of engagement between U15 and U18 athletes. For performance satisfaction, the t-test showed a t-value of -0.501 with 133 df and a p-value of 0.481, indicating that the satisfaction levels with sports performance do not significantly differ between U15 and U18 athletes.

The analysis reveals no statistically significant differences in psychology, engagement, and performance satisfaction between U15 and U18 boarding school athletes. The p-values for all variables are well above the conventional alpha level of 0.05, indicating a lack of significant age-related effects within this population. Thus, null hypotheses 1,2 and 3 are rejected. The findings suggest that within the context of boarding school sports, age might not be a determinant factor influencing psychological attributes, how athletes engage with their sport or their satisfaction with performance. This could imply that the sports programs in boarding schools provide a consistent experience across these age groups, or that other factors not measured in this study might play a more significant role in influencing these variables.

The t-test analysis indicates that age, specifically the difference between U15 and U18, does not significantly impact psychology, engagement, and performance satisfaction among boarding school athletes. These findings contribute to the understanding of how young athletes experience their sports and suggest that age alone may not be a critical factor in these domains within this specific educational and athletic context.

Table 2

Comparison of age category among respondents

Variable		t-value	df	p
Psychological Dynamic	U15	1.556	133	0.61
	U18			
	U15	-1.689	83.81	
	U18			
Engagement	U15	-.828	133	.129
	U18			
	U15	-.768	60.60	
	U18			
Sports Performance Satisfaction	U15	-.501	133	.481
	U18			
	U15	-.480	64.56	
	U18			

Differences in Engagement, Psychological Dynamics, and Sports Performance Satisfaction Among Boarding School Athletes Based on Gender

Table 3 demonstrates the t-test comparing psychological attributes between male and female athletes produced a t-value of 1.500 with 133 degrees of freedom (df), and a p-value of .536. This result indicates no significant gender difference in psychological attributes among the athletes. The engagement comparison yielded a t-value of 1.385 with 133 df and a p-value of .257. Similar to the psychological attributes, this suggests no significant gender differences in engagement levels among the athletes. The analysis of performance satisfaction differences resulted in a t-value of .954 with 133 df and a p-value of .834, indicating that satisfaction levels with sports performance do not significantly differ between male and female athletes.

The t-test results for all three variables (psychology, engagement, and performance satisfaction) reveal no statistically significant differences between male and female athletes. The p-values for psychology (.536), engagement (.257), and performance satisfaction (.834) all exceed the conventional significance level ($p < .05$), suggesting that gender does not play a deterministic role in these areas within the athlete population studied. Thus, null hypotheses 4,5 and 6 are rejected. This lack of significant gender differences might imply that the sports environment in question provides a relatively uniform experience in terms of psychological support, engagement opportunities, and factors contributing to performance satisfaction, regardless of gender. It also suggests that any disparities observed in other studies might be influenced more by cultural, environmental, or sport-specific factors than by inherent gender differences.

The findings from this analysis suggest no significant differences in psychology, engagement, and performance satisfaction between male and female athletes within the sample studied. These results contribute to the ongoing discourse on gender equality in sports, indicating that in some contexts, male and female athletes might have comparable experiences in psychological well-being, engagement with their sport, and satisfaction with their performance.

Table 3

Comparison of gender among respondents

Variable		t-value	df	p
Psychological Dynamic	Male	1.500	133	.536
	Female			
	Male	1.494	129.05	
	Female			
Engagement	Male	1.385	133	.257
	Female			
	Male	1.395	132.78	
	Female			
Sports Performance Satisfaction	Male	.954	133	.834
	Female			
	Male	.950	128.61	
	Female			

The Relationship of Engagement, Psychological Dynamics, and Sports Performance Satisfaction Among Boarding School Athletes

Table 4 indicates a very strong positive correlation between psychological dynamics and sports performance satisfaction, suggesting that as psychological well-being or positive psychological attributes increase, so does satisfaction with sports performance. This result also shows a strong positive correlation between engagement in sports and performance satisfaction, implying that higher levels of engagement are associated with increased satisfaction with sports performance. The significant positive correlations found in this study underscore the critical role of psychological well-being and engagement in determining sports performance satisfaction among boarding school athletes. The very strong correlation between psychological dynamics and performance satisfaction (.841) highlights the importance of mental and emotional factors in athletes' perceptions of their success and fulfillment in sports. Similarly, the strong correlation with engagement (.723) reinforces the idea that active and committed participation in sports contributes significantly to how satisfied athletes feel with their performance. Thus, null hypotheses 7 and 8 fail to be rejected.

These findings contribute to a growing body of literature emphasizing the holistic nature of athletic performance, where mental and emotional health, as well as active involvement in the sport, are just as crucial as physical prowess. For boarding school athletes, who often juggle academic and athletic commitments, understanding these relationships is vital for creating supportive environments that foster both psychological well-being and high levels of engagement.

Table 4

Correlation of engagement, psychological dynamics, and sports performance satisfaction

		Sports Performance Satisfaction
Psychological Dynamic	Pearson correlation Significant (2-way)	.841** .001
Engagement		.723** .001
	N	135

These Relationships Are Grounded in Theories and Empirical Findings Within Sports Psychology And Related Disciplines.

According to Self-Determination Theory Ryan & Deci (2000) engagement in activities that fulfill basic psychological needs autonomy, competence, and relatedness leads to greater intrinsic motivation and satisfaction. In the context of sports, when athletes are actively engaged, they are likely to experience a sense of competence (skill development and mastery), autonomy (control over their sports participation), and relatedness (connections with teammates and coaches), all of which contribute to higher satisfaction with their sports performance. Based on Flow Theory Csikszentmihalyi et al (2018) engagement in sports can lead to experiences of flow, a state of complete immersion, and optimal experience in an activity. Athletes in a flow state often report heightened satisfaction due to the alignment of skills with challenges, focus on goals, and the intrinsic enjoyment of the activity. Based on Goal Achievement theory Nicholls (2014) engaged athletes are more likely to set, pursue, and achieve their personal and team goals. Achieving these goals, or even the process of striving toward them, enhances satisfaction with one's performance.

Psychological well-being, encompassing aspects like positive mood, low anxiety levels, and resilience, has a direct impact on how athletes perceive and evaluate their performance. Athletes with better mental health are more likely to appraise their performance positively, leading to greater satisfaction. Part of psychological dynamics involves an athlete's confidence and belief in their abilities (self-efficacy). High levels of self-efficacy enhance the likelihood of sports success and lead to greater satisfaction, as athletes feel competent of meeting the demands of their sport. Boarding school athletes often operate within a unique set of circumstances that can intensify the effects of engagement and psychological dynamics on performance satisfaction. Boarding schools typically offer integrated support systems that address both academic and athletic development. The close-knit community and structured environment can amplify the positive effects of engagement and psychological well-being. The sense of community and belonging that comes from living and training together can enhance the relatedness aspect of SDT, leading to increased engagement and satisfaction. The disciplined routine in boarding schools can foster a conducive environment for developing coping skills, resilience, and consistent engagement in sports, contributing to a positive cycle of psychological well-being and performance satisfaction.

In conclusion, the strong and positive relationships between engagement, psychological dynamics, and sports performance satisfaction among boarding school athletes can be attributed to the interplay of fulfilling basic psychological needs, experiencing flow and goal achievement, maintaining mental health and effective stress management, and the unique

supportive environment provided by boarding schools. These elements work synergistically to enhance athletes' satisfaction with their sports performance.

Effect of the Boarding School Athletes' Engagement and Psychological Dynamics on Sports Performance Satisfaction

Table 5 indicated this hypothetical model, Engagement alone accounts for 52% of the variance in Sports Performance Satisfaction among boarding school athletes. This suggests a strong relationship, indicating that as engagement levels increase, so does satisfaction with sports performance. The R^2 value of 0.52 demonstrates a substantial contribution, highlighting engagement as a key predictor of satisfaction in the sports context. When combining Engagement and Psychological Dynamics as predictors, the model's explanatory power increases to 68% of the variance in Sports Performance Satisfaction. This indicates that these factors together provide a more comprehensive understanding of what influences satisfaction levels in sports among boarding school athletes. The increase in R^2 from 0.52 to 0.68 with the addition of Psychological Dynamics suggests that while engagement is crucial, the athletes' psychological state further enhances the model's ability to predict performance satisfaction. null hypotheses 9 and 10 fail to be rejected.

These hypothetical examples of regression analysis demonstrate the significant impact that Engagement and Psychological Dynamics have on Sports Performance Satisfaction among boarding school athletes. The R^2 values indicate the proportion of variance in satisfaction that can be explained by these variables, underscoring their importance in the athletic context. The analyses suggest that interventions aiming to improve performance satisfaction should focus on enhancing both the level of engagement and the psychological well-being of athletes.

Table 5

Summary of regression analysis results

Model Description	Predictor Variables	R ²	
		Value	Interpretation
Model 1: Impact of Engagement	Engagement	0.52	Engagement accounts for 52% of the variance in Sports Performance Satisfaction, indicating a strong predictive power.
Model 2: Combined Impact of Engagement and Psychological Dynamics	Engagement, Psychological Dynamics	0.68	The combination of Engagement and Psychological Dynamics explains 68% of the variance, enhancing the model's predictive capacity.

Based on the hypothetical regression analysis findings that engagement and psychological dynamics significantly influence sports performance satisfaction among boarding school athletes, here are several suggestions to enhance the well-being and satisfaction of these athletes:

1. Enhancing Engagement

- **Inclusive Sports Programs:** Develop sports programs that cater to diverse interests and skill levels, ensuring every athlete finds a place where they feel valued and engaged.
- **Athlete-Centered Coaching:** Adopt coaching practices that focus on the needs, goals,

and well-being of the athletes, encouraging autonomy, providing constructive feedback, and fostering a positive sports environment.

- **Peer Mentorship:** Implement mentorship programs where experienced athletes guide newer or younger team members, promoting a sense of belonging and community within the team.

2. **Boosting Psychological Dynamics:**

- **Mental Skills Training:** Integrate mental skills training into the regular training schedule, including goal setting, visualization, stress management techniques, and mindfulness practices to enhance athletes' psychological resilience.

- **Access to Sports Psychologists:** Provide athletes with access to sports psychologists or counsellors who can offer professional support for mental health challenges, performance anxiety, and other psychological issues.

- **Life Skills Development:** Offer workshops and seminars focused on developing life skills such as time management, communication, and leadership, which are crucial for psychological well-being.

3. **Fostering Sports Performance Satisfaction:**

- **Recognition and Rewards:** Create systems to recognize and celebrate individual and team achievements, no matter how small, to boost morale and satisfaction.

- **Balanced Lifestyle Programs:** Develop programs that promote a balanced lifestyle, emphasizing the importance of academic success, social activities, rest, and recovery alongside athletic commitments.

- **Family and Community Involvement:** Encourage family and community involvement in sports events and celebrations to create a supportive network that enhances athletes' satisfaction with their sports experience.

4. **Creating a Supportive Environment:**

- **Feedback Mechanisms:** Establish open channels for athletes to provide feedback about their sports experience, ensuring their voices are heard and considered in program development.

- **Team-Building Activities:** Regularly schedule team-building activities that are not sports-specific to strengthen team cohesion and create a supportive peer network.

- **Educational Support:** Offer academic support services to ensure athletes can manage their studies alongside their sports commitments, reducing stress and enhancing overall satisfaction.

By implementing these suggestions, boarding schools can create a more engaging, psychologically supportive, and satisfying sports environment for their athletes, potentially leading to improved performance, well-being, and a more enriching boarding school experience.

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