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# Organizational stress in competitive sport

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# Chapter 30
# Organizational Stress in Competitive Sport

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## Chapter Overview

Organizational stress continues to generate interest and research attention in sport psychology. This is largely because anecdotal and research evidence continues to highlight that the organizational environment in which sport performers, coaches, sport scientists, and other personnel operate is a breeding ground for experiencing stress. Although some individuals may interpret, respond, and cope well with the varying demands that they encounter in their sport teams and organizations, for others, this may have negative outcomes for their sport relationships, well-being, performance, and desire to continue participating in sport. For these reasons, research continues to be conducted to understand the concept of organizational stress in sport, and how it may be best managed to support the well-being and performance of individuals. This chapter will outline key concepts and theory relating to the concept of organizational stress. In addition, a summary of the origins of organizational stress in sport along with discussions of contemporary research in this area will be provided. Finally, a series of practical implications and future research recommendations will be outlined.

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# The Concept of Organizational Stress

The topic of organizational stress in sport has continued to receive interest and increased attention since its induction to sport psychology research almost 20 years ago (Woodman & Hardy, 2001). Organizational stress was first introduced as "work-related social psychological stress" (Shirom, 1982, p. 21). However, most sport psychology research in this area now employs the following definition, which follows Richard Lazarus' (1966) conceptualization of stress: An ongoing transaction between an individual and the environmental demands associated primarily and directly with the organization within which he or she is operating (Fletcher et al., 2006, p. 329). This definition is often employed to accommodate the ambiguity surrounding the landscape of professional and amateur sport, whereby sport performers and personnel may or may not be paid whilst operating within sport organizations. This ambiguity leaves Shirom's (1982) aforementioned definition of work-related stress less appropriate for competitive sport contexts. However, the main reason for the adoption of Fletcher and colleagues' (2006) definition is the theoretical approach that has commonly underpinned organizational stress in sport research to date. The following section outlines the cognitive-motivational-relational theory of stress (Lazarus, 1991a) which has been mainly adopted in understanding organizational stress in competitive sport.

### The Cognitive-Motivational-Relational Theory of Stress

The cognitive-motivational-relational theory (CMRT) of stress emphasizes understanding the dynamism of the psychological processes of cognitive appraisal and coping that underpin a stressful encounter (Lazarus, 1966, 1991a, 1999; Lazarus & Folkman, 1984). Inherent to this transactional based theory of stress is the view that stress is an ongoing transaction between environmental demands and a person's resources, with strain resulting from an imbalance between the two (Lazarus & Folkman, 1984). The CMRT contends several antecedents, processes, and outcomes that encapsulate stress in the organizational environment (Cooper et al., 2001; Lazarus, 1991b). Firstly, antecedents refer to the environmental conditions of a transactional encounter and a person's characteristics that interact to influence cognitive appraisals of the person-environment relationship (see Chapter 29; Didymus et al., 2021). According to Lazarus (1999), environmental conditions may include demands (i.e., stressors), constraints, opportunities, or the culture in which an individual functions. In addition, imminence, uncertainty, and duration are some of the properties of stressors that provide information about what is being encountered. The main personal characteristics that interact with environmental conditions to influence appraisals are a person's goals and goal hierarchies, beliefs about the self and the world, and personal resources (i.e., those that are used to cope).

Lazarus' CMRT asserts that stress is the result of three interacting processes: appraising of stressors, affective responses, and coping (Lazarus, 1999). Cognitive appraisals are the evaluations a person makes in terms of the significance for one's affective well-being and goals (primary appraisal) and the evaluation of coping options (secondary appraisal). According to Lazarus and Folkman (1984) and Lazarus (1999), if events are perceived to be significant for well-being and goals, they will be appraised as a threat, harm/loss, challenge, or benefit. Threat appraisals refer to the potential for damage, harm/loss appraisals represent damage that has already occurred, challenge appraisals refer to the potential for progressing towards one's goals, and benefit appraisals refer to gain that has already occurred (Lazarus, 1991a). In secondary appraisals, a person evaluates coping resources and options by questioning what they can do to cope. In so far that primary and secondary appraisals are believed to work in combination, the appraisals are hypothesized to amalgamate in the concept of core relational themes (i.e., an explanatory statement of what a person is thinking) for experiencing different emotions (see Chapter 29; Didymus et al., 2021). In this way, immediate emotional responses can be seen as short-term outcomes to primary and secondary appraisals, through action tendencies that can motivate

coping efforts. These coping efforts may serve the function of regulating distressing emotions (emotion-focused coping) or doing something proactive to change the situation causing distress (problem-focused coping). The degree to which an individual is able to appraise and cope with their relationship with their (organizational) environment may influence the type of short-term (e.g., physiological changes, affect) or long-term outcomes of stress (e.g., physical and mental health, burnout, performance; Lazarus, 1991a).

In comparing the CMRT to other approaches used to understand organizational stress (e.g., stimulus-response approaches; Seyle, 1956), the main distinction lies in the former's emphasis on understanding the adaptive and ongoing flow of events and processes over time, the varied meaning construed by individuals, their adjustment to different antecedents, and their ability to cope with their personal transaction with the environment (Cooper et al., 2001; Lazarus, 1991b). To date, the CMRT and associated transactional approaches to stress (e.g., transactional stress theory, Lazarus & Folkman, 1984) are the most widely employed approaches for underpinning organizational stress in sport psychology, and therefore inform the majority of studies that are reviewed in this chapter.

### Transactional Based Definitions of Stress-Related Terminology

Before reviewing the origins and development of organizational stress research in competitive sport, it is important to define various organizational stress-related concepts (see Table 30.1):

**Table 30.1**
*Definitions of Organizational-Stress Related Concepts*

|  | Definition | Citation |
|---|---|---|
| Organizational stress | An ongoing transaction between an individual and the environmental demands associated primarily and directly with the organization within which he or she is operating. | Fletcher et al. (2006, p. 329) |
| Organizational stressors | Environmental demands associated primarily and directly with the organization within which an individual is operating. | |
| Organizational strain | An individual's negative physiological, physical, and behavioral responses to organizational stressors. | |
| Cognitive appraisals | An evaluation of the significance of what is happening in the environment in relation to one's well-being. | Lazarus (1991, p. 122) |
| Coping | Constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person. | Lazarus and Folkman (1984, p. 141) |

## A Review of Organizational Stress in Sport Performers

Research exploring sport performers' experiences of organizational stress first came about due to a series of observations that were made from studies (e.g., Gould et al., 1993; Scanlan et al., 1991) that attempted to identify sources of stress (i.e., stressors) in competition environments (Woodman & Hardy, 2001). These qualitative studies unearthed a range of stressors that appeared to originate from the sport organizations in which sport performers trained and operated. These stressors included team selection, financial costs, training demands, travel, coaching/manager leadership and communication issues, refereeing decisions, tournament organization, negative behaviors of coaches, relationships and experiences outside of sport, and negative interpersonal relationships. The discovery of these stressors lent support for the suggestion that the social and organizational environment in which sport performers function imposes numerous demands, for which there was limited empirical evidence relating to how they may be best managed (Fletcher et al., 2006). These observations stimulated a program of qualitative research that aimed to explore sport performers' experiences of organizational stress and to identify dimensions of organizational stressors.

**Organizational Stressors**
**_The Qualitative Movement_**

Woodman and Hardy (2001) were the first researchers to directly explore elite sport performers' experience of organizational stressors in sport. Since previous research studies had identified sources of stress relating to team environments and relationships (e.g., Gould et al., 1993; Scanlan et al., 1991), Woodman and Hardy (2001) developed a framework of organizational stressors that was based on Albert Carron's (1982) model of group cohesion. Based on interviews with 15 elite athletes from the United Kingdom (U.K.), the framework highlighted organizational stressors related to four main areas: environmental issues, personal issues, leadership issues, and team issues. The main environmental issues that were identified included selection, the training environment, and finances. The main personal issues related to nutrition, injury, and goals and expectations whilst leadership issues most often included coaches and coaching styles. Finally, the main team issues that were identified included team atmosphere, support network, and roles and communication. Although this organizational stressor framework was later evaluated as focusing predominantly on group and relationship-related stressors to the potential neglect of other organizational factors, research using this framework with athletes from a range of sports provided support for the majority of stressor themes that had been identified (e.g., Fletcher & Hanton, 2003; Hanton et al., 2005). These studies did, however, identify some additional organizational stressors not previously reported, including those relating to accommodation, travel, and safety. These additional themes suggested that a new stressor framework may be warranted that focuses less exclusively on interpersonal relationships. In doing so, it was suggested that this may reveal greater insight in to a wider range of organizational issues that sport performers encounter (Fletcher & Hanton, 2003).

Based on this critique of Woodman and Hardy's (2001) framework, a new conceptual framework was developed by Fletcher and colleagues (Fletcher & Hanton, 2003; Fletcher et al., 2006, 2012a), that closely aligned to research advancements in the field of organizational psychology (Cooper et al., 2001). In a series of qualitative studies that were conducted with elite sport performers (Fletcher & Hanton, 2003; Hanton et al., 2005; Fletcher et al., 2012a), support was provided for identifying organizational stressors as related to one of the following five general dimensions: factors intrinsic to the sport, roles in the sport organization, sport relationships and interpersonal demands, athletic career and performance development issues, and the organizational structure and climate of the sport. Table 30.2 illustrates these general dimensions along with some examples of specific organizational stressors that have been reported in empirical research.

**Table 30.2**

*Summary of the Conceptual Framework of Organizational Stressors Among Sport Performers (Fletcher & Hanton, 2003; Fletcher et al., 2006, 2012a)*

| General Dimension | Higher-Order Stressors |
|---|---|
| Factors intrinsic to the sport | Training and competition environment, training and competition load, training and competition hours, travel and accommodation arrangements, nutritional issues, technological change, exposure to hazards and risk of injury. |
| Roles in the sport organization Sport relationships and interpersonal demands | Role ambiguity, role conflict, role overload, responsibility. Personality type, leadership style, lack of social support. |
| Athletic career and performance development issues | Position insecurity, income and funding, career and performance advancement. |
| Organizational structure and climate of the sport | Cultural and political environment, coaching and/or management style, lack of participation in the decision-making process, inadequate communication channels, no sense of belonging. |

What is clear from this conceptual framework is that there are a diverse range of organizational demands that sport performers can encounter. Indeed, this has been evidenced in several sports that have been sampled since the publication of this framework. Similar critique to that of Woodman and Hardy's (2001) framework was, however, evident. The general dimensions developed by Fletcher and colleagues were directly applied from Cooper et al.'s (2001) organizational psychology framework with working populations. A further critique was that the framework developed by Fletcher and colleagues (Fletcher & Hanton, 2003; Fletcher et al., 2006, 2012a) was originally meant for illustrating organizational stressors encountered by elite sport performers only, despite some studies providing support for the framework in non-elite athlete populations (Rumbold et al., 2008; Fletcher et al., 2012a). Subsequently, it was argued that a framework needed to be developed to provide a comprehensive classification of organizational stressors encountered by a wider range of athlete populations.

In addressing these limitations, Arnold and Fletcher (2012) conducted a meta-synthesis of 34 qualitative studies that had each been conducted to identify organizational stressors among sport performers. From this synthesis of literature, the organizational stressors were inductively grouped into the following four general dimensions: leadership and personnel issues, cultural and team issues, logistical and environmental issues, and performance and personal issues (see Table 30.3).

**Table 30.3**

*Summary of Arnold and Fletcher's (2012) Taxonomic Classification of Organizational Stressors*

| General Dimension | Higher-Order Stressors |
| --- | --- |
| Leadership and personnel issues | The coach's behaviors and interactions, the coach's personality and attitudes, external expectations, support staff, sports officials, spectators, media, performance feedback, governing body. |
| Cultural and team issues | Teammates' behaviors and interactions, communication, team atmosphere and support, teammates' personality and attitudes, roles, cultural norms, goals. |
| Logistical and environmental issues | Facilities and equipment, selection, competition format, structure of training, weather conditions, travel, accommodation, rules and regulations, distractions, physical safety, technology. |
| Performance and personal issues | Injuries, finances, diet and hydration, career transitions. |

There were a number of noteworthy strengths of this meta-synthesis. First, by incorporating all of the known published and unpublished studies that had been conducted up until 2011, it was possible to identify a greater commonality of organizational stressors encountered across sports, competitive standards, ages, sex, and nationalities. Second, the synthesis provides the most comprehensive classification of organizational stressors identified to date. Third, contemporary qualitative studies continue to provide support for this framework, despite often identifying new and unique stressors in specific team and organizational contexts that are beyond typical comparison (e.g., Arnold et al., 2017a; Didymus & Fletcher, 2012, 2017a; Rumbold et al., 2018; Smith et al., 2017; Whittingham et al., 2020). The findings of this meta-synthesis were seminal in initiating the development and validation of the Organizational Stressor Indicator for Sport Performers (OSI-SP; Arnold et al., 2013). In doing so, this questionnaire facilitated quantitative research that examined organizational stressors in sport performers.

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## Learning Exercise One

Tables 30.2 and 30.3 illustrate two frameworks by which organizational stressors can be classified in competitive sport performers. As a comparison, what are some of the common stressors that both frameworks share? Can you spot any themes from one stressor framework that don't appear to be highlighted in the other framework? Why do you think this might be?

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***The Quantitative Movement***

A key argument that led to the development of a questionnaire designed to measure organizational stressors was the notion that it is unlikely that all organizational stressors will lead to negative outcomes for an athlete's well-being and performance. It was therefore argued that researchers need to demonstrate which organizational stressors are related to which outcomes and in what ways. One way to address this challenge was through the examination of the situational aspects of stressors; namely the degree to which each organizational stressor encountered by athletes varies

according to their frequency (i.e., how often the organizational stressors occur), their intensity (i.e., how demanding the stressors are for the individual), and their duration (i.e., how long the stressors occur for). The OSI-SP (Arnold et al., 2013) was developed and evaluated to assess these three dimensions of organizational stressors in five different subscales (see Table 30.4). The 23-item questionnaire measures the organizational stressors that sport performers have encountered as part of their participation in competitive sport over the past month (e.g., "In the past month, I have experienced pressure associated with …"). For each of the 23 items, athletes are required to complete three rating scales with options ranging from 0 to 5. The scales include frequency ("how often did this pressure place a demand on you?"; 0 = *never*, 5 = *always*), intensity ("how demanding was this pressure?"; 0 = *no demand*, 5 = *very high*), and duration ("how long did this pressure place a demand on you?"; 0 = *no time*, 5 = *a very long time*).

**Table 30.4**

*Subscales of the 23-item Organizational Stressor Indicator for Sport Performers (OSI-SP; Arnold et al., 2013)*

| Subscale | Subscale Description | Example Questionnaire Item |
|---|---|---|
| Goals and development (6 items) | An individual's feedback, progression, and transitions within their sport. | … *the development of my sporting career"* |
| Logistics and operations (9 items) | The arrangement and implementation of procedures for training and / or competition. | … *travelling to or from training or competitions"* |
| Team and culture (4 items) | The attitudes and behavior within the team. | … *the atmosphere surrounding my team"* |
| Coaching (2 items) | The coach's personality and interpersonal skills. | … *my coach's personality"* |
| Selection (2 items) | How sport performers are chosen for teams and / or competitions. | … *how my team is selected"* |

Demographic differences in athletes' experiences of organizational stressors have been identified using the OSI-SP. For example, in one of the first cross-sectional studies using the OSI-SP (Arnold et al., 2015), demographic differences were identified in a large sample (*N* = 1277) of sport performers of varying ages, sports, sex, and competitive standards. These findings demonstrated sex differences in the frequency, intensity, and duration of different organizational stressor subscales. Specifically, males rated themselves higher than females in experiencing logistical and operational stressors for all ratings of frequency, intensity, and duration. In comparison, females rated themselves higher on selection issues than males for all ratings.

Differences in subscale stressors were also observed for individual versus team sport performers. Team sport performers rated themselves higher than individual sport performers for three of the five stressor subscales (logistics and operations, team and culture, selection; for all ratings). A series of other findings has demonstrated that national and international sport performers rated

themselves higher in all five subscales in comparison to athletes of different competitive standards (Arnold et al., 2013). These findings were important from an applied perspective as they highlighted that a "one size fits all" approach to developing stress management interventions would not make sense since the experience of organizational stressors may vary based on personal and sporting demographics. These demographic differences in experiencing stressors could lend support to the suggestion that not all stressors will lead to negative outcomes. To further explore this idea, studies are, in recent years, very much focused on identifying statistical relationships between organizational stressor subscales (and ratings of frequency, intensity, and duration) in relation to various stress components (e.g., Arnold et al., 2017, 2018; Bartholomew et al., 2017), physical and mental well-being (e.g., Larner et al., 2017; Simms et al., 2020), and performance outcomes (e.g., Roberts et al., 2019; Tamminen et al., 2018).

These quantitative studies suggest that the situational dimensions of frequency, intensity, and duration are not consistently applied across studies. For example, some studies report statistical relationships between specific stressor subscales/dimensions (e.g., team and culture frequency) and outcomes (Arnold et al., 2017b), whilst other studies focus purely on reporting the findings of specific situational dimensions, such as frequency for each subscale (e.g., Tamminen et al., 2018), or even totaling the frequency for all organizational stressor items regardless of subscale (e.g., Larner et al., 2017). This makes it difficult to tackle the original purpose of developing the OSI-SP, which was to examine which organizational stressors are related to which outcomes and in what ways. Whilst most of the aforementioned research has been conducted using cross-sectional research designs, contemporary studies in the area are beginning to examine organizational stressors temporally (Roberts et al., 2019; Tamminen et al., 2018) and longitudinally (Kristiansen et al., 2019; Larner et al., 2016; Simms et al., 2020).

The qualitative studies on organizational stressors have identified a wealth of common demands that are encountered by athletes who participate in a diverse range of sports. In addition, the quantitative studies in this area are continuing to show the ways in which organizational stressors may be related to different well-being and performance outcomes. However, a fundamental limitation in exclusively focusing on the main effect of organizational stressors for well-being alone is the degree to which individuals might appraise, respond to, and cope with their organizational environment differently. These mediating processes, as outlined by theorist Lazarus (1991, 1999), require greater attention. Sport psychology researchers are now beginning to acknowledge the importance of cognitive appraisals, and emotional and coping processes in mediating the potential influence of organizational stressors on various well-being and performance outcomes for sport performers. The following section outlines some of the research conducted to date that has explored sport performers' cognitive appraisals of, and emotional and coping responses to, organizational stressors as a means of more fully applying Lazarus' (1991) transactional conceptualization of organizational stress.

## Appraisals and Emotional and Coping Responses to Organizational Stressors
### Appraisals

In the past decade, a series of qualitative studies have sought to explore how competitive sport performers cognitively appraise the organizational stressors that they encounter. For example, Neil et al. (2011) indicated that athletes respond negatively to organizational-related demands, but some athletes are able to interpret their emotional responses to stressors in a positive way for their performance. Although this study was able to distinguish between positive and negative appraisals of organizational stressors, cognitive evaluations were not examined in great depth so as to understand the different primary appraisals originally proposed by Lazarus and Folkman's (1984) transactional stress theory. To address this limitation, Hanton et al. (2012) used a six-week stress log with four international sport performers who were competing in different sports. Their findings suggested that most athletes appraised organizational stressors as threatening or harmful, with little perceived control.

In one of the most detailed examinations of sport performers' appraisals of organizational stressors, Didymus and Fletcher (2012) conducted a 28-day diary study with 13 national standard U.K. swimmers. Whilst the qualitative analysis provided support for previous studies in highlighting that many swimmers appraised organizational stressors as a threat or with a sense of harm/loss, the authors were also able to highlight that the situational property of imminence (i.e., how much time there is before an event occurs) was linked to the greatest number of threat appraisals, and that swimmers did also experience challenge appraisals. Other qualitative studies have provided examples of how threat, harm, challenge, and benefit appraisals may be linked to specific organizational stressors. For example, Rumbold et al. (2018) conducted a series of interviews and focus groups with a professional rugby union academy team (*N* = 40). Players in this study predominantly viewed a range of organizational stressors as threatening and harmful, including: making the transition from amateur to professional rugby, negative feedback, asking for advice, job uncertainty, team hierarchies, unfriendly teammates, and competition for playing positions. However, the findings also illustrated how some players appraised the professional academy team set up that they were operating in as beneficial. Moreover, some players appraised getting injured as a challenge to work on aspects of their conditioning whilst unable to play.

Whilst currently relatively limited, there is some quantitative evidence to demonstrate how organizational stressors may be linked to specific appraisals. In a study of 315 high-level British athletes who completed the OSI-SP (Arnold et al., 2013), Bartholomew et al. (2017) found that the frequency of goals and development (positively), logistics and operations (positively), and team and culture (negatively) subscales were all significantly related to challenge appraisals. In addition, the frequency of team and culture and coaching stressors were positive predictors of athletes' threat appraisals. Significant relationships with threat and challenge appraisals were also observed in regard to the intensity and duration of some of the organizational stressor subscales. However, this study could be critiqued because it only measured general primary and secondary appraisals and, therefore, the athletes participating may only have been rating how they generally appraise demands as a threat, challenge, or harm/loss, rather than how they appraise each specific organizational stressor in these ways.

### Emotional Responses

To date, emotional responses to organizational stressors have been explored in the sport psychology literature but to a lesser extent to that which has focused on athletes' appraisals. The collective findings of a series of qualitative studies sampling a range of team sports suggest that athletes can respond in a variety of ways to specific organizational stressors. These emotional responses include: anger, anxiety, boredom, disappointment, duress, excitement, fatigue, guilt, happiness, hope, jealousy, relief, reproach, resentment, sadness, and shock (Fletcher et al., 2012b; Rumbold et al., 2018). Using a cross-sectional design with 414 sport performers across varying sports, Arnold et al. (2017b) found that no organizational stressors as measured by the OSI-SP were related to positive affect. However, the intensity and duration of goals and development stressors, and the intensity and frequency of team and culture stressors were found to be significantly associated with sport performers' negative affective (i.e., emotional) states. Perhaps surprisingly, no significant relationships were identified for three of the five OSI-SP dimensions (logistics and operations, coaching, and selection) and negative affect. One of the reasons for this could be that cognitive appraisals are likely to be a stronger predictor of affective responses than organizational stressors themselves.

In a longitudinally focused quantitative daily diary study, Rumbold et al. (2020) provided support for the argument that cognitive appraisals may be strong predictors of affective responses to organizational issues, irrespective of the organizational issues encountered. Specifically, this detailed study highlighted that daily threat and harm appraisals of organizational stressors over a five-week period of training and competition were significantly related to daily negative affective responses to

organizational events. Similarly, daily challenge (positively) and harm appraisals (negatively) were strongly related to daily positive affective responses to organizational events. This study also provided evidence to suggest that stable threat, challenge, and harm appraisals over the five-week period were strong predictors of daily fluctuations in positive and negative affective responses to organizational events within a professional rugby union academy team. These findings offer the first quantitative insight into how daily changes in cognitive appraisals of organizational events in professional sport environments may be linked to daily changes in affective responses, and, how these relationships are still significant when controlling for a range of personal (e.g., personality) and situational factors (e.g., playing position, key decision makers in the team), that could potentially reduce the influence of appraisals on affective responses.

### *Coping*

Researchers have investigated coping functions and strategies in relation to organizational stressors (Didymus & Fletcher, 2017a; Kristiansen et al., 2012; Kristiansen & Roberts, 2010; Rumbold et al., 2018) and appraisals (Didymus & Fletcher, 2014, 2017a; Rumbold et al., 2020) in sport performers from club level to international elite and professional competitive standards. In a study by Kristiansen and Roberts (2010), it was reported that elite Norwegian youth athletes tended to use different types of social support resources (e.g., tangible, information, emotional) to manage organizational stressors encountered at a major European youth competition. Similarly, in a study with U.K. based swimmers, Didymus and Fletcher (2014) reported that swimmers employed a range of coping strategies following each type of appraisal of organizational stressors. In a more recent study, Didymus and Fletcher (2017a) investigated transactional pathways between organizational stressors and their underpinning situational properties, appraisals, coping, and perceived coping effectiveness among high-level field hockey players. Interview data that were analyzed using content analysis highlighted a variety of organizational stressors relating to leadership and personnel issues, cultural and team issues, logistical and environmental issues, and performance and personal issues. These stressors were underpinned by the situational properties of ambiguity, duration, event uncertainty, novelty, and timing in relation to life cycle. The hockey players appraised the stressors either as a challenge, a threat, or with a sense of harm/loss, and most commonly used problem-solving coping to manage the negative outcomes of them. Support for some of the aforementioned findings can be seen in the daily diary study of Rumbold et al. (2020) in which professional academy rugby union players' threat and challenge appraisals were significantly associated with the daily use of seeking social support to solve problems and regulate emotions. From a practical perspective, what these findings highlight is that athletes need to learn or be taught a variety of social support based and problem-focused coping strategies to manage the various organizational stressors that can be appraised as significant for their goals and well-being.



Photo by Pixabay from Pexels

**Outcomes of Organizational Stress in Sport Performers**

A series of studies have acknowledged the importance of investigating potential outcomes that may result from training and operating within structured sport teams and organizations. Studies have indicated that competitive performers may experience various well-being and performance-related outcomes, such as changes to their physical and mental health (Roberts et al., 2019), sleep disturbances (Rumbold et al., 2018), deselection, and dropout (Rothwell et al., 2020). Two common ways in which researchers continue to demonstrate outcomes of organizational stress include the experience of burnout and assessments of sport performance.

*Burnout*

In one of the first studies to explore the relationship between organizational stressors and burnout, Tabei et al. (2012) found that English and Japanese soccer performers experienced burnout symptoms (physical and emotional exhaustion, devaluation, a reduced sense of accomplishment) in relation to their training and competition loads, insufficient rest from training, and injury-related stressors. In addition, Japanese performers experienced some burnout symptoms in relation to authoritarian leadership styles and relationship issues with teammates. In comparison, English players appeared to experience more burnout symptoms than Japanese players in relation to selection issues and the formation of cliques in their soccer teams. A recent quantitative study by Fransen et al. (2020) provided support for some of these qualitative findings by highlighting that athletes' perceptions of their teammates' leadership is linked to their own health and burnout symptoms. In a cross-sectional quantitative study of sport performers and staff working in sport organizations ($N$ = 487), Larner et al. (2017) found that the frequency of organizational stressors encountered was statistically related to experiences of burnout symptoms. In addition, the relationship between stressors and burnout was moderated by individuals' tendencies to express emotions merely for the benefit of aligning with organizational goals (i.e., emotional labor).

*Performance*

A variety of studies have taken different approaches to measuring sport performers' subjective ratings of their sport performance in relation to organizational stress. In the first study to explore performance in the context of organizational stress, Didymus and Fletcher (2017a) reported that subjective performance satisfaction was an intricate phenomenon that was linked to athletes' appraisals, rather than perceived coping effectiveness, for example. Using a cross-sectional quantitative study design, Arnold et al. (2017b) found that the intensity of selection stressors was positively related to performance satisfaction. A surprising observation from this study was that no other organizational stressors were statistically associated with athletes' performance evaluations. Of the 14 non-significant relationships between different stressor subscales/dimensions and performance, nine of these showed negative non-significant relationships between stressors and performance, and five showed positive non-significant relationships. The findings of both of these studies suggest that the relationship between organizational stressors and performance is complex. The findings of Arnold et al. (2017b) may have been due to aspects of the research design whereby sport performers were asked to reflect on their performances that had taken place over the past month. This meant that the findings will have been subject to memory decay and the potential ramifications of retrospective recall. Another study that employed the same research design with a smaller sample of sport performers (Arnold et al., 2018) suggested that the frequency of some organizational stressors was negatively associated with subjective performance evaluations. This means that the more frequent an organizational stressor, the more negative the evaluation of performance.

Using a temporal rather than a cross-sectional design, Tamminen et al. (2018) conducted a study in Canada with 84 varsity athletes from a selection of team sports: field hockey, volleyball, basketball,

and ice hockey. Athletes completed the OSI-SP, measures of perceived esteem support, and competition appraisals five days before a weekend competition. A week following competition, the athletes then rated their evaluation of their performance at the competition. The findings from this study indicated that whilst athletes' perceived support and secondary appraisals were linked to subjective performance a week after competing, the relationship between perceived support and secondary appraisals was moderated by the frequency of coaching stressors (negatively) and the frequency of team and culture stressors (positively). Other temporal approaches have been used to explore the relationships between organizational stressors in the lead up to and on the day of competitive performance. In a study of military veterans, for example, Roberts et al. (2019) found that the frequency and intensity of organizational stressors was generally linked to negative subjective performance on the day of the Invictus Games.

A key observation relating to all of these studies is the reliance on athletes' subjective evaluations of their own performance, which is likely due to the challenges associated with the objective measurement of performance in sport psychology. However, in judging selection to be an important longitudinal measure of performance for high level youth performers, Rumbold et al. (2020) found that professional rugby academy players' use of some coping techniques to deal with organizational events (e.g., seeking support to regulate emotions) during a five-week training period was statistically associated with the number of professional senior club appearances attained five years after the initial data collection period. This goes some way toward illustrating that the ways in which youth performers cope with organizational issues during the stages of development in their sports may be linked to how well they achieve success in their sport in the future as an adult.

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## Learning Exercise Two

Think back to your experiences of participating and competing in sport. What examples can you think of where you may have personally encountered organizational stressors? Can you remember how you responded, coped, or behaved at the time? The above section on Outcomes of Organizational Stress in Sport Performers suggests that there might be difficulties in measuring performance in sport. Consider some ways in which you think performance could be measured differently to understand how organizational stress may lead to better or worse sport performance.

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## Organizational Stress in Other Performers

So far, this chapter has focused exclusively on the organizational stress experiences of competitive sport performers. However, it is clear that an athlete's well-being, development, and success in sport is often the outcome of positive relationships, instructions, support, and care that they have received from various individuals who also operate (directly or indirectly) within the same sport organizational environments. For these reasons, sport psychology researchers have begun to explore the organizational stress experience as it pertains to *other* performers in sport. To date, these have included coaches, parents, referees/officials, sport science and management staff. Below, we briefly outline some of the main findings on coaches' and parents' experiences of organizational stress. Due to space limitations, we provide suggestions for further reading on the stress experiences of referee/officials (Dorsch & Paskevich, 2007; Neil et al., 2013) and sport science and management staff (Arnold et al., 2019; Fletcher et al., 2011) at the end of this chapter.

**Coaches**

Since the work of Frey (2007), sport psychology researchers have examined the stress experiences of coaches, partly because coaches' stress may impact on their relationships with athletes (Thelwell et al., 2017), and, also because stress that is unmanageable could lead to burnout and coach turnover (Kilo & Hassmén, 2016). In a systematic review conducted by Norris et al. (2017), 24 studies that had examined stress in coaches were synthesized. It was concluded from this review that coaches encounter numerous demands relating to their performance and that they also encounter a series of stressors relating to the teams and organizations in which they coach. The organizational stressors reported in this systematic review included workload (e.g., extended working hours, completing multiple coach roles), relationships (e.g., poor communication from managers, relationships with the performers and teams they coach), and career development concerns (e.g., job insecurity) to name a few (see Chapter 29; Didymus et al., 2021). The issues of workload and work-home imbalance are some of the most cited stressors that coaches report as being stressful, and studies continue to highlight that these factors are closely linked to burnout and intentions to leave the coaching profession (Bentzen et al., 2016; Kilo & Hassmén, 2016; Knight et al., 2015; Potts et al., 2019). On the basis that coaches encounter a vast range of stressors, researchers have developed and validated a measure to assess how stressors are linked to various well-being and performance outcomes for coaches. Despite currently only being validated for use among coaches in South Africa, Kubayi et al. (2018) have made promising progress toward the quantitative measurement of stressors when developing the Stressors in Sports Coaching Questionnaire (SSCQ). This questionnaire assesses coaches' perceptions of the environmental, task-related, performance, and athlete stressors that they encounter in their roles. Within this questionnaire, a variety of items relate to organizational related demands such as the coach's role, their relationships with athletes and staff, the work-home interface, and requirements to travel.

How coaches cognitively appraise and cope with organizational stressors has also received some attention (Didymus, 2017). Moreover, researchers have given consideration to how coaches and their athletes may communicate with and protect one another when using dyadic coping efforts to manage shared stressors (Staff et al., 2017). Taken together, these studies on coach stress that incorporate information about organizational stress transactions demonstrate the need to examine the environmental, personal, and relational factors that may influence how coaches cope with stressors in their vocational and occupational roles. In addition, with continued reports of stress among coaches both anecdotally and in research evidence, advances need to be made in developing interventions to support coaches' well-being.

**Parents**

It is starting to be more commonly recognized that parents of sport performers experience organizational stressors that can impact their own experiences, those of their children, and the coaches with whom their children train. In a multipart concurrent mixed method study with 135 British tennis parents, Harwood et al. (2019) reported that parents experienced organizational stressors relating to finances, time, coaching and training, organizing bodies, tournaments, and injury. These stressors were predominantly appraised as harm or challenge, and parents typically experienced anxiety and anger in relation to the stressors experienced. Interestingly, the parents experienced greater anger following competition stressors than they did following organizational (and developmental) stressors. The parents reported using various coping strategies relating to mastery, internal regulation, and goal withdrawal, which varied statistically in degrees of reported effectiveness.

Lienhart et al. (2020) conducted one of the most comprehensive studies examining parents' experiences of stressors and coping in elite sport contexts. First, 1299 parents of adolescent sport performers completed an open-ended survey to identify stressors associated with their child's sport involvement. Next, 16 parents participated in semi-structured interviews. Organizational stressors

included demands related to health (e.g., doping and injuries), sport systems (e.g., scheduling, quality of training and coach, and communication), logistics (e.g., domestic tasks and organization), and personal investments (e.g., time and finance). For each stressor cited, parents were asked to rate whether the organizational stressor was easy to manage or difficult to manage. Out of 2,762 responses to this question, parents cited that organizational stressors were difficult to manage 73.43% of the time. Leinhart et al. (2020) identified six different coping dimensions that were used by the parents themselves, their child, or the sport organization to manage stressors. These included detaching from sport, information seeking, managing emotional reactions, avoidance, taking control, and parents providing support. The authors of the study provided participant-derived examples of how specific coping strategies were adopted to deal with specific organizational stressors. For example, under the coping dimension of detaching from sport, some parents spoke of trusting their sport organization to prevent doping, to help manage parents' stress from a lack of information and concerns about athlete doping. In addition, under the coping dimension of information seeking, parents spoke of getting information from other parents to help manage a lack of clear communication from their child's sport organization. This study highlights the complex nature of sport parents' stress experience and suggests that educational interventions are needed to improve effective coping strategies. Such interventions would assist in enhancing the sport participation experience for parents, their children and sport staff working in elite sport organizations.

## Applied Implications

The organizational stress research that we have highlighted in this chapter demonstrates that there are a range of complex individual and group differences that influence the prevalence of organizational stressors, and the extent to which the frequency, intensity, and duration of organizational stressors may be linked to various outcomes (e.g., burnout and performance). Some studies do appear to suggest that the outcomes of organizational stressors are not always negative when cognitive appraisals and coping attempts are also considered. From an applied perspective, this suggests that a one size fits all approach to developing organizational stress management interventions will simply not work, and that tailored interventions are clearly necessary. To this end, we briefly outline how organizational psychologists have recommended that interventions could be best developed and tested to optimize performers' experiences in sport.

### Organizational Stress Management

Organizational stress management has been defined as "any activity initiated by an organization, which focuses on reducing the presence of stressors or minimizing the negative outcomes associated with exposure to stressors" (Ivancevich et al., 1990, p. 252). Despite approximately 20 years of research to date on organizational stress in sport, interventions designed to tackle organizational stress are still lacking and so require development and evaluation to improve our understanding of what psychological programs might work and in what ways (Didymus & Fletcher, 2017b; Fletcher et al., 2006; Rumbold et al., 2012, 2018). This is needed to help sport psychology consultants draw on a stronger evidence base to support how they tailor psychological programs when working at multiple levels (e.g., individuals, teams, coaches, CEOs) of a sport organization.

Due to the limited number of organizational stress interventions that have been developed in sport, researchers have tended to draw parallels between the organizational psychology literature and the types of stress experienced within sport contexts. According to many organizational and work psychologists, the tailoring of specific organizational stress management interventions can typically be developed based on the purpose and target of the intervention (Cooper et al., 2001; Richardson & Rothstein, 2008). For example, organizational-level interventions could be developed where the purpose

is to directly prevent or modify the organizational stressors that individuals encounter. This would involve targeting aspects of the environment or organizational structures that impact sport performers. Where stressors are unavoidable and impractical to reduce or modify, individual-level interventions could be developed where the purpose is to modify how individuals appraise, respond to, and cope with organizational stressors. This involves targeting specific individuals and groups that operate together in sport organizations. When considering the use of the OSI-SP questionnaire (Arnold et al., 2013) as a method to identify which stressors are most problematic and in need of intervention, Table 30.5 presents an example of how organizational stress management interventions could be developed based on stressors encountered by sport performers, and the subsequent purpose and target of a stress management intervention (Cooper et al., 2001). Where organizational stressors can realistically be reduced in a proactive way (e.g., improving communication channels), then organizational-level interventions should be targeted towards modifying the organizational environment in which sport performers operate. However, where stressors cannot be removed easily (e.g., changing a sport's rules and regulations), individual-level interventions targeted at modifying individuals' appraisals, emotional responses and coping abilities are more appropriate (Richardson & Rothstein, 2008; Rumbold et al., 2018). In reality, a combination of both approaches may be required to successfully combat stress in sport organizations that is judged to be detrimental to well-being and performance.

**Table 30.5**

*An Example Framework for Developing Organizational Stress Management Interventions in Sport*

| | | Organizational-level Interventions | Individual-level Interventions | |
|---|---|---|---|---|
| *Proactive* | **Purpose** | Stressor prevention / modification | Restructure / reduce stress responses | *Reactive* |
| | **Target of Intervention** | Environments and structures associated with the sport organization | Individuals and groups operating in sport organizations | |
| | **OSI-SP stressors** | ***Logistics and operations*** (e.g., structure of training) ***Team and culture*** (e.g., poor communication) ***Selection*** (e.g., unfairness in the selection process) | ***Logistics and operations*** (e.g., rules and regulations) ***Team and culture*** (e.g., cultural norms) ***Selection*** (e.g., competition for selection) | |
| | **Example stress management interventions** | Modify training structures, integrate team building, integrate regular team performance appraisals | Cognitive-behavioral treatments, individual and group goal setting, integrate social support systems | |

A key area in which organizational stress research needs to advance is the evaluation of organizational stress management interventions in sport. These interventions will need to be tailored with a view to either modifying the organizational environment in which individuals function, or helping sport performers and other stakeholders to respond and adapt more positively to the organizational environment (Rumbold et al., 2018). In the only intervention study in the context of organizational stress to date, Didymus and Fletcher (2017b) developed and evaluated the effects of a cognitive-behavioral intervention that was designed to modify sport performers' appraisals of stressors and emotional responses. This intervention was conducted over 26 weeks with 4 high-level field hockey players and included 8 weeks of one-to-one sessions to educate players and facilitate acquisition of a cognitive restructuring technique. Using a concurrent, across-participants, multiple-baseline, single-case research design they found that threat and loss appraisals reduced during the intervention whilst challenge appraisals, pleasant emotions, and performance satisfaction increased throughout. Qualitative social validation data that were collected immediately post-intervention suggested that the changes in players' appraisals of organizational stressors were meaningful to the participants, and data collected during a three-month follow-up suggested that the intervention effects had been retained.

## Future Research

There are a number of research studies that are currently being conducted worldwide which are highly relevant to the experience of organizational and occupational stress for those who operate in sport organizations. These include the experience of workload demands, burnout, and job turnover among sport coaches; stress and recovery in athletes and coaches; organizational culture and change for various stakeholders in sport; the work-life interface; dual careers in sport; dyadic coping between athletes and coaches; and emotional contagion in sport teams and personnel. Linking these areas to a research agenda on organizational stress, we anticipate that future studies will focus a great deal more on measuring the relationships between organizational stress processes, physical and mental health, and performance, both cross-sectionally and longitudinally, as means to justify the development of organizational stress management programs in varied sport populations. It is clear that further measurement developments are needed to stimulate new lines of enquiry on organizational stress in sport. For example, measures of stressors among coaches and parents that are developed with and validated for use with individuals worldwide are warranted, as are efforts to more effectively capture the dynamic and highly complex phenomena of appraising and coping.

## Conclusion

This chapter has outlined key concepts and theory that relate to organizational stress as researched in sport settings (please also see Chapter 29; Didymus et al., 2021). Although the majority of research in this area has focused on examining organizational stressors in sport performers, it is clear that the experience of organizational stress is far from straightforward for various individuals (e.g., athletes, coaches, parents). The complexity of organizational stress can be seen in the numerous ways that organizational stressors have been found to link positively, negatively, or not at all with both well-being and various measures of sport performance. The findings related to individuals' cognitive appraisals of, and emotional and coping responses to, organizational stressors also indicate that organizational stress is not simply a case of understanding the direct effects of the organizational environment on various health and well-being related outcomes. Rather, it is a case of considering how the processes of appraisal, emotions, and coping mediate whether organizational issues lead to positive or negative outcomes for well-being and performance.

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### Learning Exercise Three

Perhaps you have watched a series of recent sport documentaries without realizing that they illuminate various aspects of organizational stress in elite and professional sport environments. We have selected some sport documentaries that you may like to watch and, whilst doing so, consider how these documentaries illustrate organizational stress and subsequent outcomes that various individuals in sport may experience.

*30 for 30: Lance Armstrong documentary (Zenovich, 2020)*
*All or nothing: A season with the Philadelphia Eagles (Leitner, 2020)*
*All or nothing: Manchester City (Huerga, 2018)*
*Athlete A (Cohen & Shenk, 2020)*
*Late life: The Chien-Ming Wang story (Chen, 2018)*
*Rising phoenix (Ettedgui & Bonhôte, 2020)*
*The last dance: The Chicago Bulls documentary (Hehir, 2020)*
*The playbook: A coach's rules for life (James & Carter, 2020)*

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## Further Reading

Arnold, R., Collington, S., Manley, H., Rees, S., Soanes, J., & Williams, M. (2019). "The team behind the team": Exploring the organizational stressor experiences of sport science and management staff in elite sport. *Journal of Applied Sport Psychology*, *31*(1), 7–26. https://doi.org/10.1080/10413200.2017.1407836

Bissett, J. E., & Tamminen, K. A. (2020). Student-athlete disclosures of psychological distress: Exploring the experiences of university coaches and athletes. *Journal of Applied Sport Psychology.* Advance online publication. https://doi.org/10.1080/10413200.2020.1753263

De Jonge, J., Dormann, C., & Van den Tooren, M. (2008). The demand-induced strain compensation model: Renewed theoretical considerations and empirical evidence. In K. Näswall, J. Hellgren, & M. Sverke (Eds.), *The individual in the changing working life* (pp. 67–87). Taylor & Francis.

Dewe, P. J., O' Driscoll, M. P., & Cooper, C. L. (2010). *Coping with work stress: A review and critique*. Wiley-Blackwell.

Didymus, F. F., Rumbold, J. L., & Staff, H. (2019). Promoting and protecting coach psychological well-being and performance. In R. C. Thelwell & M. Dicks (Eds.), *Professional advances in sports coaching: Research and practice* (Chapter 16). Routledge.

Dorsch, K. D., & Paskevich, D. M. (2007). Stressful experiences among six certified levels of ice hockey officials. *Psychology of Sport and Exercise*, *8(4)*, 585–593. https://doi.org/10.1016/j.psychsport.2006.06.003

Fletcher, D., Rumbold, J. L., Tester, R., & Coombes, M. S. (2011). Sport psychologists' experiences of organizational stressors. *The Sport Psychologist*, *25(3)*, 363–381. https://doi.org/10.1123/tsp.25.3.363

Neil, R., Bayston, P., Hanton, S., & Wilson, K. (2013). The influence of stress and emotions on association football referees' decision-making. *Sport & Exercise Psychology Review*, *9*(2), 22–41.

Wagstaff, C. R. D. (2017). *An organizational psychology of sport: Key issues and practical applications*. Routledge.

# Acknowledgements

# References

Arnold, R., Edwards, T., & Rees, T. (2018). Organizational stressors, social support, and implications for subjective performance in high-level sport. *Psychology of Sport and Exercise*, *39*, 204–212. https://doi.org/10.1016/j.psychsport.2018.08.010

Arnold, R. S., & Fletcher, D. (2012). A research synthesis and taxonomic classification of the organizational stressors encountered by sport performers. *Journal of Sport and Exercise Psychology*, *34(3)*, 397–429. https://doi.org/10.1123/jsep.34.3.397

Arnold, R., Fletcher, D., & Daniels, K. (2013). Development and validation of the Organizational Stressor Indicator for Sport Performers (OSI-SP). *Journal of Sport and Exercise Psychology*, *35*(2), 180–196. https://doi.org/10.1123/jsep.35.2.180

Arnold, R., Fletcher, D., & Daniels, K. (2015). Demographic differences in sport performers' experiences of organizational stressors. *Scandinavian Journal of Medicine in Science and Sports, 26*(3), 348–358. https://doi.org/10.1111/sms.12439

Arnold, R., Fletcher, D., & Daniels, K. (2017b). Organisational stressors, coping, and outcomes in competitive sport. *Journal of Sports Sciences*, *35*(7), 694–703. https://doi.org/10.1080/02640414.2016.1184299

Arnold, R., Ponnusamy, V., Zhang, C. -Q., & Gucciardi, D. F. (2017c). Cross-cultural validity and measurement invariance of the Organizational Stressor Indicator for Sport Performers (OSI-SP) across three countries. *Scandinavian Journal of Medicine in Science and Sports*, *27(8),* 895–903. https://doi.org/10.1111/sms.12688

Arnold, R., Wagstaff, C. R. D., Steadman, L., & Pratt, Y. (2017a). The organizational stressors encountered by athletes with a disability. *Journal of Sports Sciences*, *35*(12), 1187–1196. https://doi.org/10.1080/02640414.2016.1214285

Bartholomew, K. J., Arnold, R., Hampson, R. J., & Fletcher, D. (2017). Organizational stressors and basic psychological needs: The mediating roles of athletes' appraisal mechanisms. *Scandinavian Journal of Medicine in Science and Sports*, *27*(12), 2127–2139. https://doi.org/10.1111/sms.12851

Bentzen, M., Lemyre, P., & Kenttä, G. (2016). Development of exhaustion for high performance coaches in association with workload and motivation: A person-centered approach. *Psychology of Sport and Exercise*, *22*, 10–19. https://doi.org/10.1016/j.psychsport.2015.06.004

Cannon, W. B. (1939). *The wisdom of the body*. Norton.

Carron, A. V. (1982). Cohesiveness in sport groups: Interpretations and considerations. *Journal of Sport Psychology*, *4(2)*, 123–138. https://doi.org/10.1123/jsp.4.2.123

Chen, F. W. (Director). (2018). *Late life: The Chien-Ming Wang story* [Documentary]. WYC Motions.

Cohen, B., & Shenk, J. (Directors). (2020). *Athlete A* [Documentary]. Netflix.

Cooper, C. L., Dewe, P. J., & O'Driscoll, M. P. (2001). *Organizational stress: A review and critique of theory, research, and applications*. Sage.

Didymus, F. F. (2017). Olympic and international level sports coaches' experiences of stressors, appraisals, and coping. *Qualitative Research in Sport, Exercise and Health*, *9*(2), 214–232. https://doi.org/10.1080/2159676X.2016.1261364

Didymus, F. F., & Fletcher, D. (2017a). Organizational stress in high-level field hockey: Examining transactional pathways between stressors, appraisals, coping and performance satisfaction. *International Journal of Sports Science & Coaching*, *12*(2), 252–263. https://doi.org/10.1177/1747954117694737

Didymus, F. F., & Fletcher, D. (2017b). Effects of a cognitive-behavioral intervention on field hockey players' appraisals of organizational stressors. *Psychology of Sport and Exercise*, *30*, 173–185. https://doi.org/10. 1016/j.psychsport.2017.03.005

Didymus, F. F., & Fletcher, D. (2012). Getting to the heart of the matter: A diary study of swimmers' appraisals of organisational stressors. *Journal of Sports Sciences*, *30*(13), 1375–1385. https://doi.org/10.1080/02640414.2012.709263

Didymus, F. F., Norris, L., Potts, A. J., & Staff, H. R. (2021). Psychological stress and performance. In Z. Zenko & L. Jones (Eds.), *Essentials of exercise and sport psychology: An open access textbook* (pp. 683–709). Society for Transparency, Openness, and Replication in Kinesiology. https://doi.org/10.51224/B1029

Ettedgui, P., & Bonhôte, I. (Directors). (2020). *Rising phoenix* [Documentary film]. Netflix.

Fletcher, D., & Hanton, S. (2003). Sources of organizational stress in elite sports performers. *The Sport Psychologist, 17(2)*, 175–195. https://doi.org/10.1123/tsp.17.2.175

Fletcher, D., Hanton, S., & Mellalieu, S. D. (2006). An organizational stress review: Conceptual and theoretical issues in competitive sport. In S. Hanton & S. D. Mellalieu (Eds.), *Literature reviews in sport psychology* (pp. 321–373). Nova Science.

Fletcher, D., Hanton, S., Mellalieu, S. D., & Neil, R. (2012a). A conceptual framework of organizational stressors in sport performers. *Scandinavian Journal of Medicine and Science in Sports*, *22(4)*, 545–557. https://doi.org/10.1111/j.1600-0838.2010.01242.x

Fletcher, D., Hanton, S., & Wagstaff, C. R. D. (2012b). Performers' responses to stressors encountered in sport organizations. *Journal of Sports Sciences*, *30(4)*, 349–358. https://doi.org/10.1080/02640414.2011.633545

Fransen, K., Haslam, S. A., Steffens, N. K., Mallett, C. J., Peters, K., & Boen, F. (2020). Making 'us' better: High-quality athlete leadership relates to health and burnout in professional Australian football teams. *European Journal of Sport Science*, *20*(7), 953–963. https://doi.org/10.1080/17461391.2019.1680736

Frey, M. (2007). College coaches' experiences with stress – "problem solvers" have problems too. *The Sport Psychologist*, *21(1)*, 38-57. https://doi.org/10.1123/TSP.21.1.38

Gould, D., Jackson, S. A., & Finch, L. M. (1993). Sources of stress in national champion figure skaters. *Journal of Sport and Exercise Psychology*, *15(2)*, 134–159. https://doi.org/10.1123/jsep.15.2.134

Hanton, S., Fletcher, D., & Coughlan, G. (2005). Stress in elite sport performers: A comparative study of competitive and organizational stressors. *Journal of Sports Sciences*, *23(10)*, 1129–1141. https://doi.org/10.1080/02640410500131480

Hanton, S., Wagstaff, C. R. D., & Fletcher, D. (2012). Cognitive appraisals of stressors encountered in sport organizations. *International Journal of Sport and Exercise Psychology*, *10(4)*, 276–289. https://doi.org/10.1080/1612197X.2012.682376

Harwood, C. G., Thrower, S. N., Slater, M. J., Didymus, F. F., & Frearson, L. (2019). Advancing our understanding of psychological stress and coping among parents in organized youth sport. *Frontiers in Psychology*, *10*, 1600. https://doi.org/10.3389/fpsyg.2019.01600

Hehir, J. (Director). (2020). *The last dance* [Documentary miniseries]. ESPN and Netflix.

Huerga, M. (Director). (2018). *All or nothing: Manchester city* [Documentary series]. Amazon Studios.

Ivancevich, J. M., Matteson, M. T., Freedman, S. M., & Phillips, J. S. (1990). Worksite stress management interventions. *American Psychologist*, *45(2)*, 252–261. https://doi.org/10.1037//0003-066x.45.2.252

James, L., & Carter, M. (Producers). (2020). *The playbook: A coach's rules for life* [Television series]. Los Gatos, CA: Netflix.

Kilo, R. A., & Hassmén, P. (2016). Burnout and turnover intentions in Australian coaches as related to organisational support and perceived control. *International Journal of Sports Science & Coaching*, *11*(2), 151–161. https://doi.org/10.1177/1747954116636710

Knight, C. J., Rodgers, W. M., Reade, I. L., Mrak, J. M., & Hall, C. R. (2015). Coach transitions: Influence of interpersonal and work environmental factors. *Sport, Exercise, and Performance Psychology*, *4(3)*, 170–187. https://doi.org/10.1037/spy0000036

Kristiansen, E., Ivarsson, A., Solstad, B. E., & Roberts, G. C. (2019). Motivational processes affecting the perception of organizational and media stressors among professional football players: A longitudinal mixed methods research study. *Psychology of Sport and Exercise*, *43*, 172–182. https://doi.org/10.1016/j.psychsport.2019.02.009

Kristiansen, E., Murphy, D., & Roberts, G. (2012). Organizational stress and coping in U.S. professional soccer. *Journal of Applied Sport Psychology*, *24(2)*, 207–223. https://doi.org/10.1080/10413200.2011.614319

Kristiansen, E., & Roberts, G. C. (2010). Young elite athletes and social support: Coping with competitive and organizational stress in "Olympic" competition. *Scandinavian Journal for Medicine and Science in Sports*, *20(4)*, 686–695. https://doi.org/10.1111/j.1600-0838.2009.00950.x

Kubayi, A., Toriola, A., & Didymus, F. F. (2018). Development and initial validation of an instrument to assess stressors among South African sports coaches. *Journal of Sports Sciences*, *36*(12), 1378–1384. https://doi.org/10.1080/02640414.2017.1385264

Larner, R. J., Wagstaff, C. R. D., Thelwell, R. C., & Corbett, J. (2017). A multistudy examination of organizational stressors, emotional labor, burnout, and turnover in sport organizations. *Scandinavian Journal of Medicine in Science and Sports*, *27*(2), 2103–2115. https://doi.org/10.1111/sms.12833

Lazarus, R. S. (1966). *Psychological stress and the coping process*. McGraw-Hill.

Lazarus, R. S. (1991a). *Emotion and adaptation*. Oxford University Press.

Lazarus, R. S. (1991b). Psychological stress in the workplace. *Journal of Social Behavior and Personality*, *6*, 1–13.

Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. Springer.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. Springer.

Leitner, E. (Director). (2020). *All or nothing: A season with the Philadelphia Eagles* [Documentary series]. Amazon Studios.

Neil, R., Hanton, S., Mellalieu, S. D., & Fletcher, D. (2011). Competition stress and emotions in sport performers. The role of further appraisals. *Psychology of Sport and Exercise*, *12*(4), 460–470. https://doi.org/10.1016/j.psychsport.2011.02.001

Norris, L. A., Didymus, F. F., & Kaiseler, M. (2017). Stressors, coping, and well-being among sports coaches: A systematic review. *Psychology of Sport and Exercise*, *33*, 93–112. https://doi.org/10.1016/j.psychsport.2017.08.005

Potts, A., Didymus, F. F., & Kaiseler, M. (2019). Exploring stressors and coping among volunteer, part-time, and full-time sports coaches. *Qualitative Research in Sport, Exercise and Health*, *11*, 46–68. https://doi.org/10.1080/2159676X.2018.1457562

Richardson, K. M., & Rothstein, H. R. (2008). Effects of occupational stress management intervention programmes: A meta-analysis. *Journal of Occupational Health Psychology*, *13(1)*, 69–93. https://doi.org/10.1037/1076-8998.13.1.69

Roberts, G. A., Arnold, R., Turner, J. E., Colclough, M., & Bilzon, J. (2019). A longitudinal examination of military veterans' invictus games stress experiences. *Frontiers in Psychology*, *10*, 1934. https://doi.org/10.3389/fpsyg.2019.01934

Rothwell, M., Rumbold, J. L., & Stone, J. A. (2020). Exploring British adolescent rugby league players' experiences of professional academies and dropout. *International Journal of Sport and Exercise Psychology*, *18*(4), 485–501. https://doi.org/10.1080/1612197X.2018.1549579

Rumbold, J. L., Fletcher, D., & Daniels, K. (2012). A systematic review of stress management interventions with sport performers. *Sport, Exercise, and Performance Psychology*, *1*(3), 173–193. https://doi.org/10.1037/a0026628

Rumbold, J. L., Fletcher, D., & Daniels, K. (2018). Using a mixed method audit to inform organizational stress management interventions in sport. *Psychology of Sport and Exercise*, *35*, 27–38. https://doi.org/10.1016/j.psychsport.2017.10.010

Rumbold, J. L., Fletcher, D., & Daniels, K. (2020). An experience sampling study of organizational stress processes and future playing time in professional sport. *Journal of Sports Sciences, 38*(5), 559–567. https://doi.org/10.1080/02640414.2020.1717302

Rumbold, J. L., Jowett, S., & Fletcher, D. (2008). A qualitative study of organizational stressors in non-elite performers from individual and team sports. *Journal of Sports Sciences*, *26*(Supp 2), S101.https://doi.org/10.1080/02640410802306202

Scanlan, T. K., Stein, G. L., & Ravizza. K. (1991). An in-depth study of former elite figure skaters: III: Sources of Stress. *Journal of Sport & Exercise Psychology*, *13(2)*, 103–120. https://doi.org/10.1123/jsep.13.2.103

Shirom, A. (1982). What is organizational stress? A facet analytic conceptualisation. *Journal of Organizational Behavior*, *3(1)*, 21–37. https://doi.org/10.1002/job.4030030104

Simms, M., Arnold, R., Turner, J., & Hays, K. (2020). A repeated-measures examination of organizational stressors, perceived psychological and physical health, and perceived performance in semi-elite athletes. *Journal of Sports Sciences*, *39*(1), 64–77. https://doi.org/10.1080/02640414.2020.1804801

Smith, M. J., Arnold, R., & Thelwell, R. C. (2017). 'There's no place to hide': Exploring the stressors encountered by elite cricket captains. *Journal of Applied Sport Psychology*, *30*(2), 150–170. https://doi.org/10.1080/10413200.2017.1349845

Staff, H. R., Didymus, F. F., & Backhouse, S. H. (2017). Coping rarely takes place in a social vacuum: Exploring antecedents and outcomes of dyadic coping in coach-athlete relationships. *Psychology of Sport and Exercise, 30*, 91–100. https://doi.org/10.1016/j.psychsport.2017.02.009

Tabei, Y., Fletcher, D., & Goodger, K. (2012). The relationship between organizational stressors and athlete burnout in soccer players. *Journal of Clinical Sport Psychology*, *6(2)*, 146–165. https://doi.org/10.1123/jcsp.6.2.146

Tamminen, K. A., Sabiston, C. M., & Crocker, P. R. E. (2018). Perceived esteem support predicts competition appraisals and performance satisfaction among varsity athletes: A test of organizational stressors as moderators. *Journal of Applied Sport Psychology*, *31*(1), 27–46. https://doi.org/10.1080/10413200.2018.1468363

Thelwell, R. C., Wagstaff, C. R. D., Chapman, M. T., & Kenttä, G. (2017). Examining coaches' perceptions of how their stress influences the coach-athlete relationship. *Journal of Sports Sciences*, *35*(19), 1928–1939. https://doi.org/10.1080/02640414.2016.1241422

Whittingham, J., Barker, J. B., Slater, M. J., & Arnold, R. (2020). An exploration of the organisational stressors encountered by international disability footballers. *Journal of Sports Sciences*, *39*(3), 239–247. https://doi.org/10.1080/02640414.2020.1815956

Woodman, T., & Hardy, L. (2001). A case study of organizational stress in elite sport. *Journal of Applied Sport Psychology*, *13(2)*, 207–236. https://doi.org/10.1080/104132001753149892

Zenovich, M. (Director). (2020). LANCE [Documentary]. ESPN.

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