# Psychological Resilience: Definitional Advancement and Research Developments in Elite Sport

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#### **Abstract**

The purpose of this paper is to consider definitional advancement in the area of psychological resilience and to review research developments in elite sport. To this end, the narrative is divided into two main sections. The first outlines a recent definition of psychological resilience and describes how it extends previous conceptual work in this area in four ways. The second section outlines research developments in elite sport specifically focusing on a grounded theory of psychological resilience in Olympic champions. The findings of this study are compared to existing theories of psychological resilience and the implications of the research are discussed.

**Keywords:** Athlete – Definition – Excellence – Olympic – Resilience – Sport Performance

#### **Abstrait**

Le but de cet article est d'examiner l'avancement des définitions dans le domaine de la résilience psychologique et d'examiner les développements de la recherche dans le sport d'élite. À cette fin, le récit est divisé en deux sections principales. La première décrit une définition récente de la résilience psychologique et décrit comment elle étend les travaux conceptuels antérieurs dans ce domaine de quatre façons. La deuxième section décrit les développements de recherche dans le sport d'élite en se concentrant spécifiquement sur une théorie basée de la résilience psychologique dans les champions olympiques. Les résultats de cette étude sont comparés aux théories existantes de la résilience psychologique et les implications de la recherche sont discutées.

**Mots clés:** Athlète - Définition - Excellence - Olympique - Résilience - Performance sportive

he study of psychological resilience seeks to understand why some individuals are able to withstand – or even thrive on – the pressure they experience in their lives. Over the past three decades, numerous definitions of resilience have been proposed in the psychology research literature based on alternative conceptualizations of resilience as a process or a trait (see, for a review, Fletcher & Sarkar, 2013). To illustrate, psychological resilience has been defined as a "dynamic process encompassing positive adaptation within the context of significant adversity" (Luthar, Cicchetti, & Becker, 2000, p. 543) and "the positive role of individual differences in people's response to stress and adversity" (Rutter, 1987, p. 316).

In an attempt to provide definitional advancement in this area, based on a review of resilience and building on the aforementioned perspectives, we recently defined psychological resilience as "the role of mental processes and behavior in promoting personal assets and protecting an individual from the potential negative effect of stressors" (Fletcher & Sarkar, 2012, p. 675; 2013, p. 16). This definition extends previous conceptual work in this area in a number of ways. First, the focus on psychological resilience delimits the scope of the description, by definition, to "mental processes and behavior" and excludes other types of resilience such as physical, molecular, and structural resilience. Second, this definition encapsulates aspects of both trait and process conceptualizations of resilience (cf. Fletcher & Sarkar, 2012, 2013). Regarding the trait conceptualization, the "mental processes and behavior" enable individuals to adapt to the circumstances they encounter (cf. Connor & Davidson, 2003). The process conceptualization of resilience recognizes that it is a capacity that develops over time in the context of person-environment interactions (Egeland, Carlson, & Stroufe, 1993). Central to the definition is the focusing of the conceptual lens on the role that psychological-related phenomena play - rather than the mental processes and behavior per se – in avoiding negative consequences. Third, the emphasis is placed on the more neutral term "stressor" rather than the negative value-laden term "adversity" (cf. Fletcher & Sarkar, 2013). Fourth, the focus is on "promoting personal assets and protecting an individual from the potential negative effect of stressors" rather than positive adaptation per se, because resilience generally refers to the ability of individuals to maintain normal levels of functioning rather than the restoration or enhancement of functioning (cf. Bonanno, 2004).

In terms of the extant research in this area, studies have typically been conducted with children, adults, and families who have been exposed to potentially stressful circumstances, such as the death of a close family member (Mancini & Bonanno, 2009), terrorism (Bonanno, Galea, Bucciarelli, & Vlahov 2007), serious illness (Denz-Penhey & Murdoch, 2008), and natural disaster (Goodman & West-Olatunji, 2008). Thus, resilience research has predominantly focused on individuals who are required – largely through no choice of their own – to react to potentially traumatic events in their lives. However, due to the contextual specificity of

resilience (Luthar et al., 2000), the findings of this work are not easily applicable to elite athletes who actively seek to engage with challenging situations that present opportunities for them to raise their performance level, as opposed to clinical populations who have essentially been "forced" to exhibit resilient qualities in order to maintain functioning (cf. Fletcher & Sarkar, 2012; Sarkar & Fletcher, 2014a).

Although a burgeoning body of evidence has pointed to the importance of managing stress in attaining the highest levels of sport performance (Gould & Maynard, 2009), it is only in the last decade or so that there has been an attempt to specifically investigate resilience in elite sport performers (see Fletcher & Sarkar, 2012; 2016; Morgan, Fletcher, & Sarkar, 2013; 2015; Sarkar & Fletcher, 2013; 2014b; 2016; Wagstaff, Sarkar, Davidson, & Fletcher, 2016). In one of the initial studies in this area, we developed a grounded theory of psychological resilience in Olympic champions (Fletcher & Sarkar, 2012). Specifically, we interviewed twelve Olympic gold medallists to explore and explain the relationship between psychological resilience and optimal sport performance. The findings revealed that numerous psychological factors (relating to a positive personality, motivation, confidence, focus, and perceived social support) protected the world's best athletes from the potential negative effect of stressors by influencing their challenge appraisal and meta-cognitions. These constructive cognitive reactions promoted facilitative responses that led to the realization of optimal sport performance.

When comparing the findings to existing theories of psychological resilience (see, for a review, Fletcher & Sarkar, 2013), it is possible to identify a number of common features. To illustrate, the grounded theory supports elements of both process and trait conceptualizations of resilience. More specifically, it appears that a complete understanding of psychological resilience in Olympic champions will only be obtained if it is studied within the context of the stress process. Furthermore, the emergent theory recognizes that, within the process itself, the interaction of a range of psychological factors determines whether an individual demonstrates resilience in response to the stressors he or she encounters. Interestingly, in terms of specific explanatory potential, the emphasis placed on different factors often varies across theories. For example, the conceptual model of medical student well-being (Dunn, Iglewicz & Moutier, 2008) highlights personality and temperament factors as being fundamental to resilience, whereas the conceptual model for community and youth resiliency (Brennan, 2008) places upmost importance on social support. Rather than focusing on or giving precedence to any single psychological attribute, the grounded theory in our study suggests that numerous psychological factors (relating to a positive personality, motivation, confidence, focus, and perceived social support) interact to influence the stress-resilience-performance relationship. Hence, we conceptualize resilience as the interactive influence of psychological characteristics within the context of the stress process (cf. Fletcher & Sarkar, 2013).

In contrast to the majority of existing theories, including the conceptual model of sport resilience (Galli & Vealey, 2008), our findings emphasize that the influence of psychological factors should be conceived in relation to the specific stressors encountered and context in which they arise. Since high achievers actively seek to engage with challenging situations that present opportunities for them to raise their performance level (cf. Sarkar & Fletcher, 2014a), we believe that research and practice in this area should pay careful attention to the matching of psychological factors with the environmental demands. Another important consideration of our grounded theory is that researchers need to distinguish between different levels of cognitive processing in performers' response to stress. More specifically, whilst challenge appraisals appear to be a central feature of the stress-resilience-performance relationship, it is important to note that Olympic champions also appear to engage with higher level, meta-cognitive processes that involve reflecting on one's initial reaction to stressors. This appears to be particularly salient in highly demanding performance environments, where an athlete may initially appraise a stressor in a negative manner, but further evaluates the resultant emotion as having the potential to facilitate performance (cf. Fletcher & Fletcher, 2005; Fletcher, Hanton, & Mellalieu, 2006; Fletcher & Scott, 2010), and thereby maintain resilience in stressful situations.

In terms of the praxis of our study, the grounded theory provides sport psychologists, coaches, and national sport organizations with a model to understand the impact of resilience on the stress process in sport, and its relationship with optimal sport performance. Individuals operating in elite sport should identify and monitor the psychological factors (i.e., positive personality, motivation, confidence, focus, perceived social support) that an athlete needs to develop to exhibit resilience, and should intervene to attain the optimum levels of, and balance between, these factors. In addition, it is crucial that athletes' immediate environment is carefully managed to optimize the demands they encounter in order to stimulate and foster the development of psychological factors that will protect them from negative consequences. Furthermore, educational programs in challenge appraisal and meta-reflective strategies, such as evaluating personal assumptions, minimizing

catastrophic thinking, challenging counterproductive beliefs, and cognitive restructuring, should form a central part of resilience training (cf. Reivich, Seligman, & McBride, 2011; Schinke et al., 2004). To help support these initiatives, athletes should be exposed to various formal and informal psychosocial training and developmental experiences. Examples include personal mentoring from previous gold medalists, expert coaching provision, performance enhancement training, and access to counseling during particularly demanding periods.

Finally, from a research perspective, although resilience intervention studies are required (in sport and other performance contexts), it is important that such work is grounded in systematic resilience research programs rather than piecemeal and incomplete strategies based on, for example, the mental toughness, hardiness or coping literatures. Such research programs, which should be underpinned by the conceptual and theoretical advances already made in this area in general psychology (cf. Fletcher & Sarkar, 2013; Robertson, Cooper, Sarkar, & Curran, 2015), will provide the most rigorous and robust platform from which to develop resilience training (cf. Fletcher & Sarkar, 2016).

#### **Citation**

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# **Biography**

**Dr Mustafa Sarkar** is a Senior Lecturer in Sport and Exercise Psychology at Nottingham Trent University. His teaching, research, and consultancy focuses on the psychology of sporting excellence and its application to other high performance domains (e.g., business). His work addresses how high achievers thrive on pressure and deliver sustained success.



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