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Mental Toughness Among First-Time Varsity Athletes at the University of Baguio

Cristy Grace O. Ramilo
University of Baguio
Corresponding Author: Cristy Grace O. Ramilo gracey@e.ubaguio.edu

A R T I C L E I N F O

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A B S T R A C T

This study examined mental toughness among 45 first-time varsity athletes at the University of Baguio during the 2024–2025 academic year. Using an explanatory sequential mixed-methods design, quantitative data were collected through the Sports Mental Toughness Questionnaire (SMTQ), followed by semi-structured interviews analyzed thematically. Results indicated a moderately high overall level of mental toughness, with constancy as the strongest dimension and control as the weakest. Four factors influenced mental toughness: social support systems, academic-athletic stressors, faith and spirituality, and intrinsic psychological qualities. Findings highlighted emotional control challenges associated with performance-related self-doubt. Based on these results, a Mental Toughness Development Program was proposed to enhance athletes' psychological preparation through practical strategies and structured activities.

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INTRODUCTION

Mental toughness has been globally recognized as a vital psychological factor for achieving athletic success. Numerous studies have consistently highlighted its significance across various levels of sports, including elite and collegiate competitions (Guszkowska & Wojcik, 2021). International research indicates that athletes with higher levels of mental toughness are better equipped to cope with pressure, leading to improved competitive performance (Sutoro et al., 2023). Regardless of gender, age, or skill level, a strong positive correlation exists between mental toughness and athletic performance across different sporting contexts (De La Cerna & Diego, 2022). Moreover, Bird et al. (2020) emphasize that fostering mental toughness can not only enhance the well-being of student-athletes but also reduce the stigma surrounding help-seeking behaviors. Supporting this, De La Cerna and Diego (2022) further assert that mentally tough athletes consistently excel in both motor and cognitive tasks, ultimately achieving superior sports outcomes.

Despite the extensive body of international research on mental toughness, there remains a notable gap in understanding this construct within the Philippine sporting context particularly among first-time collegiate athletes. The scarcity of empirical studies focused on this population highlights a critical need for localized research, especially given the unique academic and athletic pressures experienced by Filipino student-athletes (Cabanda, 2021; Mendizabal, 2024). Most existing research on Filipino athletes has concentrated on elite national-level performers, overlooking the distinct psychological demands faced by first-time collegiate athletes as they transition from high school to university-level sports (Arcangel, 2022).

Moreover, mental skills training an integral component in developing mental toughness is not widely implemented across Philippine universities. The absence of dedicated academic programs in sports psychology further highlights the systemic gap in psychological support for student-athletes (Cañiza & Leoncio, 2020). Given these challenges, there is an urgent need for localized, evidence-based interventions that can support the psychological development of first-time collegiate athletes. This study aims to fill that gap by examining the mental toughness of Filipino university freshmen athletes and advocating for structured psychological support mechanisms in collegiate sports.

The importance of addressing this gap cannot be overstated, as the limited integration of mental toughness training in Philippine university athletic programs suggests that many institutions may not be adequately supporting the psychological development of their student-athletes. As noted by sports psychology experts in the Philippines, while the field has been gaining traction locally, sports psychology is not yet offered as an academic program in any Philippine university, indicating a need for more comprehensive research and intervention programs. (Cañiza & Leoncio, 2020) This study addresses these gaps by specifically focusing on first-time collegiate athletes in the Philippines, contributing to the limited body of knowledge on mental toughness development in Philippine university athletic programs.

THEORETICAL REVIEW

Mental toughness has been widely acknowledged in international sports psychology as a crucial determinant of athletic success. It encompasses a constellation of psychological attributes that enable athletes to persevere through challenges, maintain focus under pressure, and consistently perform at high levels. A foundational study involving 131 expert coaches and 160 elite athletes identified twelve core components of mental toughness: motivation, coping skills, cognitive ability, discipline, goal-directedness, competitiveness, confidence, physical and mental preparedness, team unity, preparation skills, psychological hardiness, and ethics (De La Cerna & Diego, 2022). These elements serve not only as predictors of sports performance but also as indicators of an athlete's psychological readiness in high-stakes environments.

International research has consistently shown a strong positive correlation between mental toughness and sports outcomes, affirming its role as a significant psychological asset in elite competition. For example, cross-cultural comparisons between Australian and British rugby players revealed that while Australian athletes exhibited greater overall mental toughness and better tournament results, British athletes demonstrated higher self-confidence and control (Bird et al., 2020). Such findings highlight the role of cultural and environmental contexts in shaping how mental toughness is expressed and developed among athletes.

Beyond elite sports, mental toughness has gained increasing relevance in collegiate athletic programs, particularly due to the dual demands of academics and competition. Research on NCAA Division I athletes indicates that attributes such as control, challenge, and commitment are consistently observed across various collegiate sports, though levels of confidence may vary between teams (Pagdato et al., 2021). Athletes with higher mental toughness have been found to exhibit superior time management, stress coping, and academic resilience making it a critical skill set for success in university sports environments.

Structured training programs have emerged as effective interventions in developing mental toughness among college athletes. The Mental Toughness Training Circle (MTTC), for instance, includes general preparatory, specific preparatory, precompetitive, and competitive stages, incorporating skills such as positive thinking, mental imagery, goal setting, and relaxation (Bird et al., 2020). These programs have been shown to enhance both psychological resilience and physical self-awareness, empowering athletes to manage stress and sustain long-term personal growth.

In the Philippine context, research on mental toughness remains limited, particularly within the collegiate population. Most existing studies focus on elite national athletes, who have demonstrated high levels of self-efficacy and mental toughness traits such as rebound ability, pressure management, concentration, confidence, and motivation (De La Cerna & Diego, 2022). A qualitative study by Arcangel (2022) introduced three culturally grounded themes of Filipino mental toughness: *Kaisipang Pakikisama* (sense of cohesion), *Kaisipang Pagtindig* (resiliency), and *Kaisipang Pagwawagi* (winning mindset), emphasizing values such as collaboration, patriotism, and mental preparedness.

Despite these valuable insights, significant gaps remain particularly regarding first-time collegiate athletes in the Philippines. One of the few studies in this domain, conducted at Bulacan State University, found that grit and mental toughness are strong predictors of sports resilience (Mendizabal, 2024). However, the absence of widespread institutional support evidenced by the lack of formal sports psychology programs in Philippine universities underscores the urgent need for targeted research in this area (Cabanda, 2021).

First-time collegiate athletes face unique psychosocial transitions as they shift from high school to university-level sports. These students often encounter increased academic workloads, higher performance expectations, and diminished access to psychological support services. Without structured interventions, these athletes may struggle to develop the resilience necessary to succeed in both academic and athletic settings (Pagdato et al., 2021).

The current study aims to fill this critical gap by focusing specifically on the mental toughness development of first-time collegiate athletes in the Philippines. While international literature has established the significance of mental toughness and outlined effective training approaches, little is known about how these concepts translate within the Philippine collegiate system. By considering both global frameworks and local cultural contexts, this study seeks to contribute to a more comprehensive and culturally informed understanding of mental toughness in Philippine university sports.

Theoretical Framework

This study is anchored on three interrelated theoretical frameworks that collectively provide a comprehensive understanding of mental toughness development among first-time collegiate athletes: Identity Control Theory, Bioecological Systems Theory, and Basic Psychological Needs Theory. These frameworks offer valuable perspectives on identity formation, environmental interactions, and motivational processes that shape athletes' psychological resilience during their transition into collegiate sports.

Identity Control Theory, developed by Peter Burke (2016), focuses on how individuals develop, maintain, and verify their identities within various social contexts. It posits that people hold multiple role-based identities and strive to maintain consistency between their internal self-concepts and the feedback they receive from their environment. In the context of this study, the theory explains how first-time collegiate athletes navigate the shift from high school to university sports while constructing and adapting new athletic identities. The process of identity verification ensuring that others perceive them as they perceive themselves plays a vital role in how these athletes respond to expectations and stress, ultimately influencing the development of mental toughness.

Complementing this view is the Bioecological Systems Theory, introduced by Urie Bronfenbrenner (1979) and later refined with Stephen Ceci (1994), which emphasizes that human development results from the dynamic interactions between an individual and their multi-layered environment over time. The theory's PPCT model - process, person, context, and time suggests that development is shaped by both immediate and broader environmental systems,

including family, peers, coaches, institutions, and societal influences. For first-time collegiate athletes, the theory highlights how daily training routines, academic demands, support networks, and broader cultural norms interact to foster or hinder mental toughness development. These ongoing, meaningful interactions referred to as proximal processes serve as critical mechanisms through which mental resilience is cultivated.

Basic Psychological Needs Theory, a sub-theory of the broader Self-Determination Theory by Edward Deci and Richard Ryan (2000), identifies autonomy, competence, and relatedness as the three essential psychological needs for optimal functioning and well-being. This theory asserts that the satisfaction of these needs enhances intrinsic motivation, psychological resilience, and long-term growth. In relation to mental toughness, the theory explains that first-time collegiate athletes who experience autonomy in their training, feel competent in their abilities, and develop a sense of belonging within their teams are more likely to persevere in the face of adversity and stress. Conversely, when these needs are unmet, athletes may struggle with performance and motivation.

Taken together, these three theories offer a multidimensional lens through which mental toughness in first-time collegiate athletes can be understood. Identity Control Theory addresses the internal processes related to self-perception and role adaptation; Bioecological Systems Theory explores the external environmental influences and their developmental impact; and Basic Psychological Needs Theory focuses on the motivational dynamics that support or hinder psychological resilience. Integrating these frameworks allows for a richer, contextually grounded analysis of how mental toughness is formed and sustained in Filipino university student-athletes.

Significance of the Study

This investigation addresses critical gaps in sports psychology research by providing empirically-grounded insights into mental toughness development among a previously understudied population. The study's findings will benefit multiple stakeholder groups through enhanced understanding of psychological factors influencing first-time varsity athlete success. Coaches and athletic staff will gain evidence-based strategies for supporting athlete mental development during critical transition periods, while university administrators can utilize findings to inform policy decisions regarding student-athlete support services.

The research contributes significantly to the limited body of literature examining sports psychology within Filipino contexts, addressing inequities in access to culturally-relevant psychological resources for athletes (Guinto, 2016). By identifying specific factors that enhance or impede mental toughness development, the study provides foundations for designing targeted interventions that can improve both athletic performance and psychological well-being outcomes.

From a broader scientific perspective, this research advances theoretical understanding of mental toughness as a developmental construct while providing practical applications for athletic programs seeking to optimize

student-athlete experiences. The mixed-methods approach ensures comprehensive examination of both measurable mental toughness levels and the rich contextual factors that shape psychological development in competitive athletics.

Policy makers and educational leaders will benefit from evidence-based recommendations for supporting the holistic development of student-athletes, potentially influencing resource allocation and program development decisions. The study's alignment with Sustainable Development Goals, particularly those addressing health and well-being, quality education, and reduced inequalities, underscores its broader societal significance

METHODOLOGY

Study Design

This investigation employed a mixed-methods research design utilizing an explanatory sequential design framework (Creswell & Plano Clark, 2018) to examine mental toughness among first-time University of Baguio varsity athletes. The design began with quantitative data collection and analysis, followed by qualitative methods that provided context and explanation for initial findings. The explanatory sequential design enabled comprehensive baseline assessment through quantitative measurement while providing contextual understanding through qualitative inquiry, ensuring methodological coherence through the integration of quantitative breadth with qualitative depth.

Population and Locale of the Study

The target population of this study comprised all first-time varsity athletes at the University of Baguio during the 2024-2025 academic year. These student-athletes, aged 18 to 25 years, were undergoing their initial experience in collegiate-level sports while concurrently managing academic responsibilities. The study employed total enumeration sampling, whereby all individuals who met the inclusion criteria were invited to participate.

Eligible participants were full-time enrolled students, actively involved in the university's varsity sports programs, and willing to provide informed consent. Excluded from the study were transfer students with prior varsity experience, returning University of Baguio athletes, inactive or suspended players, individuals with long-term injuries, graduate students and professional athletes. For the qualitative phase, the researcher purposively selected 45 participants from the quantitative pool using maximum variation sampling to ensure broad representation across sports and disciplines and gender.

RESULTS AND DISCUSSION

Table 3 presents the mean scores, standard deviations, and verbal interpretations for each item and subscale, as well as the overall level of mental toughness.

Table 1. Level of Mental Toughness Among First-Time University of Baguio Varsity Athletes (N = 45)

STATEMENTS	N = 45		
	M	SD	VI
A. Confidence			
1. I can regain my composure if I have momentarily lost it.	2.69	0.82	MH
2. I have an unshakeable confidence in my ability.	2.53	0.76	MH
3. I have what it takes to perform well while under pressure.	2.82	0.75	MH
4. I have qualities that set me apart from other competitors.	2.91	0.73	MH
5. I interpret potential threats as positive opportunities.	3.24	0.80	MH
6. Under pressure, I can make decisions with confidence and commitment.	2.76	0.86	MH
Sub-Area Mean	2.83	0.52	MH
B. Constancy			
1. I am committed to completing the tasks I have to do.	3.44	0.62	H
2. I give up in difficult situations.*	3.36	0.80	H
3. I get distracted easily and lose my concentration.*	2.58	1.06	MH
4. I take responsibility for setting myself challenging targets.	3.27	0.65	H
Sub-Area Mean	3.16	0.52	MH
C. Control			
1. I worry about performing poorly.*	1.78	0.82	ML
2. I am overcome by self-doubt.*	2.49	0.79	ML
3. I get angry and frustrated when things do not go my way.*	2.56	1.08	MH
4. I get anxious about events I did not expect or cannot control.*	2.71	0.84	MH
Sub-Area Mean	2.38	0.61	ML
OVERALL	2.80	0.37	MH

Note. N = total number of respondents. M = mean. SD = standard deviation. VI = verbal interpretation. H = high. MH = moderately high. ML = moderately low. Items marked with an asterisk (*) are negatively worded and were reverse-scored prior to analysis.

Overall Mental Toughness

With an overall mean of 2.80 (SD = 0.37), the first-time varsity athletes at the University of Baguio demonstrated a moderately high level of mental toughness. This finding suggests that respondents possess a functional degree of psychological resilience, self-belief, and emotional regulation as they navigate their initial experience in collegiate-level sports, although considerable room for growth remains before an optimal level of mental toughness is attained. This result is consistent with the findings of Mendizabal (2024), who identified grit and mental toughness as strong predictors of sport resilience among collegiate athletes, suggesting that even at the onset of their varsity careers, student-athletes already possess foundational psychological attributes that support performance. The moderately high level also resonates with De La Cerna and Diego (2022), who noted that Filipino athletes across competitive contexts generally exhibit functional levels of mental toughness traits, including confidence and

motivation, although they may still require structured support to further develop these attributes.

From a theoretical standpoint, the result may be explained through the lens of Basic Psychological Needs Theory (Deci & Ryan, 2000). First-time athletes who experience some degree of autonomy in training, perceived competence in their skills, and a sense of relatedness within their teams are more likely to exhibit moderate to high levels of psychological resilience. The moderately high overall score suggests that these needs are partially met within the University of Baguio's athletic environment, although gaps remain, particularly in emotional control, as reflected in the Control subscale. To understand how this overall pattern manifests across the specific dimensions of mental toughness, the following sections examine the Confidence, Constancy, and Control subscales in turn.

Confidence

The Confidence Subscale (M = 2.83, SD = 0.52) was interpreted as moderately high, with tall six items falling within this range. The highest-scoring item was "I interpret potential threats as positive opportunities" (M = 3.24, SD = 0.80), indicating that athletes generally approach competitive challenges with a degree of optimism and cognitive reframing. By contrast, the lowest-scoring item was "I have an unshakeable confidence in my ability" (M =. 2.53, SD = 0.76), reflecting that although self-belie is present, it remains somewhat tentative, a pattern expected among first-time athletes still adjusting to collegiate-level competition. This finding is consistent with De La Cerna and Diego (2022), who found that Filipino collegiate athletes demonstrate moderate levels of self-efficacy and confidence in competitive settings. Through the lens of Bioecological Systems Theory (Bronfenbrenner, 1979; Bronfenbrenner & Ceci, 1994), the athlete's immediate environment, including coaches, teammates, and training routines, serves as proximal processes that gradually build confidence and self-belief. Building on this foundation of moderately high confidence, the next subscale, Constancy, reveals an even stronger pattern of psychological strength among the respondents.

Constancy

Constancy emerged as the strongest subscale (M = 3.16, SD = 0.52), with three of its four items individually rated as high: "I am committed to completing the tasks I have to do" (M = 3.44, SD = 0.62), "I give up in difficult situations" (M = 3.36, SD = 0.80, reverse-scored), and "I take responsibility for setting myself challenging targets" (M = 3.27, SD = 0.65). These findings indicate that respondents exhibit strong determination, commitment, and goal-directedness, hallmarks of the perseverance dimensions of mental toughness. This aligns with the observations of Pagdato et al. (2021), who reported that commitment and challenge are consistently strong attributes among collegiate athletes. Through Identity Control Theory (Burke, 2016), these high constancy scores may reflect athletes' active efforts to align their behavior with their emerging identities of their new athletic roles. In contrast to this consistently strong showing in Constancy, the Control subscale presents a markedly different picture, one that warrants closer examination.

Control

The Control subscale yielded the lowest mean across all dimensions (M = 2.38, SD = 0.61) and was interpreted as moderately low, the only subscale falling below the moderately high threshold. Two items registered as moderately low: "I worry about performing poorly" (M = 1.78, SD = 0.82, reverse-scored) and "I am overcome by self-doubt" (M = 2.49, SD = 0.79, reverse-scored). These results indicate that respondents tend to experience notable levels of performance-related worry and self-doubt, suggesting that emotional regulation and stress management represent significant areas of vulnerability.

This finding aligns with Cañiza and Leoncio (2020), who noted that the absence of mental skills training in Philippine University athletic programs leaves student-athletes with limited tools for managing psychological stressors. The low Control scores are further explained by Basic Psychological Needs Theory (Deci & Ryan, 2000): when athletes perceive that their needs for autonomy and competence are not fully met, particularly in high-pressure, first-time competitive situations, they become more susceptible to worry, frustration, and anxiety. The divergence between the strong Constancy scores and the weak Control scores is particularly noteworthy, as it suggests that while first-time varsity athletes at the University of Baguio are committed and goal-directed, they simultaneously struggle to manage their emotional responses to pressure, a pattern that points to the urgent need for targeted emotional regulation interventions.

Factors That Affect the Mental Toughness of First-Time Varsity Athletes

The qualitative phase involved semi-structured interviews with all 45 first-time varsity athletes (P1–P45). Using Braun and Clarke's (2006) six-phase thematic analysis, four major themes emerged as factors influencing mental toughness. These themes are presented below in order of the frequency with which they were referenced across the 45 interview transcripts, beginning with the most consistently cited factor, Social Support Systems, followed by Academic-Athletic Stressors, Faith and Spirituality, and Intrinsic Psychological Qualities. Supporting participant quotations, coded P1 through P45, are included for each theme and have been de-identified to protect confidentiality.

Theme 1: Social Support Systems

The most consistently cited factor across all participants was the presence, or absence, of social support from coaches, family, teammates, and friends. Virtually all respondents described their support network as a primary pillar of their mental toughness, with sub-themes emerging around coach mentorship, family encouragement, and peer solidarity.

Coaches were described as the primary agents of mental challenge and growth. Participants shared that their coaches pushed them beyond perceived limits, provided corrective feedback, and modeled mental discipline. According to P1, "My coaches challenge me to go beyond my comfort zone, especially during intense training. They emphasize mental discipline as much as physical

skill." P6 similarly stated, "First is my coach would always say 'Strong mind, strong body,' it means if you have a strong mind, your body will be strong too."

Family support was described as the emotional foundation that sustained athletes during difficult periods. According to P13, "My mom has always been my biggest supporter and motivation, reminding me why I started." Similarly, P17 stated, "My family encouraged me to keep going even after setbacks."

Teammates and team culture also played a central role in shaping athletes' psychological outlook. According to P1, "Being relied on by teammates pushes me to step up, training several times, and feel confident in my ability to perform under pressure." P11 similarly shared, "My team became my second family."

This theme is consistent with Bioecological Systems Theory (Bronfenbrenner, 1979; Bronfenbrenner & Ceci, 1994), wherein the microsystem, comprising coaches, family, and peers, serves as the most immediate and influential environment shaping an athlete's psychological development. The findings also align with De La Cerna and Diego (2022), who identified social support as a critical enabler of mental toughness among Filipino athletes. While social support systems provided a strong external foundation for the athletes, participants also identified academic and athletic demands as competing pressures that tested their resilience, giving rise to the second major theme.

Theme 2: Academic-Athletic Stressors

A second major theme centered on the dual demands of academic life and varsity sports commitments. Participants uniformly identified the management of competing priorities as a significant stressor influencing their mental state, with sub-themes emerging around time management challenges, unsupportive academic environments, and performance pressure.

Time management was cited as both the primary coping strategy and a persistent challenge. According to P2, "Lack of time management, self-doubt, laziness, and physical health, because of those, I started to think of a way that I can cope." P10 similarly stated, "Balancing training schedule and class schedule is my stressor; it often makes me feel overwhelmed but it teaches me time management and focus."

Several athletes reported experiencing a lack of institutional understanding from faculty. P3 explained, "It's kind of hard because some of my teachers don't understand what it means to be a student-athlete, for example, my math teacher, even if I am always present, not late, and pass all the requirements, she gave me a failing grade." P9 similarly shared, "Inconsiderate teachers and very tight schedules are a big factor to my stress."

Performance pressure, particularly the fear of letting teammates and coaches down, was also prominent. P1 noted, "My biggest stressors are grades needed to stay eligible and meeting team and coach expectations, fear of letting teammates down." P6 added, "Having to train for a competition even if it is exam week is very stressful since you need energy to train and review for exams but you need to control food intake for your weight."

These findings echo Pagdato et al. (2021), who documented that first-time collegiate athletes are especially vulnerable to the dual demands of academics and sports. The stressors identified align with the moderately low Control scores

obtained in the quantitative phase, affirming that emotional dysregulation is partly driven by the overwhelming external demands placed on student-athletes. Beyond these external academic and athletic pressures, many participants also drew on an internal source of strength rooted in personal belief systems, forming the basis of the third theme.

Theme 3: Faith and Spirituality

A third theme that distinctly emerged, particularly among Filipino athletes, was the role of faith and spirituality as a psychological anchor. Across multiple sports disciplines, athletes attributed their mental resilience to their belief in God and the practice of prayer.

According to P3, "Always trust God; pray for strength and protection." P6 stated, "God, because when I feel anxious or worried, I always pray." P16 reflected, "My mental toughness was shaped by prayers and guidance of God. Not giving up easily." Several athletes also incorporated pre-competition spiritual routines, as P6 described: "I pray first, then followed by meditation, then after that I warm up."

This theme reflects a distinctly Filipino cultural dimension of mental toughness, resonating with Arcangel's (2022) culturally grounded framework, particularly Kaisipang Pagtindig (resiliency), which encompasses values such as faith, community, and inner strength drawn from cultural and spiritual identity. The prominence of this theme suggests that mental toughness interventions in the Philippine context should recognize and integrate the cultural and spiritual dimensions of athlete resilience, rather than relying solely on Western psychological frameworks. In addition to these external and cultural influences, participants also pointed to internal, self-driven qualities that reinforced their capacity to persevere, giving rise to the fourth and final theme.

Theme 4: Intrinsic Psychological Qualities

The fourth theme centered on the personal, internal qualities that athletes identified as contributors to their mental strength, with sub-themes emerging around discipline, perseverance, positive mindset, optimism, and self-belief.

Discipline was the most frequently cited intrinsic quality. According to P10, "Discipline, patience, focus, and strategic thinking contribute most to my mental strength." Perseverance was equally prominent, appearing across multiple interviews in statements such as "not giving up easily." P18 summarized this sentiment: "I believe discipline, perseverance, and self-belief contribute most to my mental strength. I stay committed to my training even when it's difficult, and I always remind myself why I started."

Several athletes also described a growth mindset toward setbacks. P10 reflected, "Every loss taught me resilience, making me analyze my mistakes for future competitions." P1 similarly noted, "Knowing my limits helps me push myself without burning out, and recognizing when I need to ask for help from coaches, friends, or teammates instead of trying to handle everything alone."

These intrinsic qualities align directly with the construct dimensions measured by the SMTQ, particularly Confidence and Constancy, and are

consistent with the quantitative finding that these two subscales were stronger than Control. The findings support Identity Control Theory (Burke, 2016), wherein athletes who have developed a clear and stable athletic identity are better equipped to draw on internal resources during adversity.

Based on the integrated findings from the quantitative (SMTQ) and qualitative (interview) phases, a Mental Toughness Development Program (MTDP) is proposed for first-time varsity athletes at the University of Baguio. The program is informed directly by the athletes' identified needs, preferred modalities, and realistic scheduling constraints.

Needs Assessment Summary

The interview data revealed several needs that informed the design of the proposed program. Emotional control was the most commonly identified weakness, cited by the majority of respondents across all sports, while confidence and self-belief, focus, and the management of performance anxiety were also frequently mentioned. Athletes expressed a preference for interventions integrated into regular training sessions and supplemented by occasional short workshops, with a realistic time commitment of 15 to 60 minutes per session, one to three times per week. Several barriers to participation were also identified, including busy academic schedules, training fatigue, stigma surrounding mental health, and unsupportive institutional environments. In terms of content, the most requested activities included visualization and mental imagery, positive self-talk, goal-setting, mentorship, relaxation and mindfulness practices, and pressure simulations. Taken together, these findings directly informed the structure and content of the proposed program.

Proposed Program to Improve the Mental Toughness of First-Time Varsity Athletes

Guided by the quantitative and qualitative findings, the Mental Toughness Development Program (MTDP) is designed to meet the following specific objectives:

a. To reduce performance-related worry and self-doubt among first-time varsity athletes by strengthening emotional regulation through structured breathing, mindfulness, and cognitive restructuring activities (Control).
b. To reinforce athletes' self-belief and composure under pressure through goal-setting, visualization, and positive self-talk practices that build on already moderately high levels of confidence (Confidence).
c. To sustain and further develop athletes' commitment and goal-directedness through pressure simulation drills and mentorship activities that draw on existing peer and coach support systems (Constancy).

The MTDP is designed to strengthen all three dimensions of mental toughness, namely Confidence, Constancy, and Control, with primary emphasis on emotional regulation (Control), which emerged as the weakest dimension in both the quantitative and qualitative data. Table 4 presents the corresponding activity matrix developed to meet these objectives.

Table 2. Mental Toughness Development Program (MTDP): Activity Matrix

Phase	Focus Dimension	Activity	Format	Duration	Frequency
1	Control	Breathing and mindfulness exercises (4-7-8 or 4-2-8-2 breathing technique)	Integrated into warm-up	10 min	Daily
1	Control	Emotional regulation workshops (identifying triggers, cognitive restructuring)	Short workshop	30 min	Weekly
2	Confidence	Goal-setting sessions (short-term, achievable micro-goals)	Integrated into practice	15 min	Weekly
2	Confidence	Visualization and mental imagery training (pre-competition mental rehearsal)	Integrated into pre-competition warm-up	10–15 min	Before each competition
2	Confidence	Positive self-talk and cognitive restructuring (reframing negative thoughts)	Workshop and daily practice card	20 min	Weekly
3	Constancy	Pressure simulation drills (practice under game-like pressure conditions)	Integrated into training	20–30 min	Bi-weekly
3	All	Mentorship sessions (experienced varsity athletes share mental toughness strategies)	Group or one-on-one	30 min	Monthly
3	All	Reflection and journaling (post-training and post-competition mental debriefs)	Individual	10 min	After each training session or competition

Implementation Recommendations

Successful implementation of the MTDP requires institutional support mechanisms that reflect the recommendations of the athletes themselves. Mental skills should be integrated into regular training rather than treated as separate sessions, as embedding these activities within existing practice schedules reduces both the time burden on athletes and the stigma associated with seeking psychological support.

Athletes also expressed a strong desire for access to a sports psychologist or counselor with training tailored to athletic contexts, a resource currently unavailable at the University of Baguio. Given the prominence of unsupportive academic environments as a theme in the qualitative findings, the university administration should consider implementing a formal student-athlete academic accommodation policy to reduce conflicts between academic and athletic responsibilities.

A peer mentorship program is likewise recommended, wherein senior varsity athletes are trained to serve as mental toughness mentors for incoming first-time varsity members, leveraging the strong influence of social support identified in Theme 1. Finally, because athletes identified stigma around mental health as a key barrier to participation, a campus-wide destigmatization campaign normalizing mental wellness in sports should accompany the implementation of the MTDP.

The proposed MTDP is consistent with the Mental Toughness Training Circle (MTTC) framework (Sutoro et al., 2023), which integrates mental skills training across preparatory and competitive stages. It also responds to the call of Cañiza and Leoncio (2020) for structured psychological support in Philippine university athletic programs and advances the recommendations of Cabanda (2021) for evidence-based, locally grounded interventions for Filipino student-athletes.

CONCLUSIONS AND RECOMMENDATIONS

This study examined the mental toughness of 45 first-time varsity athletes at the University of Baguio through a mixed-methods explanatory sequential design. Findings from the Sports Mental Toughness Questionnaire revealed that the athletes demonstrated a moderately high overall level of mental toughness ($M = 2.80$, $SD = 0.37$), with Constancy emerging as the strongest dimension ($M = 3.16$) and Control as the most vulnerable ($M = 2.38$). Qualitative analysis of semi-structured interviews identified four major factors influencing mental toughness: Social Support Systems, Academic-Athletic Stressors, Faith and Spirituality, and Intrinsic Psychological Qualities. Together, these findings depict a population that is determined and committed, yet emotionally underprepared for the psychological demands of first-time collegiate athletic competition.

For future researchers, follow-up studies employing a quasi-experimental design are recommended to test the effectiveness of the proposed MTDP. Qualitative studies exploring the specific cultural mechanisms through which faith and spirituality build mental toughness among Filipino athletes are also warranted. For policymakers, university sports programs should be aligned with Sustainable Development Goal 3 (Good Health and Well-Being) and Sustainable

Development Goal 4 (Quality Education) by mandating psychological support services within university athletic departments.

FURTHER STUDY

This study acknowledges several limitations. The Constancy (α = .470) and Control (α = .669) subscales demonstrated poor internal consistency in the pilot test, which limits the reliability of subscale-level inferences. Total enumeration sampling, while ensuring comprehensive coverage of the target population, limits the generalizability of findings beyond the University of Baguio context. Furthermore, the cross-sectional nature of the quantitative phase does not allow for causal inferences regarding the development of mental toughness over time. Future studies should consider longitudinal designs and validated instruments with stronger subscale reliability.

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