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Levels of anxiety and self-efficacy vis-à-vis university athletes' performance

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Abstract

The study examined anxiety, self-efficacy, and emotional exhaustion among 134 university athletes from President Ramon Magsaysay State University during AY 2023-2024. Using a descriptive quantitative design, data were gathered through standardized tools the Cognitive Somatic Anxiety Questionnaire, Athlete Burnout Questionnaire, and General Self-Efficacy Scale and analyzed using descriptive statistics, t-tests, and ANOVA. Results showed moderate self-efficacy and varying anxiety levels, with emotional exhaustion higher among older and male athletes. Significant differences in anxiety and self-efficacy were found by age and sex but not by performance level. To address these findings, the researchers proposed MINDSET (Mental Intervention for developing self-efficacy and tackling anxiety in Training), a program emphasizing mental skills training, guided reflection, and self-regulation. The study concluded that understanding athletes' psychological factors is vital in promoting well-being and performance, providing baseline data for developing athlete-centered psychological interventions and support systems.

Keywords: Anxiety, emotional exhaustion, physical education, self-efficacy, university athletes

1. Introduction

University athletes across the globe participate in competitive sports while managing demanding academic responsibilities, placing them under significant physical and psychological strain. In recent years, expectations placed on student-athletes have intensified, requiring consistent high-level performance across both domains. While such environments promote discipline, teamwork, and resilience, they also contribute to a growing incidence of mental health issues. International reports have identified stress, anxiety, and burnout as frequent concerns among collegiate athletes, affecting their overall functioning and performance (Moore *et al.*, 2025) [19]. These findings have prompted renewed focus on athlete mental health in sports and academic institutions worldwide.

Anxiety is one of the most prominent psychological challenges experienced by university athletes. It presents in cognitive and somatic forms, cognitive anxiety involves intrusive thoughts and worry that impair concentration, while somatic anxiety includes physical symptoms such as elevated heart rate, tension, and sleep disturbances. These symptoms reduce athletes' ability to focus, react, and perform under pressure. Persistent anxiety not only affects performance but also risks long-term mental health. Addressing this issue requires institutional support systems that help athletes regulate anxiety before it escalates.

Anxiety, self-efficacy, and performance are deeply interconnected. Self-efficacy the belief in one's capacity to succeed shapes how athletes handle pressure and respond to setbacks. Lochbaum *et al.* (2023) ^[14] found a moderate positive correlation between self-efficacy and performance, reinforcing its role as a psychological buffer. Excessive anxiety undermines this confidence, leading to poorer outcomes. Supportive coach-athlete relationships and fulfillment of basic psychological needs such as autonomy and competence contribute to more stable emotional regulation and better performance (Leisterer & Gramlich, 2021) ^[12]. Athletes in environments that nurture these psychological needs show greater resilience and motivation.

Corresponding Author: Jay A Gamboa Graduate School, Bataan Peninsula State University, City of Balanga, Bataan 2100, Philippines In the Philippines, national policies affirm the value of mental and physical health in athletic development. Republic Act No 11180, also known as the Athletic Programs Report Act, promotes physical education and school-based sports as essential to fostering discipline, teamwork, and personal growth. It encourages institutions to implement regular sports programs that build healthy, high-performing individuals. Complementing this, CHED Memorandum Order No. 08, Series of 2022, positions sports as an integral part of higher education. It calls on colleges and universities to support programs that contribute to the physical, emotional, and psychological development of student-athletes. These national directives emphasize a holistic framework where academic and athletic success are supported through well-structured sports systems.

Despite policy support, limited research has focused on how psychological factors, particularly anxiety, emotional fatigue, and self-efficacy, impact university athletes in local contexts, especially in smaller state institutions. This study addresses that gap by examining student-athletes at President Ramon Magsaysay State University. The investigation centers on the relationship between psychological factors and athletic performance, with attention to demographic influences such as age, sex, and level of performance. Understanding how these variables interact provides insight into the unique mental health challenges university athletes face. Focusing on a specific institutional context helps clarify how support strategies can be better adapted to local needs.

The study aimed to offer evidence that informs more responsive mental health interventions within athletic programs. Insights drawn from the findings will help guide the creation of structured support systems, such as counseling, stress management workshops, and performance-based mentoring, that promote self-efficacy and reduce anxiety. Intervention programs grounded in actual athlete experiences can help improve their performance and emotional well-being. Supporting university athletes in managing psychological stress strengthens their potential to succeed academically and athletically. This approach reinforces the university's role in shaping disciplined, capable individuals who perform well both on the field and in broader academic settings.

2. Materials and Methods

2.1 Research Design

This study utilized a quantitative descriptive research design to determine the levels of emotional exhaustion, anxiety, and self-efficacy among university athletes. Quantitative research involves the systematic collection and analysis of numerical data to describe and interpret phenomena objectively (Williams, 2011 [32]; Creswell, 2012) [3]. As Ivankova *et al.* (2006) [25] explained, quantitative methods emphasize precision, reliability, and replicability, allowing researchers to describe a phenomenon with statistical accuracy. The descriptive approach was particularly appropriate because it aimed to portray the existing conditions of athletes' psychological states without manipulating variables. In line with Creswell (2014), descriptive research focuses on identifying and quantifying the "what is" of a phenomenon rather than establishing causal relationships.

Through this design, the study sought to provide a factual account of the levels of cognitive anxiety, somatic anxiety, emotional exhaustion, and self-efficacy among university athletes. Descriptive quantitative research systematically gathers numerical data to produce an accurate picture of the

current situation within a given population. This approach allowed the researcher to determine trends and associations between variables using statistical measures such as means, standard deviations, and frequency distributions. The findings provided baseline information that can inform the creation of future intervention programs for university athletes.

2.2 Population and Sample of the Study

The study population consisted of 264 officially enrolled university athletes from all campuses of President Ramon Magsaysay State University (PRMSU) during Academic Year 2023-2024. These athletes represented various sports disciplines, including both team and individual sports. The sampling procedure followed a two-stage purposive random sampling technique to ensure both relevance and representativeness.

In the first stage, purposive sampling was used to identify athletes who met specific inclusion criteria. Eligible participants were (1) officially enrolled during Academic Year 2023-2024, (2) had competed in at least one school-recognized intramural or external event, and (3) voluntarily agreed to participate. This ensured that the respondents had recent experience in competitive athletic environments. In the second stage, simple random sampling was employed among the qualified participants by assigning each athlete a number and selecting 134 names using a random number generator.

The sample size of 134 was determined using G*Power analysis, which calculated the minimum required number of respondents to achieve a medium effect size (f=0.25) with a significance level (α) of 0.05 and a statistical power (1- β) of 0.80. This ensured sufficient statistical power to detect meaningful differences or relationships. The final group included athletes from all PRMSU campuses and covered different levels of achievement, such as non-medalists, bronze, silver, and gold medalists. All participants were fully informed of their rights, provided written consent, and were assured that they could withdraw at any time without any academic or athletic consequence.

Table 1: Sample of the study

Campus	Male	Female	Total
Iba (Main)	25	21	46
Botolan	7	5	12
Candelaria	3	3	6
Castillejos	6	3	9
Masinloc	15	9	24
San Marcelino	18	12	30
Sta. Cruz	4	3	7
Total	80	54	134

2.3 Research Instrument

Data were collected using a structured survey questionnaire composed of four sections: demographic profile, anxiety, emotional exhaustion, and self-efficacy. Each section was designed to correspond with the study's research questions and variables.

The first section collected demographic data such as age, sex, and level of performance. These details provided context for interpreting differences among subgroups. The second section measured anxiety using the Cognitive-Somatic Anxiety Questionnaire (CSAQ) developed by Salam *et al.* (2012) [26] and Roberts *et al.* (2016) [24]. The instrument consists of 14 items that assess two dimensions of anxiety cognitive and somatic. Cognitive anxiety refers to mental tension, worry, and self-doubt, while somatic anxiety pertains to

physiological responses such as trembling or increased heart rate. Each item was rated on a five-point Likert scale, with 1 interpreted as "Not at all" and 5 as "Extremely." Higher scores indicate greater levels of anxiety.

The third section assessed emotional exhaustion using the Athlete Burnout Questionnaire (ABQ) developed by Raedeke and Smith (2001) [21]. The ABQ consists of 15 items divided into three subscales: emotional or physical exhaustion, sport devaluation, and reduced sense of accomplishment. Each item was rated on a five-point Likert scale, ranging from 1 ("Not at all") to 5 ("Very often"), with higher scores indicating greater levels of burnout. This instrument was chosen for its strong validity and reliability in assessing emotional fatigue among athletes.

The fourth section measured self-efficacy using the General Self-Efficacy Scale (GSES) by Schwarzer and Jerusalem (1995) ^[27]. The GSES contains 10 items that assess athletes' confidence in their ability to handle stress and achieve goals. Items were rated on a five-point scale ranging from 1 ("Not at all true") to 5 ("Exactly true"), where higher scores represented greater self-efficacy. The GSES has been extensively validated across cultures and disciplines, including in sports psychology (Kamal *et al.*, 2022; Juárez & Contreras, 2008) ^[9, 8]. All instruments were selected based on their psychometric reliability and prior use in similar studies involving student-athletes.

2.4 Data Analysis

The data were analyzed using both descriptive and inferential statistical methods. Descriptive statistics, including frequency distribution, mean, and standard deviation, were used to summarize the demographic characteristics and the levels of cognitive anxiety, somatic anxiety, emotional exhaustion, and self-efficacy. Weighted means were computed to determine the average levels of each psychological variable based on the Likert-scale responses.

Inferential statistical analyses were then conducted to determine whether significant differences existed among groups based on demographic variables such as age, sex, and level of performance. Independent sample t-tests were used for comparisons between two groups (e.g., male and female athletes), while one-way analysis of variance (ANOVA) was used to assess differences among multiple groups. The level of significance was set at p < 0.05. Statistical analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 26.

3. Results & Discussion Part I, Profile of the Respondents

The sample comprised 134 university athletes. Most were 18-22 years old (approximately 59%), with the remainder aged 23-27 (about 41%). Males comprised roughly 58% of the sample, while females made up 42%. Regarding performance, about 61% had participated in competitions without winning medals, while roughly 20% were gold medalists; bronze and silver medalists accounted for about 11% and 7%, respectively. This age distribution mirrors typical collegiate eligibility and suggests heterogeneity in competitive experience and stress exposure newer athletes are still adapting to university-level demands. In contrast, older athletes may have accrued coping skills through repeated exposure to competition. The sex distribution indicates a participation gap that may reflect structural and sociocultural influences on sport access and reinforcement, with potential downstream effects on anxiety and self-efficacy. In terms of

performance tiers, the large proportion of non-medalists highlights a group that may be more vulnerable to worry, self-doubt, and reduced confidence, consistent with evidence linking achievement history to self-efficacy and competitive anxiety (Marín-González *et al.*, 2022) [16]. Literature further suggests that age, sex, and performance level are salient correlates of anxiety in athletes (Mahmoud *et al.*, 2021; Amaro & Brandão, 2023) [15, 1], underscoring the need for tailored supports across these subgroups.

Table 2: Profile of the respondents

Profile	Frequency	Percentage						
Age								
18 to 22 years old	79	58.96						
23 to 27 years old	55	41.04						
Sex	Sex							
Male	78	58.21						
Female	56	41.79						
Level of Per	Level of Performance							
Participant (Poor)	82	61.19						
Bronze (Satisfactory)	15	11.19						
Silver (Very Satisfactory)	10	7.46						
Gold (Excellent)	27	20.15						

Part II, Level of anxiety

Cognitive and somatic anxiety were both low, while emotional exhaustion was moderate. Within cognitive anxiety, the most endorsed experience was difficulty concentrating due to intrusive thoughts; difficulty suppressing anxiety-provoking images was the least endorsed. This profile implies that, although athletes experience negative cognitions, these are not at levels that severely impair functioning. Prior work has shown that elevated cognitive anxiety can disrupt attention and decision-making under pressure (Freire et al., 2020; Ede et al., 2020) [6, 5]. However, the present low levels suggest that athletes' thought regulation and exposure to competition may be buffering these effects (Mahmoud et al., 2021) [15]. Somatic anxiety was likewise low; a racing heartbeat was the most common symptom, while gastrointestinal upset and immobilization were least frequent. Somatic arousal can be functionally adaptive preparing the body for performance so long as it remains within a manageable range (Mertens et al., 2020) [18]. The pattern observed here aligns with research indicating that more experienced athletes often report lower disruptive somatic arousal, reflecting habituation and better regulation (Marín-González et al., 2022) [16].

In contrast, emotional exhaustion was moderate. Athletes most commonly felt they expended substantial effort for comparatively little reward. This asymmetry high demands with perceived low return is a classic antecedent of burnout (Amemiya & Sakairi, 2021) [2] and signals risk if unaddressed. Emotional exhaustion, characterized by persistent fatigue and diminished motivation, is a key component of burnout, associated with reduced performance and well-being (Yıldız, 2020; Kim et al., 2023) [36, 10]. The cooccurrence of low anxiety and moderate exhaustion suggests a "slow-burn" strain: immediate pre-performance stress is contained, but cumulative load is accruing in ways that may erode motivation and recovery over time. Evidence-based interventions such as mindfulness, goal-setting, cognitive restructuring, and self-talk can reduce anxiety and alleviate exhaustion by enhancing emotion regulation and perceived competence (Walter et al., 2019; Tang et al., 2022; Wang et al., 2024) [29, 28, 31]. Programmatically, this highlights the need for routine monitoring of recovery, coaching practices that emphasize mastery, and institutional support for counseling and stress management resources.

Table 3: Level of anxiety

Indicators	Mean	SD	DI
1. I find it difficult to concentrate because of uncontrollable thoughts.	2.54	0.99	Somewhat
3. I worry too much over something that doesn't really matter.	2.43	1.09	Somewhat
5. I imagine terrifying scenes.	2.25	1.13	Somewhat
7. I can't keep anxiety-provoking pictures out of my mind.	1.99	1.03	Somewhat
9. Some unimportant thought runs through my mind and bothers me.	2.22	1.05	Somewhat
11. I feel like I am losing out on things because I can't make up my mind soon enough	2.27	1.02	Somewhat
13. I can't keep anxiety-provoking thoughts out of my mind.	2.06	1.04	Somewhat
Cognitive Anxiety	15.7	76	Low
2. My heart beats faster.	2.60	1.03	Moderately so
4. I feel jittery in my body.	2.33	1.00	Somewhat
6. I get diarrhea.	1.80	0.92	Somewhat
8. I feel tense in my stomach.	2.04	0.96	Somewhat
10. I nervously pace.	2.21	0.97	Somewhat
12. I become immobilized.	1.92	0.92	Somewhat
14. I perspire.	2.16	1.04	Somewhat
Somatic Anxiety	15.0		Low
1. Training or competitions cause me excessive stress.	2.25	1.13	Rarely
2. I feel like I put much effort for little reward in my athletic activities.	3.11	1.35	Occasionally
3. I feel down or sad about my sports, even without a clear reason.	2.26	1.26	Rarely
4. There are days when I don't sleep well because of my training and competitions.	2.27	1.13	Rarely
5. I have headaches and other discomforts that affect my athletic performance.	2.34	1.12	Rarely
6. There are days when I feel more exhausted and lack the energy to concentrate on my training.	2.58	1.15	Rarely
7. I feel emotionally drained by my sports commitments.	2.16	1.15	Rarely
8. I feel tired after training and competing at the end of the day.	2.92	1.27	Occasionally
9. Training and/or competing with performance pressures causes me stress.	2.40	1.26	Rarely
10. I lack time, and I feel overwhelmed by my athletic responsibilities.	2.47	1.23	Rarely
Emotional Exhaustion	24.7	78	Moderate

Part III, Level of Self-Efficacy

Athletes reported a moderate overall level of self-efficacy. The strongest endorsement was the belief that problems can be solved with sufficient effort, echoing Bandura's mastery-experience principle whereby successful attempts amplify future confidence. The comparatively lower (though still "mostly true") endorsement of sticking to aims and accomplishing goals hints at challenges in sustained self-regulation amidst dual academic-athletic demands. Prior work has connected self-efficacy with improved stress coping,

resilience, and sport performance (Rogowska *et al.*, 2022) ^[25], and has shown that mental skills (e.g., self-talk, planning) can strengthen efficacy beliefs (Walter *et al.*, 2019) ^[30]. Conversely, heavy academic loads and competitive pressures can dilute sustained motivation even in otherwise confident athletes (Liu *et al.*, 2024) ^[13]. Overall, the moderate efficacy observed here provides a solid platform that targeted supports such as goal-setting workshops, resilience training, and reflective practice could build upon to become a stronger predictor of both performance and mental health.

Table 4: Self-efficacy level

Indicators	Mean	SD	DI
1. I can always manage to solve difficult problems if I try hard enough.	3.71	1.10	Mostly True
2. If someone opposes me, I can find the means and ways to get what I want.	3.61	1.02	Mostly True
3. It is easy for me to stick to my aims and accomplish my goals.	3.59	1.06	Mostly True
4. I can solve most problems if I invest the necessary effort.	3.90	1.01	Mostly True
5. I am confident that I could deal efficiently with unexpected events.	3.69	0.98	Mostly True
6. Thanks to my resourcefulness, I know how to handle unforeseen situations.	3.72	0.99	Mostly True
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	3.67	1.12	Mostly True
8. When I am confronted with a problem, I can usually find several solutions.	3.69	0.98	Mostly True
9. If I am in trouble, I can usually think of a solution.	3.69	1.03	Mostly True
10. I can usually handle whatever comes my way.	3.75	1.11	Mostly True
General Self-Efficacy Scale	37.0	00	Moderate

Part IV, Comparison of variables

Age

Older athletes (23-27) reported significantly higher cognitive anxiety, somatic anxiety, and emotional exhaustion than younger athletes (18-22), while self-efficacy did not differ by age. The elevated anxiety and exhaustion in older athletes likely reflect cumulative stressors heavier academic responsibilities, leadership expectations, and sustained exposure to high-stakes competition consistent with findings

that prolonged life stress and training demands predict emotional fatigue and disengagement (Yang *et al.*, 2023) [35] and that exhaustion increases with persistent performance pressure absent adequate recovery (Amemiya & Sakairi, 2021) [2]. That self-efficacy remained statistically comparable across age groups suggests it may stabilize once established through early mastery experiences and supportive environments (Koryagina *et al.*, 2020) [11], acting as a buffer against stress effects (Ozkara, 2019) [20]. Practically, older

athletes may benefit from enhanced recovery protocols, load management, and counseling focused on emotion processing,

while all athletes can profit from continued efficacy-building practices to preserve this protective factor.

Table 5: Anxiety and Self-Efficacy vis-à-vis Age

Variables	Group	Mean	SD	T	Sig.	Decision on Ho	Interpretation
Cognitive Anxiety	18 to 22 years old	14.63	5.98	2.67	0.01	Reject	Significant
Cognitive Anxiety	23 to 27 years old	17.38	5.71	2.07			
Somatic Anxiety	18 to 22 years old	14.29	5.15	2.09	0.04	Reject	Significant
Somatic Anxiety	23 to 27 years old	16.13	4.81	2.09	0.04		
Emotional Exhaustion	18 to 22 years old	52.20	18.97	2 10	.18 0.03	Reject	Significant
Elliotioliai Exhaustioli	23 to 27 years old	60.44	18.26	2.10			
Anxiety Level	18 to 22 years old	36.78	8.93	2.51	2.51 0.01	0.01 Reject	Cignificant
Alixiety Level	23 to 27 years old	37.31	8.45	2.31	0.01	Reject	Significant
Self-efficacy	18 to 22 years old	14.63	5.98	0.34	0.73	Failed to Reject	Not Significant

Sex

Males reported significantly higher cognitive anxiety, emotional exhaustion, and overall anxiety than females, alongside higher self-efficacy; somatic anxiety did not differ significantly by sex. This pattern departs from commonly reported trends of higher anxiety in female athletes (e.g., Rice et al., 2019) [22], suggesting contextual moderators such as sport type, role expectations, or cultural norms. Male athletes may internalize stronger performance mandates and leadership burdens, which can elevate cognitive worry and exhaustion, even as feedback and role opportunities bolster

their self-efficacy (Winkelmann & Webb, 2022; Criticos *et al.*, 2020) [33, 4]. For females, comparatively lower anxiety but also lower self-efficacy may reflect structural barriers and gendered reinforcement patterns that depress perceived competence (Yasuda *et al.*, 2023; Mascaro *et al.*, 2023) [34, 17]. Intervention design should therefore diverge by sex: for males, prioritize burnout prevention, emotional literacy, and help-seeking norms; for females, emphasize confidence-building, leadership opportunities, and explicit mastery-oriented feedback to strengthen efficacy beliefs.

Table 6: Anxiety and self-efficacy vis-à-vis Sex

Variables	Group	Mean	SD	T	Sig.	Decision on Ho	Interpretation
Cognitive Anxiety	Female	14.39	5.90	2.27	0.02	Daigat	Significant
Cognitive Anxiety	Male	16.74	5.92	2.21	2.27 0.02	Reject	Significant
Somatic Anxiety	Female	14.11	4.58	1.83	0.07	Failed to Reject	Not Significant
Somatic Anxiety	Male	15.72	5.33	1.65	1.83 0.07	raneu to Reject	
Emotional Exhaustion	Female	50.64	18.27	2.74	0.01	Reject	Significant
Emotional Exhaustion	Male	59.13	18.93	2.74	2.74 0.01		
Anxiety Level	Female	33.96	7.95	2.60	0.01	Reject	Significant
Alixiety Level	Male	39.18	8.62	2.00 0.01	Reject	Significant	
Self-efficacy	Female	14.39	5.90	3.57	< 001	.001 Reject	Significant
Sen-efficacy	Male	16.74	5.92	3.37	<.001		Significant

 Table 7: Anxiety and self-efficacy vis-à-vis performance

Variables	Group	Mean	SD	F	Sig.	Decision on Ho	Interpretation
Cognitive Anxiety	Participant	16.23	5.98		0.26	Failed to Reject	Not Significant
	Bronze	17.20	5.45	1.37			
Cognitive Anxiety	Silver	14.20	5.47	1.37			
	Gold	14.11	6.41				
	Participant	15.54	5.14				Not Significant
Comotio Anvioty	Bronze	16.27	4.45	1.78	0.15	Failed to Reject	
Somatic Anxiety	Silver	13.60	5.17	1./6			
	Gold	13.41	4.95	1			
	Participant	25.84	9.97		0.22	Failed to Reject	Not Significant
Emotional Exhaustion	Bronze	25.87	7.80	1.50			
Emotional Exhaustion	Silver	21.00	8.83				
	Gold	22.33	9.61				
	Participant	57.61	19.13		0.16	Failed to Reject	Not Significant
Anviety I aval	Bronze	59.33	16.76	1.77			
Anxiety Level	Silver	48.80	16.63	1.//			
	Gold	49.85	19.92				
Self-efficacy	Participant	37.88	8.61			6 Failed to Reject	Not Significant
	Bronze	33.13	8.18	1.75	0.16		
	Silver	39.30	9.06	1./3			
	Gold	35.63	8.81				

Performance level

No statistically significant differences emerged in anxiety or self-efficacy across performance tiers (participant, bronze, silver, gold). However, descriptive patterns suggested lower anxiety and slightly higher efficacy among silver/gold medalists. That null findings coexist with meaningful trends is

unsurprising in heterogeneous university samples where overlapping academic pressures and similar team demands can equalize stress exposures (Amemiya & Sakairi, 2021) [2]. Still, the directional differences cohere with research showing that higher competitive attainment is associated with better psychological regulation and confidence (Rinaldy *et al.*, 2022; Marín-González *et al.*, 2022) [23, 16]. Practically, supports should be universal rather than reserved for top performers: all athletes face convergent stressors and can benefit from skills training in arousal regulation, cognitive reframing, and mastery-focused goal setting.

Synthesis and Practical Implications

The core picture is asymmetrical: day-to-day competitive anxiety is contained (low cognitive and somatic scores), but chronic load manifests as moderate emotional exhaustion. Age amplifies anxiety and exhaustion, males shoulder higher cognitive strain while maintaining stronger efficacy, and medal status does not cleanly stratify mental health. The upshot is a programmatic agenda that couple's recovery and emotional-regulation support (to address exhaustion) with efficacy-enhancing practices (to consolidate a key protective factor). Evidence-based components include mindfulness and breathing protocols, structured goal-setting and self-talk, coach education on autonomy-supportive climates, and accessible counselling each linked to reductions in anxiety and gains in resilience and self-efficacy (Walter et al., 2019; Tang et al., 2022; Wang et al., 2024) [30, 28, 31]. Tailoring by subgroup age-responsive recovery, sex-specific confidence, and help-seeking interventions can further optimize outcomes while supporting equitable participation and long-term athlete well-being.

4. Conclusions

This study contributes to the limited body of literature on psychological well-being among university athletes in Philippine state universities by focusing on the experiences of developing athletes rather than elite performers. The presence of moderate emotional exhaustion despite generally low anxiety levels offers a new perspective on how stress can accumulate gradually in athletic contexts, indicating that anxiety alone may not fully capture an athlete's psychological burden. The identification of moderate self-efficacy levels among respondents highlights a disconnect between athletes' belief in their abilities and actual performance outcomes, suggesting a need for sustained psychological support. Notably, older athletes and males reported higher levels of cognitive anxiety and emotional exhaustion, emphasizing how age and gender influence psychological responses to performance demands. The observed gender difference in self-efficacy, with males showing higher confidence, contributes to ongoing discussions on sex-based disparities in sports psychology and reinforces the importance of genderresponsive mental training programs.

Moreover, the absence of significant differences in anxiety and self-efficacy across levels of performance challenges the assumption that competitive success directly reflects psychological resilience, drawing attention to the role of personal and environmental factors in athlete development. In response to these findings, the MINDSET Intervention Program was developed to enhance mental resilience by reducing emotional exhaustion and reinforcing self-efficacy. The program is designed to be flexible and accessible, providing structured psychological support without disrupting academic and training schedules.

References

- 1. Amaro R, Brandão T. Competitive anxiety in athletes: Emotion regulation and personality matter. Kinesiology. 2023;55:108-119. DOI: 10.26582/k.55.1.12.
- 2. Amemiya R, Sakairi Y. The role of mental toughness and self-compassion in predicting burnout in Japanese student-athletes. Psychol Sport Exerc. 2021;52:101825. https://doi.org/10.1016/j.psychsport.2020.101825
- 3. Creswell JW. Mapping the developing landscape of mixed methods research. In: SAGE Handbook of Mixed Methods in Social and Behavioral Research. Thousand Oaks (CA): SAGE Publications; 2012, p. 45-68. https://doi.org/10.4135/9781506335193.n2
- 4. Criticos M, Layne T, Simonton K, Irwin C. Gender differences with anxiety, perceived competence, and grit in collegiate track and field throwers. J Phys Educ Sport. 2020;20(5):2751-2759. https://doi.org/10.7752/jpes.2020.05374
- 5. Ede MO, Ede TO, Ugwu LE. Cognitive test anxiety, academic stress, and academic performance: A serial mediation. Cogent Psychol. 2020;7(1):1796599. https://doi.org/10.1080/23311908.2020.1796599
- 6. Freire T, Ferreira G, Lima C. Cognitive anxiety and performance in university athletes: The role of self-efficacy and motivation. Int J Sport Exerc Psychol. 2020;18(1):15-29.
- 7. Ivankova N, Creswell J, Stick S. Using mixed-methods sequential explanatory design: From theory to practice. Field Methods. 2006;18(1):3-20. https://doi.org/10.1177/1525822x05282260
- Juárez F, Contreras F. Psychometric properties of the general self-efficacy scale in a Colombian sample. Int J Psychol Res. 2008;1(2):6-12. https://doi.org/10.21500/20112084.907
- 9. Kamal E, Fahd S, Bhatti R, Bhukhari F. Self-efficacy and academic stressors in university students. IUB J Soc Sci. 2022;2(1). https://doi.org/10.52461/ijoss.v2i1.713
- Kim H, Kim M, Kim HJ, Kim MS. Athlete burnout and its relationship with self-efficacy, motivational climate, and psychological well-being. Int J Environ Res Public Health. 2023;20(4):2821. https://doi.org/10.3390/ijerph20042821
- 11. Koryagina I, Mikhaylova E, Solovyeva T. Self-efficacy in youth sport: The role of psychological preparedness. Eur J Contemp Educ. 2020;9(4):924-935. https://doi.org/10.13187/ejced.2020.4.924
- 12. Leisterer S, Gramlich L. Having a positive relationship to physical activity: Basic psychological need satisfaction and age as predictors for students' performance in physical education. Sports. 2021;9(7):90. https://doi.org/10.3390/sports9070090
- 13. Liu S, Tang Y, Xu X, Li R. Self-efficacy and performance in university athletes: The mediating role of emotional regulation. J Sports Psychol Res. 2024;19(1):35-47.
- 14. Lochbaum M, Sisneros C, Cooper S, Terry PC. Pre-event self-efficacy and sports performance: A systematic review with meta-analysis. Sports. 2023;11(11):222. https://doi.org/10.3390/sports11110222
- 15. Mahmoud AA, El-Naggar AA, Abd El-Hady SM. Anxiety, stress and depression among university student-athletes. Med J Cairo Univ. 2021;89:1103-1110. https://doi.org/10.21608/mjcu.2021.175329
- 16. González MF, Pino PI, García FJ, Patiño MM. Relationship between sports and personal variables and

- the competitive anxiety of Colombian elite athletes of Olympic and Paralympic sports. Int J Environ Res Public Health. 2022;19(13):7791. https://doi.org/10.3390/ijerph19137791
- 17. Mascaro M, Barrera MD, Castillo L. Barriers to self-confidence among collegiate women athletes: A qualitative analysis. Women Sport Phys Act J. 2023;31(1):24-33.
 - https://doi.org/10.1123/wspaj.2022-0015
- 18. Mertens G, Boddez Y, Krypotos AM, Engelhard IM. A review on mental imagery in fear conditioning research 100 years since "Little Albert". Behav Res Ther. 2020;126:103556. https://doi.org/10.1016/j.brat.2020.103556
- 19. Moore EM, Simmons MA, Threatt J. Mental health challenges and substance use in student-athletes: Prevalence and impact. Front Sports Act Living. 2025;7:1527793. https://doi.org/10.3389/fspor.2025.1527793
- 20. Ozkara AB. The role of self-efficacy in reducing perceived stress among university athletes. J Educ Train Stud. 2019;7(3):70-76. https://doi.org/10.11114/jets.v7i3.4041
- 21. Raedeke TD, Smith AL. Development and preliminary validation of an athlete burnout measure. J Sport Exerc Psychol. 2001;23(4):281-306. https://doi.org/10.1123/jsep.23.4.281
- 22. Rice S, Gwyther K, Echarri SO, Baron D, Gorczynski P, Gouttebarge V, *et al.* Determinants of anxiety in elite athletes: A systematic review and meta-analysis. Br J Sports Med. 2019;53(11):722-730. https://doi.org/10.1136/bjsports-2019-100620
- 23. Rinaldy M, Suherman W, Arianto A, Ayudi A, Hartanto A. Confidence, motivation, and anxiety: Does it affect the performance of basketball athletes? Int J Multidiscip Res Anal. 2022;5(11):3165-3170. https://doi.org/10.47191/ijmra/v5-i11-25
- 24. Roberts RJ, Treasure DC, Conroy DE. Understanding anxiety and its regulation in sport: A revised cognitive-somatic model. Sport Exerc Perform Psychol. 2016;5(3):221-233. https://doi.org/10.1037/spy0000066
- 25. Rogowska AM, Wróbel P, Mazur J. The role of self-efficacy and motivation in predicting sports success: Evidence from young athletes. Int J Environ Res Public Health. 2022;19(6):3449. https://doi.org/10.3390/ijerph19063449
- 26. Salam M, Alias R, Bakar MN. Validation of the
- Cognitive-Somatic Anxiety Questionnaire in a Malaysian university athlete sample. Malays J Sport Sci Recreat. 2012;8(1):18-27.
- Schwarzer R, Jerusalem M. Generalized self-efficacy scale. In: Weinman J, Wright S, Johnston M, editors. Measures in health psychology: A user's portfolio. Causal and control beliefs. Windsor (UK): NFER-Nelson; 1995, p. 35-37.
- 28. Tang Y, Liu Y, Jing L, Wang H, Yang J. Mindfulness and regulatory emotional self-efficacy of injured athletes: Effects on burnout and competitive anxiety. Int J Environ Res Public Health. 2022;19(18):11702. https://doi.org/10.3390/ijerph191811702
- 29. Walter N, Nikoleizig L, Alfermann D. Effects of self-talk training on competitive anxiety, self-efficacy, volitional skills, and performance: An intervention study with junior sub-elite athletes. Sports. 2019;7(6):148. https://doi.org/10.3390/sports7060148

- 30. Walter O, Lochbaum M, Landers D. Psychological skills training and the self-regulation of learning in sport. J Appl Sport Psychol. 2019;31(1):1-17. https://doi.org/10.1080/10413200.2018.1442641
- 31. Wang Y, Lin H, Chen J. Competitive anxiety and mental resilience among university athletes: A longitudinal study. Behav Sci. 2024;14(2):156. https://doi.org/10.3390/bs14020156
- 32. Williams C. Research methods. J Bus Econ Res. 2011;5(3). https://doi.org/10.19030/jber.v5i3.2532
- 33. Winkelmann ZK, Webb T. Mental health literacy in male collegiate athletes: Stigma and help-seeking behavior. J Am Coll Health. 2022;70(8):2354-2360. https://doi.org/10.1080/07448481.2021.1912895
- 34. Yasuda K, Okuda H, Shinohara K. Promoting female athlete confidence: Addressing gender disparities in sport settings. J Sport Psychol. 2023;41(2):112-128.
- 35. Yang Y, Chen Y, Zhang C, Zhou Y. The impact of life stress on athlete burnout among university players: A longitudinal study. Front Psychol. 2023;14:1172565. https://doi.org/10.3389/fpsyg.2023.1172565
- 36. Yıldız MA. Examining the relationships between emotional exhaustion, psychological well-being and life satisfaction in university students. Educ Res Rev. 2020;15(3):113-121.
 - https://doi.org/10.5897/ERR2020.3876