

Burnout and Athletic Performance of Collegiate Basketball Student-Athletes: Exploring Perceived Causes, Effects and Coping Mechanisms

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Abstract

This study examined the relationship between burnout, coping mechanisms, and athletic performance among collegiate basketball student-athletes in the National University System. Anchored on Self-Determination Theory and the Cognitive-Affective Model of Athletic Burnout, the study investigated the perceived causes of burnout, burnout dimensions, coping mechanisms, and their influence on athletic performance. A quantitative-correlational research design was employed involving 254 collegiate basketball student-athletes from nine National University campuses. Universal sampling was utilized, and data were collected using the Athlete Burnout Questionnaire (ABQ), the Athletic Coping Skills Inventory-28 (ACSI-28), a Self-Determination Theory-guided questionnaire, and a researcher-developed athletic performance instrument. Descriptive statistics, Spearman's rank-order correlation, reliability analysis, and mediation analysis were performed using SPSS. The findings revealed that respondents generally experienced low levels of burnout, with emotional and physical exhaustion emerging as the most evident burnout dimension, while sport devaluation was least evident. The respondents generally did not perceive autonomy, competence, and relatedness as major causes of burnout and demonstrated frequent use of adaptive coping mechanisms, particularly coachability, confidence and motivation, coping with adversity, and goal setting. Burnout was found to negatively influence cognitive and physical aspects of athletic performance, whereas motivation and effort remained relatively stable. Coping mechanisms demonstrated only a small mediating effect on the relationship between burnout and athletic performance, indicating that burnout continues to influence performance despite the presence of adaptive coping strategies. The study concludes that maintaining supportive athletic environments, promoting athlete-centered coaching, strengthening psychological well-being, and implementing comprehensive burnout prevention programs are essential for sustaining athletic performance among collegiate basketball student-athletes. The findings further support the development of evidence-based institutional interventions that integrate mental health promotion, recovery strategies, and athlete support services. The study aligns with Sustainable Development Goal (SDG) 3: Good Health and Well-Being by promoting the psychological well-being of collegiate student-athletes and SDG 4: Quality Education by supporting balanced academic and athletic development within higher education institutions. The study contributes to public health and educational sustainability by providing evidence that may guide universities, coaches, and sports professionals in developing sustainable athlete support systems that enhance mental well-being, resilience, and long-term athletic performance.

Keywords: Athlete Burnout, Athletic Performance, Collegiate Basketball Student-Athletes, Coping Mechanisms, Psychological Well-Being, Self-Determination Theory, Sports Psychology

1. Introduction

Basketball is one of the most physically and mentally demanding sports, requiring athletes to perform repeated high-intensity movements while making rapid decisions under pressure (Garcia et al., 2024; Peña et al., 2024; Daub et al., 2024). In the Philippines, basketball is deeply embedded in the nation's culture and has evolved from a recreational activity into a highly competitive sport supported by educational institutions and athletic organizations (Manila Standard, 2023; Devgan, 2025; Cooper, 2025). For collegiate student-athletes, participation in basketball involves balancing rigorous academic responsibilities with intensive athletic demands, increasing their vulnerability to stress and burnout (Gaston-Gayles & Hu, 2024). Burnout negatively affects motivation, emotional well-being, and athletic performance, highlighting the importance of understanding its causes, effects, and coping mechanisms among collegiate basketball student-athletes. This study examines the relationship between burnout and athletic performance while exploring the role of coping mechanisms in managing burnout and sustaining performance.

Basketball demands high levels of physical endurance, agility, cognitive processing, and teamwork, making athletes susceptible to physical and psychological strain (Garcia et al., 2024; Peña et al., 2024). As basketball continues to grow in popularity in the Philippines through institutional support and international participation, student-athletes are increasingly exposed to pressures that affect both their academic and athletic lives (Manila Standard, 2023; Devgan, 2025). Collegiate student-athletes face the dual responsibility of meeting academic expectations while maintaining competitive athletic performance. Although a strong student-athlete identity can enhance motivation and life satisfaction, it also increases performance pressure and the risk of emotional exhaustion. When athletic and academic demands exceed available personal resources, athletes become more vulnerable to burnout, which is characterized by physical and emotional exhaustion, reduced accomplishment, and sport devaluation (Story et al., 2024; Gerber et al., 2024). Emotional regulation plays a significant role in preventing burnout. Student-athletes with higher emotional intelligence demonstrate lower burnout symptoms, while supportive coaching environments promote motivation and autonomy. Conversely, high-pressure coaching and emotionally demanding environments increase stress and reduce athlete satisfaction (Xue et al., 2024; Cabañas-Sánchez et al., 2024). The psychological challenges experienced by elite Filipino athletes further demonstrate the impact of burnout on performance. Reports involving Hidilyn Diaz, Alex Eala, and Tony Dela Cruz illustrate how prolonged competitive pressure, emotional exhaustion, and anxiety affect athletes regardless of competitive level (GMA News, 2021; The Philippine Star, 2021; ABS-CBN Corporation, 2025). These experiences emphasize that burnout is a critical concern requiring greater attention in collegiate sports. Burnout has been associated with reduced motivation, impaired concentration, declining athletic performance, and diminished quality of life (Xu et al., 2025; Xue et al., 2024). Student-athletes who simultaneously manage academic and athletic responsibilities often experience increased psychological distress, particularly during periods of high workload. Although previous Philippine studies have examined burnout and coping separately (De Café-Eta & Salva, 2022; Lim et al., 2023), limited research has investigated how burnout, coping mechanisms, and athletic performance interact within a single framework, particularly among collegiate basketball student-athletes. National University provides an appropriate setting for this investigation because of its established academic reputation and competitive participation in collegiate athletics. Examining burnout among its basketball student-athletes contributes to understanding how perceived causes, burnout experiences, coping mechanisms, and athletic performance are interrelated, thereby supporting the development of evidence-based interventions for collegiate sports.

Existing literature consistently identifies athlete burnout as a multidimensional psychological condition resulting from prolonged exposure to physical, emotional, and environmental stressors (Gustafsson et al., 2011; Gustafsson et al., 2017). Longitudinal studies indicate that increasing training demands, competitive pressure, and insufficient recovery contribute significantly to burnout, while resilience and social support serve as protective factors (Dislere et al., 2025). Psychological characteristics substantially influence burnout susceptibility. High levels of maladaptive perfectionism are associated with greater emotional exhaustion and stress, whereas adaptive perfectionism promotes healthy achievement when properly managed (Valdez & Juan, 2020; Gotwals et al., 2003). Likewise, Mental fatigue negatively affects cognitive functioning, technical skills, reaction time, and decision-making during basketball performance (Cao et al., 2022; Daub et al., 2024). Burnout has also been linked with anxiety, depression, insomnia, and reduced life satisfaction (De Francisco et al., 2020), emphasizing the importance of recovery, supportive coach-athlete relationships, and psychological monitoring (Gerber et al., 2024; Glandorf et al., 2023). Research further demonstrates that burnout adversely affects athletic performance by reducing motivation, persistence, concentration, and competitive consistency (Olsson et al., 2024). Psychological factors such as competitive anxiety, unmet psychological needs, and perfectionistic concerns further intensify burnout and diminish intrinsic motivation. Collegiate student-athletes are particularly vulnerable because they must simultaneously manage demanding academic responsibilities and athletic commitments. Protective

psychological characteristics, including grit and resilience, reduce burnout risk and promote sustained motivation and well-being (Gray et al., 2023). Among Filipino athletes, studies consistently report moderate burnout levels associated with perfectionism, prolonged stress, and inadequate psychosocial support, highlighting the need for comprehensive mental health programs and institutional support (Caray et al., 2025; Broa et al., 2025; De Café-Eta and Salva, 2024; Sosa et al., 2025). The literature also identifies coping strategies as essential in mitigating burnout. Time management, problem-solving, relaxation techniques, social support, and psychological skills training (Seo et al., 2023) strengthen resilience and reduce burnout symptoms (Ines, 2021; Choi et al., 2020; Nicholls et al., 2022; Nuetzel, 2023). Despite these findings, existing research indicates limited evidence regarding the effectiveness of coping strategies specifically among collegiate basketball student-athletes and their influence on athletic performance. Overall, the reviewed literature suggests that burnout results from the interaction of psychological characteristics, environmental demands, and coping resources. Although previous studies have extensively examined burnout, coping, and psychological well-being independently, limited research has integrated these variables into a comprehensive model explaining athletic performance among Filipino collegiate basketball student-athletes, thereby justifying the need for the present study.

Athlete burnout has become a growing concern across international sports because of increasing training demands, competitive pressure, and the need to balance multiple responsibilities. Longitudinal and sport psychology studies consistently identify burnout as a multidimensional condition characterized by emotional and physical exhaustion, reduced sense of accomplishment, and sport devaluation, all of which negatively affect athletes' mental health and performance (Dislere et al., 2025; Gerber et al., 2024; Glandorf et al., 2023; Olsson et al., 2024). Psychological factors such as perfectionism, competitive anxiety, unmet psychological needs, and mental fatigue further increase athletes' vulnerability to burnout, while resilience, grit, social support, and adaptive coping strategies serve as protective factors (Gray et al., 2023; Cao et al., 2022). Nationally, basketball remains one of the most prominent sports in the Philippines and occupies an important role in educational institutions and competitive collegiate athletics (Manila Standard, 2023; Devgan, 2025). Filipino student-athletes experience comparable psychological and physical demands as they strive to balance academic responsibilities with intensive athletic training. Local studies report moderate levels of burnout among Filipino athletes, particularly those demonstrating maladaptive perfectionism, prolonged stress, limited recovery, and insufficient psychosocial support (Caray et al., 2025; Broa et al., 2025; De Café-Eta and Salva, 2024; Sosa et al., 2025). Experiences shared by elite Filipino athletes such as Hidilyn Diaz, Alex Eala, and Tony Dela Cruz further illustrate how sustained competitive pressure contributes to emotional exhaustion, anxiety, and reduced motivation (GMA News, 2021; The Philippine Star, 2021; ABS-CBN Corporation, 2025). At the institutional level, collegiate student-athletes encounter additional challenges associated with dual academic and athletic roles. National University, recognized for both academic excellence and competitive participation in collegiate sports, provides an appropriate context for examining burnout among basketball student-athletes. Its established athletic program offers an opportunity to investigate how burnout, coping mechanisms, and athletic performance interact within a competitive university environment while generating evidence that may support athlete development and institutional well-being initiatives.

This study is anchored on Self-Determination Theory (SDT), which explains that optimal motivation, well-being, and performance are achieved when the psychological needs for autonomy, competence, and relatedness are satisfied (Deci & Ryan, 1985, 2000; Ryan & Deci, 2017; Hagger & Chatzisarantis, 2007; Ntoumanis et al., 2009). In athletic settings, supportive environments promote autonomous motivation and sustained engagement, whereas controlling environments that frustrate these psychological needs increase the likelihood of disengagement and burnout (Choi et al., 2020; Kim & Choi, 2024; Wu et al., 2024; Ryan & Deci, 2017). The study also adopts the Cognitive-Affective Model of Athletic Burnout, which explains burnout as the outcome of prolonged exposure to situational stressors that athletes cognitively appraise as exceeding their coping resources (Smith, 1986; Lazarus & Folkman, 1984; Hobfoll, 1989, 2001). Academic demands, training intensity, and competitive pressure contribute to emotional and psychological stress, which may eventually develop into physical and emotional exhaustion, reduced sense of accomplishment, and sport devaluation when effective coping resources are insufficient. Integrating these frameworks provides a comprehensive explanation of how situational demands influence psychological need satisfaction, motivational processes, cognitive appraisal, stress responses, coping mechanisms, burnout, and athletic performance. Athletes who maintain autonomous motivation and adaptive coping strategies are more likely to sustain resilience and performance, whereas maladaptive coping and prolonged psychological need frustration increase burnout risk and negatively affect athletic performance (Deci & Ryan, 1985, 2000; Ryan & Deci, 2017; Smith, 1986; Choi et al., 2020; Kim & Choi, 2024; Wu et al., 2024). The conceptual framework further explains that training load, coaching style, academic demands, psychological need frustration, burnout dimensions, and coping mechanisms interact to influence perceived athletic performance and guide the development of intervention strategies. Figure and framework descriptions have been incorporated into this narrative without reproducing the original figures.

Although previous international and local studies have established the relationship between burnout and athletes' psychological well-being, several important research gaps remain. Existing literature has primarily examined burnout, coping strategies, and athletic performance independently rather than investigating their combined

relationships within a comprehensive explanatory model (De Caf -Eta & Salva, 2022; Lim et al., 2023). Similarly, while burnout has been associated with declining motivation, emotional exhaustion, and reduced athletic performance (Olsson et al., 2024; Giusti et al., 2021), limited empirical evidence explains how coping mechanisms influence this relationship, particularly among collegiate basketball student-athletes in the Philippine setting. Furthermore, few local quantitative studies have examined gender differences and the correlational relationships among burnout, coping mechanisms, and athletic performance using an integrated framework. Research focusing specifically on basketball student-athletes remains limited despite the sport's unique physical, psychological, and cognitive demands (Gerber et al., 2024). Likewise, the effectiveness of coping strategies such as resilience, psychological capital, social support, mindfulness, and time management has not been extensively investigated within collegiate basketball populations (Gerber et al., 2024). These gaps justify the present study, which seeks to examine the relationships among perceived causes of burnout, burnout dimensions, coping mechanisms, and athletic performance among collegiate basketball student-athletes. By integrating these variables within a single quantitative framework, the study aims to generate evidence that may support the development of intervention programs designed to reduce burnout, strengthen coping capacities, and enhance athletic performance and overall well-being among collegiate basketball student-athletes.

The present study aligns with several United Nations Sustainable Development Goals (SDGs) by addressing the psychological well-being, educational success, and sustainable development of collegiate basketball student-athletes. SDG 3 – Good Health and Well-Being is directly supported because the study focuses on athlete burnout, emotional exhaustion, psychological well-being, and coping mechanisms that promote mental health and reduce the adverse effects of prolonged physical and psychological stress. By identifying the perceived causes and effects of burnout and the coping strategies used by collegiate basketball student-athletes, the study contributes to evidence-based interventions that support healthier athletic participation and overall well-being (Gerber et al., 2024; Glandorf et al., 2023; Xue et al., 2024). SDG 4 – Quality Education is likewise relevant because collegiate student-athletes are expected to balance academic responsibilities with competitive sports participation. Understanding how burnout influences motivation, concentration, and performance may assist educational institutions in developing policies and student support systems that promote academic achievement while safeguarding student-athletes' physical and psychological welfare (Gaston-Gayles & Hu, 2024). The study also supports SDG 8 – Decent Work and Economic Growth by promoting sustainable athlete development. Enhancing athletic performance through effective burnout management and adaptive coping strategies contributes to long-term athlete productivity, career sustainability, and institutional excellence in collegiate sports. Findings may guide coaches, sports psychologists, and athletic administrators in implementing evidence-based programs that improve athlete performance while protecting health and well-being (Gerber et al., 2024). Overall, the study contributes to these SDGs by generating empirical evidence that may strengthen athlete support systems, promote mental health, and encourage sustainable participation in collegiate sports.

The study contributes to public health sustainability by increasing understanding of burnout prevention and promoting coping mechanisms that support the mental and emotional well-being of collegiate basketball student-athletes. Identifying factors associated with burnout may help reduce psychological distress while encouraging healthier participation in competitive sports (Gerber et al., 2024; Glandorf et al., 2023). It also supports educational sustainability by providing evidence that may assist higher education institutions in developing balanced academic and athletic environments. The findings may inform institutional policies and student support initiatives that enable student-athletes to fulfill both academic and athletic responsibilities while maintaining overall well-being (Giusti et al., 2024). From a socio-economic and community sustainability perspective, the study may benefit coaches, athletic trainers, sports psychologists, educational institutions, and sports organizations by providing evidence-based information for designing burnout prevention programs, improving athlete development, and strengthening support systems within collegiate sports. Such initiatives may contribute to sustained athlete participation, improved performance, and healthier sports communities. The study further contributes to institutional sustainability by supporting the development of comprehensive athlete welfare programs that integrate psychological support, recovery strategies, and evidence-based coaching practices. These initiatives may help educational institutions maintain competitive athletic programs while promoting student-athletes' long-term health, motivation, and performance. Overall, the study advances multidisciplinary sustainability by integrating perspectives from sports psychology, education, health, and athletic management to improve the well-being and performance of collegiate basketball student-athletes while supporting sustainable institutional practices in higher education and sports development.

2. Material and methods

2.1 Research Design

The study employed a quantitative-correlational research design to examine the perceived causes, effects, and coping mechanisms of burnout and their relationship with athletic performance among collegiate basketball student-athletes. This design enabled the objective measurement of psychological constructs and the statistical examination of relationships among variables without experimental manipulation (Zhang et al., 2020; Kim & Choi, 2024). Because the study sought to determine the degree, direction, and predictive relationships among burnout, coping mechanisms, and athletic performance, the correlational approach was considered appropriate. Although the design does not establish causality, interpretations were guided by accepted principles of non-experimental research, including temporality, strength and direction of association, plausibility, and theoretical coherence (Stevens et al., 2025). Previous theoretical and empirical evidence also supports the conceptual ordering of burnout as an antecedent of reduced athletic performance despite the limitations of cross-sectional data (DeFresse & Smith, 2021). Standardized and validated questionnaires were used to assess burnout and coping mechanisms, while athletic performance was measured through sport-specific self-reported performance indicators. Descriptive statistics summarized respondents' demographic characteristics and the levels of burnout, coping mechanisms, motivation, and athletic performance, providing baseline information for subsequent correlational analyses (Gustafsson et al., 2023; Kim & Choi, 2024). The instrument was pilot-tested with thirty (30) qualified respondents, validated by experts in psychology and physical education, and used with the permission of its original proponent. Overall, the design provided a systematic framework for examining the relationships among psychological well-being, coping mechanisms, and athletic performance and for generating evidence-based recommendations to reduce burnout and improve athlete performance (Gustafsson et al., 2023; Wu et al., 2024).

2.2 Locale of the Study

The study was conducted across the National University (NU) system in the Philippines, which includes the campuses of NU Baliwag, NU Clark, NU Dasmariñas, NU East Ortigas, NU Fairview, NU Laguna, NU Lipa, NU Manila, and NU MOA. These campuses provide a competitive collegiate sports environment where student-athletes experience both academic and athletic demands, making them appropriate settings for investigating burnout, coping mechanisms, and athletic performance (Madigan & Nichols, 2021). The study covered the academic years 2024–2026 to include student-athletes who had sustained exposure to collegiate academic and athletic responsibilities. This period allowed the assessment of athletes who had experienced prolonged participation in dual academic-athletic roles, which previous studies have associated with burnout symptoms and performance differences (Sorkkila et al., 2020).

2.3 Respondents of the Study

The respondents consisted of all collegiate basketball student-athletes enrolled in the National University (NU) system during the academic years 2024–2026. A total of 254 officially registered basketball student-athletes from the nine NU campuses participated in the study. The respondents represented a diverse group in terms of age, year level, playing experience, and competitive exposure, providing a comprehensive understanding of the psychosocial demands experienced by collegiate basketball student-athletes. Including athletes from multiple campuses strengthened the representativeness of the study and enhanced its ability to examine burnout, coping mechanisms, and athletic performance within different institutional contexts. Previous research likewise indicates that developmental stage, training history, and competition experience influence burnout and coping behaviors among collegiate athletes (Creswell & Creswell, 2018; Madigan et al., 2021; Sorkkila et al., 2020).

2.4 Sample and Sampling Procedure

The study employed universal sampling, wherein all eligible collegiate basketball student-athletes within the National University system were invited to participate. This method was selected because the target population was relatively small, clearly defined, and fully accessible, thereby minimizing sampling bias and improving representativeness (Creswell & Creswell, 2018; Etikan et al., 2016; Etikan & Bala, 2017). Participants were included if they were currently enrolled at any National University campus, officially listed as active members of the university basketball team, and voluntarily agreed to participate in the survey. Universal sampling enhanced the internal validity and institutional generalizability of the findings by ensuring complete population coverage. This approach is recommended in sport-specific research because it provides a comprehensive assessment of psychological constructs, including burnout, coping mechanisms, and athletic performance.

2.5 Research Instrument

The study utilized standardized and validated instruments to measure the major variables. Burnout was assessed using the Athlete Burnout Questionnaire (ABQ), originally developed by Raedeke (1997) and subsequently refined and validated by Raedeke and Smith (2001, 2009), which measures emotional and physical exhaustion, reduced sense of accomplishment, and sport devaluation. The ABQ has demonstrated strong reliability, factorial validity, and applicability among collegiate and elite athletes (Zhang et al., 2020; Gustafsson et al., 2023).

Perceived coping mechanisms were measured using the Athletic Coping Skills Inventory-28 (ACSI-28), which evaluates athletes' psychological coping skills across multiple dimensions and has established psychometric properties in competitive sports. Perceived causes of burnout were measured through a Self-Determination Theory (SDT)-guided questionnaire assessing autonomy, competence, relatedness, and motivational regulation consistent with SDT-based sport research (Ryan & Deci, 2020; Kim & Choi, 2024). Athletic performance was measured using a researcher-developed self-report instrument that assessed cognitive and mental performance, physical performance, and motivation and effort. Prior to data collection, the questionnaire underwent pilot testing involving thirty (30) qualified respondents and was evaluated by experts following established principles of scale development (DeVellis, 2016). The original proponent granted permission to modify and use the instrument. Reliability analysis using Cronbach's alpha demonstrated good to excellent internal consistency across all constructs, indicating that the instruments were appropriate for measuring burnout, perceived causes of burnout, athletic performance, and coping mechanisms. Although some subscales produced very high alpha coefficients, particularly the Coachability dimension, these results were interpreted in the context of the validated ACSI-28 framework and the relatively uniform coaching environment within the National University system. Future studies may further examine potential item redundancy through additional psychometric analyses such as confirmatory factor analysis and item-total correlation analysis (Vacha-Haase & Thompson, 2025). The responses were scored using standardized four-point Likert scales corresponding to each instrument. Higher scores indicated stronger perceived causes of burnout, higher burnout levels, greater perceived effects on athletic performance, and more frequent use of coping mechanisms. Demographic information, including age, sex, year level, playing position, years of basketball experience, weekly training hours, and competition participation, was summarized using frequency counts and percentages to describe the characteristics of the respondents.

2.6 Data Gathering Procedure

Prior to data collection, the researchers secured the required institutional approvals and complied with ethical standards governing research involving human participants. Formal authorization was obtained from the participating schools, while respondents were provided with informed consent explaining the study's purpose, procedures, voluntary participation, and right to withdraw at any time without penalty. Questionnaires were administered either personally or through a secure online platform using Microsoft Forms to maximize accessibility and response rates. The National University Research Ethics and Integrity (NUREI) Office approved the use of Microsoft Forms and required that respondents' email addresses not be collected to protect anonymity. Self-report questionnaires using four-point Likert scales were employed to gather data on burnout, coping mechanisms, perceived causes of burnout, and athletic performance. Each participant was assigned a unique identification code to maintain confidentiality throughout the study. Completed questionnaires were securely stored in Microsoft Forms, and only authorized individuals involved in the research were granted access to the collected data. All information was managed in accordance with institutional privacy and data security policies, and the collected data were scheduled for permanent deletion following the completion and publication of the study.

2.7 Data Analysis Techniques

The collected data were encoded, managed, and analyzed using the Statistical Package for the Social Sciences (SPSS). Prior to statistical analysis, the dataset was examined for completeness and accuracy. Responses with more than 20% missing values within a subscale were excluded, while pairwise deletion was applied to randomly occurring missing data to preserve the sample size. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were computed to summarize respondents' demographic characteristics and determine the perceived levels of burnout, burnout-related causes, coping mechanisms, and athletic performance. The internal consistency of the research instruments was evaluated using Cronbach's alpha. Reliability coefficients of $\alpha \geq 0.80$ indicated strong reliability, while $\alpha \geq 0.70$ indicated good reliability (Nunnally & Bernstein, 1994). The interpretation of reliability coefficients also considered current psychometric recommendations regarding item count and construct characteristics (Gonzales-Arias et al., 2024; Vacha-Haase & Thompson, 2025; Gonzales-Arias et al., 2025). Descriptive analyses were conducted using the Self-Determination Theory (SDT)-guided questionnaire, the Athlete Burnout Questionnaire (ABQ), the Athletic Coping Skills Inventory-28 (ACSI-28), and the researcher-developed athletic performance instrument to determine the perceived causes of burnout, burnout levels, coping mechanisms, and athletic performance. The SDT-guided questionnaire assessed autonomy, competence, and relatedness (Ryan & Deci, 2020; Kim & Choi, 2024), the ABQ measured emotional and physical exhaustion, reduced sense of accomplishment, and sport devaluation (Gustafsson et al., 2023; Zhang et al., 2020), the athletic performance instrument evaluated cognitive and mental performance, physical performance, and motivation and effort (Madigan et al., 2021; Wu et al., 2024), while the ACSI-28 measured coping with adversity, coachability, concentration, goal setting and mental preparation, confidence and motivation, freedom from worry, and team support (Smith et al., 2021; Wu et al., 2024). Spearman's rank-order correlation (Spearman's Rho) was employed to determine the strength and direction of the relationships among burnout, coping mechanisms, and athletic performance. This non-parametric technique was selected because the variables were measured using Likert-scale responses and did not fully satisfy the assumptions of normality required for Pearson's correlation (Zhang et al., 2020; Wu et al., 2024). Correlation analyses examined the relationships between burnout dimensions

and athletic performance as well as between burnout and coping mechanisms, consistent with previous findings that greater burnout is associated with poorer performance and less adaptive coping strategies (Madigan et al., 2021; Kim & Choi, 2024; Wu et al., 2024). To determine the mediating role of coping mechanisms in the relationship between burnout and athletic performance, mediational regression analysis was performed. Burnout was first entered as the predictor of athletic performance, followed by the inclusion of coping mechanisms to determine whether they significantly explained additional variance and reduced the direct effect of burnout on performance. Mediation was inferred when coping mechanisms significantly increased the explained variance and weakened the relationship between burnout and athletic performance, consistent with contemporary mediation procedures in sports psychology research (Madigan et al., 2021; Wu et al., 2024).

2.8 Ethical Considerations

The study complied with the ethical standards for research involving human participants and secured ethical clearance from the National University Research Ethics and Integrity (NUREI) Office before data collection. Respondents were informed of the study's purpose, procedures, voluntary participation, confidentiality, and right to withdraw at any time without penalty. For participants below eighteen (18) years of age, parental or guardian consent was obtained in accordance with established ethical guidelines. To protect respondents' welfare, participants were informed that some questions related to stress, emotional exhaustion, and burnout might cause temporary discomfort. Those who experienced emotional distress were allowed to discontinue participation immediately and were provided with appropriate referrals to the Guidance Services Offices (GSOs), counseling services, licensed psychologists, sports psychologists, or other qualified mental health professionals available within the participating National University campuses. Strict confidentiality and anonymity were maintained throughout the study. No personally identifiable information was collected, and all responses were stored in password-protected electronic files accessible only to the researcher and, when necessary, the research adviser. Only aggregated findings were reported, while electronic records were retained for five years in accordance with institutional guidelines before being permanently deleted and printed materials securely destroyed. To minimize power imbalance within collegiate athletics, recruitment and questionnaire distribution were conducted by university administrators or athletic coordinators rather than coaches. Respondents were assured that participation or non-participation would not affect their academic standing, athletic participation, or scholarship opportunities. Recognizing the researcher's role as a basketball coach, measures were implemented to avoid conflicts of interest. The researcher did not recruit participants from their own team or administer questionnaires directly to their athletes. Data collection was coordinated through the National University Research Ethics and Integrity (NUREI) Office and designated athletic coordinators, while anonymous online data collection ensured that individual responses remained inaccessible to the researcher, thereby preserving the integrity and ethical conduct of the study.

3. Results and Discussion

3.1 Burnout Among Collegiate Basketball Student-Athletes

3.1.1 Emotional and Physical Exhaustion

The findings indicate that respondents rarely experienced emotional and physical exhaustion ($WM = 2.27$, $SD = 0.71$). Physical exhaustion from participating in basketball obtained the highest rating ($WM = 2.69$), whereas feeling mentally drained recorded the lowest rating ($WM = 2.07$). Overall, the respondents demonstrated relatively low levels of emotional and physical exhaustion despite the physical and academic demands associated with collegiate basketball. The low level of emotional and physical exhaustion suggests that burnout symptoms were generally uncommon among the respondents. According to Self-Determination Theory (SDT), athletes who experience adequate autonomy, competence, and relatedness are more likely to maintain psychological well-being and resist burnout (Deci & Ryan, 1985). Although physical fatigue emerged as the most evident symptom, this finding is expected given the demanding nature of basketball and the challenge of balancing athletic and academic responsibilities. The results imply that while occasional physical fatigue exists, respondents generally possess sufficient psychological resources to manage these demands.

3.1.2 Reduced Sense of Accomplishment

The respondents likewise rarely experienced a reduced sense of accomplishment ($WM = 2.28$, $SD = 0.72$). Feeling that little was achieved despite significant effort received the highest rating ($WM = 2.44$), while perceiving oneself as incompetent as a basketball player received the lowest rating ($WM = 2.06$). These findings indicate that the respondents generally maintained confidence in their basketball abilities despite occasional performance-related concerns. The findings indicate that respondents' need for competence remained largely satisfied. Consistent with Self-Determination Theory (Deci & Ryan, 1985), athletes who perceive themselves as capable are more likely to sustain motivation, persistence, and psychological well-being. As collegiate athletes selected through competitive processes and regular participation, respondents have likely developed strong athletic competence and self-efficacy. Consequently, feelings of inadequacy occurred infrequently and may have helped protect them from more severe burnout symptoms despite the pressures associated with collegiate sports.

3.1.3 Sport Devaluation

The results further revealed that respondents rarely experienced sport devaluation, with the lowest overall burnout rating among the three dimensions ($WM = 2.02$, $SD = 0.77$). Questioning one's motivation to continue playing basketball recorded the highest mean ($WM = 2.30$), whereas no longer enjoying basketball as much as before obtained the lowest mean ($WM = 1.83$). Overall, respondents continued to value and enjoy basketball despite experiencing occasional burnout symptoms. The findings suggest that collegiate basketball student-athletes maintained strong psychological attachment to their sport. According to Self-Determination Theory (Deci & Ryan, 1985), sustained intrinsic motivation reflects continued engagement and satisfaction, while the Cognitive-Affective Model explains that positive emotional appraisal reduces withdrawal from sport (Smith, 1986). Although some respondents occasionally questioned their motivation, this appeared to represent only an early indication of psychological strain rather than genuine disengagement. Compared with emotional and physical exhaustion and reduced sense of accomplishment, sport devaluation was the least evident burnout dimension, indicating that respondents remained committed to basketball even when experiencing physical or psychological demands.

3.2 Perceived Causes of Burnout Among Collegiate Basketball Student-Athletes

3.2.1 Autonomy

The findings showed that respondents generally disagreed that autonomy-related factors contributed to burnout ($WM = 2.37$, $SD = 0.65$). Perceiving limited control over training received the highest rating ($WM = 2.50$), while believing that training needs were not considered by coaches obtained the lowest rating ($WM = 2.22$). Overall, the respondents perceived that they had an acceptable level of control and participation in their athletic experiences. The results indicate that autonomy was not a major source of burnout among the respondents. According to Self-Determination Theory, athletes who perceive their actions as self-directed are more likely to remain intrinsically motivated and psychologically engaged (Deci & Ryan, 1985). Likewise, Smith's (1986) Cognitive-Affective Model of Athletic Burnout explains that athletes who perceive greater control over their sport experiences are more likely to appraise demands as manageable rather than threatening. The generally low autonomy-related burnout ratings therefore suggest that respondents' sense of control may have protected them from developing more severe burnout symptoms.

3.2.2 Competence

The respondents also disagreed that competence-related concerns were major causes of burnout ($WM = 2.49$, $SD = 0.70$). Feeling frustrated when performance did not match the amount of effort invested obtained the highest rating ($WM = 2.67$), whereas perceiving one's skills as lower than those of teammates received the lowest rating ($WM = 2.35$). Although the overall dimension remained within the "Disagree" range, frustration over unmet performance expectations emerged as the most noticeable competence-related concern. The findings suggest that respondents generally viewed themselves as competent basketball players but occasionally experienced psychological strain when effort was not reflected in performance. According to Self-Determination Theory, such situations may temporarily frustrate athletes' need for competence (Deci & Ryan, 1985, 2000). Similarly, the Cognitive-Affective Model (Smith, 1986) proposes that repeated negative evaluations of performance outcomes increase stress reactions that contribute to burnout. These results imply that competence-related frustrations may become situational stressors affecting athletic performance even though competence was not perceived as an overall cause of burnout.

3.2.3 Relatedness

The results further revealed that respondents disagreed that relatedness was a significant cause of burnout ($WM = 2.04$, $SD = 0.73$), making it the lowest-rated perceived cause among the three psychological needs. Perceiving insufficient emotional support from important people in the basketball journey recorded the highest mean ($WM = 2.15$), while feeling unsupported by teammates during challenging situations obtained the lowest mean ($WM = 1.96$). Overall, the findings indicate that respondents generally experienced positive interpersonal relationships within their athletic environment. The findings suggest that strong social relationships and team support served as protective factors against burnout. According to Self-Determination Theory, satisfying the need for relatedness promotes motivation, psychological well-being, and continued sport participation (Deci & Ryan, 1985). Likewise, the Cognitive-Affective Model explains that supportive social environments encourage athletes to appraise challenges as manageable rather than threatening. The consistency between these findings and the positive ratings for social coping presented later in the study indicates that team cohesion, coach-athlete relationships, and social support contribute to sustaining psychological well-being and reducing burnout among collegiate basketball student-athletes. Overall, autonomy, competence, and relatedness were not perceived as major contributors to burnout, suggesting that respondents generally experienced supportive athletic environments and adequate psychological need satisfaction.

3.3 Perceived Effects of Burnout on Athletic Performance

3.3.1 Cognitive and Mental Performance

The findings showed that respondents agreed that burnout affected their cognitive and mental performance (WM = 2.65, SD = 0.66). Difficulty maintaining focus during games obtained the highest rating (WM = 2.72), while difficulty staying mentally sharp throughout an entire game received the lowest rating (WM = 2.60). Overall, respondents perceived that burnout negatively influenced concentration, decision-making, confidence, and mental readiness during competition. The results indicate that burnout primarily affects athletes' cognitive functioning. Consistent with the Cognitive-Affective Model, stress impairs concentration and decision-making during the early stages of burnout (Smith, 1986). Self-Determination Theory likewise explains that temporary frustration of psychological needs may reduce cognitive functioning. Because basketball requires continuous attention, rapid decision-making, and quick responses to changing game situations, reduced focus may negatively influence both individual and team performance. These findings emphasize the importance of mental skills training and psychological support to strengthen cognitive resilience among collegiate basketball student-athletes.

3.3.2 Physical Performance

The respondents also agreed that burnout negatively affected their physical performance (WM = 2.61, SD = 0.65). Reduced stamina during games and training recorded the highest mean (WM = 2.72), whereas increased susceptibility to injury obtained the lowest mean (WM = 2.45), which remained within the "Disagree" range. Overall, burnout was perceived to reduce stamina, physical readiness, consistency during training, and the ability to sustain high-intensity performance. The findings suggest that although respondents recognized the immediate physical consequences of burnout, prolonged exposure to stress may also contribute to cumulative physiological strain (McEwen, 1993). This result should be interpreted cautiously because previous studies have shown that prolonged physical and psychological fatigue may increase injury susceptibility through impaired recovery, reduced concentration, and diminished physical readiness (Gerber et al., 2024; Glandorf et al., 2023). The findings also support the Cognitive-Affective Model (Smith, 1986), which explains that accumulated stress influences athletes' physiological functioning, and Self-Determination Theory, which proposes that prolonged psychological stress may compromise athletes' energy, well-being, and overall functioning (Deci & Ryan, 1985). Collectively, the results reinforce the relationship between burnout and diminished physical performance.

3.3.3 Motivation and Effort

The results further indicated that respondents disagreed that burnout substantially reduced their motivation and effort (WM = 2.43, SD = 0.70). Difficulty maintaining consistent effort across practices and games obtained the highest rating (WM = 2.49), while exerting less effort during practice received the lowest rating (WM = 2.38). Overall, respondents reported maintaining their motivation and willingness to perform despite experiencing burnout symptoms. The findings suggest that motivation remained relatively stable even when respondents experienced physical or cognitive symptoms of burnout. According to Self-Determination Theory, athletes who possess strong intrinsic or identified motivation are more likely to remain committed to their sport despite challenges (Deci & Ryan, 1985). Likewise, the Cognitive-Affective Model (Smith, 1986) explains that athletes may continue investing effort despite experiencing emotional and cognitive stressors. Compared with cognitive and physical performance, motivation and effort were the least affected by burnout, indicating that respondents continued to demonstrate commitment and persistence in basketball. Overall, burnout appeared to influence cognitive and physical functioning more strongly than motivational commitment, providing an important context for understanding the relationships among burnout, coping mechanisms, and athletic performance examined in the succeeding sections.

3.4 Coping Mechanisms Among Collegiate Basketball Student-Athletes

3.4.1 Coping with Adversity

The findings showed that respondents almost always used coping with adversity strategies (WM = 3.26, SD = 0.63). Treating mistakes as opportunities to learn and improve received the highest rating (WM = 3.38), while recovering emotionally after setbacks obtained the lowest rating (WM = 3.17). Overall, the respondents demonstrated strong resilience and adaptive responses to competitive challenges. The results indicate that respondents possessed well-developed coping skills that enabled them to manage setbacks and performance-related stress effectively. Viewing mistakes as opportunities for growth reflects resilience and emotional stability, which may protect athletes from burnout and its adverse effects on performance (Li et al., 2021). This finding is consistent with Self-Determination Theory and the Cognitive-Affective Model, which emphasize that psychological need satisfaction and effective coping improve stress appraisal and reduce burnout (Nicholls et al., 2022; Li et al., 2021). The high rating for this dimension suggests that resilience is one of the respondents' strongest psychological resources.

3.4.2 Coachability

The respondents almost always demonstrated coachability as a coping mechanism (WM = 3.41, SD = 0.65), representing the highest-rated coping dimension. Being open and receptive to coaches' feedback obtained the highest rating (WM = 3.49), while actively asking coaches for feedback recorded the lowest rating (WM = 3.31). Despite these differences, respondents consistently reported positive responses to coaching guidance. The findings indicate that respondents valued coaching support as an important resource for managing burnout. Although the

Coachability subscale demonstrated excellent internal consistency, the very high Cronbach's alpha suggests possible item redundancy and should therefore be interpreted with caution. Nevertheless, the findings support the Cognitive-Affective Model (Smith, 1986), which views constructive feedback as improving athletes' cognitive appraisal of stressful situations, and Self-Determination Theory (Deci & Ryan, 1985), which emphasizes that supportive coaching satisfies athletes' needs for competence and relatedness.

3.4.3 Concentration

The findings revealed that respondents often used concentration strategies to manage burnout (WM = 3.17, SD = 0.62). Remaining focused on their specific role during games obtained the highest mean (WM = 3.22), whereas blocking out distractions received the lowest mean (WM = 3.09). Overall, respondents frequently relied on attentional control to maintain performance during competition. The results suggest that although respondents generally maintained good concentration, occasional lapses still occurred under competitive pressure. This finding is consistent with the earlier result that burnout negatively affected cognitive and mental performance. According to the Cognitive-Affective Model (Smith, 1986), athletes who maintain attentional control are better able to regulate emotions and appraise stressful situations adaptively. Similarly, Self-Determination Theory (Deci & Ryan, 1985) explains that psychologically engaged athletes are more likely to sustain attention during competition. The findings highlight concentration as an important psychological resource for minimizing burnout-related declines in performance.

3.4.4 Goal Setting and Mental Preparation

The respondents often practiced goal setting and mental preparation (WM = 3.24, SD = 0.61). Setting clear performance goals received the highest rating (WM = 3.29), while breaking long-term goals into smaller objectives obtained the lowest rating (WM = 3.17). Overall, respondents consistently used goal-setting strategies to prepare for training and competition. The findings suggest that respondents emphasized immediate performance goals more than long-term developmental planning. While they regularly established goals, structured goal decomposition appeared less frequently practiced. Encouraging athletes to divide long-term objectives into manageable milestones may strengthen motivation, self-regulation, and progress monitoring. These findings support the proposed mental performance intervention and align with Self-Determination Theory and the Cognitive-Affective Model, which recognize goal setting as an important strategy for maintaining motivation and reducing stress (Smith, 1986).

3.4.5 Confidence and Motivation

The findings showed that respondents almost always demonstrated confidence and motivation (WM = 3.32, SD = 0.62). Remaining motivated to improve despite setbacks obtained the highest rating (WM = 3.35), while maintaining confidence during high-pressure situations received the lowest rating (WM = 3.27). Overall, respondents consistently exhibited confidence in their abilities and sustained motivation despite challenges. The results indicate that confidence and motivation contributed to the relatively low burnout levels observed among the respondents. Athletes who remain confident and motivated are better able to cope with the physical, emotional, and psychological demands of collegiate basketball. These findings support both the Cognitive-Affective Model (Smith, 1986), which emphasizes positive cognitive appraisal and emotional regulation, and Self-Determination Theory, which explains that satisfying the need for competence promotes persistence, motivation, and psychological well-being (Deci & Ryan, 1985; 2000). Strong confidence and motivation may therefore protect athletes from reduced accomplishment and sport devaluation.

3.4.6 Freedom from Worry

The respondents often demonstrated freedom from worry as a coping mechanism (WM = 3.20, SD = 0.60). Remaining calm despite others' expectations received the highest rating (WM = 3.23), while controlling nervous thoughts before and during competitions obtained the lowest rating (WM = 3.16). Overall, respondents frequently managed performance-related anxiety effectively. The findings suggest that respondents were generally able to manage pressure associated with academic responsibilities, competition, and external expectations. Maintaining composure under pressure is particularly important in basketball because excessive worry can impair concentration, confidence, and decision-making. Consistent with the Cognitive-Affective Model (Smith, 1986), effective emotional regulation enables athletes to appraise stressful situations more positively, while Self-Determination Theory (Deci & Ryan, 1985) explains that psychological stability supports sustained motivation and engagement.

3.4.7 Team Support and Social Coping

The findings indicated that respondents often relied on team support and social coping (WM = 3.20, SD = 0.64). Participating in team-bonding activities to relieve stress received the highest rating (WM = 3.29), whereas seeking emotional support from teammates when stressed obtained the lowest rating (WM = 3.07). Overall, respondents frequently used social relationships and team interactions to manage burnout and maintain motivation. The

findings emphasize the importance of interpersonal relationships in helping collegiate basketball student-athletes manage the demands of competitive sport. Positive team cohesion, communication, and mutual trust provide emotional support that may reduce stress and strengthen resilience (Chen et al., 2021). These results complement the earlier findings on relatedness, indicating that supportive team environments help protect athletes from burnout while promoting psychological well-being and continued athletic engagement.

4. Conclusion & Recommendations

The study found that collegiate basketball student-athletes generally experienced low levels of burnout, although physical exhaustion emerged as the most evident burnout dimension and may serve as an early indicator of developing burnout. Burnout was significantly associated with lower athletic performance, particularly in the cognitive and physical domains, while coping mechanisms demonstrated only a small mediating effect on this relationship. These findings indicate that strengthening coping skills alone is insufficient to offset the adverse effects of burnout and highlight the importance of addressing broader psychological, environmental, and organizational factors. Overall, the findings support the role of comprehensive athlete support systems in promoting psychological well-being, preventing burnout, and sustaining athletic performance.

Student-athletes should regularly monitor their physical and psychological well-being, recognize early signs of burnout, and seek appropriate support while maintaining healthy coping strategies. Coaches and athletic trainers should strengthen athlete-centered coaching, monitor athlete wellness, and integrate mental skills training and recovery management into regular training programs. Educational institutions should enhance counseling services, wellness initiatives, and balanced academic-athletic support systems. These initiatives are consistent with recommendations promoting athlete mental health and psychological support (Rice et al., 2021; Storey et al., 2024). Future researchers are encouraged to investigate additional psychological, academic, and environmental factors, incorporate objective measures of athletic performance, and employ longitudinal or experimental research designs to further examine burnout, coping mechanisms, and athletic performance.

The findings should be interpreted considering several limitations. The study relied on self-reported data, making the results susceptible to response and social desirability bias. Athletic performance was assessed through self-perceptions rather than objective performance indicators, and the respondents were limited to collegiate basketball student-athletes from the National University System, which restricts the generalizability of the findings. The mediation analysis showed that coping mechanisms explained only a small portion of the relationship between burnout and athletic performance, suggesting that other factors were not examined. In addition, contextual variables such as coaching style, team culture, institutional support, and access to sport psychology services were not directly investigated. Finally, the quantitative-correlational design identifies associations among variables but does not establish cause-and-effect relationships.

5. Compliance with ethical standards

This study was conducted in accordance with the ethical standards for research involving human participants. Ethical clearance was obtained from the National University Research Ethics and Integrity (NUREI) Office prior to data collection. Participation was voluntary, and informed consent was obtained from all participants, with parental or guardian consent secured for participants below 18 years of age. Participant confidentiality and anonymity were maintained throughout the study, and all collected data were securely managed in accordance with institutional privacy and data protection policies. Appropriate measures were implemented to protect participants' welfare, minimize potential risks, and ensure the integrity of the research process.

REFERENCES

- ABS-CBN Corporation. (2025, November 16). SS. ABS-CBN. <https://www.abs-cbn.com/sports/othersports/2025/11/16/how-alex-cala-broke-filipino-tradition-to-become-one-of-the-world%E2%80%99s-top-50-tennis-players-0651>
- Broa, D. I., et al. (2025). Perfectionism and burnout among junior high school athletes. In Proceedings of the 11th ASEAN Physical Education and Sport (ACPES) International Conference. Mindanao State University–Iligan Institute of Technology.
- Cabañas-Sánchez, L., Torregosa, M., & Cruz, J. (2024). Contextual pressure and its effects on coaching behavior and athletes' satisfaction in youth basketball. *Psychology of Sport and Exercise*, 72, 102621. <https://pubmed.ncbi.nlm.nih.gov/40246184>
- Cao, S., Kim Geok, S., Roslan, S., Sun, H., Lam, S. K., & Qian, S. (2022). Mental fatigue and basketball performance: A systematic review. *Frontiers in Psychology*, 12, 819081. <https://doi.org/10.3389/fpsyg.2021.819081>

- Caray, J. D., Alcordo, I. J. M., Nebria, B. S. N., & Broa, D. I. (2025). Level of perfectionism and the extent of burnout among student athletes. *Asian Journal of Advanced Research and Reports*, 19(11), 261–272. <https://doi.org/10.9734/ajarr/2025/v19i111214>
- Chen, G., Kanfer, R., DeShon, R., Mathieu, J., & Kozlowski, S. W. J. (2021). The motivating potential of teams: Test and extension of the Input-Process-Output model. *Organizational Psychology Review*, 11(1). <https://doi.org/10.1177/2041386620905422>
- Choi, H., Jeong, H.-S., & Kim, S.-H. (2020). The relationship between coaching behavior and athlete burnout: Mediating effects of the coach-athlete relationship. *International Journal of Environmental Research and Public Health*, 17(22), 8618. <https://doi.org/10.3390/ijerph17228618>
- Cipriano, C. V. (2024). The path to athlete burnout: A mediation model of coaching behavior, communication, and coach-athlete relationships: A systematic review.
- Cooper, M., & Cooper, M. (2025, May 28). How basketball shapes the heart of Philippine national identity. Info Blog. <https://asia-news.biz/asia/philippines/how-basketball-shapes-the-heart-of-philippine-national-identity/>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Daub, B. D., Mclean, B. D., Heishman, A. D., Peak, K. M., & Coutts, A. J. (2024). The relationship between mental fatigue and shooting performance over the course of a National Collegiate Athletic Association Division I basketball season. *Journal of Strength & Conditioning Research*, 38(2), 334–341. <https://doi.org/10.1519/JSC.0000000000004624>
- De Café-Eta, J., & Salva, R. (2024). Burnout, mental energy and social support among collegiate athletes in Region IX, Philippines. *Philippine Journal of Psychology*, 57(2), 112–130.
- De Café-Eta, M. J., & Salva, E. T. (2022). Received support, burnout and athletic mental energy of athletes in Region IX: A convergent design. *European Journal of Physical Education and Sports Science*. <https://www.oapub.org/edu/index.php/ejep/article/view/5726>
- De Francisco, C., Vilchez, M. P., Vales, A., & Arce, C. (2020). Antecedents and consequences of athlete burnout: Perceived stress and depression. *International Journal of Environmental Research and Public Health*, 17(12), 4476. <https://doi.org/10.3390/ijerph17124476>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (4th ed.). SAGE Publications.
- Devgan, A. (2025, August 1). Why Filipinos love basketball: Inside the Philippines’ national sporting obsession. Sports News Philippines. <https://sportsnewsph.com/why-filipinos-love-basketball-inside-thephilippines-national-sporting-obsession>
- Dislere, B. E., Martinsone, K., & Kolesnikova, J. (2025). A scoping review of longitudinal studies of athlete burnout. *Frontiers in Psychology*, 16, 1502174. <https://doi.org/10.3389/psy.2025.1502174>
- Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), 215–217. <https://doi.org/10.15406/bbij.2017.05.00149>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Garcia, F., Vicens-Bordas, J., Espasa-Labrador, J., Peña, J., & Calleja-Gonzales, J. (2024). Relationship between physical demands and player performance in basketball. *Sensors*, 24(19), 6365. <https://doi.org/10.3390/s24196365>
- Gaston-Gayles, J., & Hu, S. (2024). Identity profiles and well-being among college student-athletes: Balancing academic and athletic roles. *Journal of College Student Development*, 65(2), 145–160. <https://pubmed.ncbi.nlm.nih.gov/39559209>
- Gerber, M., Bianchi, R., Madigan, D. J., Jonsdottir, I. H., Claussen, M. C., & Gustaffson, H. (2024). Burnout and overtraining elite athletes: Unresolved issues and avenues for future research (Editorial). *Sport Psychiatry*, 3(1), 1–3. <https://doi.org/10.1024/2674-0052/a000073>
- Gerber, M., Bianchi, R., Madigan, D. J., Jonsdottir, I. H., Claussen, M. C., & Gustafsson, H. (2024). Five unsolved issues concerning burnout in athletes: An expert perspective. *Sports Psychiatry*, 3(2), 53–56. <https://doi.org/10.1024/2674-0052/a000074>
- Giusti, N., Carder, S., Wolf, M., Vopat, L., Baker, J., Tarakemeh, A., Bal, K., Randall, J., & Vopat, B. (2022). A measure of burnout in current NCAA student-athletes. *Kansas Journal of Medicine*, 15(3), 325–330. <https://journals.ku.edu/kjm/article/view/17784>
- Glandorf, H. L., Madigan, D. J., Kavanagh, O., & Mallinson-Howard, S. H. (2023). Mental and physical health outcomes of burnout in athletes: A systematic review and meta-analysis. *International Review of Sport and Exercise Psychology*, 16(1), 244–272. <https://doi.org/10.1080/1750984X.2023.2225187>

- GMA News. (2021, July 22). Hidilyn Diaz opens up about mental breakdown ahead of Tokyo Olympics. GMA News Online. <https://www.gmanetwork.com/news/lifestyle/healthandwellness/797290/hidilyn-diaz-opens-up-about-mental-breakdown-ahead-of-tokyo-olympics/story/>
- Gonzales-Arias, M., Gonzales-Gonzales, C. S., & Gonzales-Bernal, J. J. (2025). Academic performance, self-reported motivation, and affect among university students: A structural model. *Frontiers in Psychology*, 15, 1519454. <https://doi.org/10.3389/fpsyg.2025.1519454>
- Gotwals, J. K., Dunn, J. G. H., & Wayment, H. A. (2003). Development and validation of the Sport Multidimensional Perfectionism Scale-2 (SMPS-2). *Journal of Sport & Exercise Psychology*, 25(2), 220–221. <https://doi.org/10.1123/jsep.25.2.200>
- Gray, H. M., Moran, R. N., Elder, E., Wilkerson, A., Gilmore-Childress, G., & Wallace, J. (2023). Grit, athlete burnout, and well-being in female collegiate student-athletes. *Journal of Athletic Training*. Advance online publication. <https://doi.org/10.4085/1062-6050-0121.23>
- Gustafsson, H., Defresse, J. D., & Madigan, D. J. (2021). Athlete burnout: Review and recommendations. *Current Opinion in Psychology*, 16(1), 109–113. <https://doi.org/10.1016/j.copsyc.2021.01.004>
- Gustafsson, H., DeFresse, J. D., Madigan, D. J., & Hill, A. P. (2023). Athlete burnout: Review and recommendations for future research. *International Review of Sport and Exercise Psychology*, 16(1), 1–29. <https://doi.org/10.1080/1750984X.2021.1979047>
- Gustafsson, H., Kenttä, G., & Hassmén, P. (2011). Athlete burnout: An integrated model and future research directions. *International Review of Sport & Exercise Psychology*, 4(1), 3–24. <https://doi.org/10.1080/1750984X.2010.541927>
- Gustafsson, H., Madigan, D. J., & Lundkvist, E. (2017). The athlete burnout model. In R. Fuchs & M. Gerber (Eds.), *Handbook of sports psychology* (pp. 453–472). Springer. https://doi.org/10.1007/978-3-319-66195-5_22
- Hagger, M. S., & Chatzisarantis, N. L. D. (2007). Intrinsic motivation and self-determination in exercise and sport. *Human Kinetics*.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested self in the stress process: Advancing conservation of resource theory. *Applied Psychology*, 50(3), 337–421. <https://doi.org/10.1111/1464-0597.00062>
- Ines, J. V. (2021). Stress and coping strategies for college student-athletes. *International Journal of Scientific and Research Publications*, 11(7), 57–67. <https://doi.org/10.29322/IJSRP.11.07.2021.p11509>
- Kim, M., & Choi, J. (2024). Psychological need frustration, burnout, and coping strategies among collegiate athletes. *Journal of Sports Sciences*. Advance online publication.
- Kim, M., & Choi, S. (2024). Basic psychological need satisfaction, motivation, and burnout among collegiate athletes: A self-determination theory approach. *Psychology of Sport and Exercise*, 68, 102451. <https://doi.org/10.1016/j.psychsport.2023.102451>
- Kim, M., & Lee, Y. H. (2021). The influence of academic stress on burnout in student-athletes: The mediating role of motivation. *Frontiers in Psychology*, 12, 679962. <https://doi.org/10.3389/fpsyg.2021.679962>
- Kim, S., & Choi, H. (2024). Effects of coaches' autonomy support on athletes' aggressive behavior and athlete burnout: Mediating effects of the coach-athlete relationship and team efficacy. *Frontiers in Psychology*, 15, 1388185. <https://doi.org/10.3389/fpsyg.2024.1388185>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. Springer Publishing Company.
- Li, C., Ivarsson, A., Lam, L. T., & Sun, J. (2021). Basic psychological needs satisfaction and frustration, stress, and burnout in athletes: A longitudinal study. *Psychology of Sport and Exercise*, 53, 101850. <https://doi.org/10.1016/j.psychsport.2020.101850>
- Lim, J. C., Pacong, J. R. T., Alquizar, C. M. D., & Manaois, J. O. (2023). Unpacking post-pandemic academic burnout and coping mechanisms among Filipino college students. *International Journal of Research and Innovation in Social Science*, 7(12), 1501–1511. <https://rsisinternational.org/journals/ijriss/articles/unpacking-postpandemic-academic-burnout-and-coping-mechanisms-among-filipino-collegestudents>
- Madigan, D. J., Stoeber, J., & Passfield, L. (2021). Perfectionism and burnout in athletes: The mediating role of coping strategies. *Journal of Sport Sciences*, 39(9), 1022–1030. <https://doi.org/10.1080/02640414.2020.1837349>
- Manila Standard. (2023, September 5). Basketball popularity soars globally, spiked by increased interest in the World Cup. <https://manilastandard.net/sports/sports-headlines/basketball/314476183>
- McEwen, B. S., & Stellar, E. (1993). Stress and the individual: Mechanisms leading to disease. *Archives of Internal Medicine*, 153(18), 2093–2101. <https://doi.org/10.1001/archinte.1993.00410180039004>
- National Collegiate Athletic Association. (2021). Student-athlete well-being study: Fall 2021. https://ncaaorg.s3.amazonaws.com/research/other/2021/2021RES_WellBeingSurvey.pdf
- Nicholls, A. R., Madigan, D. J., & Earle, K. (2022). Multi-wave analyses of coping, athlete burnout, and well-being among F.A. Premier League academy players. *Frontiers in Psychology*, 13, 979486. <https://doi.org/10.3389/fpsyg.2022.979486>

- Nicholls, A. R., Madigan, D. J., & Levy, A. R. (2022). A systematic review of coping in sport: Relationships with stress, burnout, and performance. *International Review of Sport and Exercise Psychology*, 15(1), 1–28. <https://doi.org/10.1080/1750984X.2020.1774291>
- Ntoumanis, N., Barkoukis, V., & Thøgersen-Ntoumani, C. (2009). Developmental trajectories of motivation in physical education: Course, demographic differences, and antecedents. *Journal of Educational Psychology*, 101(3), 717–728. <https://doi.org/10.1037/a0014696>
- Nuetzel, B. (2023). Coping strategies for handling stress and providing mental health in elite athletes: A systematic review. *Frontiers in Sports and Active Living*, 5, 1265783. <https://doi.org/10.3389/fspor.2023.1265783>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.
- Olsson, L. F., Ludqvist, C., Gustafsson, H., & Madigan, D. J. (2024). A multi-sample examination of the relationship between athlete burnout and sport performance. *Psychology of Sport and Exercise*, 69, 102611. <https://doi.org/10.1016/j.psychsport.2024.102611>
- Peña, J., Calleja-Gonzales, J., & Garcia, F. (2024). Well-being and performance responses to back-to-back games in basketball. *Applied Sciences*, 14(23), 11374. <https://doi.org/10.3390/app142311374>
- Raedeke, T. D. (1997). Is athlete burnout more than just stress? A sports commitment perspective. *Journal of Sport & Exercise Psychology*, 19(4), 396–417. <https://doi.org/10.1123/jsep.19.4.396>
- Raedeke, T. D., & Smith, A. L. (2001). Development and preliminary validation of an athlete burnout measure. *Journal of Sport and Exercise Psychology*, 23(4), 281–306. <https://doi.org/10.1123/jsep.23.4.281>
- Raedeke, T. D., & Smith, A. L. (2009). *The Athlete Burnout Questionnaire manual*. Fitness Information Technology.
- Rice, S. M., Walton, C. C., Gwyther, K., & Purcell, R. (2021). Mental health and wellbeing in elite athletes: A narrative systematic review. *Sports Medicine*, 51(3), 1–16. <https://doi.org/10.1007/s40279-020-01370-5>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development and wellness*. Guilford Press.
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from self-determination theory perspective: Contemporary issues and applications. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Seo, H., Kim, M., & Kang, H. (2023). Effects of psychological capital and training load on stress and burnout among university athletes. *Journal of Exercise Rehabilitation*, 19(4), 234–242. <https://doi.org/10.12965/jer.2345678.001>
- Smith, R. E. (1986). Toward a cognitive-affective model of athletic burnout. *Journal of Sport Psychology*, 8(1), 35–50. <https://doi.org/10.1123/jsp.8.1.36>
- Sorkkila, M., & Ryba, T. V. (2020). A person-oriented approach to sport and school burnout in adolescent student-athletes: The role of individual and context factors. *Psychology of Sport and Exercise*, 51, 101719. <https://doi.org/10.1016/j.psychsport.2020.101719>
- Sosa, K. E. R., Nermal, C. N. M., Rea, K. L. A., Tanhueco, G. A., Andico, I. M. M., Chiu, J. A. C., Lao, T. D., Penalzoa, M. J. I. G., & Silva, Z. R. B. (2025). Lived experiences of well-being of UAAP Season 84 student-athletes in bubble training during the COVID-19 pandemic. *Acta Medica Philippina*, 59(18). <https://doi.org/10.47895/amp.vi0.9328>
- Stevens, C., & Isbell, J. (2025). Improving the teaching of “correlation does not equal causation” in introductory psychology. *Frontiers in Psychology*, 16, Article 1645518.
- Storey, Q. K., Hewitt, P. L., & Ogrodniczuk, J. S. (2024). Managing daily responsibilities among collegiate student-athletes: Examining the roles of stress, sleep, and sense of belonging. *Journal of American College Health*, 72(6), 1834–1840. <https://doi.org/10.1080/07448481.2022.2093610>
- The Philippine Star. (2021, July 27). In her lows as an athlete, Hidilyn Diaz found God and renewed purpose. <https://www.philstar.com/sports/2021/07/27/2115617/there-purpose-her-lows-athlete-hidilyn-diaz-found-god>
- Vacha-Haase, T., Kogan, L. R., & Thompson, B. (2025). Reliability generalization of the Problem-Solving Inventory: A meta-analysis of Cronbach’s alpha with a varying-coefficient model. *Journal of Educational and Psychological Measurement*, 85(1), 3–22. <https://doi.org/10.1177/21582440251361978>
- Valdez, R. B., & Juan, M. T. (2020). Levels of perfectionism and sports burnout among student-athletes. *International Journal of Scientific & Technology Research*, 9(4), 282–287. <https://www.ijstr.org/final-print/apr2020/Levels-Of-Perfectionism-And-Sports-Burnout-Among-Student-athletes.pdf>
- Wu, A. M. S., Lai, M. H. C., & Chan, I. T. Y. (2024). Motivation, coping and athlete burnout: A self-determination theory perspective. *Psychology of Sports Sciences*, 64, 102506.
- Wu, J., Tang, X., Liu, L., & Tian, Y. (2024). Associations between motivational factors and burnout syndrome among elite skiers. *BMC Psychology*, 12, 214. <https://doi.org/10.1186/s40359-024-01989-y>
- Wu, Y., Lai, M. H. C., & Chan, D. K. C. (2024). Coping strategies as mechanisms linking burnout and performance in athletes: A self-determination theory perspective. *International Journal of Sport and Exercise Psychology*. Advance online publication. <https://doi.org/10.1080/1612197X.2023.2279456>

- Wu, Y., Lai, M. H. C., & Chan, D. K. C. (2024). Motivational climate, coping strategies and burnout among athletes: A self-determination theory perspective. *International Journal of Sport and Exercise Psychology*. Advance online publication. <https://doi.org/10.1080/1612197X.2023.2279456>
- Xu, L., Yang, Y., Zhang, Z., & Li, L. (2025). The impact of athlete burnout on academic burnout among college athletes: A multiple mediation model based on emotion regulation and sleep. *Frontiers in Psychology*, 16, 1669344. <https://doi.org/10.3389/fpsyg.2025.1669344>
- Xue, W., Tao, Y., Huang, Y., Liu, G., & Wang, H. (2024). Emotional intelligence and burnout among adolescent basketball players: The mediating effect of emotional labor. *Sports*, 12(10), 266. <https://doi.org/10.3390/s12100266>
- Zhang, Y., Gan, Y., & Cham, H. (2020). Perfectionism, burnout, and engagement among athletes: The mediating role of coping strategies. *Journal of Sport and Exercise Psychology*, 43(3), 182–195. <https://doi.org/10.1123/jsep.2019-029>