

Understanding Students' Psychological Readiness: Analysis of Motivation and Anxiety Levels Among High School Badminton Student-Athletes

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ABSTRACT

Psychological readiness is a vital component in physical education and school sports, yet empirical attention often skews toward physical and tactical training, neglecting the deep psychological experiences of student-athletes facing competitive school championships. This study aims to analyze the intrinsic and extrinsic configurations of motivation and pre-competition anxiety among senior high school (SMA) badminton student-athletes representing their school in a regional student championship. Using a descriptive qualitative research design, this study investigated six senior high school badminton student-athletes selected through purposive sampling. Data were collected using semi-structured interviews, non-participant observations during school-level preparation, and document analysis. The data were evaluated through Miles and Huberman's interactive qualitative analysis, consisting of data reduction, data display, and conclusion drawing. Trustworthiness was preserved using source and technique triangulation. The thematic synthesis indicated that students' motivation levels prior to the match were predominantly high to very high, heavily driven by intrinsic athletic self-improvement and extrinsic social reinforcement (coach support, peer recognition, and school pride). Conversely, student-athletes also manifested high levels of pre-competition cognitive and somatic anxiety, triggered by academic-athletic role conflicts, fear of failure, and the intimidating atmosphere of the championship. High motivation does not automatically insulate student-athletes from severe anxiety. Physical education teachers and school sports coaches must integrate structured psychological skill training (PST) alongside standard tactical instruction to optimize students' mental health and athletic performance.

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1. INTRODUCTION

In the framework of secondary physical education and school-based sports development, athletic performance during inter-school competitions is not merely an

outcome of motor skills and physiological conditioning (Bailey et al., 2009; Hardman, 2011). It is fundamentally shaped by the student-athletes' psychological readiness (Gould & Westfall, 2013). Within secondary school athletic programs, such as specialized sports classes (Kelas Khusus Olahraga) or elite school sports clubs, student-athletes constantly face dual-role pressures: maintaining academic standards while fulfilling high-performance expectations in competitive arenas (Stambulova & Wylleman, 2014; Guidotti et al., 2015; Subarkah et al., 2020).

Psychological dynamics like motivation and competitive anxiety function as critical determinants of how effectively a student-athlete translates training into performance under stress (Deci & Ryan, 2000; Weinberg & Gould, 2019). Motivation acts as the internal and external catalyst directing a student's persistence to practice (Vallerand, 2007), whereas anxiety represents the multidimensional emotional and cognitive reaction triggered by perceived threats to their athletic identity and academic reputation (Martens et al., 1990; Smith et al., 2006).

Extensive sports psychology literature asserts that robust self-determined motivation correlates positively with mental resilience and superior competitive performance (Ryan & Deci, 2017; Lonsdale et al., 2008), whereas unmitigated anxiety impairs working memory, compromises motor precision, and degrades self-efficacy (Eysenck et al., 2007; Woodman & Hardy, 2003; Bandura, 1997). In high-speed, precision-dominant sports like badminton, split-second decisions and sustained spatial awareness are required (Phomsoupha & Laffaye, 2015). Consequently, a student's psychological equilibrium prior to entering the court is paramount (Lazarus, 2000). Student-athletes who fail to regulate their pre-match anxiety often experience performance collapse, regardless of how technically proficient they are during routine physical education sessions (Hill et al., 2010; Hanin, 2007).

While the interplay between motivation and anxiety is widely acknowledged, traditional sports science research has predominantly relied on quantitative metrics, employing psychometric questionnaires to convert psychological states into numerical variables (Clancy et al., 2017; Ntoumanis, 2001). These statistical trends often isolate variables from the authentic, subjective experiences of young learners (Sparkes & Smith, 2014).

Crucially, there is an empirical gap in qualitative inquiries examining secondary school student-athletes within regional inter-school championships (Culver et al., 2012). Most existing studies overlook how the school ecosystem—encompassing physical education teachers, school coaches, parental expectations, and academic peer pressure—simultaneously fuels a student's drive and feeds their anxieties (Harwood et al., 2015; Sheridan et al., 2014; Keegan et al., 2010).

This study addresses this knowledge deficit by exploring the qualitative realities of senior high school student-athletes preparing for a major regional championship (Creswell & Poth, 2016). It bypasses rigid statistical hypotheses to answer a central qualitative question: How do high school student-athletes experience and conceptualize their motivation and anxiety before a competitive championship, and what systemic factors shape these psychological states?

The conceptual insights generated here intend to help physical education teachers, school administrators, and youth coaches design balanced pedagogical and mental training regimens that optimize both athletic excellence and psychological well-being (Myer et al., 2015; Bergeron et al., 2015).

2. METHOD

This study employed a descriptive qualitative research design to capture an authentic and contextual understanding of the psychological well-being of high school student athletes. This approach allowed researchers to look beyond superficial numerical scores and document the lived experiences, emotional nuances, and personal narratives of students facing competitive pressure within their natural sporting ecosystem. Spatially and temporally, this study was set during the preparation and involvement of student athletes in a regional championship representing high schools in Makassar City. Data collection took place intensively from October 20 to 24, 2025, with interviews and initial field observations conducted directly at the school's sports facilities during intensive pre-championship training sessions and inside the tournament pavilion throughout the competition week.

The study involved six (N=6) high school student athletes selected to represent their school in the senior student category in the badminton championship. Informants were selected using a purposive sampling technique to select individuals capable of providing information-rich narratives related to the psychological phenomena under study. The established selection criteria included: (1) being an active high school student enrolled in a badminton sports or extracurricular program; (2) being selected as the school's official representative for the 2025 regional championship; (3) competing in singles or doubles in both the boys' and girls' divisions; and (4) being willing to actively participate in reflective and semi-structured in-depth interviews. To ensure confidentiality and research ethics, the participants' real identities were disguised using repository codes Student-Athlete 1 (SA1) to Student-Athlete 6 (SA6).

In line with the qualitative paradigm, the primary instrument in this study was the researcher herself (the researcher as the instrument), who acted as a humanistic data collector without imposing any bias or preconceived notions. To systematically guide the data collection process, the researcher's involvement was guided by a semi-structured interview protocol focusing on intrinsic-extrinsic motivational drives and cognitive-somatic anxiety symptoms. This primary instrument was then supported by a field observation guide sheet to record behavioral dynamics around the field of the competition, and a school sports documentation checklist to verify the formal track records of student athletes.

The data collection process was structured comprehensively through three complementary qualitative channels. First, in-depth semi-structured interviews were conducted individually in a quiet room before and between competition days, lasting between 45 and 60 minutes each, and audio-recorded with the participants' explicit consent. Second, non-participant observation was employed by the research team to monitor students' expressive actions, behavioral rituals, non-verbal signs of somatic

anxiety such as fidgeting or pacing, and their interaction patterns with the school coach during warm-ups on the sidelines. Third, documentation analysis was conducted on official school documents, including athlete rosters, daily practice logs, and formal tournament charts, to contextualize the level of competitive stress faced by the informants.

The collected qualitative data was then processed using Miles and Huberman's interactive analysis model, which consists of three dynamic stages. The first stage is data reduction, in which interview recordings were transcribed verbatim to extract meaningful statements and filter out redundant disclosures without damaging their original psychological essence. The second stage is data display, which was carried out by organizing the condensed statements into a thematic matrix and categorical tables aligned with the constructs of motivation and anxiety. The final stage is conclusion drawing and verification, in which the researcher cross-referenced patterns across the six cases to develop integrated thematic conclusions that explain the psychological realities of the student athletes.

To ensure scientific rigor and validity in this qualitative research, the researcher applied four standard parameters of data validity (trustworthiness). Credibility was achieved through member-checking, where transcript summaries were returned to the student-athletes to confirm the accuracy of the researcher's interpretations. Transferability was achieved by providing in-depth and thick descriptions of the high school sport context so that future educational researchers could evaluate its relevance. Finally, dependability and confirmability were maintained through the provision of an external audit trail and systematic triangulation of techniques and sources, which verified the congruence between interview statements, observed behaviors on the field, and testimonies from school coaches.

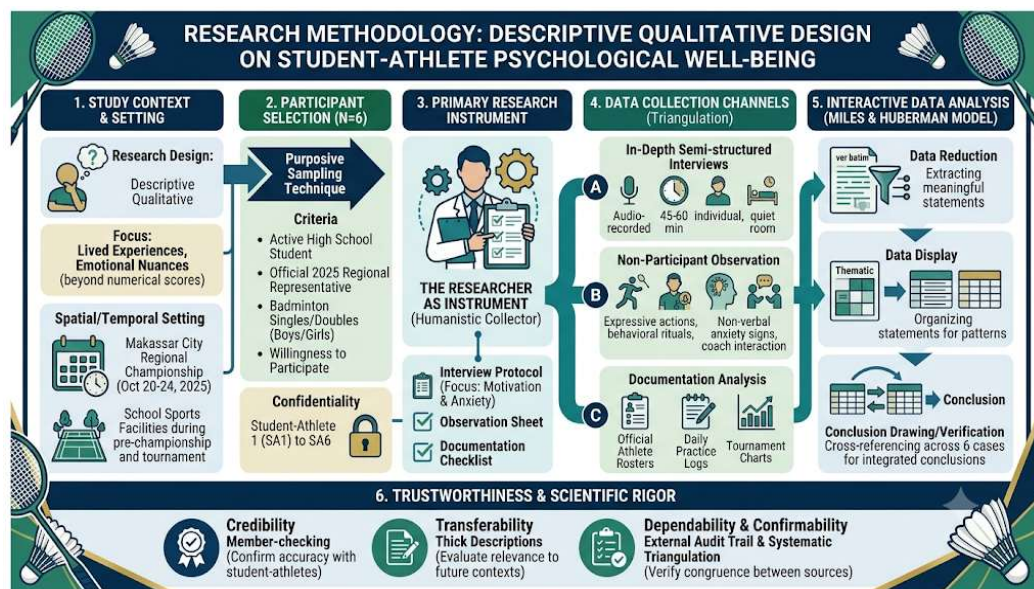


Figure 1. Research Flowchart

3. RESULTS AND DISCUSSION

Results

Motivation Configurations of High School Badminton Student-Athletes

The thematic analysis of qualitative narratives revealed that the motivation levels of the high school badminton student-athletes before the championship were uniformly intense, categorized across high to very high dimensions. Rather than operating as an isolated psychological metric, their motivation emerged as a multi-layered structure driven by both intrinsic personal desires and extrinsic institutional reinforcements.

Tabel 1. Motivation Configurations of High School Badminton Student-Athletes

Category	Frequency (N=6)	Percentage	Primary Thematic Indicators
Very High	2	33.3%	Intense desire for self-actualization, scholarship pursuits, absolute sport passion.
High	4	66.7%	School institutional pride, coach validation, parental expectations, peer prestige.
Moderate	0	0.0%	Routine participation, low personal investment in competitive outcomes.
Low	0	0.0%	Detached engagement, forced participation by school authorities.
Very Low	0	0.0%	Complete amotivation, psychological burnout regarding school sports.

The qualitative disclosures indicated that intrinsic factors were rooted in the students' search for self-mastery, personal enjoyment of badminton, and long-term aspirations, such as securing athletic entry pathways into prestigious universities. Concurrently, extrinsic factors exerted significant influence. The student-athletes emphasized that representing their high school generated a strong sense of institutional pride. Direct encouragement from physical education teachers, peer groups, and school coaches served as a valuable psychological resource, boosting their commitment to excel on the court.

Anxiety Manifestations Among High School Student-Athletes

Despite displaying high motivation, the student-athletes simultaneously reported elevated levels of pre-competition anxiety. The qualitative mapping demonstrated that 66.7% of the student-athletes operated under high anxiety states, while 33.3% navigated moderate anxiety thresholds prior to their matches.

Tabel 2. Anxiety Manifestations Among High School Student-Athletes

Anxiety Threshold	Percentage (%)	Interpretation / Context
High Anxiety	66.7%	Experienced prior to matches despite high motivation levels.
Moderate Anxiety	33.3%	Navigated by student athletes during the pre-competition phase.
Total	100%	N = Total sample mapped in the qualitative analysis.

The sources of this pre-competition anxiety were multifaceted. Extrinsically, the high-stakes environment of an inter-school championship, coupled with fear of letting down the school administration and coping with public scrutiny from peers, amplified cognitive worry. Intrinsically, the student-athletes battled self-imposed perfectionism and an acute fear of failure. This psychological distress manifested somatically as elevated heart rates, muscle tightness during warm-ups, and temporary lapses in concentration, which posed a threat to their competitive performance.

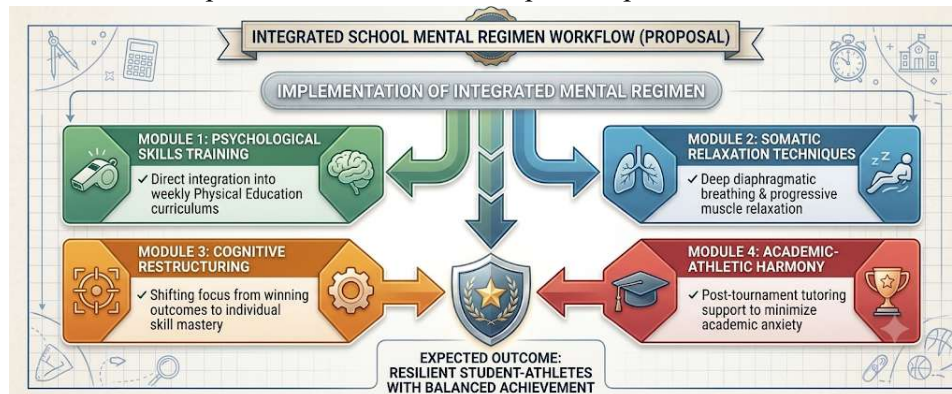


Figure 2. Integrated School Mental Regimen

Discussion

The Dual-Drive Dynamics of Student Motivation

The finding that senior high school badminton student-athletes possess high to very high motivation levels underscore the psychological value that competitive sports hold within secondary education settings (Bailey, 2006). In this high school cohort, motivation does not spring from a singular origin; instead, it operates as a complementary blend of intrinsic and extrinsic factors, validating contemporary frameworks of Self-Determination Theory (SDT) (Deci & Ryan, 2000; Ryan & Deci, 2017).

Intrinsically, the student-athletes are propelled by a desire for self-mastery, athletic skill improvement, and the personal enjoyment derived from playing badminton (Vallerand, 2007). For these adolescents, the sports field serves as an arena for self-actualization. They view success in regional tournaments as a steppingstone for future academic and athletic opportunities, such as sports scholarships for higher education (Stambulova & Wylleman, 2014).

Extrinsically, the role of institutional pride emerged as a powerful motivator. Representing their high school provides these students with a valued social identity among their peers (Marsh, 1993). Support from the school hierarchy—specifically physical education teachers, school sports coaches, and teammates—acts as an external social scaffold that reinforces their determination. This finding aligns with youth sports research highlighting that positive reinforcement from coaches and structural validation from schools significantly enhance a student's commitment and resilience during intense competition preparations (Keegan et al., 2010; Sheridan et al., 2014).

Decoding Pre-Competition Anxiety in the High School Ecosystem

A key insight from this study is the co-existence of high anxiety alongside high motivation. This complicates the traditional assumption that highly motivated student-athletes are naturally shielded from psychological distress. Instead, the high-stakes nature of school championships often exacerbates pre-competition anxiety (Weinberg & Gould, 2019). The anxiety observed in these high school athletes is driven by both external and internal factors:

- **Extrinsic Stressors:** These include pressure from school coaches, strict performance expectations from school authorities, the visible strength of opposing school teams, and the unfamiliar environment of the main tournament venue (Harwood et al., 2015). Additionally, student-athletes face a distinct academic-athletic conflict: the worry that time spent away from the classroom will disrupt their academic performance (Guidotti et al., 2015).
- **Intrinsic Stressors:** These are characterized by cognitive worry, self-imposed perfectionism, and a fear of underperforming in front of their school peers (Smith et al., 2006). Somatically, these stresses manifest as increased heart rates, sleep disturbances before match days, and muscle tension during warm-ups (Martens et al., 1990).

These qualitative themes correspond with established multidimensional models of competitive anxiety, which show that psychological distress spikes when an athlete perceives an imbalance between high environmental demands (winning for the school) and their personal coping capabilities (Lazarus, 2000; Woodman & Hardy, 2003).

Pedagogical and Practical Implications for Secondary Education

The coexistence of high motivation and elevated anxiety suggests clear recommendations for secondary school physical education and school sports management. School sports programs must look beyond physical and tactical preparation to actively address the mental health of student-athletes (Bergeron et al., 2015). First, physical education teachers and school coaches should integrate basic Psychological Skills Training (PST) into their weekly routines (Gould & Westfall, 2013). Student-athletes need to learn practical coping mechanisms, such as deep diaphragmatic breathing, positive self-talk, and visualization techniques, to manage somatic anxiety during warm-ups. Second, coaching philosophies should shift from a strict focus on winning outcomes toward a mastery-oriented climate that emphasizes personal improvement and tactical execution (Ntoumanis, 2001). Reducing the emphasis on institutional status can help lower cognitive anxiety. Finally, school administrations should establish academic support systems, such as flexible assignment deadlines or post-tournament tutoring, to relieve the academic stress that contributes to an athlete's pre-match anxiety.

4. CONCLUSION

This qualitative study demonstrates that senior high school badminton student-athletes face distinct psychological conditions before regional competitions. While they

exhibit high to very high motivation fueled by a blend of personal goals, school pride, and coach support, they simultaneously experience high levels of pre-competition anxiety. This anxiety is driven by fear of failure, the pressures of competition, and the challenge of balancing sports with schoolwork.

These findings show that strong motivation does not automatically eliminate anxiety. Instead, motivation and anxiety function as twin psychological forces that shape a student's competitive experience. Consequently, school sports programs must balance physical training with targeted mental health support to help student-athletes manage stress and protect both their well-being and performance.

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