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A Research Synthesis and Taxonomic Classification of the Organizational Stressors Encountered by Sport Performers

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The purpose of this study was to synthesize the research that has identified the organizational stressors encountered by sport performers and develop a taxonomic classification of these environmental demands. This study used a meta-interpretation, which is an interpretive form of synthesis that is suited to topic areas employing primarily qualitative methods. Thirty-four studies (with a combined sample of 1809 participants) were analyzed using concurrent thematic and context analysis. The organizational stressors that emerged from the analysis numbered 1287, of which 640 were distinct stressors. The demands were abstracted into 31 subcategories, which were subsequently organized to form four categories: leadership and personnel, cultural and team, logistical and environmental, and performance and personal issues. This meta-interpretation with taxonomy provides the most accurate, comprehensive, and parsimonious classification of organizational stressors to date. The findings are valid, generalizable, and applicable to a large number of sport performers of various ages, genders, nationalities, sports, and standards.

Keywords: athlete, athletic, job, meta-interpretation, occupational, stress

Psychological stress refers to a transactional phenomenon, which involves an individual ascribing meaning to his or her interactions with the environment (Cox, 1978; Lazarus & Launier, 1978). This transactional perspective emphasizes that stress resides neither in the person nor in the environment, but in the relationship between the two (Cox & McKay, 1981; Lazarus, 1981). Although this view of stress is widely accepted at a conceptual and theoretical level, for operational and practical reasons many researchers underpin their work with a predominantly stimulus-based model of stress. This perspective focuses on external forces or environmental demands—which are typically referred to as *stressors*—impinging on individuals' functioning (Hinkle, 1973; Mason, 1975). By focusing the empirical lens on the stimulus component of stress-related transactions, researchers have

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begun to ascertain the cause of dysfunctional responses and the consistent stressor themes or patterns that affect the majority of individuals in the populations being studied (Sutherland & Cooper, 2000).

Over the past couple of decades, sport psychology researchers have adopted a stimulus-based perspective of stress when identifying the “sources of stress” that sport performers encounter (see, e.g., Gould, Jackson, & Finch, 1993; Noblet & Gifford, 2002; Scanlan, Stein, & Ravizza, 1991). Collectively, the stressors identified in these studies span a wide range of issues, with organizational-related stressors—defined as “the environmental demands (i.e., stimuli) associated primarily and directly with the organization within which an individual is operating” (Fletcher, Hanton, & Mellalieu, 2006, p. 329)—emerging as particularly prevalent in performers’ lives (Fletcher & Wagstaff, 2009).

The nature and distribution of organizational stressors in competitive sport are typically diverse and disparate (Fletcher et al., 2006). Consequently, and in line with the assumptions underpinning the stimulus-based model of stress, research in this area has typically focused on identifying the organizational demands that sport performers encounter. At the turn of the century, Woodman and Hardy (1998, 2001a, 2001b) developed an exploratory framework that highlighted four main areas of organizational stress: environmental issues, personal issues, leadership issues, and team issues (cf. Carron, 1982). Empirical research that has adopted this framework has illustrated a wide range of organizational stressors that elite performers experience (see Fletcher & Hanton, 2003b; Hanton, Fletcher, & Coughlan, 2005; Woodman & Hardy, 2001a). However, due to its conceptual origins, the framework may reflect a bias toward group cohesion and interpersonal dynamics (Fletcher et al., 2006; Fletcher, Hanton, Mellalieu, & Neil, 2012).

In an attempt to advance this area of research, Fletcher and Hanton (2003a; Fletcher et al., 2006; Fletcher, Hanton, Mellalieu, et al., 2012) proposed an alternative framework of organizational stressors that integrated recent developments in organizational psychology (see, for a review, Cooper, Dewe, & O’Driscoll, 2001) and sport psychology (see, for a review, Fletcher et al., 2006). The model consists of a three-level hierarchical framework of organizational stressors with 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 organizational structure and climate of the sport. Preliminary evidence for this framework was presented in a brief report that reflected on potential stressors within each dimension (Hanton & Fletcher, 2005) and a study investigating the conceptual integrity of the framework in elite and nonelite performers (Fletcher, Hanton, Mellalieu, et al., 2012). Despite this support, Fletcher, Hanton, Mellalieu, et al. (2012) acknowledged that the framework was influenced by organizational stressors from a range of nonsport occupations; therefore, the extent to which it is free from bias or is entirely relevant to contemporary sport is questionable.

To enhance the relevance of a study to the broader population and generalize beyond the sample studied, researchers should pay careful attention to the participants that are recruited (Onwuegbuzie & Leech, 2007). On reflection of the extant organizational stress research in sport psychology, it is apparent that studies have typically sampled elite or professional performers, with sample sizes ranging from 10 (Hanton et al., 2005) to 16 participants (Woodman & Hardy, 2001a). While these relatively small-scale, qualitative studies enable researchers to explore

stressor-related issues in depth, their narrow focus limits the external validity of the research since the demands that a performer encounters can vary as a function of his or her age (see, e.g., Reeves, Nicholls, & McKenna, 2009), gender (see, e.g., Gan & Anshel, 2009), culture (see, e.g., Puente-Diaz & Anshel, 2005), sport type, skill level, and athletic experience (see, e.g., Nicholls, Polman, Levy, Taylor, & Coble, 2007). Recently, researchers have begun to address some of these issues by exploring the organizational stressors that different populations encounter, including elite and nonelite performers (see, e.g., Fletcher, Hanton, Mellalieu, et al., 2012), parents (see, e.g., Harwood & Knight, 2009), coaches (see, for a review, Fletcher & Scott, 2010), and psychologists (see, e.g., Fletcher, Rumbold, Tester, & Coombes, 2011). Notwithstanding these advances, the number of participants sampled in this area of research typically remains low.

To realize a more complete understanding of organizational stress in competitive sport, it is necessary to consider the experiences of a larger number and wider range of performers. Indeed, as the following extract from Fletcher, Hanton, Mellalieu, et al. (2012) alludes to, sport psychology researchers investigating organizational stressors should move beyond conducting isolated studies that sample a limited number of performers:

The body of knowledge in this area has now reached a point that researchers need to move beyond qualitative studies to identify environmental demands, and develop innovative investigative approaches that develop less biased and more encompassing taxonomic classifications of the organizational stressors encountered by sport performers.

One investigative approach that can be used to accumulate and consolidate isolated knowledge is a research synthesis (Feldman, 1971; Price, 1965). This method seeks to summarize available evidence by drawing overall conclusions from discrete investigations (Thomas & Harden, 2008). When quantitative data are synthesized, a meta-analysis method is typically employed; however, for qualitative data, a meta-synthesis is adopted (Barnett-Page & Thomas, 2009; Sandelowski, Docherty, & Emden, 1997). In view of the isolated and primarily qualitative nature of studies in this area, the first purpose of this study was to synthesize the research that has identified the organizational stressors encountered by sport performers. Similar research in organizational psychology, which has attempted to establish lists of potentially stressful events or situations, has typically proved to be taxonomic in nature (Cooper et al., 2001). Taxonomy is the theoretical study of classification and is used to arrange units (also labeled as *taxa*) into a nomenclature of the construct of interest (Anderson & Krathwohl, 2001; Leech & Onwuegbuzie, 2008; Simpson, 1961). Therefore, the second purpose of this study was to develop a taxonomic classification of the organizational stressors encountered by sport performers. It is envisaged that such a taxonomy will provide an understandable and applicable framework that can be used to classify organizational demands in athletic contexts.

From a theoretical perspective, Fletcher et al.'s (2006) meta-model of stress, emotions, and performance postulates that organizational stressors arise from the sport organization the performer operates in; are mediated by the processes of perception, appraisal, and coping; and, as a consequence, result in positive or negative responses, feeling states, and outcomes. It has been argued that the most

fundamental and significant hindrance to testing this model and the application of other theories of organizational stress in a sport context (e.g., Beehr, 1998; Beehr & Newman, 1978; Cummings & Cooper, 1979, 1998; Edwards, 1991, 1992, 1998; French, Rogers, & Cobb, 1974; Karasek, 1979; Newman & Beehr, 1979; Spector, 1998) has been the lack of a valid and reliable means of assessing the organizational stressors encountered by sport performers (Fletcher & Hanton, 2003b; Fletcher et al., 2006; Hanton et al., 2005; Kristiansen, Halvari, & Roberts, 2012). With this in mind, Arnold and Fletcher (2012) recently contended that one of the most important theoretical advances in this area would be the adoption of “a systematic approach to developing a taxonomic classification that identifies and synthesizes the range of organizational stressors that sport performers encounter” (p. 86). More specifically, such progress would provide a rigorous and robust foundation for the development of an assessment indicator (Arnold & Fletcher, 2012), thus enabling researchers to subsequently examine the mediating linkages within, and moderating influences on, the organizational stress process in sport (cf. Fletcher et al., 2006).

Method

Method of Synthesis

While a number of meta-synthesis methods exist (Sandelowski & Barroso, 2007; Walsh & Downe, 2005), the specific method adopted in this study was a *meta-interpretation* (Weed, 2005, 2006, 2008). This method is appropriate for this study since it is well suited to broad research areas in which the studies primarily employ qualitative methods (Weed, 2005). A further reason for adopting a meta-interpretation is its interpretive rather than aggregative focus, which aims to produce “a new and integrative interpretation of findings that is more substantive than those resulting from individual investigations” (Finfgeld, 2003, p. 894). This emphasis allowed novel patterns to emerge from the data so that an advanced and integrative taxonomic classification of organizational stressors could be developed.

Data Set Development

The first stage of developing the data set involved the researchers selecting a sample of illustrative studies that were relevant to the research area (Weed, 2005, 2006, 2008). To identify further studies for the data set in subsequent iterations, a number of electronic databases were used. These included Article First, Applied Social Sciences Index and Abstracts, Medline, Physical Education Index, PsychARTICLES, PsycINFO, SportDISCUS, Web of Science, and Zetoc. To decide which key search terms were to be used in these databases, the authors sought feedback from four experts who had extensive experience of researching stress. In addition, the technique of *citation pearl growing* (Hartley, Keen, Large, & Tedd, 1990) was also used to trace relevant studies, which involved identifying keywords and descriptors in citations that could be incorporated into subsequent searches. As a result of these two processes, a number of terms were used in combination to search for pertinent studies in the aforementioned databases (see Figure 1). This search strategy returned a larger volume of literature at each iteration of the meta-interpretation than was originally anticipated (see Figure 1). Therefore, to identify appropriate research that could provide a conceptual and theoretical contribution, the studies underwent a

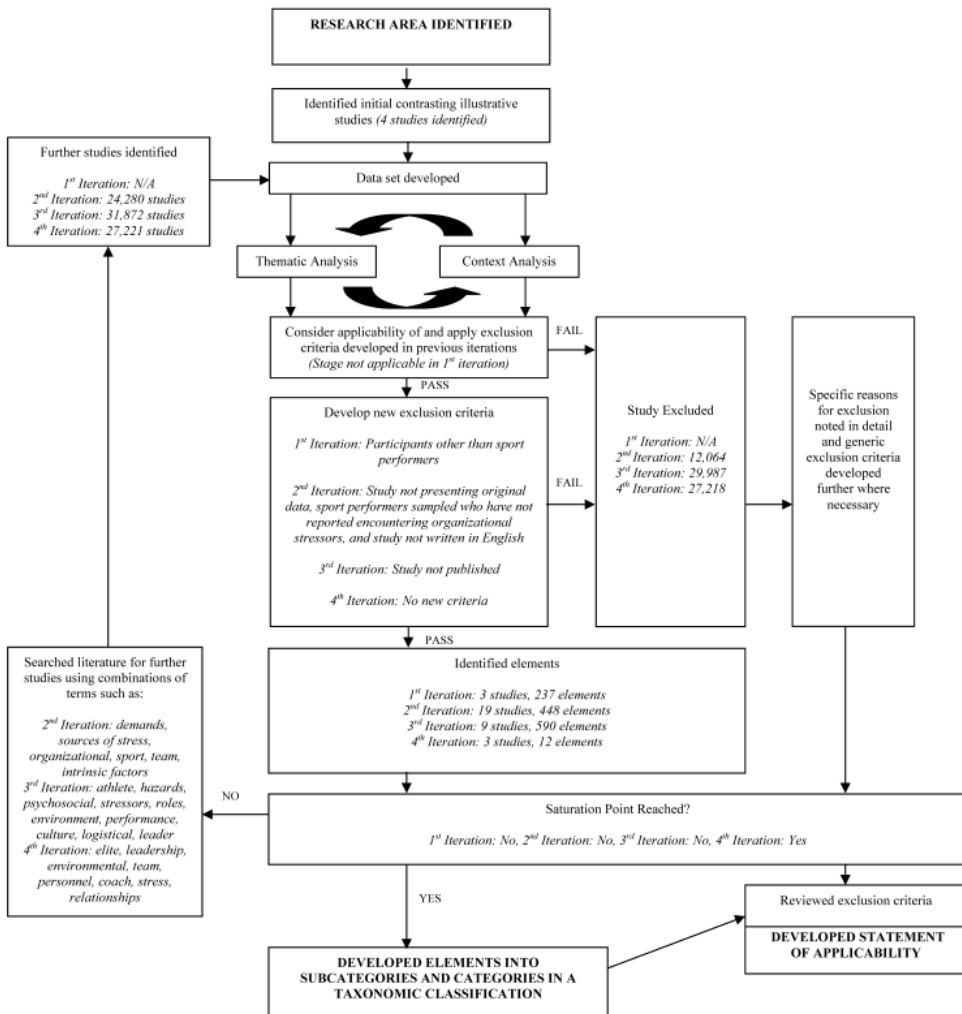


Figure 1 — The meta-interpretation procedure adopted in this study. Adapted from “Meta-Interpretation: A method for the interpretive synthesis of qualitative research,” by M. Weed, 2005, *Forum Qualitative Sozial Forschung*, 6, p. 12. Copyright 2005 by Forum Qualitative Sozial Forschung.

thematic and context analysis and various exclusion criteria were developed as the meta-interpretation progressed (Weed, 2005, 2006, 2008). Studies were excluded for a range of reasons, including the study not being published (see, e.g., Rumbold, 2007), the work not presenting original data (see, e.g., Hanton & Fletcher, 2005), participants being sampled who were not sport performers (see, e.g., Harwood & Knight, 2009), sport performers being sampled who had not reported encountering organizational stressors (see, e.g., Kihl, Richardson, & Campisi, 2008), and the publication language not being English. Therefore, to be eligible for inclusion,

studies were required to be published (or in press), present original data, sample sport performers that had encountered organizational stressors, and be written in English. In addition to the criteria that were developed in this meta-interpretation, Xu (2008) suggested using spatial (i.e., participants from a certain area or nation) and temporal (i.e., time cut-offs for included studies) criteria. However, we decided not to employ these additional criteria, since we wanted to collect any theoretically relevant studies.

Since this study seeks to provide a rigorous and robust foundation for the development of theory in this area of research, it is important that relevant concepts and constructs are clearly defined. Indeed, Klein and Zedeck (2004) remarked that “clearly defined constructs are the building blocks of good theory” (p. 932). In line with Fletcher, Hanton, Mellalieu et al.’s (2012) remarks about previous research in this area, an inclusive approach was adopted when classifying organizational stressors. To elaborate, rather than only including those stressors that were directly associated with the sport organization (e.g., “the governing body of my sport”), any environmental demands that were considered to be primarily associated with the organization within which a performer was operating, but often related in some secondary sense with competitive or personal aspects of performers’ lives, were also included in the meta-interpretation process (e.g., “the officials in my sport”) (cf. Fletcher et al., 2006; Fletcher, Hanton, Mellalieu, et al., 2012).

Procedure

As illustrated in Figure 1, the meta-interpretation began by identifying the research area, before selecting an initial sample of four contrasting, illustrative studies that provide the greatest opportunity to learn. This is known as *maximum variation sampling* (Patton, 2002) and required the researchers to display theoretical sensitivity to the research area. Similar to grounded theory (cf. Pidgeon & Henwood, 1996), displaying theoretical sensitivity involves the synthesizer possessing a broad awareness of the field so that the first sample of studies can be selected (Weed, 2008). Once these studies had been selected, they were subjected to a concurrent thematic and context analysis to identify what conceptual and theoretical contribution each could make to the developing issue(s) in question. This analytical procedure involved extracting interpretations of organizational stressors from the original research studies into elements. We chose to extract and synthesize interpretations of organizational stressors rather than the raw data itself, since interpretations are widely available in journal publications and this approach maintains meaning within the original research context (Weed, 2005, 2008).

Following this initial thematic and context analysis, the need to reject any of the studies was considered and the aforementioned exclusion criteria were developed (see Figure 1). For instance, after the initial iteration it became evident that some studies had explored the organizational stressors encountered by personnel other than sport performers. Consequently, to ensure that the data set addressed the purpose of this research, these studies were excluded. The exclusion criteria were established as the meta-interpretation progressed rather than adopting predetermined selection criteria, since the latter can exclude potentially relevant and insightful studies simply because they use unorthodox methods (Weed, 2008). After the exclusions had been removed, further theoretical sampling was conducted by specifically targeting relevant studies with the key terms from both the expert feedback and

citation pearl growing outlined in the previous section, alongside those that emerged from the concurrent and thematic analysis in the earlier iteration(s) (see Figure 1) (Weed, 2006, 2008). The selected studies then underwent a concurrent thematic and context analysis and the researchers considered whether the exclusion criteria from the previous iteration were still relevant. Since the criteria were still applicable, new bases for exclusion were considered and noted. For instance, at this stage of the process some studies were found that did not present original data and, since this study attempts to maintain meaning in context, it was decided that this would form a new basis for exclusion. The next stage in the meta-interpretation involved exploring the elements that had been extracted, while assessing the need to further theoretically sample. The above meta-interpretation cycle was then repeated for four iterations until, in a similar manner to grounded theory (cf. Pidgeon & Henwood, 1996), the analysis became saturated and it was deemed that no further additional insights were emerging (Weed, 2006, 2008).

Thomas and Harden (2008) have suggested that when using a meta-synthesis method, scholars should attempt to go beyond the original research findings and “generate additional concepts, understandings, or hypotheses” (p. 51). Therefore, once saturation had been achieved, the findings were explored, interpreted, developed, and presented in the form of a taxonomic classification. To elaborate, interpretations of organizational stressors were extracted into elements, which were subsequently combined and cataloged into subcategories, before they were conceptualized into appropriate categories through the processes of open and focused coding, constant comparison, critical reflection, and discussion between the authors. This interpretation process was not without its difficulties, since the complex and dynamic nature of organizational stressors (cf. Fletcher et al., 2006) often made it difficult to analyze and operationalize the data. For example, the following quote illustrates organizational stressors related to both a coach and diet:

He [the coach] used to turn around and tell me that I was too fat and that I needed to lose weight and everything and I used to get really p****d off with him . . . it caused me a lot of problems in my personal life because I used to think about it all the time. (McKay, Niven, Lavallae, & White, 2008, p. 154)

McKay et al. (2008) interpret this quote as “coach’s comments about weight” (p. 154). Therefore, after extracting this interpretation into an element, we used our own interpretation to classify and catalog the element into an appropriate subcategory. To this end, we compared the element to others that had already been extracted in the meta-interpretation process, critically reflected on what the element was primarily illustrating and, after discussion among the authors, concluded that the element would be most appropriately categorized in the coach’s behavior and interactions subcategory.

While the taxonomic classification provides a comprehensive description of organizational stressors, the outcome is reflective of the process of interpreting, categorizing, organizing, and identifying the characteristics of each element, subcategory, and category. Furthermore, our interpretation was used for the appellation of subcategories and categories within the taxonomic classification since, unlike extant frameworks in this area, we did not want these labels to be biased and predetermined by previous research, but rather be guided by our own meta-level interpretations of the emergent data. Following the interpretation of organizational stressors, a *statement of applicability* was produced (Weed, 2006) to identify the

boundaries of relevance for the findings and to enhance the quality and integrity of the meta-interpretation. This statement is as follows:

This study and its findings relate to the organizational stressors that sport performers encounter as part of their participation in competitive sport. The meta-interpretation process synthesized interpretations of organizational-related demands from published (or in press) research studies written in English. These studies sampled both male and female sport performers, who ranged in age from 12 to 56 years, were drawn from a number of different countries and sports, and competed at standards ranging from high school to international and professional level. A taxonomic classification is presented that is intended to provide academic researchers and practitioners with the most accurate, comprehensive, parsimonious, and externally valid conceptualization of stressors in sport organizations to date.

Rigor and Trustworthiness

It is essential that researchers conducting a meta-interpretation demonstrate rigor and trustworthiness because they are active interpretive agents within the synthesis process (Denzin, 1998). Researchers can enhance rigor and trustworthiness by providing clear and comprehensive descriptions of the procedures that they use (Egger & Smith, 1998). Indeed, a fundamental feature of a meta-interpretation is a transparent “audit trail” that details any decisions and interpretations made (Weed, 2006). Therefore, detailed information is provided about the procedures used and the decisions taken in this study, to not only enhance the credibility of the research process, but also to support the veracity of the findings and enlighten others about the methodology (Finfgeld, 2003). When conducting a meta-interpretation, Weed (2006) advised researchers to be cognizant of the *triple hermeneutic effect*, which occurs when the synthesizer’s interpretations are added to those of both the original researcher(s) and participants. While this third layer of interpretation can add significant value to a synthesis, it can also potentially lose some individual differentiations in the move from specific to generic data. To minimize the loss of individual differentiation in this study, the interpretations were extracted from the original studies in their purest form. For instance, some of the organizational stressors that emerged were highly specific to the sample and the context in which they had been encountered (e.g., “threat of hitting whales” was specific to sport performers competing in sailing); however, rather than rewording these stressors in an attempt to increase their applicability to other performers, these demands were extracted verbatim to accurately reflect the performers’ personal experiences.

Results

The meta-interpretation synthesized the findings of 34 studies before it was considered that theoretical saturation had occurred. Descriptive information about these studies is presented in Table 1. Published between 1990 and 2012, the 34 studies sampled a total of 1809 participants (1000 males, 646 females, 163 unknown sex) who ranged in age from 12 to 56 years, were drawn from seven countries, and represented 34 sports at standards ranging from high school to international and

Table 1 Descriptive Information About the 34 studies Included in the Meta-Interpretation

Authors	Year Published	Method	Number of Participants	Participants' Gender	Participants' Mean Age in Years (Range)	Participants' Sport(s)	Participants' Nation(s)	Participants' Standard
Cohn	1990	Interviews	10	10 male 0 female	— (15–17)	Golf	USA	High school
Scanlan, Stein, & Ravizza	1991	Interviews	26	15 male, 11 female	35.11 (22–49)	Figure skating	USA	Senior national
Gould, Eklund, & Jackson	1992a	Interviews	20	—, —	26.6 (21–31)	Wrestling	USA	International
Gould, Eklund, & Jackson	1992b	Interviews	20	—, —	26.6 (21–31)	Wrestling	USA	International
Gould, Jackson, & Finch	1993	Interviews	17	7 male, 10 female	25 (18–33)	Figure skating	USA	Senior national
Gould, Udry, Bridges, & Beck	1997	Interviews	21	11 male, 10 female	23.9 —	Skiing	USA	International
James & Collins	1997	Interviews	20	10 male, 10 female	22 (17–31)	Hockey, soccer, gymnastics, rowing, swimming, track and field, dressage, fencing, golf, rugby union, tennis	—	Club to international

(continued)

Table 1 (continued)

Authors	Year Published	Method	Number of Participants	Participants' Gender	Participants' Mean Age in Years (Range)	Participants' Sport(s)	Participants' Nation(s)	Participants' Standard
Gould, Guinan, Greenleaf, Medbery, & Peterson	1999	Interviews	23	11 male, 12 female	— —	—	USA	International
Anshel & Wells	2000	Interviews	20	20 male, 0 female	— — (16–42)	Basketball	Australia	Club
Woodman & Hardy	2001	Interviews	16	8 male, 8 female	23.9 (17–30)	—	UK	International
Dugdale, Eklund, & Gordon	2002	Questionnaires	91	—, —	25.6 (14–46)	Athletics, badminton, boxing, cricket, cycling, diving, gymnastics, hockey, lawn bowls, netball, shooting, squash, weightlifting	New Zealand	International
Holt & Hogg	2002	Interviews	10	0 male, 10 female	24.3 (19–30)	Soccer	—	International
Noblet & Gifford	2002	Interviews	32	—, —	— —	Australian football	Australia	Club
Fletcher & Hanton	2003	Interviews	14	7 male, 7 female	27.36 (21–38)	—	England	International
Giacobbi, Foore, & Weinberg	2004	Interviews	11	11 male, 0 female	21.18 (19–25)	Golf	South East USA	Collegiate/ university

(continued)

Table 1 (continued)

Authors	Year Published	Method	Number of Participants	Participants' Gender	Participants' Mean Age in Years (Range)	Participants' Sport(s)	Participants' Nation(s)	Participants' Standard
Giacobbi, Lynn, Wetherington, Jenkins, Bodendorf, & Langley	2004	Interviews	5	0 male, 5 female	18 —	Swimming	USA	Collegiate/ university
Holt & Dunn	2004	Audio-diaries and interviews	4	0 male, 4 female	24.75 (21–28)	Soccer	Canada	Collegiate/ university to national
Devonport, Biscoomb, Lane, Mahoney, & Cassidy	2005	Focus groups and interviews	33	0 male, 33 female	16.7 (14–18)	Netball	England	Junior national
Hanton, Fletcher, & Coughlan	2005	Interviews	10	10 male, 0 female	22.0 (18–36)	—	England	International
Heller, Bloom, Neil, & Salmela	2005	Interviews	6	0 male, 6 female	20.2 (19–22)	Ice hockey	USA	Collegiate/ university
Nicholls, Holt, Polman, & James	2005	Diaries	11	11 male, 0 female	16.4 —	Golf	Wales	International
Thewell, Weston, & Greenlees	2005	Interviews	6	6 male, 0 female	—	Cricket (batsmen)	England	Professional
Bawden, Chell, & Maynard	2006	Interviews	20	11 male, 9 female	15.2 (13–18)	Table tennis	England	National

(continued)

Table 1 (continued)

Authors	Year Published	Method	Number of Participants	Participants' Gender	Participants' Mean Age in Years (Range)	Participants' Sport(s)	Participants' Nation(s)	Participants' Standard
Nicholls, Holt, Polman, & Bloomfield	2006	Diaries	8	8 male, 0 female	24.6 (21–28)	Rugby union	UK	Professional
Nicholls, Polman, Levy, Taylor, & Copley	2007	Concept maps used as open-ended questionnaire	749	455 male, 294 female	19.8 (18–38)	—	—	Club to international
TheIwell, Weston, & Greenlees	2007	Interviews	9	9 male, 0 female	27.5 (18–38)	Cricket (batsmen)	England	Professional
McKay, Niven, Lavallee, & White	2008	Interviews	12	5 male, 7 female	22.7 —	Track athletics	UK	National to international
Kaiser, Polman, & Nicholls	2009	Questionnaire	482	305 male, 177 female	20.44 (16–45)	—	UK	Club to international
Kristiansen & Roberts	2009	Interviews and open-ended questionnaires	29	8 male, 21 female	16.6 (14–17)	Handball, track and field, swimming, judo	Norway	Junior national
Mellalieu, Neil, Hanton, & Fletcher	2009	Interviews	12	6 male, 6 female	23.67 (19–56)	Rowing, hockey, swimming, snooker, rugby union, mountain biking, soccer, surf-lifesaving, tennis, badminton	UK	State/Regional to international

(continued)

Table 1 (continued)

Authors	Year Published	Method	Number of Participants	Participants' Gender	Participants' Mean Age in Years (Range)	Participants' Sport(s)	Participants' Nation(s)	Participants' Standard
Nicholls, Jones, Polman, & Borkoles	2009	Diaries	5	5 male, 0 female	27.2 —	Rugby union	UK	Professional
Reeves, Nicholls, & McKenna	2009	Interviews	40	40 male, 0 female	14.22 (12–18)	Soccer	England	Club
Weston, Thelwell, Bond, & Hutchings	2009	Interviews	5	5 male, 0 female	42.4 (32–53)	Sailing	—	Professional
Fletcher, Hanton, Mellalieu, & Neil	2012	Interviews	12	6 male, 6 female	27.08 —	—	England	State/Regional to international

Note. The dash (—) indicates that this information was not reported in the original study. Due to publication space restrictions, the complete bibliographic references are not provided in this table or in the References section of this article. For a copy of this information, please contact the corresponding author, Arnold.

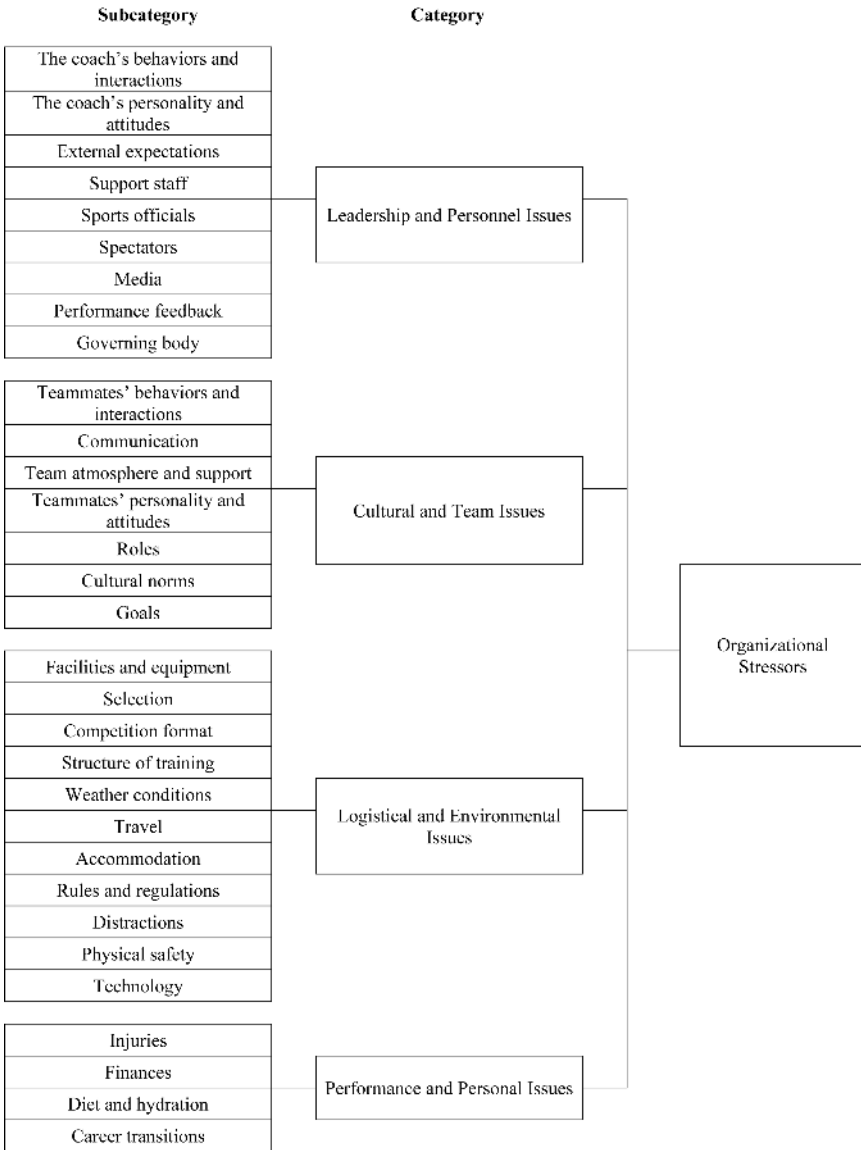


Figure 2 — A taxonomic classification of the organizational stressors encountered by sport performers.

professional level. This diversity of nations, sports, and standards of participants sampled illustrates the broad range of contexts studied within this meta-interpretation (see Table 1 for further details). Emerging from the analysis were 1287 organizational stressors, of which 647 were duplicates. Therefore, 640 distinct stressors were identified. The meta-interpretation abstracted all of the demands into 31 subcategories, which were subsequently organized to form four categories: leadership and personnel issues, cultural and team issues, logistical and environmental issues, and performance and personal issues (Figures 2–6). Leadership and personnel issues encapsulated the organizational stressors associated with the management and support of a sports team. Cultural and team issues encapsulated the organizational stressors associated with the attitudes and behaviors within a sports team. Logistical and environmental issues encapsulated the organizational stressors associated with the organization of operations for training and/or competition. Performance and personal issues encapsulated the organizational stressors associated with a performer's athletic career and physical self.

Leadership and Personnel Issues

Leadership and personnel issues consisted of *the coach's behaviors and interactions, the coach's personality and attitudes, external expectations, support staff, sports officials, spectators, media, performance feedback, and the governing body* (see Figure 3). Since a coach plays a highly influential role in a performer's involvement in sport, it is not surprising that a coach's personality, attitudes, behaviors, and interactions were repeatedly identified as significant organizational stressors. The following quote illustrates how one coach's behavior was not congruent with an athlete's expectations of how they should act in certain situations:

There was a bit of clash of personalities. I went to do this move and I didn't do it basically. I sort of kicked out at the last minute and nearly broke my neck. It really freaked me out. . . . You know, heart beating and things like that and this coach sat and laughed and thought it was hilarious. . . . I wasn't happy with the way she dealt with it. (Fletcher & Hanton, 2003b, p. 187)

The most commonly mentioned coach-related organizational stressors included coaches who were perceived as “technically incompetent,” “constantly criticizing” athletes, and “non supportive,” since these characteristics affected coach–athlete relationships, creating “coach-athlete tension” and “conflict.” Two main sources of conflict that performers most commonly recalled were a “lack of performance feedback” and “not knowing what you have done wrong.” A further issue that had the potential to create conflict was external expectations from a variety of people, including parents, coaches, and teammates. For instance, several studies reported how these individuals placed “high and inconsistent pressure” on athletes to perform and achieve. In addition to these personnel, support staff and individuals in the governing body created considerable stressors for athletes. For example, some support staff had provided “inappropriate support” to performers and demonstrated a “lack of knowledge,” while governing bodies had displayed a “lack of organization after the resignation of a coach.”

While the above demands relate to those personnel within a performer's sporting organization, stressors have also been encountered in relation to people located

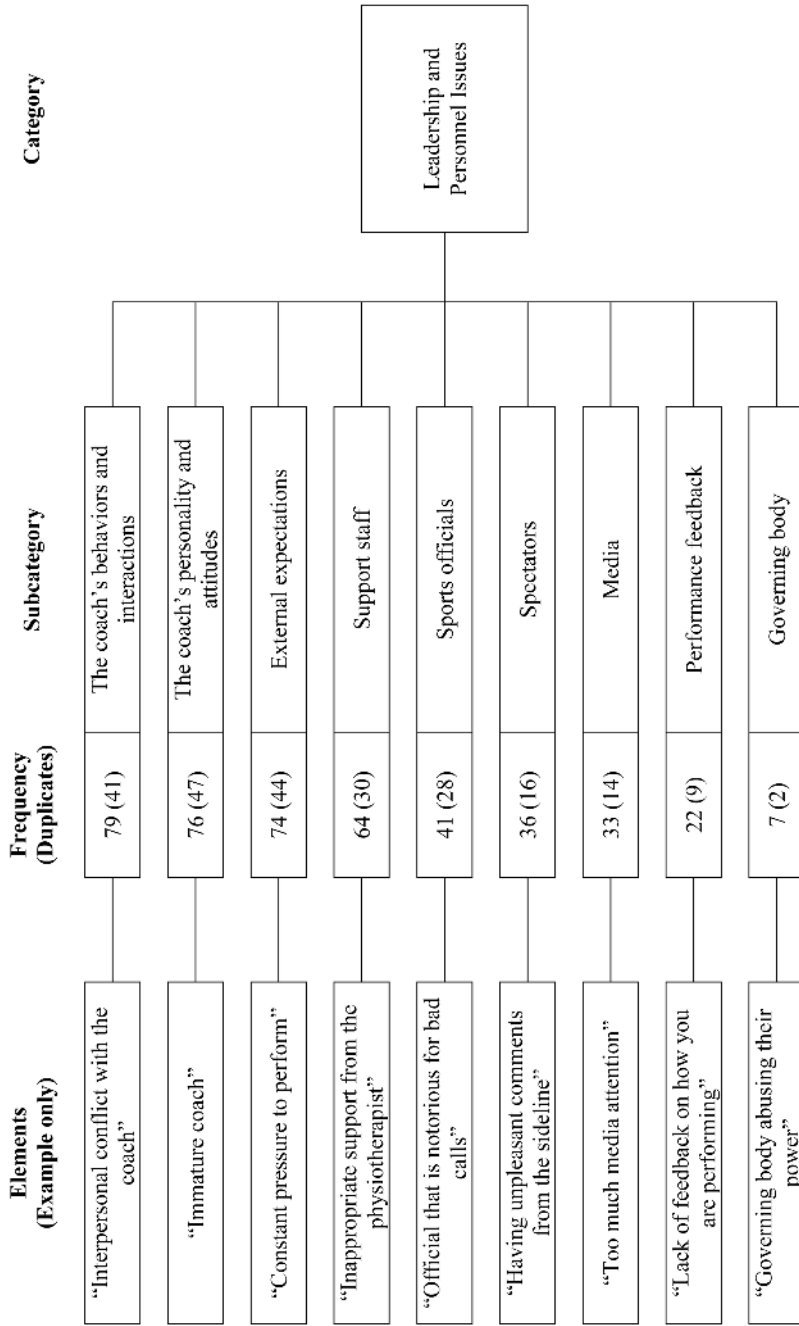


Figure 3 — A taxonomic classification of the organizational stressors encountered by sport performers: Leadership and personnel issues.

on the periphery of the organizational context, including the media and spectators. Indeed, study participants reported issues associated with a “hostile and abusive crowd,” the pressures of “being in the public eye,” and encountering “too much media exposure.” A final noteworthy issue to emerge was related to sports officials who “didn’t fulfill their role,” displayed “biased judging,” and “made bad calls.”

Cultural and Team Issues

Cultural and team issues consisted of *teammates’ behaviors and interactions, communication, team atmosphere and support, teammates’ personality and attitudes, roles, cultural norms, and goals* (see Figure 4). Performers are often required to spend a considerable amount of time with teammates, particularly those who participate in team sports. These interactions typically give rise to a number of organizational stressors that can create an “undesirable team atmosphere,” such as “negative behavior of teammates” or “teammates lacking ambition.” The following quote provides an insight into how teammates’ behaviors and interactions can create an undesirable training environment:

They [skating peers] made it difficult to practice; they played mind games with you. . . . This one girl one day came in and she was just obnoxious, evil, rotten, basically a witch. . . . You just hear all these little rumors that were started about you. (Scanlan, Stein, & Ravizza, 1991, p. 113)

An additional stressor that had the potential to create conflict was “a lack of communication” among coaches, administrators, and performers. Such communication problems have typically related to “team members’ perspectives being ignored,” “the organization of training,” and “financial issues.” A further cultural and team issue that has been identified as a contributory factor to strain is the pressure placed on performers to conform to cultural norms of a team, club, and/or sport. In addition, a team can create strain for performers via the goals that they set. Indeed, performers commonly accept individual and team goals as integral aspects of their preparation for competition; however, goals that were “unclear and unrealistic” with “no direction” emerged as significant organizational stressors. Clarity was also required regarding performers’ roles, since a “lack of role structure” and a “lack of awareness about others’ roles” are both stressors that have been repeatedly identified in the literature.

Logistical and Environmental Issues

Logistical and environmental issues consisted of *facilities and equipment, selection, competition format, structure of training, weather conditions, travel, accommodation, rules and regulations, distractions, physical safety, and technology* (see Figure 5). The structure of training is a significant organizational stressor for performers. To elaborate, athletes have encountered demands relating to the content, duration, intensity, frequency, and organization of training sessions. Furthermore, the facilities that performers train and compete at, together with the equipment they use, have been identified as prominent organizational stressors. Another demand that emerged from the literature was selection. The main selection issues were “being dropped,” “an inappropriate selection process,” and “perceived unfairness during

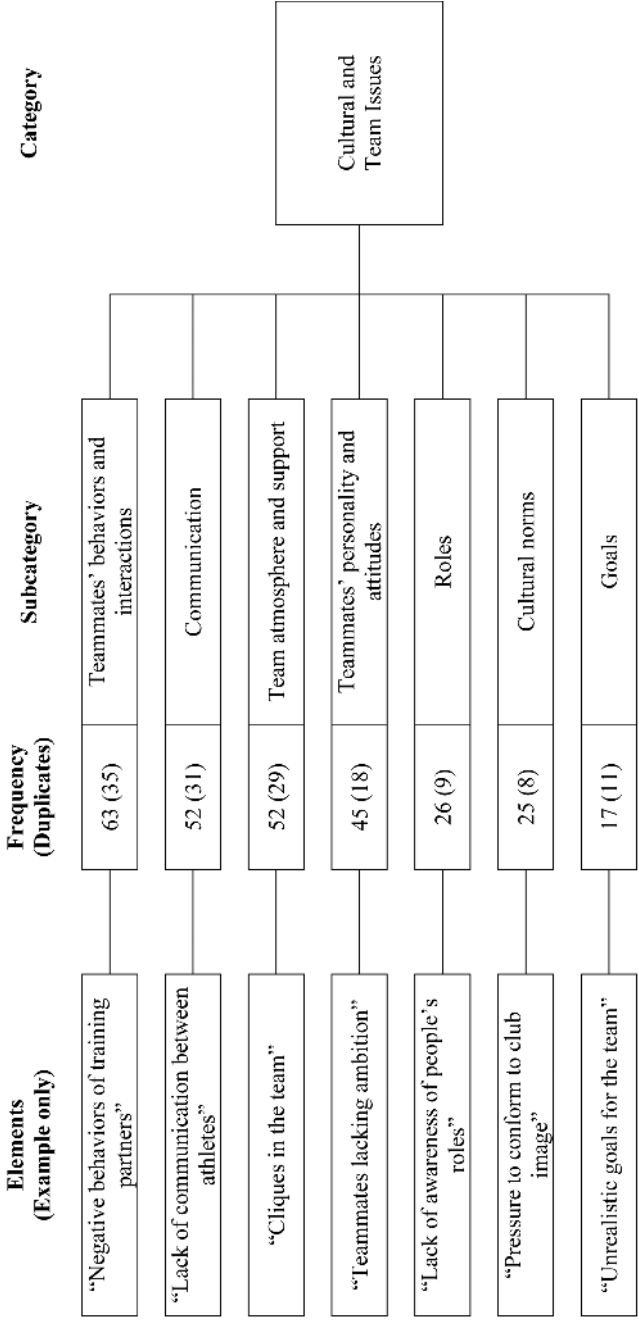


Figure 4 — A taxonomic classification of the organizational stressors encountered by sport performers: Cultural and team issues.

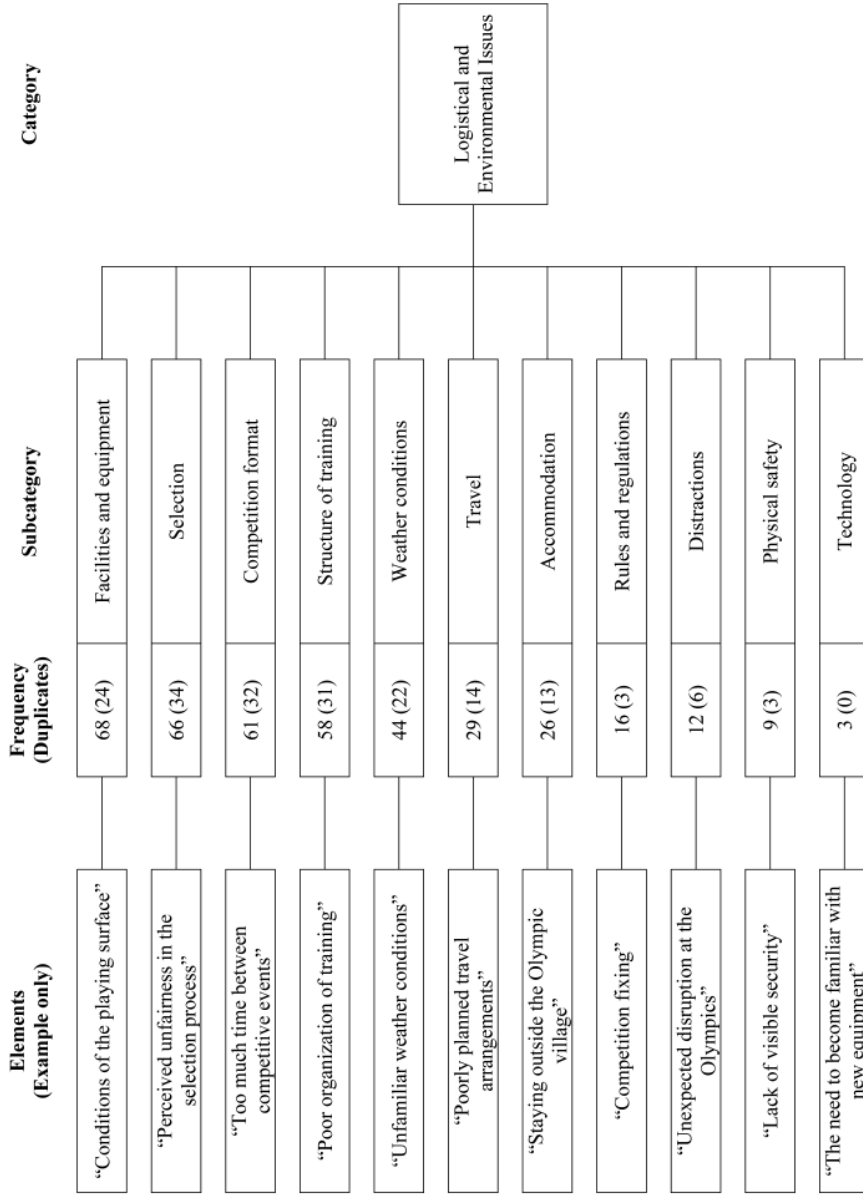


Figure 5 — A taxonomic classification of the organizational stressors encountered by sport performers: Logistical and environmental issues.

selection.” The following quote illustrates how perceived unfairness in the selection process can create considerable frustration for sport performers:

I was just like, well, what’s the point? You know who you want to take, you know who’s going to go, you know where you want them to be ranked, so therefore you fix it. So why am I going through this? Why can’t I do my normal training to make me compete well at the competition instead of having these stupid f***ing trial things. (Woodman & Hardy, 2001a, p. 215)

Once selected, athletes highlighted that organizational stressors were encountered when traveling to competitions. Indeed, both “prolonged traveling” and “unsatisfactory arrival times” have the potential to contribute to performers’ levels of strain. On arrival at competitions, stressors relating to “the competition schedule” and having to “compete in multiple events” both arose. The organization of accommodation was another pressing demand, with many performers recalling “disturbed sleep patterns” and “incompatible roommates.” Turning to the stressors associated with rules and regulations, it is important to note that these were generally specific to the sport being studied. However, “banned substances” emerged as a common stressor across sports. Another stressor that was evident in many sports was weather conditions, including “unfamiliar” and “extreme weather.” The other subcategories in this category related to distractions when performing, physical safety, and technology.

Performance and Personal Issues

Performance and personal issues consisted of *injuries, finances, diet and hydration, and career transitions* (see Figure 6). An organizational stressor that was encountered across a wide range of sports was injuries. More specifically, many performers seemed acutely aware of the pressures to “train and compete through injuries,” despite the numerous negative consequences that are associated with this behavior. While some individuals chose to ignore these potential consequences, others were simply unaware of them, which can perhaps be explained by a “lack of support while injured” and a “lack of structure to injury treatment.” A further area where performers felt unsupported was in their finances for sport. Indeed, several athletes encountered stressors relating to “inadequate financial support.” It is important to note that this stressor only applied to elite athletes who received financial assistance and to professional performers whose occupation was their sport, and who therefore had limited time to earn money elsewhere. This sole income often means that athletes rely on “sponsorship” and “contract renewal and negotiation” to enable their sporting involvement; however, both of these emerged as organizational stressors. Further financial demands that elite and professional athletes encountered related to “differential funding” or “perceived favoritism” in the monetary allocations within their sport.

It is also clear that diet and hydration can be major stressors for performers. A central issue in this subcategory was “disordered eating,” which is perhaps closely related to “the importance placed on diet” by coaches, athletes’ attempts to “attain and maintain an optimal body weight,” the “poor provision of food” at competitions, and “upsets due to foreign cuisine.” Coaches and support staff that place

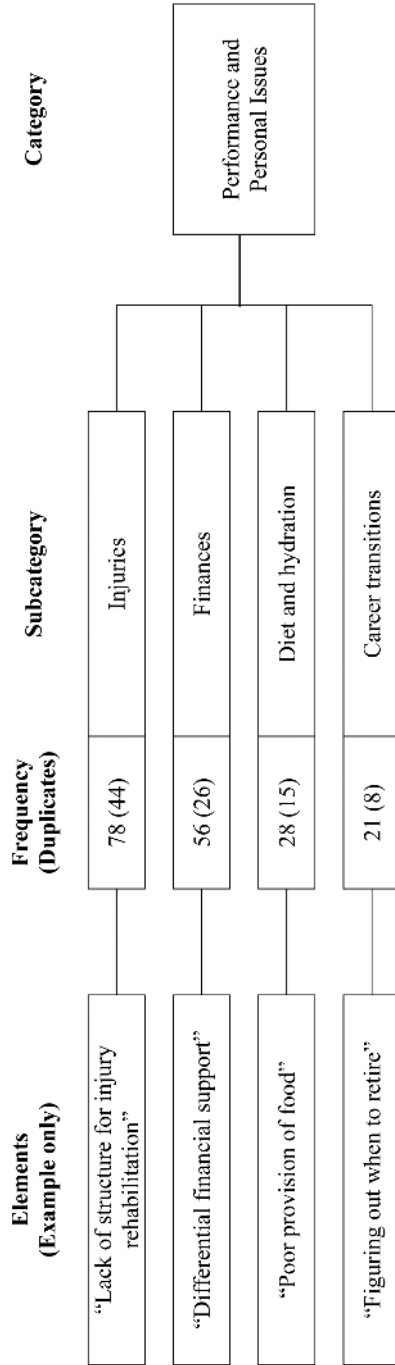


Figure 6 — A taxonomic classification of the organizational stressors encountered by sport performers: Performance and personal issues.

importance on diet and comment on body weight can place significant demands on sport performers, as the following quote illustrates:

You should do a whole story on weight in figure skating; it is such an appearance sport. You have to go up there with barely anything on. . . . It's not like I'm really skinny or anything, but I'm definitely aware of it. I mean I have dreams about it sometimes. So it's hard having people look at my thigh and saying, "Oops, she's an eighth of an inch bigger" or something. It's hard. . . . Weight is continually on my mind. I am never, never allowed to be on a vacation. (Gould, Jackson, & Finch, 1993, p. 149)

The final subcategory within performance and personal issues related to career transitions. To elaborate, studies have repeatedly identified the demands of "position insecurity," a "lack of opportunities to compete at desired levels," and the difficulties associated with attempting to "progress from nonelite to elite competitions." In addition to the stressors associated with progressing within sport, individuals have also encountered stressors relating to transitions out of sport, such as "figuring out when to retire" and "post career uncertainty."

Discussion

Recent literature in sport psychology suggests that, to make a robust and substantive contribution to organizational stress research and theory, scholars should attempt more conceptually focused and integrative work (cf. Fletcher et al., 2006; Fletcher, Hanton, Mellalieu, et al., 2012). To accomplish this, a meta-interpretation was conducted to synthesize the wealth of research identifying the organizational stressors encountered by sport performers and develop a taxonomic classification. This study extends previous frameworks of organizational stress in three main ways. Firstly, while the structure of the existing two frameworks in this area (see Fletcher, Hanton, Mellalieu, et al., 2012; Woodman & Hardy, 2001a) has been based on a priori knowledge, this taxonomic classification is not heavily influenced by existing theory and is based solely on empirical data relating to the organizational stressors that sport performers encounter. Secondly, previous studies in this area have typically employed interview or survey techniques to explore the organizational stressors that are peculiar to a small, isolated sample. In contrast, this study identifies and organizes the stressors encountered by 1809 participants who range in age, gender, nationality, sport, and standard. Thirdly, in contrast to Woodman and Hardy's (2001a) theoretical framework of 347 stressors, and Fletcher, Hanton, Mellalieu, et al.'s (2012) conceptual framework of 365 stressors, this study identifies 640 distinct organizational stressors that are classified into leadership and personnel, cultural and team, logistical and environmental, and performance and personal domains of an individual's sport participation (see Figure 2). Unfortunately, space precludes a discussion of each of the additional stressors and different subcategories; however, in comparison with Woodman and Hardy's (2001a) original theoretical framework, it is worth highlighting the new stressor themes reported in the present taxonomy, such as facilities, equipment, competition format, weather conditions, travel, rules and regulations, distractions, physical safety, technology, career transitions, cultural norms, spectators, the media, and performance feedback. Therefore, taken together, these advancements indicate that this study provides the most accurate, comprehensive, parsimonious

and externally valid conceptualization of stressors in sport organizations to date. Although this meets critical criteria for advancing psychological theory (Klein & Zedeck, 2004), this is not to suggest that the current meta-interpretation provides the definitive account of organizational stressors; rather, this synthesis and taxonomy represents our interpretation of the research and, since sport organizations are complex and continually evolving (cf. Fletcher & Wagstaff, 2009), it is likely that new demands will emerge in the future. Consequently, researchers may need to refine and extend the conceptualization of organizational stressors and further explore the essence of this phenomenon.

A main finding to emerge from this study was that sport performers are confronted with numerous organizational stressors associated with their leadership and other personnel. Leaders play a pivotal role in creating an environment in which individuals can thrive and perform to their potential; however, as the findings suggest, a leader's behaviors (see also Skakon, Nielsen, Borg, & Guzman, 2010), leadership style (see also Lyons & Schneider, 2009), relationship with his/her subordinates (see also Tepper, 2000), personality, attitude, and expectations can be potential sources of strain. While there has been an abundance of research in sport psychology specifically examining the coach-athlete relationship (see, for a review, Jowett & Poczwardowski, 2007), the findings presented here highlight that sport performers not only encounter stressors relating to their coach, but also with the personnel who manage and support their participation in competitive sport and the people located on the periphery of the organizational context. This can perhaps be explained by the nature of a sport performer's role, in that it typically requires such an intensity of interaction with others, that they can find themselves not only managing their own attitudes and behaviors, but also being influenced by those of others. These findings support the review by Dewe, O'Driscoll, and Cooper (2010), which established that a wide range of occupations require employees to interact with others on a regular basis and manage both their own emotions and those of others, leaving many workers feeling disengaged and emotionally exhausted.

The findings of this study illustrate that a sport performer's team and surrounding culture can be a breeding ground for organizational stressors. To elaborate, environmental demands emanated from teammates' behaviors and interactions, communication, the team atmosphere, teammates' personalities and attitudes, roles, cultural norms, and goals. Shultz, Wang, and Olson (2010) have remarked that most research on work stress has focused on role overload and its association with work-related illness. While role overload emerged in the findings, sport performers also reported various other role-related stressors, including a lack of role awareness, limited role structure, and having to fulfill different roles. In an attempt to explain how role and other team and cultural stressors elicit strain for individuals, Gamero, González-Romá, and Peiró (2008) found that many of these group-related demands can create task conflict, which involves members disagreeing about the content of their decisions, tasks, and procedures. If task conflict is not carefully managed, such as through mediation and support, it can evolve into relationship conflict between team members and, ultimately, increased stress and anxiety (Ilies, Johnson, Judge, & Keeney, 2011). In light of these findings, it is imperative that sport organizations address team and cultural issues, since not only can they create task and relationship conflict, but they can also influence individuals' satisfaction and commitment (Silverthorne, 2004), intention to leave a team or organization (Egan, Yang, & Bartlett, 2004), and performance (Chan, Shaffer, & Snape, 2004).

Turning to the logistical and environmental issues that sport performers encounter, the findings highlight that many of these demands are related to the organization of operations for training or competition. More specifically, the operational elements of sport that generated organizational stressors for performers were facilities and equipment, selection, competition format, the structure of training, weather conditions, travel, accommodation, rules and regulations, distractions, physical safety, and technology. Since the logistical and environmental category in this meta-interpretation consisted of the most subcategories, it is clear that an organization's programs, planning, infrastructure, and strategies are a potential source of strain for performers, unless they have the appropriate resources to match and address these demands (van den Tooren & de Jonge, 2010). In line with this observation, meso- and micro-level sport management research (see, e.g., DeBosscher, Bingham, Shibli, van Bottenburg, & DeKnop, 2008; DeBosscher, DeKnop, van Bottenburg, Shibli & Bingham, 2009; Sotiriadou & Shilbury, 2009) has demonstrated that organizations that do not consider and design effective sport policies, resource allocations, competitive program structures, and specific facilities can negatively impact on athlete development and long-term performance. As a result, organizations should identify and manage any policy, logistical, and environmental factors that can be potential sources of strain for individuals.

The findings of this study revealed that sport performers encounter a range of performance and personal issues. Performers reported certain organizational stressors that could directly affect their physical self, such as injury, diet, and hydration. Since an athlete's body plays such a crucial role in his or her performances (Howe, 2004; Young, 2004), it is not surprising that threats to one's physical self stemming from the organization represent a major environmental stressor. Indeed, research on high-risk occupational groups has shown that many of the physical risks and hazards associated with these jobs are perceived as pervasive sources of strain (see, e.g., Chen, Wong, Yu, Lin, & Cooper, 2003). This category in the results also highlights that sport performers encounter financial and career transition demands. These stressors can restrict the amount of time or opportunities that performers have to develop their sporting abilities and reach their desired performance levels. It is important to note, however, that for some performers the stressor was not related to the amount of finances or opportunities that they received per se, but rather if the support they had was different to what others received, or was perceived to favor certain individuals more. These findings support Schaufeli and Peeters's (2000) review of stress in correctional officers, which indicated that rather than absolute finances, it is the perceived fairness in financial distribution that is linked to well-being and performance.

Each of the organizational stressor categories has been presented as a discrete unit in the taxonomy. From a theoretical perspective, it is important to recognize, however, the potential interface between, and interactive impact of, the stressor themes. Stressor research from industrial and organizational psychology has highlighted the importance of examining relationships between stressors, such as occupational versus personal demands (commonly referred to as *work-life conflict*), since this can add another conceptual and psychosocial layer to individuals' stress experiences (Jones, Burke, & Westman, 2006). In the context of the current study and sport performers' lives, the following quote illustrates the interwoven nature of organizational stressors relating to teammates' behaviors and performance feedback:

I lost the ball and he [a teammate] was all in my face and stuff and shouting at me and putting my confidence down and my head went down. I was worried about doing better next time because if I didn't I knew that he'd be in my face again. It dropped my confidence because he was shouting negative comments and I was down because I lost the ball. (Reeves, Nicholls, & McKenna, 2009, p. 38)

The frequency data reported in the taxonomic classification illustrate the number of elements and duplicates within each subcategory. On reflection and interpretation of these frequencies and the underlying links between categories, it appears that some organizational stressors are pervasive and permeate throughout an individual's sport experience (e.g., those stressors associated with the coach), manifesting themselves either directly (e.g., argument with coach) or indirectly (e.g., argument with coach leading to being dropped from the team), whereas other demands are more peripheral to an individual's sport experience (e.g., lack of visible security). This interpretation has important theoretical and practical implications for stress management in sport, since it behooves sport psychologists to prioritize the significance and impact of the organizational stressors encountered by sport performers. Turning to the duplicates within the taxonomic classification, this information can also provide important insights, since it highlights the number of replica elements (organizational stressors) that have been raised by participants across various studies, thus indicating which stressors cohere (and also, therefore, those that contrast) across different sport performer's stress experiences. While practitioners can interpret the frequency data to inform their decision making, theorists should further investigate the interactions and relationships between the categories and subcategories presented in the taxonomy, and further explore how participants' stress experiences cohere and contrast.

The meta-interpretation method is a relatively new approach within sport psychology research; it is, therefore, worth considering some of its strengths and limitations. Weed (2005) stated that the value of a meta-interpretation can be determined by the extent to which it provides a total effect that is greater than the sum of the individual studies that it synthesizes. In accordance with this statement, this study advances previous research in the area by synthesizing 34 studies and 1809 participants' stress experiences to, most importantly, provide a taxonomic classification of stressors in sport organizations. Moreover, by employing this approach to qualitative research synthesis, this study has avoided isolationist and esoteric work (Silverman, 1997), provided a comprehensive insight into the existing knowledge base (Xu, 2008), generated more satisfactory answers to research questions (Weed, 2006), and produced accessible and powerful results (Fingeld, 2003). Notwithstanding these strengths, it is important to acknowledge the limitations of this study. First, it could be argued that this study reflects a publication bias, since it only included published (and in press) studies during the meta-interpretation process. This was because published studies are not only easier to locate and retrieve, but also generally acknowledged to represent higher quality research than unpublished work due to the rigors of the peer review process (cf. Xu, 2008). Second, a meta-interpretation can detach researchers from direct contact with original research participants, by integrating previously analyzed data. To avoid such interpretation problems, we contacted the authors of some of the primary studies that were selected in the

meta-interpretation process for clarification concerning the precise nature of certain stressors. Despite adopting this approach, some scholars (see, e.g., Sandelowski et al., 1997) have argued that synthesizing qualitative studies can lose the integrity and vitality of the experiences represented in the original studies. Countering these arguments, Walsh and Downe (2005) stated that:

It may be helpful to view the [qualitative research synthesis] process as opening up spaces for new insights and understandings to emerge, rather than one in which totalizing concepts are valued over richness and thickness of description. This would move the debate away from assumptions that the essence of phenomena has been revealed in a final, unarguable summary, and towards an appreciation that synthesis is an ever-expanding, boundary-breaking exercise. (p. 205)

With these remarks in mind, the meta-interpretation process has confirmed that sport psychology researchers have amassed a significant body of research about *what* organizational-related factors have the potential to cause strain in sport performers, but little is known about *how* and under what particular circumstances these stressors impact on well-being and performance. One explanation for this could be the tendency for researchers in this area to use interview methods (see Table 1). Although interviews typically encourage participants to provide in-depth information that resonates at a personal level and capture the subjective meaning in contextual situations (Kvale & Brinkmann, 2008), this approach is unable to ascertain whether there is a cause-and-effect relationship between variables, such as stress and well-being or performance. Future researchers should consider adopting alternative data collection and analysis techniques, including multivariate statistics, to more rigorously investigate the organizational stress process in competitive sport. To move beyond the mere identification of environmental demands, researchers should examine the different properties of stressors, such as the intensity, duration, prevalence, quantity, timing, specificity, and closeness (Fletcher et al., 2006), and the underlying properties of situations appraised as stressful, such as novelty, predictability, event uncertainty, imminence, duration, temporal uncertainty, ambiguity, and timing (Thatcher & Day, 2008). By exploring these characteristics, researchers can elicit more insightful depictions of the organizational environment. This information could contribute to the much-needed design of a measurement indicator to assess organizational stressors (cf. Arnold & Fletcher, 2012), so that, ultimately, researchers can focus the empirical lens on the intricate theoretical relationships that exist between organizational stress-related concepts (see Fletcher et al., 2006). A potential avenue for extending knowledge in this area involves examining the underlying mechanisms of the stressor–strain relationship (cf. Fletcher, Hanton, & Wagstaff, 2012). For instance, research on stress in the workplace (see, e.g., Oaten & Cheng, 2005; Schmidt, Neubach, & Heuer, 2007), has found that a lack of individual control over work is negatively correlated with job satisfaction and positively correlated with indicators of job strain, such as health complaints and impaired psychological well-being. In view of these findings, future sport psychology research should examine whether a sport performer's perceived level of control has an influence on the strain they experience. In addition to individual control, scholars should also examine ownership at a group level to ascertain if

it has an influence on organizational stress. To elaborate, in the organizational behavior literature, Pierce and Jussila (2010) recently introduced the concept of *collective psychological ownership*, which emerges when individuals in a group interact and develop a shared mindset for ownership over a particular aspect of their work. Although research has established that individual psychological ownership can produce positive and negative effects on a variety of organizational outcomes (see for a review, Pierce, Kostova, & Dirks, 2003), future research is necessary to ascertain if there is a link between collective psychological ownership among sport performers and their organizational stress experiences.

This study has shown that organizational stressors emanate from a wide range of sources within the sport environment. It is surprising, therefore, that stress management interventions have typically focused on changing an individual's psychological reactions to stressors (Rumbold, Fletcher, & Daniels, 2012). Instead of viewing stress as a solely personal issue, sport organizations should acknowledge the full impact of their own processes and procedures in addressing this type of stress in sport performers. The stress management strategy used to reduce or eliminate stressors is commonly referred to as a primary stress management intervention (PSMI; Cox, 1993; Cox, Taris, & Nielson, 2010; Sutherland & Cooper, 2000). This proactive and preventative approach to managing stress typically seeks to make changes in the macro environment (e.g., organizational culture), the micro-environment (e.g., task redesign), or in worker's perceptions of control (e.g., enhanced decision-making opportunities). When attempting to implement a PSMI, sport psychology practitioners should draw on the lessons learned by general and organizational psychologists. For example, stress prevention programs have been developed to address sudden and unexpected events—known as *crises*—which can threaten to disrupt organizational operations (Coombs, 2007). Although not all organizational stressors in competitive sport could be classified as crises, the principles and techniques used in these prevention programs will likely transfer well to address many of the issues that emerged in the findings of this study (cf. Jaques, 2007, 2009; Pearson, Roux-Dufort, & Clair, 2007). To address crises, Jaques (2010) recommended that consultants guide organizations through four main stages which, when applied to sport psychology, would involve the following: proactively addressing the underlying causes of stressors, establishing effective mechanisms to recognize and respond to stressor warning signs, properly identifying the perspectives of stakeholders, and implementing systematic organization learning and unlearning.

To conclude, this study has synthesized the research identifying the organizational stressors encountered by sport performers. The results of this meta-interpretation are displayed in an innovative taxonomy, which illustrates that organizational stressors can be classified under four main categories: leadership and personnel issues, cultural and team issues, logistical and environmental issues, and performance and personal issues. Since the empirical data of 1809 sport performer's stress experiences has been synthesized to illustrate 640 distinct organizational stressors, it can be concluded that this study not only provides the most accurate, comprehensive, and parsimonious conceptualization of stressors in sport organizations to date, but also its findings are valid, generalizable, and applicable to a large number and wide range of sport performers.

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References

- Anderson, L.W., & Krathwohl, D.R. (Eds.). (2001). *A taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives*. New York, NY: Addison Wesley Longman, Inc.
- Arnold, R., & Fletcher, D. (2012). Psychometric issues in organizational stressor research: A review and implications for sport psychology. *Measurement in Physical Education and Exercise Science*, 16, 81–100.
- Barnett-Page, E., & Thomas, J. (2009). Methods for the synthesis of qualitative research: A critical review. *BMC Medical Research Methodology*, 9, 59–70. [PubMed doi:10.1186/1471-2288-9-59](https://doi.org/10.1186/1471-2288-9-59)
- Beehr, T.A. (1998). An organizational psychology meta-model of occupational stress. In C.L. Cooper (Ed.), *Theories of organizational stress* (pp. 6–27). Oxford, UK: Oxford University Press.
- Beehr, T.A., & Newman, J.E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis model, and literature review. *Personnel Psychology*, 31, 365–399. [doi:10.1111/j.1744-6570.1978.tb02118.x](https://doi.org/10.1111/j.1744-6570.1978.tb02118.x)
- Carron, A.V. (1982). Cohesiveness in sports groups: Interpretations and considerations. *Journal of Sport Psychology*, 4, 123–138.
- Chan, L.M., Shaffer, M.A., & Snape, E. (2004). In search of sustained competitive advantage: The impact of organizational culture, competitive strategy and human resource management practices on firm performance. *International Journal of Human Resource Management*, 15, 17–35. [doi:10.1080/0958519032000157320](https://doi.org/10.1080/0958519032000157320)
- Chen, W., Wong, T., Yu, T., Lin, Y., & Cooper, C.L. (2003). Determinants of perceived occupational stress among Chinese offshore oil workers. *Work and Stress*, 17, 287–305. [doi:10.1080/02678370310001647302](https://doi.org/10.1080/02678370310001647302)
- Coombs, W.T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, 10, 163–176. [doi:10.1057/palgrave.crr.1550049](https://doi.org/10.1057/palgrave.crr.1550049)
- Cooper, C.L., Dewe, P.J., & O'Driscoll, M.P. (2001). *Organizational stress: A review and critique of theory, research, and applications*. Thousand Oaks, CA: Sage Publications.
- Cox, T. (1978). *Stress*. New York, NY: Macmillan.
- Cox, T. (1993). *Stress research and stress management: Putting theory to work*. Sudbury, UK: HSE Books.
- Cox, T., & McKay, C. (1981). A transactional approach to occupational research. In E.N. Corlett & J. Richardson (Eds.), *Stress, work design and productivity* (pp. 91–115). New York, NY: John Wiley.
- Cox, T., Taris, T.W., & Nielson, K. (Eds.). (2010). Organizational interventions: Issues and challenges [Special issue]. *Work and Stress*, 24, 217–307. [doi:10.1080/02678373.2010.519496](https://doi.org/10.1080/02678373.2010.519496)
- Cummings, T.G., & Cooper, C.L. (1979). A cybernetic theory of occupational stress. *Human Relations*, 32, 395–418. [doi:10.1177/001872677903200504](https://doi.org/10.1177/001872677903200504)
- Cummings, T.G., & Cooper, C.L. (1998). A cybernetic theory of organizational stress. In C.L. Cooper (Ed.), *Theories of organizational stress* (pp. 101–121). Oxford, UK: Oxford University Press.
- DeBoscher, V., Bingham, J., Shibli, S., van Bottenburg, M., & DeKnop, P. (2008). *The global sporting arms race: An international comparative study on sports policy factors leading to international sporting success*. Aachen, Germany: Meyer & Meyer.

- DeBosscher, V., DeKnop, P., van Bottenburg, M., Shibli, S., & Bingham, J. (2009). Explaining international sporting success: An international comparison of elite sport systems and policies in six countries. *Sport Management Review*, *12*, 113–136. doi:10.1016/j.smr.2009.01.001
- Denzin, N.K. (1998). The art and politics of interpretation. In N.K. Denzin & Y.S. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (pp. 313–344). London, UK: Sage Publications.
- Dewe, P.J., O'Driscoll, M.P., & Cooper, C.L. (2010). *Coping with work stress: A review and critique*. Chichester, UK: Wiley-Blackwell.
- Edwards, J.R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. *International Review of Industrial and Organizational Psychology*, *6*, 283–357.
- Edwards, J.R. (1992). A cybernetic theory of stress, coping, and well-being in organizations. *Academy of Management Review*, *17*, 238–274.
- Edwards, J.R. (1998). Cybernetic theory of stress, coping, and well-being: Review and extension to work and family. In C.L. Cooper (Ed.), *Theories of organizational stress* (pp. 122–152). Oxford, UK: Oxford University Press.
- Egan, T.M., Yang, B., & Bartlett, K. (2004). The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention. *Human Resource Development Quarterly*, *15*, 279–301. doi:10.1002/hrdq.1104
- Egger, M., & Smith, G.D. (1998). Bias in location and selection of studies. *British Medical Journal*, *316*(7124), 61–66. PubMed doi:10.1136/bmj.316.7124.61
- Feldman, K.A. (1971). Using the work of others: Some observations on reviewing and integrating. *Sociology of Education*, *44*, 86–102. doi:10.2307/2111964
- Finfgeld, D.L. (2003). Meta-synthesis: The state of the art so far. *Qualitative Health Research*, *13*, 893–904. PubMed doi:10.1177/1049732303253462
- Fletcher, D., & Hanton, S. (2003a, April). Research in organizational stress and British Olympic athletes: Conceptual, theoretical, and practical issues. In S. J. Bull (Chair), Building and supporting an Olympic management team. Symposium conducted at the meeting of the British Olympic Association Psychology Advisory and Steering Group, Milton Keynes, UK.
- Fletcher, D., & Hanton, S. (2003b). Sources of organizational stress in elite sports performers. *The Sport Psychologist*, *17*, 175–195.
- 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). Hauppauge, NY: Nova Science Publishers.
- Fletcher, D., Hanton, S., Mellalieu, S.D., & Neil, R. (2012). A conceptual framework of organizational stressors in sport performers. *Scandinavian Journal of Medicine & Science in Sports*. Advance online publication. doi:10.1111/j.1600-0838.2010.01242.x PubMed
- Fletcher, D., Hanton, S., & Wagstaff, C.R.D. (2012). Performers' responses to stressors encountered in sport organizations. *Journal of Sports Sciences*. Advance online publication. doi:10.1080/02640414.2011.633545
- Fletcher, D., Rumbold, J.L., Tester, R., & Coombes, M.S. (2011). Sport psychologists' experiences of organizational stressors. *The Sport Psychologist*, *25*, 363–381.
- Fletcher, D., & Scott, M. (2010). Psychological stress in sports coaches: A review of concepts, research, and practice. *Journal of Sports Sciences*, *28*, 127–137. PubMed doi:10.1080/02640410903406208
- Fletcher, D., & Wagstaff, C.R.D. (2009). Organizational psychology in elite sport: Its emergence, application and future. *Psychology of Sport and Exercise*, *10*, 427–434. doi:10.1016/j.psychsport.2009.03.009
- French, J.R.P. Jr., Rogers, W.L., & Cobb, S. (1974). Adjustment as person-environment fit. In G.V. Coelho, D.A. Hamburg, & J. E. Adams (Eds.), *Coping and adaptation* (pp. 316–333). New York, NY: Basic Books.

- Gamero, N., González-Romá, V., & Peiró, J.M. (2008). The influence of intra-team conflict on work teams' affective climate: A longitudinal study. *Journal of Occupational and Organizational Psychology, 81*, 47–69. doi:10.1348/096317907X180441
- Gan, Q., & Anshel, M.H. (2009). Sources of acute stress among Chinese college athletes as a function of gender and skill level. *Journal of Sport Behavior, 32*, 36–52.
- Gould, D., Jackson, S.A., & Finch, L.M. (1993). Sources of stress in national champion figure skaters. *Journal of Sport & Exercise Psychology, 15*, 134–159.
- Hanton, S., & Fletcher, D. (2005). Organizational stress in competitive sport: More than we bargained for? *International Journal of Sport Psychology, 36*, 273–283.
- 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*, 1129–1141. PubMed doi:10.1080/02640410500131480
- Hartley, R.J., Keen, E.M., Large, J.A., & Tedd, L.A. (1990). *Online searching: Principles and practice*. London, UK: BowkerSaur.
- Harwood, C., & Knight, C.J. (2009). Understanding parental stressors: An investigation of British Tennis-parents. *Journal of Sports Sciences, 27*, 339–351. PubMed doi:10.1080/02640410802603871
- Hinkle, L.E., Jr. (1973). The concept of “stress” in the biological and social sciences. *Science, Medicine and Man, 1*, 31–48. PubMed
- Howe, D. (2004). *Sport, professionalism, and pain: Ethnographies of injury and risk*. London, UK: Routledge.
- Ilies, R., Johnson, M.D., Judge, T.A., & Keeney, J. (2011). A within-individual study of interpersonal conflict as a work stressor: Dispositional and situational moderators. *Journal of Organizational Behavior, 32*, 44–64. doi:10.1002/job.677
- Jaques, T. (2007). Issue management and crisis management: An integrated, non-linear, relational construct. *Public Relations Review, 33*, 147–157. doi:10.1016/j.pubrev.2007.02.001
- Jaques, T. (2009). Issue and crisis management: Quicksand in the definitional landscape. *Public Relations Review, 35*, 280–286. doi:10.1016/j.pubrev.2009.03.003
- Jaques, T. (2010). Reshaping crisis management: The challenge for organizational design. *Organization Development Journal, 28*, 9–17.
- Jones, F., Burke, R., & Westman, M. (2006). *Managing the work-home interface*. Hove, UK: Psychology Press.
- Jowett, S., & Poczwadowski, A. (2007). Understanding the coach-athlete relationship. In S. Jowett & D. Lavallee (Eds.), *Social Psychology in Sport* (pp. 3–14). Champaign, IL: Human Kinetics.
- Karasek, R.A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*, 285–308. doi:10.2307/2392498
- Kihl, L.A., Richardson, T., & Campisi, C. (2008). Toward a grounded theory of student-athlete suffering and dealing with academic corruption. *Journal of Sport Management, 22*, 273–302.
- Klein, K.J., & Zedeck, S. (2004). Introduction to the special section on theoretical models and conceptual analyses. Theory in applied psychology: Lessons (re)learned. *The Journal of Applied Psychology, 89*, 931–933. doi:10.1037/0021-9010.89.6.931
- Kristiansen, E., Halvari, H., & Roberts, G.C. (2012). Organizational and media stress among professional football players: Testing an achievement goal theory model. *Scandinavian Journal of Medicine & Science in Sports*. Advance online publication. doi:10.1111/j.1600-0838.2010.01259.x PubMed
- Kvale, S., & Brinkmann, S. (2008). *Interviews: Learning the craft of qualitative research interviewing* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Lazarus, R.S. (1981). The stress and coping paradigm. In C. Eisdorfer, D. Cohen, A. Kleinman, & P. Maxim (Eds.), *Models for clinical psychopathology* (pp. 177–214). New York, NY: Spectrum.

- Lazarus, R.S., & Launier, R. (1978). Stress-related transactions between person and environment. In L.A. Pervin & M. Lewis (Eds.), *Perspectives in interactional psychology* (pp. 287–327). New York, NY: Plenum.
- Leech, N.L., & Onwuegbuzie, A.J. (2008). Qualitative data analysis: A compendium of techniques and a framework for selection for school psychology research and beyond. *School Psychology Quarterly*, 23, 587–604. doi:10.1037/1045-3830.23.4.587
- Lyons, J.B., & Schneider, T.R. (2009). The effects of leadership style on stress outcomes. *The Leadership Quarterly*, 20, 737–748. doi:10.1016/j.leaqua.2009.06.010
- Mason, J.W. (1975). A historical view of the stress field. *Journal of Human Stress*, 1, 6–12. PubMed doi:10.1080/0097840X.1975.9940399
- McKay, J., Niven, A.G., Lavallae, D., & White, A. (2008). Sources of strain among elite UK track athletes. *The Sport Psychologist*, 22, 143–163.
- Nicholls, A.R., Polman, R., Levy, A.R., Taylor, J., & Cobley, S. (2007). Stressors, coping, and coping effectiveness: Gender, type of sport, and skill differences. *Journal of Sports Sciences*, 25, 1521–1530. PubMed doi:10.1080/02640410701230479
- Newman, J.E., & Beehr, T.A. (1979). Personal and organizational strategies for handling job stress: A review of research and opinion. *Personnel Psychology*, 32, 1–43. doi:10.1111/j.1744-6570.1979.tb00467.x
- Noblet, A.J., & Gifford, S.M. (2002). The sources of stress experienced by professional Australian footballers. *Journal of Applied Sport Psychology*, 14, 1–13. doi:10.1080/10413200209339007
- Oaten, M., & Cheng, K. (2005). Academic examination stress impairs self-control. *Journal of Social and Clinical Psychology*, 24, 254–279. doi:10.1521/jscp.24.2.254.62276
- Onwuegbuzie, A.J., & Leech, N.L. (2007). Validity and qualitative research: An oxymoron? *Quality & Quantity*, 41, 233–249. doi:10.1007/s11135-006-9000-3
- Patton, M.Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Pearson, C.M., Roux-Dufort, C., & Clair, J.A. (2007). *International handbook of organizational crisis management*. Thousand Oaks, CA: Sage Publications.
- Pidgeon, N., & Henwood, K. (1996). Grounded theory: Practical implementation. In J.T.E. Richardson (Ed.), *Handbook of qualitative research methods for psychology and the social sciences* (pp. 86–101). Leicester, UK: BPS Books.
- Pierce, J.L., & Jussila, I. (2010). Collective psychological ownership within the work and organizational context: Construct introduction and elaboration. *Journal of Organizational Behavior*, 31, 810–834. doi:10.1002/job.628
- Pierce, J.L., Kostova, T., & Dirks, K.T. (2003). The state of psychological ownership: Integrating and extending a century of research. *Review of General Psychology*, 7, 84–107. doi:10.1037/1089-2680.7.1.84
- Price, D. (1965). Networks of scientific papers. *Science*, 149, 510–515. PubMed
- Puente-Diaz, R., & Anshel, M.H. (2005). Sources of acute stress, cognitive appraisal, and coping strategies among highly skilled Mexican and U.S. competitive tennis players. *The Journal of Social Psychology*, 145, 429–446. PubMed doi:10.3200/SOCP.145.4.429-446
- Reeves, C.W., Nicholls, A.R., & McKenna, J. (2009). Stressors and coping strategies among early and middle adolescent premier league academy soccer players: Differences according to age. *Journal of Applied Sport Psychology*, 21, 31–48. doi:10.1080/10413200802443768
- Rumbold, J.L. (2007). Sources of organizational stress in sub-elite student athletes (Unpublished master's thesis). Loughborough University, Leicestershire, UK.
- Rumbold, J.L., Fletcher, D., & Daniels, K. (2012). A systematic review of stress management interventions with sport performers. *Sport, Exercise, and Performance Psychology*. Advance online publication. doi:10.1037/a0026628
- Sandelowski, M., & Barroso, J. (2007). *Handbook for synthesizing qualitative research*. New York, NY: Springer Publishing.

- Sandelowski, M., Docherty, S., & Emden, C. (1997). Qualitative meta-synthesis: Issues and techniques. *Research in Nursing & Health, 20*, 365–371. PubMed doi:10.1002/(SICI)1098-240X(199708)20:4<365::AID-NUR9>3.0.CO;2-E
- 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*, 102–120.
- Schaufeli, W.B., & Peeters, M.C.W. (2000). Job stress and burnout among correctional officers: A literature review. *International Journal of Stress Management, 7*, 19–48. doi:10.1023/A:1009514731657
- Schmidt, K.H., Neubach, B., & Heuer, H. (2007). Self-control demands, cognitive control deficits, and burnout. *Work and Stress, 21*, 142–154. doi:10.1080/02678370701431680
- Shultz, K.S., Wang, M., & Olson, D.A. (2010). Role overload and underload in relation to occupational stress and health. *Stress and Health, 26*, 99–111. doi:10.1002/smi.1268
- Silverman, D. (1997). Towards an aesthetics of research. In D. Silverman (Ed.), *Qualitative research: Theory, method, and practice* (pp. 239–253). London, UK: Sage Publications.
- Silverthorne, C. (2004). The impact of organizational culture and person-organization fit on organizational commitment and job satisfaction in Taiwan. *Leadership and Organization Development Journal, 25*, 592–599. doi:10.1108/01437730410561477
- Simpson, G.G. (1961). *Principles of animal taxonomy*. New York, NY: Columbia University Press.
- Skakon, J., Nielsen, K., Borg, V., & Guzman, J. (2010). Are leaders' well being, behaviors, and style associated with the affective well-being of their employees? A systematic review of three decades of research. *Work and Stress, 24*, 107–139. doi:10.1080/02678373.2010.495262
- Sotiriadou, K., & Shilbury, D. (2009). Australian elite athlete development: An organizational perspective. *Sport Management Review, 12*, 137–148. doi:10.1016/j.smr.2009.01.002
- Spector, P.E. (1998). A control theory of the job stress process. In C.L. Cooper (Ed.), *Theories of organizational stress* (pp. 153–169). Oxford, UK: Oxford University Press.
- Sutherland, V.J., & Cooper, C.L. (2000). *Strategic stress management: An organizational approach*. New York, NY: Palgrave.
- Tepper, B.J. (2000). Consequences of abusive supervision. *Academy of Management Journal, 43*, 178–190. doi:10.2307/1556375
- Thatcher, J., & Day, M.C. (2008). Re-appraising stress appraisals: The underlying properties of stress in sport. *Psychology of Sport and Exercise, 9*, 318–335. doi:10.1016/j.psychsport.2007.04.005
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology, 8*, 45–55. PubMed doi:10.1186/1471-2288-8-45
- van den Tooren, M., & de Jonge, J. (2010). The role of matching job resources in different demanding situations at work: A vignette study. *Journal of Occupational and Organizational Psychology, 83*, 39–54. doi:10.1348/096317909X462257
- Walsh, D., & Downe, S. (2005). Meta-synthesis method for qualitative research: A literature review. *Methodological Issues in Nursing Research, 50*, 204–211. PubMed
- Weed, M. (2005). Meta-Interpretation: A method for the interpretive synthesis of qualitative research. *Forum Qualitative Sozial Forschung, 6*, 1–17.
- Weed, M. (2006). Interpretive qualitative synthesis in the sport and exercise sciences: The meta-interpretation approach. *European Journal of Sport Science, 6*, 127–139. doi:10.1080/17461390500528576
- Weed, M. (2008). A potential method for the interpretive synthesis of qualitative research: Issues in the development of meta-interpretation. *International Journal of Social Research Methodology, 11*, 13–28. doi:10.1080/13645570701401222
- Woodman, T., & Hardy, L. (1998, March). Le stress organisationnel: une étude de cas (Organizational stress: A case study). Presentation made at the Journées nationales d'études de la société Française de psychologie du sport, Poitiers, France.

- Woodman, T., & Hardy, L. (2001a). A case study of organizational stress in elite sport. *Journal of Applied Sport Psychology, 13*, 207–238. doi:10.1080/104132001753149892
- Woodman, T., & Hardy, L. (2001b). Stress and anxiety. In R.N. Singer, H.A. Hausenblas, & C.M. Janelle (Eds.), *Handbook of sport psychology* (pp. 290–318). New York, NY: John Wiley.
- Xu, Y. (2008). Methodological issues and challenges in data collection and analysis of qualitative meta-synthesis. *Asian Nursing Research, 2*, 173–183. doi:10.1016/S1976-1317(08)60041-9
- Young, K. (2004). *Sporting bodies, damaged selves: Sociological studies of sports-related injuries*. Oxford, UK: Elsevier Press.

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