

Considerations on self-efficacy in sport psychology and athlete well-being

Abstract

Self-efficacy is highly relevant in sport, as it influences performance, emotional regulation, recovery, and the prevention of risk behaviors. This essay discusses its implications for athlete health by highlighting its role in competitive stress, injury rehabilitation, and coaching effectiveness. Evidence indicates that self-efficacy strengthens resilience, adherence to training, and psychological readiness, while reducing vulnerability to anxiety, burnout, and maladaptive behaviors. Future research should prioritize longitudinal and intervention studies, and practice should systematically integrate self-efficacy into prevention, treatment, and rehabilitation strategies to promote athlete well-being and sustainable careers.

Keywords: self-efficacy, sport psychology, athlete health, performance, rehabilitation, prevention

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Introduction

Self-efficacy is one of the main psychological predictors of performance and health in sport. Defined as the individual's belief in their ability to organize and execute actions required to achieve goals,¹⁻³ it influences not only immediate competitive outcomes but also medium- and long-term athletic trajectories.⁴ In the field of sport and health, self-efficacy functions as a central mediator between competitive stressors, physical recovery processes, and emotional regulation, playing a fundamental role in both high performance and the preservation of well-being.⁵⁻⁷

The purpose of this essay is to discuss the relevance of self-efficacy in sport, with emphasis on its implications for athlete health. It examines how this construct relates to performance, emotional regulation, the prevention of risk behaviors, and injury rehabilitation, as well as outlining directions for future research and practical applications in prevention, treatment, and health promotion programs in sport.

Self-efficacy and sport performance

The relationship between self-efficacy and performance has been consistently documented across different sports, indicating that higher efficacy beliefs are directly associated with superior competitive results.⁷ This association also holds when considering self-confidence as a related construct, as positive beliefs about one's abilities directly affect skill execution under pressure⁶. In high-performance sport, self-efficacy is linked not only to outcomes but also to persistence, resilience, and adherence to training programs, demonstrating that its influence extends beyond immediate performance to shape long-term athletic development.^{4,5}

Pre-competition efficacy beliefs also emerge as reliable predictors of outcomes. Elevated pre-event self-efficacy is associated with better performance, suggesting that psychological preparation before competition plays a decisive role in athletes' responses to competitive demands.^{6,8} This association is not isolated but interacts with other psychological factors. Recent evidence shows that motivation, emotional regulation, and perceived social support interact with self-efficacy, amplifying or mitigating its effects on performance.^{5,9}

The influence of self-efficacy is not limited to competitive outcomes. Higher beliefs in one's ability modulate emotional responses

to anxiety and reduce perceived stress, favoring self-regulation and decreasing vulnerability to burnout.^{5,10} Goal-setting strategies effectively strengthen self-efficacy and lead to improvements in both performance and psychological well-being, indicating that this relationship is mediated by motivational and emotional regulation processes.^{8,9}

Self-efficacy also plays a crucial role in vulnerable contexts such as injury rehabilitation. Athletes returning to sport after anterior cruciate ligament reconstruction report higher levels of psychological readiness and confidence in their abilities, elements directly associated with successful return to competition.^{10,11} This process is shaped by multiple sources of efficacy information: mastery experiences, professional feedback, peer observation, and social persuasion contribute to efficacy beliefs during recovery.¹² In addition, mindfulness-based practices strengthen regulatory self-efficacy in injured athletes, reduce competitive anxiety and burnout symptoms, and facilitating healthier reintegration into sport.^{10,13}

Recent evidence also highlights the influence of coaching on athletes' self-efficacy. The quality of interactions between coaches and young athletes correlates directly with perceived self-efficacy, suggesting that relational and communicative attributes of coaches are significant sources of efficacy beliefs.¹⁴ Furthermore, coaching efficacy and effectiveness predicts athlete satisfaction, indicating that congruence between coaches' self-perceptions and athletes' evaluations of competence strengthens both the relationship and motivation in sport.¹⁵

Another relevant domain is the prevention of maladaptive behaviors. Higher self-efficacy is associated with a reduced likelihood of engaging in doping, as athletes confident in their capacity to achieve results legitimately are less inclined to rely on illicit substances.¹⁶ The relationship also extends to aggressive behavior in competitive contexts, with lower self-efficacy linked to a higher propensity for aggression, whereas higher levels are associated with greater emotional regulation and impulse control.¹⁷

Self-efficacy should therefore be regarded as a key construct at the intersection of sport and health. Its influence spans multiple levels, from the execution of immediate skills to career sustainability, encompassing mental health protection and the prevention of risk behaviors. Advancing rigorous research through longitudinal designs

and controlled interventions is essential to deepen understanding of this construct and to inform evidence-based practices. Strengthening self-efficacy ultimately contributes not only to optimizing performance but also to promoting athletes' overall health and well-being.

Future research and practical implications for prevention, treatment, and rehabilitation

Current literature confirms that self-efficacy is a consistent predictor of sport performance, mental health, and adaptation to injury, yet methodological gaps still limit the understanding of its role across different stages of athletic careers. Most investigations are cross-sectional, preventing analysis of dynamic processes by which efficacy beliefs evolve over time. Longitudinal studies are needed to capture how accumulated experiences, victories, defeats, and injury episodes shape the trajectory of self-efficacy and, consequently, athlete health and performance.

Another important direction involves controlled interventions. Randomized clinical trials comparing psychological techniques such as emotional regulation training, mindfulness programs, goal visualization, and structured feedback could provide stronger evidence on how to strengthen self-efficacy and its preventive effects on competitive anxiety, burnout, and sport-related depression. Expanding research in multicultural contexts is also critical, since socioeconomic and cultural factors influence how athletes develop and sustain efficacy beliefs, requiring culturally sensitive measures and comparisons across different sporting systems.

From a practical perspective, self-efficacy should be considered a guiding construct in strategies for prevention, treatment, and rehabilitation. In prevention, strengthening efficacy beliefs may reduce vulnerability to competitive stress, pre-game anxiety, and risk behaviors such as doping. In treatment, integrating self-efficacy-focused psychological techniques with medical and physiotherapeutic protocols can accelerate recovery from psychosomatic and musculoskeletal conditions. In rehabilitation, mastery experiences, positive feedback, and peer observation act as efficacy sources that increase psychological readiness for returning to sport, reducing relapse and career withdrawal.

The cultivation of self-efficacy in sport requires structured, intentional approaches that integrate cognitive, behavioral, and social strategies across training, competition, and recovery contexts.¹⁸ Empirical evidence shows that self-efficacy is not a static trait but a modifiable psychological state that can be strengthened through guided interventions emphasizing mastery experiences, progressive feedback, and emotional regulation. Exercise-based programs, for example, have demonstrated significant improvements in perceived self-efficacy and related outcomes such as mood and motivation.^{3,18} For example, structured exercise interventions, when combined with feedback mechanisms and goal progression, consistently enhance self-efficacy among adults.¹⁹ These interventions help athletes internalize perceptions of competence by transforming physical effort into tangible experiences of achievement, thereby reinforcing the belief in their ability to influence performance outcomes and health behaviors.¹⁹

Another effective strategy for cultivating self-efficacy involves the use of imagery and visualization techniques, particularly during periods of rehabilitation or performance preparation. Imagery allows athletes to mentally simulate successful execution of skills, recovery milestones, or return-to-play scenarios, which strengthens cognitive representations of competence and emotional readiness.^{10,13} Imagery-based interventions in athletes recovering from sports injuries and

found consistent evidence that visualization practices increase confidence in rehabilitation capabilities and accelerate psychological adaptation to injury.¹³ By enabling athletes to rehearse coping strategies and anticipate success, imagery acts as a mental training tool that bridges physical constraints and psychological preparedness, fostering optimism, self-regulation, and persistence throughout recovery.

Comprehensive reviews indicate that effective programs for enhancing self-efficacy in sport integrate goal setting, modeling, verbal persuasion, and emotional regulation techniques in a coordinated manner to foster the development of competence beliefs.^{18,20} These methods draw directly on Bandura's theoretical framework,¹⁻³ which identifies mastery experiences, vicarious learning, social persuasion, and physiological states as the main sources of efficacy beliefs. In practice, this means designing coaching and rehabilitation environments that reinforce small, progressive successes; encourage observation of competent peers; provide constructive, credible feedback; and teach emotional control strategies to manage anxiety and arousal. When integrated into sport training and rehabilitation programs, these approaches foster an enduring sense of agency, promote resilience in the face of setbacks, and contribute to sustained well-being across athletic careers. Strengthening self-efficacy through such multifaceted, evidence-based methods not only optimizes performance but also enhances athletes' overall adaptation, mental health, and motivation to remain engaged in sport.

The systematic incorporation of self-efficacy into interdisciplinary sport health protocols contributes not only to improved performance but also to the protection of athletes' overall health. Advancing the production of robust evidence on how to strengthen this construct across different phases and contexts of sport represents a decisive step toward consolidating preventive and therapeutic practices grounded in science.

Conclusion

Self-efficacy plays a significant role at the intersection of health and sport, being associated with performance, emotional regulation, the prevention of risk behaviors, and successful injury rehabilitation. Athletes with stronger efficacy beliefs tend to demonstrate greater resilience, enhanced well-being, and more consistent competitive outcomes. Advancing longitudinal research and evidence-based interventions, as well as integrating self-efficacy into prevention, treatment, and rehabilitation practices, is essential to fostering more balanced and sustainable athletic careers.

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Conflicts of interest

The authors declare no conflicts of interest related to the content of this article.

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