

MENTAL TOUGHNESS AND SELF-EFFICACY IN PARA ATHLETES

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ABSTRACT

Background: Para-athletes manage competitive stressors alongside distinct physical, equipment, and social disability-related barriers. Mental toughness and self-efficacy are crucial constructs that heavily influence athletic motivation, resilience, and performance under intense pressure. While well-studied in able-bodied fields, research regarding these psychological strengths in para-athletes remains heavily limited and fragmented.

Purpose: The primary objective is to investigate how mental toughness and self-efficacy correlate and interact among para-athletes. The study implements a quantitative, cross-sectional design to determine if mental toughness significantly predicts an athlete's self-efficacy. It aims to provide actionable empirical insights for coaches and psychologists to design targeted, evidence-based psychological support programs.

Results: The study expects data to show a significant, positive relationship between mental toughness and self-efficacy beliefs. Mentally tough para-athletes are expected to showcase stronger, more adaptive beliefs in their capabilities to succeed. The framework notes that these psychological resources will likely vary based on disability type, experience, and support systems.

Conclusion: Psychological resilience directly reinforces a para-athlete's core belief in their ability to overcome both sporting and situational adversity. By establishing this empirical link, the paper directly enriches the limited existing body of disability sport psychology literature. Enhancing these mental traits ultimately improves competitive performance, self-esteem, and the broader quality of life for para-athletes.

LAY SUMMARY

Mental toughness and self-efficacy are two essential psychological constructs that contribute to athletes' performance, resilience, and ability to cope with competitive demands. While these constructs have been extensively studied among able-bodied athletes, limited research has focused on para-athletes, who often encounter unique physical, psychological, and social challenges throughout their sporting careers. The present study aims to examine the relationship between mental toughness and self-efficacy among para-athletes and to determine whether mental toughness significantly predicts self-efficacy. A quantitative, cross-sectional correlational research design is proposed. The study will recruit para-athletes from various sports disciplines, using purposive sampling. Mental toughness will be assessed using a standardized mental toughness scale, while self-efficacy will be measured using a validated self-efficacy instrument. Descriptive statistics, reliability analysis, Pearson correlation, and linear regression will be employed to analyze the data. It is expected that mental toughness will demonstrate a significant positive relationship with self-efficacy, suggesting that psychologically resilient para-athletes are more likely to possess stronger beliefs in their ability to perform successfully. The findings are expected to contribute to the growing body of literature in sport psychology by addressing an important research gap concerning para-athletes. Furthermore, the study may provide practical implications for

coaches, sport psychologists, and rehabilitation professionals in designing psychological interventions aimed at enhancing mental toughness and self-efficacy, thereby promoting optimal performance and psychological well-being among para-athletes.

Keywords: Para-athletes, Mental Toughness, Self-Efficacy, Sport Psychology, Psychological Resilience, Athletic Performance.

INTRODUCTION

Sport participation has increasingly been recognized as a powerful medium for promoting physical, psychological, and social well-being among individuals with disabilities. Para-athletes, who participate in organized competitive sports despite physical, sensory, or intellectual impairments, encounter a unique combination of competitive demands and disability-related challenges. These challenges include physical limitations, accessibility barriers, societal stereotypes, injury risks, and psychological stressors. Despite these obstacles, many para-athletes consistently demonstrate exceptional resilience, perseverance, and competitive excellence. As the International Paralympic Committee famously states, 'the Paralympic movement demonstrates that disability is not inability.' Such observations have led researchers to examine the psychological factors that contribute to their successful adaptation and athletic performance.

Among the various psychological constructs studied in sports psychology, mental toughness and self-efficacy have emerged as two of the most influential determinants of athletic success. Mental toughness refers to an individual's psychological capacity to remain confident, focused, determined, and emotionally resilient under conditions of pressure, adversity, and uncertainty. Self-efficacy, on the other hand, reflects an individual's belief in their capability to organize and execute the actions required to achieve specific performance goals. Together, these constructs influence athletes' motivation, emotional regulation, persistence, coping strategies, and overall competitive performance.

The importance of mental toughness in sports has been emphasized by researchers who argue that psychological skills often differentiate elite athletes from their less successful counterparts. Mental toughness has been defined as "having the natural or developed psychological edge that enables an athlete to generally cope better than opponents with the many demands that sport places on performers" (Jones et al., 2007, p. 243). This definition highlights that mentally tough athletes are capable of maintaining concentration, confidence, and emotional control even under intense competitive pressure. Similarly, the concept of self-efficacy, introduced by Albert Bandura (1997), has become one of the foundational theories in sport psychology. This statement underscores the significance of efficacy beliefs in shaping athletic performance, persistence, and emotional responses during competition.

Para-athletes represent a particularly important population for examining these constructs because their sporting experiences often involve additional psychological demands beyond those encountered by able-bodied athletes. They must adapt not only to the competitive environment but also to disability-related barriers, rehabilitation experiences, equipment challenges, and social attitudes. These experiences may foster higher levels of resilience and psychological strength, yet they may also increase psychological vulnerability depending on contextual factors such as social support, coaching quality, competitive experience, and type of impairment.

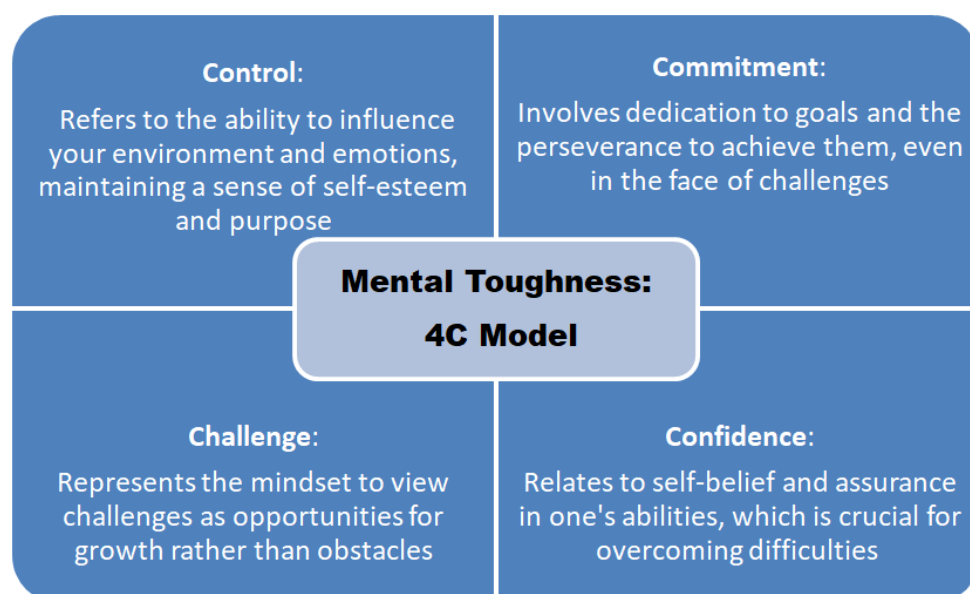
Previous research has demonstrated that mentally tough athletes are better able to regulate emotions, recover from setbacks, and sustain high performance under pressure. Likewise, athletes with stronger self-efficacy beliefs tend to display greater motivation, persistence,

confidence, and adaptive coping behaviors. Several studies have also suggested a positive relationship between mental toughness and self-efficacy, indicating that athletes who believe strongly in their abilities are more likely to develop resilient psychological characteristics that facilitate consistent performance. Gucciardi et al. (2009) defined mental toughness as "a collection of values, attitudes, emotions, and cognitions that influence the way in which an individual approaches, responds to, and appraises demanding events to consistently achieve his or her goals" (p. 57).

Although considerable research has examined mental toughness and self-efficacy in able-bodied athletes, comparatively fewer studies have focused specifically on para-athletes. Existing evidence suggests that psychological factors may play an even more significant role in this population because of the additional personal and environmental challenges associated with disability sport. However, findings remain fragmented across different sports, impairment categories, and competitive levels. Consequently, there remains a need for systematic investigation into the relationship between mental toughness and self-efficacy among para-athletes to better understand how these psychological resources contribute to athletic performance and well-being. The present study seeks to address this gap by reviewing existing literature on mental toughness and self-efficacy among para-athletes and examining the theoretical and empirical relationship between these constructs. A comprehensive understanding of this relationship may assist coaches, sport psychologists, rehabilitation professionals, and policymakers in designing evidence-based psychological interventions that enhance both athletic performance and overall quality of life among para-athletes.

MENTAL TOUGHNESS

According to Sheard (2013), mental toughness is a psychological mindset that enables athletes to remain focused, resilient, and confident while coping effectively with pressure and adversity. Mental toughness is a psychological characteristic that enables athletes to perform consistently under pressure. It helps individuals remain confident, focused, and determined despite challenges. Clough, Earle, and Sewell (2002) introduced the influential 4C model for Mental Toughness.



Mentally tough athletes recover quickly from setbacks and failures. They maintain emotional control during stressful situations. Mental toughness includes resilience, commitment,

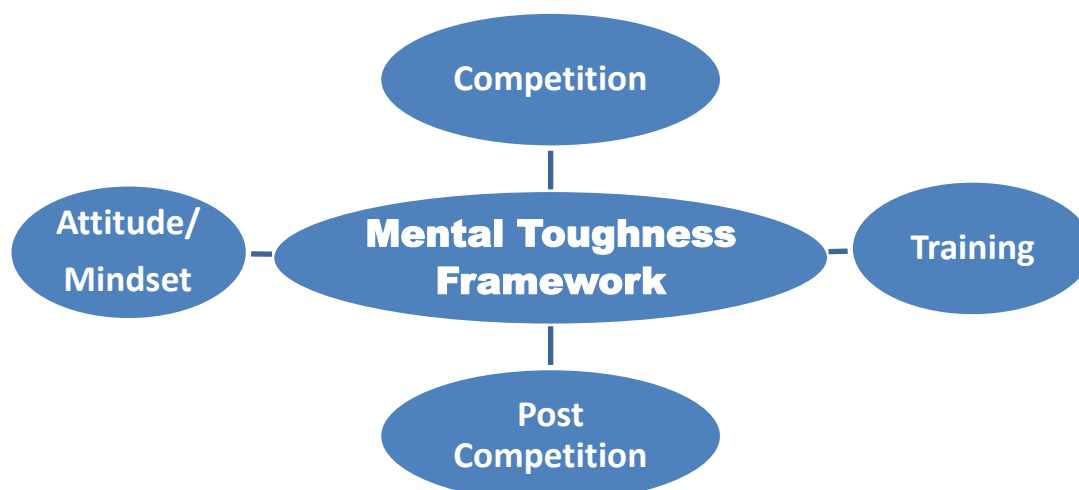
confidence, and self-belief. It enables athletes to cope effectively with competition-related stress and adversity. This quality helps them stay motivated toward long-term goals. Mental toughness can be developed through training, experience, and psychological skills practice. It is considered a key factor distinguishing elite athletes from others. "Mental toughness (MT) is often referred to as one of the most important psychological attributes underpinning the success of athletes." — Cowden (2017). In para-athletes, mental toughness plays an essential role in overcoming both sport-related and disability-related challenges.

SELF-EFFICACY

Self-efficacy refers to an individual's belief in their ability to successfully perform a specific task or achieve a desired goal. It is a central concept in social cognitive theory developed by Albert Bandura. Athletes with high self-efficacy are more confident in handling difficult situations. They are more likely to persevere when facing obstacles and setbacks. Self-efficacy influences motivation, effort, emotional reactions, and performance. It develops through mastery experiences, observation of others, verbal encouragement, and emotional regulation. Feltz, Short, and Sullivan (2008) described self-efficacy as a sport-specific belief in an athlete's capability to successfully execute the actions required to achieve desired performance outcomes. They also emphasized that self-efficacy influences athlete's effort, persistence, emotional responses, and performance. High self-efficacy enhances resilience and effective coping under pressure. In sports, it contributes to improved performance and greater persistence. For para-athletes, strong self-efficacy helps overcome physical, psychological, and environmental barriers. Therefore, self-efficacy is regarded as an essential predictor of athletic success and psychological well-being. Bandura (1986) argued that self-efficacy beliefs strongly influence individuals' behavioral choices, persistence, effort, and emotional reactions. He asserted that an individual's self-efficacy beliefs fundamentally dictate their levels of motivation, the degree of effort they expend during adversity, and their overall emotional resilience against stressors like depression. This perspective provides the theoretical foundation for understanding how self-efficacy contributes to resilience and athletic performance among para-athletes.

LITERATURE REVIEW

Weinberg and Gould (2023) explain that psychological factors such as self-confidence, motivation, self-efficacy, anxiety regulation, goal setting, imagery, and psychological skills training play a fundamental role in enhancing athletic performance and well-being. The literature on sport psychology highlights mental toughness and self-efficacy as two important psychological factors that influence athletic performance and success. Albert Bandura (1997) explained that self-efficacy refers to an individual's belief in their ability to organize and execute actions required to achieve specific goals. Athletes with high self-efficacy show greater confidence, persistence, and motivation during training and competition. Similarly, Jones, Graham, Hanton, Sheldon, and Connaughton (2007) described mental toughness as the psychological advantage that enables athletes to cope effectively with pressure and adversity. Research has consistently shown that mentally tough athletes demonstrate better emotional control, resilience, and performance under stressful situations. Jones, G., Hanton, S., & Connaughton, D. (2007) depicts "Mental toughness is having the natural or developed psychological edge..." The study identified attributes of mental toughness (p. 243). These attributes organized in four dimensions.



Studies also indicate a positive relationship between mental toughness and self-efficacy, suggesting that athletes who believe in their abilities are more likely to remain resilient and committed to their goals. In disability sport, psychological characteristics such as confidence, optimism, resilience, and determination are essential for overcoming both sporting and disability-related challenges. Martin, John J. (2013) emphasized that participation in sport enhances the psychological well-being, confidence, and social integration of para-athletes. However, research specifically examining mental toughness and self-efficacy among para-athletes remains limited. Most studies have focused on able-bodied athletes, creating a gap in the literature. There is also limited evidence regarding how these psychological variables differ across disability types and levels of competition. Therefore, further research is needed to better understand the relationship between mental toughness and self-efficacy in para-athletes and to support the development of effective psychological interventions that enhance both performance and well-being. Moran (2016) explained that concentration is a fundamental attentional process that enables athletes to maintain focus on task-relevant cues while resisting internal and external distractions. Effective concentration is essential for consistent performance in competitive sport.

MENTAL TOUGHNESS AND SELF-EFFICACY IN PARA-ATHLETES

Para-athletes compete in high-performance sport while managing physical, sensory, or intellectual impairments, making psychological strengths especially important for success. Among these strengths, mental toughness and self-efficacy are widely recognized as key determinants of performance and adaptation. Mental toughness enables para-athletes to remain focused, resilient, and confident despite competitive pressure, injury, or disability-related challenges. Self-efficacy reflects an athlete's belief in their capability to perform successfully and achieve desired outcomes. Para-athletes with high self-efficacy are more likely to persevere through adversity, maintain motivation, and recover from setbacks. Mental toughness supports emotional regulation, determination, and persistence during training and competition. Together, these psychological resources enhance coping strategies, confidence, and athletic performance. Research suggests that participation in sport can strengthen self-belief and resilience among athletes with disabilities. Positive coaching, social support, and successful competitive experiences further contribute to the development of mental toughness and self-efficacy. These constructs also promote psychological well-being and improve athletes' quality of life beyond sport. However, the level of mental toughness and self-efficacy may vary according to the type of disability, competitive experience, and available support systems. Although research on able-bodied athletes is extensive, empirical studies focusing specifically on para-athletes remain comparatively limited. Understanding these

psychological characteristics is therefore essential for designing effective psychological skills training and support programs. Enhancing mental toughness and self-efficacy can help para-athletes achieve sustained performance excellence while adapting successfully to the unique demands of disability sport.

PSYCHOLOGICAL CHARACTERISTICS OF PARA-ATHLETES

In view of International Paralympic Committee, the Paralympic movement demonstrates that disability is not inability. Kokun et al. (2021) stated that "their self-efficacy, capacity for self-organization of their activities and psychological well-being can also be considered as significant personal characteristics necessary for their self-realization in sports" (p. 440). This finding indicates that successful participation in para-sports depends not only on physical ability but also on psychological resources that support adaptation, performance, and personal development. These characteristics include resilience, mental toughness, self-efficacy, motivation, optimism, emotional regulation, and adaptability. Discussing the psychological characteristics of para-athletes, Kumar et al. (2025) highlighted that "mental toughness is crucial in helping para-athletes surmount various emotional and physical challenges" (p. 111). This suggests that mentally tough athletes are better equipped to adapt to disability-related barriers, manage competitive pressure, and sustain high levels of performance. Participation in competitive sport helps para-athletes develop confidence and a strong sense of achievement. Kumar et al., (2025) shows, "the findings highlight that psychosocial correlates, such as burnout, coaching style, and societal perceptions, significantly impact mental toughness and overall well-being in para-athletes." They often display exceptional perseverance in overcoming disability-related barriers and competitive challenges. As noted by Martin, John J. (2018), "Many elite-level Paralympians can achieve physical goals that a person we might label as able-bodied could not even come close to achieving." High levels of intrinsic motivation encourage continuous training and commitment to performance goals. Psychological resilience enables para-athletes to recover from setbacks such as injuries, defeats, and social discrimination. Self-efficacy strengthens their belief in their ability to achieve success despite limitations. Positive coping strategies and emotional control allow them to manage competitive stress effectively. Social support from coaches, teammates, and family further enhances psychological well-being and athletic performance. Research has shown that psychological skills training contribute to improved confidence, concentration, and performance among para-athletes. These psychological characteristics not only enhance sporting success but also improve quality of life, self-esteem, and social integration. However, the development of these characteristics may vary depending on the type of disability, competitive level, and access to resources. Therefore, understanding the psychological profile of para-athletes is essential for designing effective coaching, rehabilitation, and mental skills interventions. Singh et al. (2022) investigated elite Indian standing and seated para-throws athletes, highlighting the importance of psychological and performance-related factors in elite para-sport and emphasizing the need for evidence-based approaches to support athlete development and competitive success. Continued research in disability sport psychology will further strengthen evidence-based practices that support the holistic development of para-athletes.

RESEARCH DESIGN:

A quantitative, cross-sectional correlational research design is used to examine the relationship between the variables and determine if one predicts the other.

VARIABLES:

Independent Variable – Mental Toughness is the independent variable used to determine. It refers to the psychological mindset that enables athletes to remain focused, confident, and resilient under pressure.

Dependent Variable – Self-efficacy is the dependent variable being predicted. It represents an athlete's belief in their capability to successfully perform tasks and carry out actions required to achieve performance goals.

RESEARCH GAP

Although research on the psychological aspects of sports has increased over the past few decades, studies focusing specifically on mental toughness and self-efficacy among para-athletes remain limited. Most previous research has been conducted with able-bodied athletes, making it difficult to generalize the findings to athletes with disabilities. Existing studies have often examined mental toughness and self-efficacy as separate psychological constructs, with relatively few investigating the relationship between them in para-athletes. Furthermore, there is limited research comparing these variables across different types of disabilities, sports, age groups, and levels of competition. The influence of factors such as coaching support, training environment, rehabilitation experiences, and social support on these psychological characteristics has also received insufficient attention.

In India, research on the psychological characteristics of para-athletes is still in its early stages. Most available studies have focused on physical fitness, performance, or rehabilitation rather than psychological strengths such as mental toughness and self-efficacy. This creates a need for more empirical research to understand how these psychological factors contribute to athletic performance, resilience, and overall well-being among para-athletes.

Therefore, the present study aims to explore the relationship between mental toughness and self-efficacy among para-athletes and contribute to the existing body of knowledge. The findings may help coaches, sport psychologists, rehabilitation professionals, and sports organizations develop effective psychological interventions to enhance the performance and well-being of para-athletes.

SUMMARY

The literature suggests that mental toughness and self-efficacy are essential psychological factors influencing athletic performance and well-being. Mental toughness helps athletes remain confident, resilient, and focused under pressure. Self-efficacy strengthens athletes' belief in their ability to perform successfully and overcome challenges. Together, these constructs enhance motivation, persistence, emotional regulation, and coping skills. Studies have shown that para-athletes develop these qualities through training, competition, and life experiences. Psychological characteristics such as resilience, confidence, and determination contribute significantly to their success. However, research on mental toughness and self-efficacy among para-athletes is still limited compared with studies on able-bodied athletes. There is a need for more research exploring the relationship between these constructs across different disability groups and sports. Such research can help coaches and sport psychologists design effective psychological interventions. Therefore, the present study aims to contribute to a better understanding of mental toughness and self-efficacy among para-athletes.

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