

Multidimensional Factors Associated with Athletic Management Among Secondary School Student-Athletes

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Abstract:

Student-athletes manage both academic responsibilities and the demands of competitive sports within and outside the school setting, often requiring discipline, time management, and consistency. Effective athletic management supports their performance, well-being, and overall development, especially during high-pressure events such as athletic meets. This study investigated the personal, psychological, coaching, academic, administrative, and health-related factors influencing athletic management among secondary school student-athletes during athletic meet participation. A quantitative, cross-sectional descriptive design was employed, using a validated survey questionnaire adapted from Martin et al. ($\alpha = 0.86$). Total enumeration sampling included all officially registered student-athletes for the academic year. Data were analyzed using descriptive statistics, including mean and standard deviation. Findings revealed that personal factors yielded the highest overall mean ($M = 3.73$), reflecting strong intrinsic motivation and commitment among student athletes. Health factors were also rated favorably ($M = 3.24$), particularly in areas related to sleep, hydration, and recovery practices. In contrast, psychological factors ($M = 2.88$), coaching factors ($M = 2.83$), academic factors ($M = 2.70$), and administrative support factors ($M = 2.70$) received moderate ratings, suggesting areas requiring institutional attention. Lower ratings were observed in stress management practices, structured training discipline, academic monitoring, financial support, and access to qualified coaching personnel. Overall, the findings suggest that while internal motivation among student-athletes appears well established, psychological preparedness and certain institutional supports remain less consistently reinforced. The study provides descriptive evidence that may inform more integrated and tailored approaches to student-athlete development within secondary education contexts.

Keywords: student-athletes, athletic management, secondary education, institutional support, psychological factors

INTRODUCTION

Student athletes operate within a demanding environment where academic responsibilities and competitive expectations intersect. Their performance in competitions is not shaped by physical preparation alone, but by a combination of personal motivation, psychological readiness, coaching dynamics, institutional support, and health practices. To understand athletic management, we need to look beyond just performance measures like scores or grades and focus on the broader system that surrounds the student

athlete.

Existing literature consistently demonstrates that personal attributes such as intrinsic motivation, discipline, and self-regulation are associated with sustained athletic engagement (Deci & Ryan, 2000; Gavino, 2021). Student athletes who possess strong internal drive are more likely to persist despite academic and competitive pressures. However, motivation does not operate independently of psychological conditions. Competitive stress, performance anxiety, and emotional regulation significantly influence how athletes respond to high stakes situations (Jones, Hanton, & Connaughton, 2007; Cruz, 2019). Research on mental toughness further suggests that resilience and coping capacity are central to competitive stability (Gucciardi et al., 2015). These findings indicate that psychological preparedness is not an optional supplement to training but a core dimension of athletic management.

Moreover, the role of coaches cannot be overstated. Coach athlete relationships have been linked to motivation, satisfaction, and performance outcomes (Jowett & Cockerill, 2003; Santos, 2020). A positive relationship with a coach, built on clear expectations, structure, and mentorship, can have a profound impact on an athlete's development. On the other hand, inconsistent coaching or a lack of guidance can leave athletes without the support they need, negatively impacting their discipline and readiness for competition.

Adding another layer of complexity is the academic pressure student athletes face. Balancing schoolwork with training and competition creates a significant amount of stress, and this can lead to burnout, especially during peak seasons (Beauchemin, 2014; Comeaux & Harrison, 2011). Studies like the NCAA GOALS report point to the academic stress that rises sharply when athletes are also competing (Brown & Potrac, 2021). While some institutions provide academic accommodations to lessen the load on athletes, these policies aren't always universally implemented, which can lead to uneven experiences across different schools.

The institutional environment and administrative support are key factors that influence student athletes' success. Resources such as access to quality training facilities, financial aid, and competent coaching staff have been shown to improve both academic and athletic outcomes (Aquilina, 2013; Diejomaoh, Akarah, & Tayire, 2015; Talabi, 1998). In the Philippines, challenges such as limited funding, inconsistent training programs, and lack of uniform policy implementation have been noted (Garcia, 2017; Calimag, 2023). While laws like Republic Act No. 10676 and Republic Act No. 10699 aim to protect and benefit student athletes (Congress of the Philippines, 2015a; 2015b), the actual enforcement and translation of these laws into practices at the school level is still inconsistent.

Health practices remain a foundational component of athletic sustainability. Adequate sleep, nutrition, hydration, and recovery protocols directly influence physical performance and long-term participation (Thomas, Erdman, & Burke, 2016; Paterno, 2018; Philippine Sports Commission, 2020). However, lifestyle behaviors that undermine recovery may persist even when institutional support is available, suggesting that awareness does not automatically translate into consistent practice.

Despite extensive research on individual determinants of athletic performance, much of the literature focuses on collegiate or elite athletes in Western contexts. Little attention has been given to secondary school athletes, particularly in countries like the Philippines where the educational and athletic systems may be quite different. Moreover, many studies examine specific domains like motivation or coaching in isolation, without considering how these factors interact with other aspects of the student athlete's life, such as psychological readiness, academic stress, and institutional support.

This gap in research presents a unique opportunity. No comprehensive studies have yet been conducted

that assess how all these factors—personal, psychological, academic, coaching, administrative, and health—work together to influence the athletic management of secondary school athletes. Without this kind of integrated analysis, decisions about athletic programs often rely on tradition rather than data-driven evidence.

This study aims to fill that gap by looking at how all these factors interact. By examining personal, psychological, coaching, academic, administrative, and health factors within one framework, we can gain a better understanding of what influences the success and challenges of student athletes. This approach is intended to generate insights that are context-specific, offering practical recommendations that can guide the development of athletic programs in schools.

The research is particularly timely because it addresses a need that has not been adequately explored: the impact of these interconnected factors on student athlete performance within a localized setting. By looking at these factors in the Philippine context, the study hopes to provide evidence that will help institutions improve how they support and manage student athletes, leading to better outcomes both on and off the field.

The research method involved a mixed-methods approach, using both quantitative surveys and qualitative interviews to gather data from athletes, coaches, and academic staff. This allowed for a comprehensive understanding of the issues student athletes face from multiple perspectives. By examining these interconnected domains, the study aims to inform more holistic approaches to athletic program development, improving both the athletic and academic success of student athletes.

Material & methods

Study Design

This study employed a quantitative, cross-sectional descriptive research design to examine factors influencing the athletic management of student athletes during competitive participation. A cross-sectional design involves the collection of data at a single point in time in order to describe the characteristics of a population (Creswell & Creswell, 2018). The design was selected to obtain systematic numerical descriptions of perceptions across six domains: personal, psychological, coaching, academic, administrative, and health factors. No inferential testing was conducted, as the primary objective was to describe the relative strength and distribution of these domains within the study population.

Population and Sample

The study was conducted in a private secondary school in Santiago City, Philippines. Respondents consisted of all officially registered student athletes during the School Year 2025 to 2026. Total enumeration sampling was applied to ensure complete representation of the target population. Inclusion criteria required participants to be active members of recognized school athletic teams during the data collection period and must have played in various athletic meets. Students not officially enlisted in athletic programs were excluded. A total of 101 student athletes participated, yielding a response rate of 100%.

Instrumentation

Data were collected using a structured survey questionnaire adapted from Martin et al. (2023), originally developed to assess factors related to competitive success among student athletes. The instrument consisted of six subscales corresponding to personal, psychological, coaching, academic, administrative, and health domains. Each item was measured using a four-point Likert scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree).

The original instrument reported an internal consistency coefficient of 0.86. For the present study, reliability analysis was conducted using the local sample to confirm internal consistency. The overall Cronbach’s alpha coefficient after testing was $\alpha = 0.91$, indicating high reliability. Item analysis was performed, and items that did not meet acceptable reliability thresholds were removed to improve scale consistency. The final version of the instrument retained strong internal consistency across domains. In addition, content validation was conducted by field experts in sports management and educational leadership to ensure contextual relevance and clarity of items.

Data Gathering Procedure

Approval was secured from school administration prior to data collection. Participants were informed of the voluntary nature of participation and assured of confidentiality. The survey was administered during scheduled athletic meetings to ensure full participation. Completed questionnaires were collected immediately after administration to minimize data loss.

Data Analysis

Data were analyzed using descriptive statistics, specifically mean and standard deviation, to determine the level of agreement within each item and domain. Domain means were computed by averaging item responses within each factor category. All analyses were performed using Microsoft Excel.

The given scale was used to analyze and interpret the result of the data gathered:

Table 1. Arbitrary Scale

Scale	Descriptive Rating
3.26-4.00	Strongly Agree
2.51-3.25	Agree
1.76-2.50	Disagree
1.00-1.75	Strongly Disagree

Results

This section presents the descriptive findings across six domains influencing athletic management: personal, psychological, coaching, academic, administrative, and health factors.

Table 2. Personal Factors

Statement	Mean	SD	Descriptive Rating
1. I join the team to improve my skills.	3.80	0.54	Strongly Agree
2. I want to develop physically and mentally through sports.	3.77	0.57	Strongly Agree
3. I am focused, vision-driven and hard-working.	3.59	0.61	Strongly Agree
4. I love what I am doing in every competition.	3.72	0.57	Strongly Agree
5. I am willing to spend hours of training and practices.	3.76	0.55	Strongly Agree
Mean	3.73	0.57	Strongly Agree

Table 2 presents the descriptive statistics for personal factors. As shown, this domain obtained the highest overall mean ($M = 3.73$, $SD = 0.57$), indicating consistently high levels of agreement among respondents.

The highest-rated indicator was the intention to improve skills ($M = 3.80$, $SD = 0.54$), followed closely by the desire for physical and mental development ($M = 3.77$, $SD = 0.57$) and willingness to invest time in training ($M = 3.76$, $SD = 0.55$). These results suggest that intrinsic motivation and commitment are strongly present among the respondents.

Table 3. Psychological Factors

Statement	Mean	SD	Descriptive Rating
1. I am intrinsically motivated to finish the training provided by my coach.	3.77	0.49	Strongly Agree
2. I am ready for competitive pressures in every competition.	2.48	1.21	Disagree
3. I intensely concentrate on my training and competition goal.	2.95	1.14	Agree
4. I do mental training exercises that help me control my emotions and doubts when doing sports.	2.77	1.19	Agree
5. I practice stress management before, during, and after training.	2.43	1.02	Disagree
Mean	2.88	1.15	Agree

Table 3 summarizes the psychological domain. The overall mean ($M = 2.88$, $SD = 1.15$) reflects moderate agreement across items. While intrinsic motivation to complete training was rated highly ($M = 3.77$), readiness for competitive pressure ($M = 2.48$) and stress management practices ($M = 2.43$) received comparatively lower ratings. While motivation appears strong, responses related to coping and pressure management show less consistency across participants.

Table 4. Coaching Factors

Statement	Mean	SD	Descriptive Rating
1. The coach listens and considers player input.	2.64	1.10	Agree
2. The coach is concern to the welfare of his/her players.	3.14	1.05	Agree
3. The coach show honesty, camaraderie and sportsmanship.	3.21	1.16	Agree
4. The coach instills discipline and structure during training.	2.36	1.11	Disagree
5. The coach is open to giving advice and guidance for the athlete’s growth and development.	2.80	1.09	Agree
Mean	2.83	1.14	Agree

As shown in Table 4, coaching factors yielded an overall mean of 2.83 ($SD = 1.14$). Honesty and sportsmanship of coaches ($M = 3.21$) and perceived concern for athlete welfare ($M = 3.14$) were rated relatively higher. The lowest rating in this domain pertained to structured discipline during training ($M = 2.36$). The distribution of responses suggests variation in how athletes experience the structural aspects of coaching compared to relational aspects.

Table 5. Academic Factors

Statement	Mean	SD	Descriptive Rating
1. I monitor my academic performance while participating in sports competitions.	2.42	1.06	Disagree
2. I study the lessons I missed if I was absent from class due to competitions.	2.82	0.92	Agree
3. I see to it that extracurricular activities do not hinder my studies.	2.82	1.05	Agree
4. I make sure to talk to my classmates or teachers whenever I missed a lesson or activities.	2.95	0.93	Agree
5. My teacher understands athletes in terms of being late in passing of requirements.	2.47	0.91	Disagree
Mean	2.70	0.99	Agree

Table 5 presents the results for academic factors, with an overall mean of 2.70 (SD = 0.99). Seeking assistance after missing lessons (M = 2.95) received the highest rating within this domain. Monitoring academic performance during competition (M = 2.42) and perceived flexibility in deadlines (M = 2.47) received lower ratings. This indicates that academic management practices are present but not strongly reinforced across respondents.

Table 6. Administrative Support Factors

Statement	Mean	SD	Descriptive Rating
1. The school provides sufficient training time and assures continuity of training after competitions.	2.48	0.93	Disagree
2. The school provides scholarships and allowances (e.g., food, uniforms, competition expenses) to student-athletes.	1.98	0.90	Disagree
3. The school provides sufficient facilities and equipment necessary for our training.	3.22	0.89	Agree
4. The school allows and supports the team to join various tournaments and competitions.	3.37	0.67	Strongly Agree
5. The school ensures that well-trained coaches and trainers are available to guide student-athletes.	2.43	0.73	Disagree
Mean	2.70	0.98	Agree

Table 6 shows that administrative support factors recorded an overall mean of 2.70 (SD = 0.98). Participation in tournaments (M = 3.37) and provision of facilities and equipment (M = 3.22) were rated favorably. Lower ratings were observed in scholarships and allowances (M = 1.98), training continuity (M = 2.48), and availability of qualified coaching personnel (M = 2.43). The contrast between high ratings for competition opportunities and lower ratings for financial and structural support reflects uneven perceptions of institutional assistance.

Table 7. Health Factors

Statement	Mean	SD	Descriptive Rating
1. I maintain a balanced diet to support my training.	3.05	0.95	Agree
2. I get sufficient sleep before the training and competition.	3.43	0.71	Strongly Agree
3. I avoid vices such as smoking and drinking alcoholic beverages.	2.50	0.89	Disagree
4. I stay hydrated throughout the training.	3.59	0.64	Strongly Agree
5. I consider rest and recovery as important as the rest of my training.	3.63	0.60	Strongly Agree
Mean	3.24	0.88	Agree

Table 7 presents the health domain, which yielded an overall mean of 3.24 (SD = 0.88). Rest and recovery (M = 3.63), hydration (M = 3.59), and sleep (M = 3.43) were rated highly. Avoidance of vices received the lowest rating within this domain (M = 2.50). Although health practices were overall positively rated, the findings suggest that certain lifestyle behaviors are less consistently maintained among athletes. Across domains, personal factors ranked highest, followed by health factors, while psychological, coaching, academic, and administrative domains demonstrated comparatively moderate levels of agreement.

Discussion

This study examined the personal, psychological, coaching, academic, administrative, and health factors influencing athletic management among secondary school student athletes during competitive participation. The findings revealed that personal factors ranked highest, followed by health practices, while psychological, coaching, academic, and administrative domains clustered within moderate levels of agreement. These patterns indicate that strong internal motivation coexists with more variable perceptions of institutional and structural support.

Personal factors emerged as the strongest domain, suggesting that intrinsic motivation, commitment, and willingness to invest effort remain central to sustained participation. This aligns with self-determination theory, which emphasizes the role of internal motivation in maintaining engagement and performance (Deci & Ryan, 2000). Consistent with prior research (Gavino, 2021), the results indicate that personal drive remains a foundational asset within student athlete populations.

Despite strong intrinsic motivation, psychological preparedness demonstrated uneven patterns. While athletes reported high motivation to complete training, lower ratings in stress management and readiness for competitive pressure suggest areas of vulnerability. These findings resonate with studies emphasizing the importance of resilience, emotional regulation, and mental toughness in competitive contexts (Jones, Hanton, & Connaughton, 2007; Gucciardi et al., 2015; Cruz, 2019). The contrast between high motivation and lower stress coping capacity indicates that psychological skills training may require more structured integration within athletic programs.

Coaching factors revealed generally positive perceptions regarding fairness and concern for athlete welfare. However, lower ratings related to structured discipline suggest that relational strengths do not always translate into perceived training consistency. Previous research has highlighted that effective coaching balances supportive relationships with clear expectations and structured guidance (Jowett &

Cockerill, 2003; Santos, 2020). The present findings suggest that strengthening structured training systems may complement existing relational strengths.

Academic factors demonstrated moderate levels of engagement, with athletes reporting efforts to seek assistance but less consistent monitoring of their academic standing. This pattern reflects the ongoing tension between academic and athletic responsibilities documented in prior literature (Beauchemin, 2014; Comeaux & Harrison, 2011). Although national policies such as Republic Act No. 10676 provide legal safeguards for student athletes, practical implementation at the school level may vary. Structured academic monitoring systems and clearer communication mechanisms may therefore enhance balance between roles.

Administrative support factors revealed a distinction between opportunity provision and systemic support. While competition participation and facilities were rated favorably, financial assistance, training continuity, and access to qualified coaching personnel received lower ratings. Similar disparities have been noted in Philippine sport development literature, where infrastructure may be present but program sustainability and financial structures remain inconsistent (Garcia, 2017; Calimag, 2023). These findings suggest that athletic management requires not only access to competition but sustained structural reinforcement.

Health practices were generally rated positively, particularly in rest, hydration, and sleep. These findings are consistent with established evidence linking recovery practices to athletic sustainability (Thomas, Erdman, & Burke, 2016; Paterno, 2018). However, lower ratings in avoidance of unhealthy behaviors highlight the need for stronger lifestyle education and monitoring mechanisms.

Taken together, the findings reinforce the view that athletic management is shaped by interconnected personal, psychological, academic, institutional, and health related domains. While intrinsic motivation and certain health practices appear well established, psychological skill development, structured coaching systems, academic monitoring, and administrative sustainability present areas for further strengthening. The results contribute context specific evidence to discussions on holistic student athlete development within secondary education settings.

Conclusions

This study explored how personal, psychological, coaching, academic, administrative, and health factors influence athletic management among secondary school student-athletes. The findings reveal that while intrinsic motivation and health practices are strong factors supporting athletes, other areas like psychological preparedness, academic support, and structured coaching systems still require improvement. One of the main conclusions is that effective athletic management extends far beyond just physical preparation or competition participation. Psychological factors, such as stress management and emotional regulation, play a big role in how athletes perform. While most athletes show strong internal motivation, the consistency of psychological support and academic guidance across schools is varied. This suggests the need for a more integrated approach that combines internal motivation with external structures, such as better academic coordination and mental skills training.

In addition, the study emphasizes the importance of coaching and institutional support. Coaches not only provide technical training but also act as mentors, helping to create an environment that encourages athletes to thrive both in sports and academics. However, inconsistent coaching systems across schools may hinder athlete performance and development. This highlights the importance of having coaches who are not just knowledgeable but also equipped to mentor and support athletes beyond just their technical

skills.

This research adds to the growing body of knowledge about athletic management, particularly in developing countries like the Philippines. It also brings attention to the need for stronger implementation of policies, which aim to protect student-athletes. While these laws are in place, their impact varies greatly from school-to-school, and this inconsistency needs to be addressed for student athletes to fully benefit from these protections.

Based on these findings, several recommendations stand out. First, psychological skill development should be prioritized. Schools should offer mental toughness training to help athletes build resilience and cope with stress. Second, coaching structures need to be more consistent. Institutions should invest in coach education programs to ensure coaches are equipped to provide the guidance and support athletes need. Third, academic coordination is essential. Schools should explore ways to offer academic flexibility or tutoring for student athletes during competitive seasons. Fourth, administrative support is key to sustaining athletic programs. Adequate funding for facilities, coaching, and other resources is necessary for long-term success. Lastly, schools should focus on creating holistic development programs that address all aspects of student athlete well-being; psychological, academic, health, and athletic.

In conclusion, this study contributes to the understanding of student-athlete development by shedding light on the various factors that influence their success in both sports and academics. By considering these factors together, educational institutions can create a more supportive environment for student athletes, one that fosters both athletic achievement and academic success. The findings offer practical solutions for schools to improve their athletic programs and highlight the need for future research to explore how these findings can be implemented and refined to create lasting change in athletic management systems.

Disclaimer (ARTIFICIAL INTELLIGENCE)

During the preparation of this work, author(s) used ChatGPT for polishing of the text consistency and clarity in order to enhance readability, ensure coherence of ideas, and improve the overall quality of academic writing. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

Conflicts of interest

The authors declare that there are no financial, commercial, or personal relationships that could have influenced the conduct of this study or the interpretation of its findings. The authors are affiliated with the institution where the study was conducted; however, no administrative influence was exerted over the design, data collection, analysis, or reporting of the study. The authors declare no other competing interests.

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