Organizational Stress and Well-Being in Competitive Sport: A Systematic Review

Abstract

Research on organizational stress in sport has grown exponentially within the last two decades. Despite the volume of literature available, no systematic reviews exist to bring findings together in a single, rigorous point of reference. Filling this void helps researchers and practitioners to better understand organizational stress and its implications for health, well-being, and performance. The objectives of this study were to search for, appraise, and critically synthesize the literature on organizational stress (i.e., stressors, appraisals, coping, emotions) and or well-being within the context of organizational stress in competitive sport. In addition, we aimed to identify strengths of and gaps in the literature to progress conceptual, methodological, and applied understanding. A systematic review of literature was conducted using PRISMA guidelines and robust searches of PsycArticles, PsycInfo, and SPORTDiscus databases. The final sample comprised 55 methodologically sound studies with athletes, coaches, and or support staff. The findings of this review revealed a myriad of organizational stressors that were underpinned by a range of situational properties and were managed using a variety of coping options (e.g., problem solving, social support). Some important components of stress transactions (e.g., appraisals, emotions) and well-being have received scant attention in the context of organizational stress. Experiences of organizational stress among athletes, coaches, and support staff have highlighted implications for health- and performance-related outcomes. Future research should consider the use of longitudinal, diary, and integrative designs, in addition to analytical pluralism within under-represented populations (e.g., coaches, support staff) to deepen our understanding.

Keywords: Appraisals, coping, emotions, performance, transactional

Organizational Stress and Well-being in Competitive Sport: A Systematic Review

Research on organizational stress and well-being has grown exponentially in the last two decades. It has commonly been reported that the enduring presence of organizational stress has the potential to reduce performance, restrict productivity, and impose severe individual health consequences (Cooper et al., 2001). These concerns are relevant to competitive sport where concerns regarding bullying (Newman et al., 2021), non-accidental violence (e.g., neglectful harassment or abuse; Gorczynski et al., 2020), and adjusting to retirement (Cavallerio et al., 2017) can spate the competitive echelons of sport organizations and the people operating within them. Research on organizational stress in competitive sport has witnessed burgeoning growth in recent years, and has focused on athletes (e.g., Didymus & Fletcher, 2014), coaches (e.g., Rhind et al., 2013), and the wider sport science support team (e.g., Arnold et al., 2019).

Transactional theories of stress (e.g., Lazarus, 1999; Lazarus & Folkman, 1984) have been widely used to conceptualize psychological stress in sport. From these perspectives, stress is an umbrella term (Didymus, 2017) encompassing stressors, appraisals, coping, and emotions as key components of stress transactions. Indeed, stress is defined as a "relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p. 19). With reference to organizational stress in sport, various theoretical models have been proposed (e.g., Demand-Induced Strain Compensation Recovery Model; De Jonge et al., 2012). Fletcher et al. (2006) defined organizational stress as "an ongoing transaction between an individual and the environmental demands associated primarily and directly with the organization within which he or she is operating" (p. 329). Stressors (e.g., selection, injury, interpersonal conflict), as the starting point of stress transactions, can be defined as "environmental demands (i.e., stimuli) encountered by an individual" (Fletcher et al., 2006, p.

9), and are underpinned by situational properties (e.g., imminence, novelty; Lazarus, 1999) that determine the potential for a stressful appraisal. This appraisal refers to an individual's cognitive evaluation of the meaning, relevance, and significance of a perceived stressor in relation to one's well-being and goals (Lazarus, 1966; Lazarus, 1999).

Cognitive appraising comprises two distinct but related processes: primary and secondary appraising. Primary appraising is when a stressor is evaluated according to its relevance for the individual and its potential to influence emotions, coping, and various stress-related outcomes (e.g., well-being; Lazarus & Folkman, 1984). During this process, individuals appraise situations as a threat, challenge, harm/loss, and or benefit (Lazarus, 1999). Secondary appraising involves an evaluation of available coping resources to manage the stressor(s) encountered (Lazarus & Folkman, 1984). Coping is defined as "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 & Folkman, 1984, p. 141). Emotions are entwined within stress transactions and can be defined as "an organized psychophysiological reaction to ongoing relationships with the environment, most often, but not always, interpersonal or social" (Lazarus, 2000, p. 230). To encompass the concepts of appraising and emotion, Lazarus (1991) proposed the cognitive-motivational-relational theory of emotions (CMRT). This suggests that certain characteristics of emotions (e.g., duration, intensity, quality) are dependent on the appraisals made of the relevance and significance of the stressful encounter and its potential outcomes for well-being.

Turning to the concept of well-being, there is consensus within sport psychology literature that sub-optimal well-being can reflect an individual's inability to cope with stress, and that organizational stressors can have a significant impact on well-being and performance (Arnold et al., 2018; Didymus & Fletcher, 2017b). Despite such knowledge, no universal definition of well-being has been recognized in the social sciences (Dodge et al., 2012;

Forgeard et al., 2011). It is, however, acknowledged that well-being is multi-faceted (Diener & Ryan, 2009) and that there are various traditions (e.g., utilitarian, virtue), perspectives (e.g., self-determination theory), and foundational frameworks (e.g., positive psychology) that researchers can work from (see Lambert et al., 2015). Well-being can be contextualized as a global- (e.g., purpose in life) or a context-specific concept (e.g., purpose in sport; Lundqvist, 2011). For the purpose of this review, well-being integrates both hedonic (i.e., subjective well-being and life satisfaction; see Diener et al., 1999) and eudaimonic (i.e., psychological well-being, social well-being, see Keyes, 1998; Ryff & Keyes, 1995) elements that contribute to an individual's functioning and happiness (Didymus et al., 2018). Various scholars (e.g., Dodge et al., 2012; Huppert & So, 2013) advocate that, whilst hedonic and eudaimonic traditions are distinct, one dimension (e.g., life satisfaction) alone does not capture the full essence of well-being.

The difficulties in conceptualizing well-being have been no different within the context of organizational stress in sport, an area of research that focuses on the complex social and organizational environments that performers (e.g., athletes, coaches, support staff) and employees operate within (Fletcher & Arnold, 2017). The importance of recognizing these complexities within sport and business domains was proffered by Jones (2002) who suggested "organizational issues probably have the biggest impact [of any psychosocial factor] on performance" (p. 279). Since this recognition, and Woodman and Hardy's (2001) case study of organizational stress in elite sport, researchers have explored organizational stressors in different sport environments (e.g., Didymus & Fletcher, 2012; Larner et al., 2017), how they are appraised (e.g., Didymus & Fletcher, 2017a; Rumbold et al., 2018), emotionally responded to (e.g., Fletcher et al., 2012a; Rumbold et al., 2020), coped with (e.g., Didymus & Fletcher, 2014; Thelwell et al., 2010), and how organizational stressors might be managed (e.g., Didymus & Fletcher, 2017b; Rumbold et al., 2018). This research has

broadened understanding of the links between organizational stress, health, well-being, and performance. Despite these advances, competitive sport is still inundated with organizational issues (e.g., destructive cultures, dysfunctional relationships; Feddersen et al., 2020; Wachsmuth et al., 2018) that threaten the well-being of individuals and groups. Previous research has often sought to explore organizational stress from a performance-driven perspective with less attention paid to the implications of organizational stress for well-being and or other stress outcomes (e.g., burnout; Baldock et al., 2020; Didymus et al., 2018). Given various white papers (e.g., duty of care report; Department for Digital, Culture, Media & Sport, 2017) implicating well-being as a pivotal concern in performance sport, it is important for practitioners, academics, and decision-makers to understand how to optimize organizational environments and enhance the quality of life for those operating within them (Fletcher & Wagstaff, 2009; Wagstaff & Larner, 2015).

Despite published book chapters on stress and well-being in sport (e.g., Baldock et al., 2020; Didymus et al., 2018; Fletcher et al., 2006), and the meta syntheses of relevant qualitative research in organizational stressors (Arnold & Fletcher, 2012) and psychological stress in sport coaches (Potts et al., 2021); no systematic, peer-reviewed work exists that takes stock of findings on organizational stress components and or well-being within the context of organizational stress in competitive sport. A single, rigorous point of reference that addresses this void is needed to help researchers and practitioners to better understand organizational stress and its implications for health, well-being, and performance. Thus, the aim of this study was threefold: first, to capture current understanding of stress and well-being in the context of organizational sport environments and to explore links between these concepts; second, to review the study quality of existing qualitative, quantitative, and mixed method studies; and third, to identify extant gaps in the literature to advance conceptual, theoretical, methodological, and applied understanding.

Methods

Study Design

Preliminary scoping searches indicated that research into organizational stress and or well-being within the context of organizational stress has used a range of methods (e.g., qualitative, quantitative, mixed methods), and has studied a variety of individuals (e.g., athletes, coaches, support staff) and teams. Thus, a systematic review offered an appropriate study design. Through critical exploration, evaluation, and synthesis (Rumbold et al., 2012), a systematic review approach was adopted to synthesize a heterogeneous body of work that other methods (e.g., meta-analysis, meta-synthesis) are not designed for (Shamseer et al., 2015). The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Page et al., 2021) were used to direct this review. Whilst existing reviews of organizational psychology in sport are available (e.g., Fletcher & Wagstaff, 2009; Wagstaff & Larner, 2015) along with those that focus on stress and or well-being more broadly (e.g., Baldock et al., 2020; Didymus et al., 2018), these efforts were narrative, rather than systematic, in design. Thus, the current systematic review advances understanding and extends the contribution of previous reviews by utilizing a rigorous and comprehensive protocol (e.g., to minimize reporter bias; Rumbold et al., 2012) that outlines how the topic area could be theoretically and methodologically advanced.

Search Strategy

Thorough electronic searches of three databases (PsycArticles, PsycInfo, SPORTDiscus) were conducted, monitored, and updated until June 2021. These databases mirrored those used in previous systematic reviews of stress and well-being (Norris et al., 2017) and stress management in sport (Rumbold et al., 2012), and were deemed appropriate due to the volume of relevant papers that were returned during manual keyword searches in comparison to other databases (e.g., Web of Science). Keywords (see supplemental Table S1)

that were established using previous literature (e.g., Wagstaff & Larner, 2015) and peer discussions were piloted using synonymous terms (e.g., health) to determine the potential volume of retrieved papers. The drafted list of keywords returned a vast yet manageable collection of research and so was used for the main phase of searching. To ensure a rigorous retrieval of papers, searches were conducted at full-text and subject levels using filters on the EBSCO research platform. Using a Microsoft^{TM} Excel spreadsheet, basic information (e.g., names of authors, publication dates, article titles) were extracted from the returned papers to maintain a clear audit trail. After completing the searches, citation pearl growing (e.g., forward and backward citation searches of previous review papers; e.g., Arnold & Fletcher, 2012; Potts et al., 2021), manual searches of academic journals (i.e., those that frequently published work on organizational stress and well-being; e.g., Psychology of Sport and Exercise and the Journal of Sport Sciences), and the scanning of reference lists of included papers helped to collate additional relevant research (Tod et al., 2015). The authors also engaged in discussions about known literature in competitive sport and whether papers had been missed or excluded during the searches.

Criteria for Inclusion

To be included in this systematic review (see supplemental Table S2), retrieved papers must: (a) have been available in full-text in a peer-reviewed journal, (b) have been available in full in the English language, (c) have contained primary empirical data (excluding, for example, questionnaire validations) that specifically and explicitly focused on one or more organizational stress component (i.e., organizational stressors, appraisals, emotions, coping) and or well-being in the context of organizational stress, (d) have collected data from athletes, coaches, or support staff in competitive sport (parents' were excluded as these individuals are not classed as an employee or performer who represents an organization), (e) have used qualitative, quantitative, or mixed method designs, and (f) have

been published between March 2001 and June 2021. The beginning of this time period marks the publication of the first paper on organizational stress in sport. Reasons for exclusion and the number of papers excluded at each stage were recorded in a flow diagram (see supplemental Figure 1) in accordance with PRISMA guidelines. A reflective log was maintained by the lead author to facilitate transparency and to show how the inclusion criteria were applied (Newton et al., 2012).

Sifting of Retrieved Citations

Guided by Dundar and Fleeman (2017) and Jones (2004), papers were sifted at the title, abstract, and full-text levels in line with the inclusion criteria (see supplemental Figure 1). A Microsoft^{TM} Excel spreadsheet was used to audit and track the papers retrieved during the searches. To facilitate rigor, the second and third named authors each sifted and coded 50% of papers included within the final sample, and also reviewed a sample of papers that were excluded at the abstract and full-text levels. Both included and excluded papers that were reviewed by the second and third authors were chosen using a random number generator. Seven included papers that the second author had co-authored were reviewed by the third author to minimize bias. The relevance of each sampled paper to the inclusion criteria was discussed, with authors fully agreeing on all papers except one paper which the authors were split on (Knights & Ruddock-Hudson, 2016). This paper had focused on occupational (rather than organizational) stress. Whilst these terms have often been used interchangeably in mainstream psychology they are contextually ambiguous in regard to whether performers are professional and paid (i.e., by an organization) or whether they are amateur and voluntary (i.e., an occupation; see Fletcher et al., 2006). This difficult distinction shows the need for researchers and stakeholders to consider these similar but distinct terms within their own classifications. For this review, discussions between the authors led to an agreement that the data in the aforementioned paper (Knights & Ruddock-Hudson, 2016)

were relevant to the focus of this review and, thus, the paper was included.

Quality Assessment

Following the sifting of included papers, study quality of the final sample was evaluated to reduce the risk of bias (Shamseer et al., 2015). Due to its validity and reliability compared to other quality assessment tools that have been used in systematic reviews in sport (e.g., quality index; Downs & Black, 1998), the authors used Kmet et al's (2004) standard quality assessment criteria (SQAC; a 14-item checklist for quantitative papers and a 10-item checklist for qualitative papers) to assess the included studies (see supplemental Tables S5 and S6). The SQAC has been applied in health science contexts (Kmet et al., 2004) and within other published systematic reviews in sport (e.g., Norris et al., 2017; Staff et al 2017). Each included paper was scored against each relevant SQAC item to determine how well it satisfied the criteria (2=fully meets the criteria, 1=partially meets the criteria, 0=does not meet the criteria, n/a=not applicable). For example, when assessing quantitative studies, criterion nine (see Table S5) was fully met if strong sample size estimations and degrees of freedom were evident, this criteria was partially met if these estimations and or degrees of freedom were evident yet weak, and the criteria was not met if estimations and degrees of freedom had not been considered. For qualitative studies, item ten (see Table S6), for example, was fully met if reflexivity was explicitly discussed and appropriately applied, partially met if researcher reflexivity was suggested but not fully explored or applied, and was not met if reflexivity had not been considered. Mixed methods papers were assessed by reviewing the qualitative and quantitative components separately against the relevant criteria. A total quality score was calculated for each paper and converted to a percentage for standardization purposes. All studies in the provisional final sample were quality assessed by each author to reduce the risk of bias. Each quality score was within 10% of that reported by each other author, and because none of the assessed studies received a score below the agreed

quality threshold of 60%, all of the studies in the final sample were included in the review.

Characteristics of the Final Sample

The first author extracted information from each study in the final sample and tabulated it in the following columns: study aims, study design (quantitative, qualitative, or mixed methods), participant characteristics (sample size, mean age, gender, experience, employee role in organization), the country where the study took place, guiding theory, and key findings (Pope et al., 2007). Extracted data were reviewed by the second author to ensure relevance to the aims of the systematic review. Once data extraction and tabulation was complete, narrative synthesis (Popay et al., 2006) was used to group data and construct new knowledge (Gough et al., 2017) from the findings of included studies. This approach to synthesis reflects the protocol used in other published systematic reviews in sport psychology (e.g., Norris et al., 2017; Staff et al., 2017), and is reflected herein in a way that allows effective grouping and presentation of relevant findings, connections, and conclusions (Popay et al., 2006).

Findings

Study Characteristics

Fifty-five empirical studies were included in the final sample (see supplemental Tables S3-4), which comprised cross-sectional ($n=39$), longitudinal ($n=13$), intervention ($n=1$), auto-biographical ($n=1$), and case study designs ($n=1$). These studies encompassed qualitative ($n=37$), quantitative ($n=16$), and mixed methods ($n=2$) research. A range of methodological tools were used (see Tables S3-4); semi-structured interviews ($n=31$), stress questionnaires ($n=17$; e.g., OSI-SP, SAM), health and well-being questionnaires ($n=8$; e.g., WEMWBS, ABQ), diaries ($n=6$), grounded theory ($n=1$), concept mapping ($n=1$), and experience sampling ($n=1$). The included studies represented participants (50% men, 41% women, 9% unspecified) from various performance sport populations, including: athletes

(*n*=41 studies), coaches (*n*=15 studies), and support staff (e.g., performance directors, sport scientists, health practitioners; *n*=5 studies). Participants' ages ranged from 16-78 years, with experience in competitive sport ranging from six months to 65 years and spanning various performance contexts: representative (e.g., county, regional; *n*=7), amateur (e.g., semi-professional, club; n=9), University (*n*=5), and elite (e.g., national, international, Olympic; *n*=51). Studies that employed a theoretical framework (*n*=47) typically utilized transactional stress theory (Lazarus & Folkman, 1984; *n*=26); a meta-model of stress, emotions, and performance (Fletcher et al., 2006; *n*=7); or the cognitive-motivational-relational theory of emotions (CMRT: Lazarus, 1999; *n*=8).

In considering the quality assessments, all included studies within the final sample were deemed to be methodologically sound (i.e., they met the 60% quality threshold agreed by the authors). When assessing quantitative studies (see Table S5), criteria that were consistently fully met included: sufficient detail in the reporting of results (criterion 13) and outcome measures being well-defined and robust to misclassification bias (criterion 8). In contrast, exemplar quality criteria that were not fully met included sample size appropriateness (criterion 9), controlling for confounding variables (criterion 12), and the evidence and appropriateness of study designs (i.e., does not fully support the answering of stated research questions; see criterion 2). Turning to the qualitative studies in the final sample (see Table S6), exemplar criteria that were consistently fully met included sufficient description of the research questions and or study objectives (criterion 1), clear contexts for the study (criterion 3), and clearly described and systematic data collection methods (criterion 6). Criteria that were not consistently fully met included the reporting of verification procedures to establish credibility (criterion 8). For example, studies that did not contain details of verification procedures were deemed to not satisfy this criterion. Another criterion that was not sufficiently addressed was the use of reflexivity, with many studies

demonstrating no evidence of reflexivity in their work (criterion 10).

Organizational Stressors

In synthesizing the findings of this review, topics were presented through the sections of organizational stressors, appraising, emotions, coping, and well-being. Starting with organizational stressors, the final sample consisted of 50 studies that explored individuals' experiences of organizational stressors in a competitive sport setting. Of these studies, 37 used a qualitative research design. Whilst most qualitative studies used semi-structured interviews ($n=29$; see Table S4), other methods were employed, including diaries ($n=6$; e.g., Hanton et al., 2012; Levy et al., 2009; Miles et al., 2016), multiple qualitative methods (e.g., Kristiansen & Roberts, 2010; Rumbold et al., 2018), grounded theory (Fletcher et al., 2012b), and auto-biography (Smith et al., 2018). Collectively, the included qualitative studies demonstrate the variety and volume of organizational stressors prevalent within performance environments and spans across athlete, coach, and support staff populations. The majority of research that has examined organizational stressors has focused on athletes ($n=23$; see Table S4). These studies frequently cited various categories of organizational stressors, including: interpersonal issues ($n=18$; e.g., Kristiansen et al., 2012b; Smith et al., 2018), environmental and logistical issues ($n=20$; e.g., Arnold et al., 2017b; Fletcher et al., 2012b), personal issues ($n=19$; e.g., Mellalieu et al., 2009; Woodman & Hardy, 2001), and leadership issues ($n=8$; e.g., Didymus & Fletcher, 2012; Fletcher & Hanton, 2003). The plethora of organizational stressors reported highlights the pervasiveness of organizational issues experienced by athletes. Indeed, Hanton et al. (2005) reported that organizational stressors were recalled more frequently by athletes than competition stressors. Taken together with our findings that also highlighted unique organizational stressors in various sports (see e.g., Fletcher et al., 2012b; Mellalieu et al., 2009), this exemplifies the wide distribution of organizational stressors that athletes may encounter.

Interpersonal issues was a commonly cited dimension of organizational stressors (n=18; e.g., Fletcher et al., 2012a; Kristiansen et al., 2012b). Common interpersonal issues included communication (Whittingham et al., 2020; Woodman & Hardy, 2001), team issues (e.g., lack of role clarity or interactions with team-mates; Leprince et al., 2018; Mellalieu et al., 2008), perceptions of sport relationships (e.g., lack of social support; Fletcher et al., 2012b; Mellalieu et al., 2009), and coach-athlete interactions (e.g., Kristiansen et al., 2012b; Thelwell et al., 2017). Specifically, Woodman and Hardy (2001) highlighted that a lack of an appropriate support network (e.g., from support staff) was an enduring stressor for athletes. Similarly, Smith et al. (2018) identified that interactions with players, support personnel, and the media were among stressors experienced by cricket captains. In summary, interpersonal issues reported in qualitative research reflected the quality and presence (or lack) of relationships and communications with and between athletes, and represents a crucial organizational stressor for competitive athletes.

Another commonly reported category of organizational stressors that was experienced by athletes was environmental and logistical issues (n=20). This included stressors relating to selection, training, competition, cultural issues, workload, accommodation, and travel (e.g., Arnold et al., 2017b; Kristiansen et al., 2012b; Rumbold et al., 2018). For example, Weston et al. (2009) examined stressors faced by single-handed round-the-world ocean sailing skippers and revealed that environmental conditions and isolated performance environments were prevalent organizational stressors. In another study, Kristiansen and Roberts (2010) further reported that accommodation and transportation were prevalent issues for youth Olympic athletes. These examples demonstrate the plethora of environmental and logistical issues that manifest across sport contexts.

In other qualitative studies, frequent personal issues (n=19) experienced by athletes included injury, career development, goals and expectations, nutrition, and finances (e.g.,

Arnold et al., 2017b). These stressors reflected athletes' issues relating to progression (e.g., career concerns) as well as issues that are intrinsically specific to the individual. For example, Kristiansen et al. (2012b) found that inequities in salaries among U.S. professional soccer players was a mutual organizational stressor that manifested as tension between players. Similarly, Fletcher et al. (2012b) reported that career and performance development, position insecurity, and performance advancement were common personal stressors that led to feelings of resentment and bitterness. In considering, leadership issues (n=8), coach behaviors, personality, attitude, and coaching style were commonly reported by athletes (Fletcher & Hanton, 2003; Thelwell et al., 2017). Fletcher and Hanton (2003) noted that leadership issues presented as coach-athlete tension (e.g., incompatible styles), whilst Arnold et al. (2017b) found that disabled athletes reported issues related to support staff, media coverage, and their national governing bodies. Overall, these findings suggest that leadership stressors related to factors that were both internal (e.g., coaches) and external (e.g., handling of media coverage) to sport organizations.

Turning to organizational stressors experienced by coaches (n=11; see Table S4), frequent stressors included those relating to the environment and logistics (n=11; e.g., administration, selection), interpersonal factors (n=8; e.g., conflict, managing athletes), personal factors (n=8; e.g., finances, work-life-balance) and leadership (n=6; e.g., expectations; coach performance). Environmental and logistical issues were seemingly the most prevalent stressors, with coaches surmising the organizational requirements expected of them had detrimental effects on their private lives (e.g., Olusoga et al., 2009; Thelwell et al., 2008). For example, Levy et al. (2009) highlighted that administrative stressors decreased the resources (e.g., time) that a coach had to work with athletes. Subsequently, coaches often made sacrifices to their work-life balance (i.e., workload; Potts et al., 2019) and relationships with significant others (Baldock et al., 2021) and, thus, experienced various categories of

organizational stressors (i.e., environmental and logistical, personal, and interpersonal issues) simultaneously. Other studies have suggested further environmental and logistical stressors that are prevalent among coaches, such as travel, workplace environments, decision-making, contractual issues, and major competitions (Knights & Ruddock-Hudson, 2016; Potts et al., 2019; Stynes et al., 2017). In addition, Rhind et al. (2013) found that professional football coaches experienced leadership issues related to their job role (e.g., lack of time), support staff (e.g., lack of staff, injury reports), and football culture (e.g., high expectations). Further studies (e.g., Baldock et al., 2021; Didymus, 2017) explored the factors underpinning organizational stressors among coaches and found that situational properties (e.g., ambiguity, imminence) determine the potential for a stressful evaluation of a demand. This work, which went beyond description of the organizational stressors encountered, added additional depth of insight relating to coaches' stress transactions. Collectively, findings suggest that a culmination of work-life imbalance and environmental and logistical issues, which can be simultaneously experienced, are prevalent organizational stressors for coaches.

Shifting our attention to support staff, a handful of qualitative studies have explored organizational stress experiences among these individuals (*n*=4). Fletcher et al. (2011) reported that sport psychology practitioners experienced issues with their roles in the organization (e.g., ambiguity and overload), job insecurity, interpersonal issues (e.g., lack of social support), career advancement, and factors intrinsic to sport psychology (e.g., ethical obligations). In addition, Rumbold et al. (2018) reported that a wide range of organizational stressors (e.g., cultural and academy issues) were experienced among performance staff. Similarly, Kerai et al. (2019) found that high workload, working in a 'performance-and-risk' culture, interpersonal conflicts, scrutiny in decision-making, and working beyond their remit were significant organizational stressors for physiotherapists working with international athletes. Arnold et al. (2019) explored the experiences of 40 sport science and management

personnel, finding that stressors related to interpersonal issues (e.g., relationships), physical resources, career development, organizational structure, and logistical issues. These stressors had direct consequences for support staff's emotions (e.g., anger), work-life balance (e.g., family time), finances, and personal care (e.g., health).

Thirteen quantitative papers examined organizational stressors (Arnold et al., 2016, 2017a; Bartholomew et al., 2017; Bentzen et al., 2020; Didymus, 2020; Kristiansen, 2012a; Larner et al., 2017; Nicholls et al., 2007; Roberts et al., 2019; Simms et al., 2020; Tamminen et al., 2019; Wagstaff et al. 2018; Wu et al., 2021) and two papers used mixed methods, (Kristiansen et al., 2019; Tabei et al., 2012) which have been grouped herein due to the similarity of reported findings within their quantitative components. The most commonly employed measure was the Organizational Stressor Indicator for Sport Performers (n=9; OSI-SP; Arnold et al., 2013; see Tables S3-4). Three key themes were reflected by quantitative examinations of organizational stressors: the influence of organizational stressors for burnout and health-related outcomes (n=9; Arnold et al., 2017a; Bentzen et al., 2020; Didymus et al., 2020; Roberts et al., 2019; Simms et al., 2020; Tabei et al., 2012; Tamminen et al., 2019; Wagstaff et al., 2018; Wu et al., 2021), the role of demographic differences (n=2; Arnold et al., 2016; Nicholls et al., 2007), and the role of motivational climates (n=2; Kristiansen et al., 2012a, 2019). First, some studies (e.g., Tabei et al., 2012; Wagstaff et al., 2018; Wu et al., 2021) identified that the prevalence, specificity, and frequency of organizational stressors contributed to the occurrence of athlete and coach burnout. For example, within mixed methods research, Tabei et al. (2012) found that soccer players associated specific organizational stressors (e.g., interpersonal issues, career development) with burnout. It was also reported in this study that cultural differences (e.g., relationships and coaching styles) existed in the prevalence and frequency of organizational stressors. In addition, it has been suggested that psychological resilience can buffer some of the potentially negative outcomes

of organizational stressors (e.g., turnover, anxiety; Wagstaff et al., 2018; Wu et al., 2021). Other studies (e.g., Arnold et al., 2017a; Bentzen et al., 2020; Didymus et al., 2020; Roberts et al., 2019; Simms et al., 2020; Tamminen et al., 2019) demonstrated the positive and negative impact of organizational stressors and other related variables (i.e., appraisals, emotions) on subjective well-being (i.e., happiness, affect, vitality), eudaimonic well-being (i.e., sense of purpose), esteem support, psychological and physical strain, psychological and physical (ill-)health, and performance within athletes and coach populations.

Second, the findings of this review highlight gender, sport type, and performance level (e.g., gender, sport type, performance level) to be influential demographic variables in organizational stress transactions. For example, male athletes have been shown to experience a higher magnitude (i.e., frequency, intensity, and duration) of logistical and operational issues (e.g., injury, salary), whilst females seem to experience a higher magnitude of selection and interpersonal stressors (e.g., communication; Arnold et al., 2016; Nicholls et al., 2007). Team-based athletes reported a higher magnitude of team and culture (e.g., conflicts) and logistical and operations stressors (e.g., selection), whilst individual athletes experienced more training and coach-related stressors (Arnold et al., 2016; Nicholls et al., 2007). High-performance athletes (e.g., national or international) experienced a higher magnitude of organizational stressors than lower performance levels (e.g., regional or university; Arnold et al., 2016; Nicholls et al., 2007). Third, findings that have explored differences in motivational climates show that performance climates were positively associated with interpersonal issues (e.g., coach-athlete) and a higher stressor frequency whilst a mastery climate was associated with a lower frequency of organizational stressors (Kristiansen et al., 2012a, 2019). To summarize the quantitative literature on organizational stressors, our findings suggest that organizational stressors have implications for burnout and health-related outcomes; that demographic differences relating to gender, sport type, and performance level are important;

and that motivational climates are linked to organizational stressor frequency.

Appraising

Within the included sample, there was a total of 15 studies (10 qualitative and five quantitative) that explored appraising among athletes (*n*=12; Bartholomew et al., 2017; Didymus & Fletcher, 2012, 2014, 2017a, 2017b; Fletcher et al., 2012a; Hanton et al., 2012; Miles et al., 2016; Neil et al., 2011; Rumbold et al., 2018, 2020; Roberts et al., 2019; Tamminen et al., 2019), coaches (*n*=3; Baldock et al., 2021; Didymus, 2017; Rumbold et al., 2018) and support staff (*n*=1; Rumbold et al., 2018). In addition to highlighting the important role of appraisals within stress transactions (e.g., Bartholomew et al., 2017), three important points are reflected by the studies in this area: the personal relevance and significance of organizational stressors for athletes and coaches (*n*=15; e.g., Baldock et al., 2021; Fletcher et al., 2012a), athletes' evaluations of coping resources (*n*=3; Bartholomew et al., 2019; Hanton et al., 2012; Tamminen et al., 2019), and the ways in which individuals may re-evaluate stressful situations using reappraisal techniques (*n*=3; Hanton et al., 2012; Neil et al., 2011; Rumbold et al., 2018).

Using qualitative methods (*n*=10; diaries or interviews), research typically found that challenge, threat, and harm/loss primary appraisals were made by athletes (e.g., Didymus & Fletcher, 2012, 2017b, Miles et al., 2016; Neil et al., 2011) and coaches (e.g., Baldock et al., 2021; Didymus, 2017; Rumbold et al., 2018) to assess the significance and relevance of an organizational stressor (Fletcher et al., 2012a). Some studies also found that such transactional alternatives (i.e., challenge, threat, benefit, harm/loss) were associated with one or more situational properties that underpinned organizational stressors (e.g., Didymus, 2017; Didymus & Fletcher, 2012; Baldock et al., 2021). Further qualitative evidence pointed to the role of secondary appraisals among athletes and coaches in evaluating the resources and

controllability of stressors (Hanton et al., 2012), and to reappraisal of stressors (Neil et al., 2011; Rumbold et al., 2018).

Turning to quantitative studies (*n*=5; Bartholomew et al., 2017; Didymus & Fletcher, 2017a; Roberts et al., 2019; Rumbold et al., 2020; Tamminen et al., 2019), research (e.g., using longitudinal designs) has highlighted how primary appraisals (i.e., challenge, threat) act as conceptual bridge between stressors and both positive and negative stress outcomes (i.e., affect, well-being; Roberts et al., 2019; Rumbold et al., 2020) and could be optimized through the use of appraisal-focused interventions (e.g., cognitive restructuring; Didymus & Fletcher; 2017a). Furthermore, researchers have denoted the crucial role of secondary appraising in mediating between primary appraisals and basic psychological need satisfaction (Bartholomew et al., 2017), and in correlating to esteem support (as mediated by stressor frequency; Tamminen et al., 2019).

Emotions

The search strategy yielded eight qualitative studies (Arnold et al., 2019; Baldock et al., 2021; Fletcher et al., 2012a; Miles et al., 2016; Neil et al., 2011; Nicholls & Levy, 2016; Rumbold et al., 2018; Tamminen et al., 2016) and two quantitative studies (Didymus & Fletcher, 2017a; Roberts et al., 2019) that investigated emotions in the context of organizational stress. Each of these qualitative studies noted that athletes, coaches, and support staff responded to organizational stressors with a range of emotions including, for example: anger, anxiety, dejection, frustration, happiness, hope, relief, and resentment. Beyond individual emotions, researchers have explored emotions as a social, relational, and temporal phenomenon (Miles et al., 2016; Tamminen et al., 2016). Using the CMRT (Lazarus, 1999), Miles et al. (2016) conducted a temporal exploration of stress, emotions, and coping among elite male cricketers. Their findings suggested that cricketers experienced a myriad of emotional responses (e.g., happiness, anger, frustration, anxiety) and pointed to the

importance of cognitions (i.e., appraisals) in understanding emotions in a 7-day pre-competition period. Similarly, Tamminen et al. (2016) found that shared organizational stressors among Canadian varsity athletes led to individual, group-based, and collective emotions that prompted communal coping.

Coping

Twenty-three papers included in the final sample (17 qualitative, 6 quantitative) explored the coping strategies used by performers to manage the potentially negative outcomes of organizational stressors. Coping strategies have been categorized in different ways, which adds complexity to an already multiplex phenomenon. For example, some studies (*n*=11; Arnold et al., 2017a; Hanton et al., 2012; Kristiansen et al., 2012b; Leprince et al., 2018; Nicholls et al., 2007; Roberts et al., 2019; Rumbold et al., 2018, 2020; Stynes et al., 2017; Thelwell et al., 2010; Weston et al., 2009) classified coping according to problem- (e.g., planning), emotion- (e.g., self-talk), avoidance- (e.g., isolation), (re)appraisal- (e.g., reflective practice), and approach-focused (e.g., goal-setting) categories. Others (*n*=9; Arnold et al., 2018; Knights & Ruddock-Hudson, 2016; Kristiansen & Roberts, 2010; Kristiansen et al., 2012b; Larner et al., 2017; Levy et al., 2009; Miles et al., 2016; Nicholls & Levy, 2016; Stynes et al., 2017), however, referred more specifically to individual ways of coping, including cognitive (e.g., planning, rationalizing thoughts), social support (e.g., informational and emotional), psychological skills, humor, surface-acting (i.e., emotional regulation), and behavioral (e.g., habits and routines) strategies. Another categorization of coping (see Skinner et al., 2003) that views coping as an adaptive process was also discussed by some studies in our final sample (*n*=5; Baldock et al., 2021; Didymus, 2017; Didymus & Fletcher, 2014, 2017b; Potts et al., 2019). This categorization of coping emphasizes the multiple adaptative functions that coping can have and, in this way, is different to other categorizations that group ways of coping according to a singular adaptive function or topic

(e.g., problem- and emotion-focused coping).

Seventeen studies examined coping using a qualitative research design. The majority of these papers used semi-structured interviews (*n*=11; e.g., Didymus, 2017; Potts et al., 2019; Rumbold et al., 2018), three studies used diary methods (Didymus & Fletcher, 2014; Levy et al., 2009; Miles et al., 2016), two studies used questionnaires (Didymus & Fletcher, 2017b; Stynes et al., 2017), and one study used multi-methods (e.g., Kristiansen & Roberts, 2010). A large proportion of qualitative papers (*n*=11; see Table S4) explored coping experiences among athletes (e.g., Didymus & Fletcher, 2014; Rumbold et al., 2018; Weston et al., 2009). Collectively, problem-focused strategies (e.g., Leprince et al., 2018; Rumbold et al., 2018) and the problem-solving family of coping (e.g., Didymus & Fletcher, 2017b) were commonly favored coping options for athletes. Emotion-focused strategies (e.g., Miles et al., 2016; Nicholls et al., 2007; Rumbold et al., 2018) were also frequently reported by athletes as coping options. In other work, reappraisal- (e.g., self-rationalization, rationalizing with others; Hanton et al., 2012) and avoidance-focused strategies (e.g., Nicholls et al., 2007) were used by athletes to either re-evaluate the relevance and importance of organizational stressors or to purposefully avoid them. Whilst self-rationalization has been shown in some studies (e.g., Hanton et al., 2012) to be a commonly used strategy, Rumbold et al. (2018) noted that rationalizing with others was rarely adopted by professional academy rugby players. This was due to individuals lacking the confidence to seek support from staff or teammates when coping with stressors. These contrasting findings show that some individuals may find it difficult to use interpersonal forms of coping (i.e., rationalizing with others). With reference to avoidance-focused coping, Kristiansen et al. (2012b) suggested that, temporarily, avoidance coping may be beneficial in some instances (e.g., coping with salaries when it cannot be changed).

Social support was also a common coping option used by athletes. For example,

Kristiansen and Roberts (2010) and Kristiansen et al. (2012b) suggested that social support (e.g., tangible, informational, emotional support) helped both youth elite and professional soccer athletes to manage organizational stressors during competition and or training. Miles et al. (2016) pointed to the importance of instrumental and emotional social support in managing organizational stressors leading up to a competition. Athletes in this study reported that social support from family and friends (e.g., external support) was important prior to competition because internal support (e.g., coaches and teammates) was perceived to have implications for future selection. Arnold et al. (2018) noted that some dimensions of social support exacerbated athletes' experiences of organizational stressors. Rumbold et al. (2018) found that social support was commonly used among athletes to protect against negative outcomes of stressors.

Two qualitative studies were retrieved that focused on athletes' perceived effectiveness of the coping strategies they employed to manage organizational stressors. Didymus and Fletcher (2014) explored coping effectiveness among swimmers, identifying that self-reliance, escape, and negotiation were the perceived most effective families of coping when used in isolation. Among field hockey players, Didymus and Fletcher (2017b) found that, when managing leadership and personnel issues, problem-solving and information seeking used together was equally as effective as using escape and self-reliance coping families in isolation. They also found that opposition and support seeking used in combination and problem solving used in isolation were most effective for managing cultural and team issues; that accommodation, support seeking, and escape each used in isolation were the most effective coping options for dealing with logistical and environmental issues; and that problem solving used in isolation was the perceived most effective family of coping when athletes experienced performance and personal issues. These two studies highlight the complexities of coping during organizational stress transactions and illuminate some ways in

which athletes use coping strategies both in isolation and in combination.

Eight qualitative studies focused on coping among coaches in the context of organizational stress (Baldock et al., 2021; Didymus, 2017; Knights & Ruddock-Hudson, 2016; Levy et al., 2009; Potts et al., 2019; Rumbold et al., 2018; Stynes et al., 2017; Thelwell et al., 2010). Studies in this area suggest that problem-focused coping (e.g., planning) and emotion-focused coping (e.g., self-talk) were the most commonly deployed strategies. Levy et al. (2009), for example, conducted a longitudinal diary-based study with a high-performance coach and found problem- and emotion-focused strategies to be the most effective, however, perceived effectiveness of these coping efforts declined over a period of 28-days. More recent research (e.g., Baldock et al., 2021; Didymus, 2017; Potts et al., 2019) has explored coping among coaches as an adaptative process. Didymus (2017), for example, found that six of Skinner et al.'s (2003) 12 families of coping (e.g., support seeking, negotiation, escape) were used by coaches. A new family of coping, namely dyadic coping, was also proposed in this study to account for the interpersonal nature of coping that often occurs between two or more people. Both Baldock et al. (2021) and Potts et al. (2019) supported these findings and found that these coping families were relevant to professional football coaches and were used among volunteer, part-time, and full-time coaches.

Six quantitative papers examined coping with organizational stressors. Five of these studies did so with athletes (Arnold et al., 2017a, 2018; Larner et al., 2017; Nicholls et al., 2007; Roberts et al., 2019; Rumbold et al., 2020) and one focused on coaches (Larner et al., 2017). Nicholls et al. (2007), for example, found differences in coping and coping effectiveness according to gender, sport type, and skill level of athletes. Indeed, female athletes reported more frequent use of problem-focused (e.g., planning, communication) strategies than male athletes, and higher skilled athletes (e.g., international) reported using more planning, blocking, and visualization, and perceived their coping as more effective than

less-skilled athletes. The use of problem-, emotion-, and avoidance-focused strategies, as well as social support were generally reflected across these papers (Arnold et al., 2017a, 2018; Roberts et al., 2019). Using a longitudinal design, Larner et al. (2017) found that surface-acting (a form of emotional-regulation) moderated the link between organizational stressor frequency and burnout among athletes, and the link between stressor frequency and turnover intentions over time in coaches. Rumbold et al. (2020) also used a longitudinal design and found that eliciting support to regulate emotions was linked to increased playing time five years later. These findings suggest that some coping efforts could be early indicators of future health, performance, and turnover outcomes in professional sport.

Well-Being

Ten studies, which covered quantitative (*n=7*) and qualitative (*n=3*) methods, considered well-being in the context of organizational stress. In addition to reviewing papers that explored hedonic and eudaimonic components of PWB, we were also able to interpret data on performance satisfaction as relevant to well-being because of the conceptual overlap between hedonic well-being (e.g., subjective well-being and life satisfaction) and performance satisfaction. Seven papers used quantitative methods (Arnold et al., 2017a; Bentzen et al., 2020; Didymus & Fletcher, 2017a; Didymus et al., 2020; Roberts et al., 2019; Simms et al., 2020; Tamminen et al., 2019) and three adopted a qualitative approach (Baldock et al., 2021; Didymus & Fletcher, 2017b; Sohal et al., 2013). Within the quantitative papers, a variety of questionnaires were used including: The Positive and Negative Affect Schedule (PANAS; Watson, Tellegen, & Clark, 1988); the Depression, Anxiety, and Stress Scale (Dass-21; Anthony et al., 1998); the subjective vitality scale (Ryan & Frederick, 1997), and various performance satisfaction scales (e.g., Levy et al., 2011; Riemer & Chelladurai, 1998).

The quantitative studies on well-being in the context of organizational stress

acknowledged the importance of appraisals (and appraisal-focused interventions) in influencing performance satisfaction and health-outcomes (e.g., Didymus & Fletcher, 2017a; Roberts et al., 2019; Tamminen et al., 2019). For example, Didymus and Fletcher (2017a) conducted a cognitive restructuring intervention with female hockey players and found that the intervention not only optimized appraisals but also positively influenced emotions and performance satisfaction. Other research (e.g., Arnold et al., 2017; Bentzen et al., 2020; Didymus et al., 2020; Roberts et al., 2019; Simms et al., 2020) has recognized the effect of organizational stressors and stress-related variables (e.g., coping, emotions) on psychological health and well-being. As an example, using a repeated-measures design, Simms et al. (2020) found that selection-related organizational stressors positively predicted symptoms of perceived psychological and physical ill-health (which constitute proxy measures of well-being due to their links to affect, motivation, and subjective well-being), and negatively predicted perceived performance. Furthermore, coaching stressors negatively predicted perceived psychological ill-health, logistical and operational stressors positively predicted perceived performance, and goal and development stressors negatively predicted perceived performance.

Turning to the qualitative studies that focused on well-being (*n*=3; Baldock et al., 2021; Didymus & Fletcher, 2017b; Sohal et al., 2013), this research has focused on both direct and indirect examinations of well-being via the study of eudaimonic and hedonic well-being and performance satisfaction. Sohal et al. (2013) explored the impact of organizational stressors on the psychological well-being of Indian elite female athletes and reported that organizational stressors resulted in feelings of low environmental mastery and personal growth (i.e., eudaimonic well-being). Didymus and Fletcher (2017b) presented transactional pathways between stressors, appraisals, coping, and performance satisfaction among high-level female field hockey players. They interviewed ten players and reported that these

individuals were most likely to be satisfied with their performance when they had appraised stressors as a challenge. More recently, Baldock et al. (2021) explored the impact of stress experiences on daily lives and well-being of professional football coaches. They found coping effectiveness led to a range of adaptations (i.e., positive and negative adaptations to functioning) that influenced eudaimonic and hedonic well-being dimensions, and altered perceptions of eudaimonic well-being that itself influenced the coaches' hedonic well-being. In summary, this research foregrounds the importance of optimizing appraisals and coping to improve and protect well-being.

Discussion

The aim of this study was threefold: first, to capture current understanding of stress and well-being in the context of organizational sport environments and to explore links between these two concepts; second, to review the study quality of existing qualitative, quantitative, and mixed method studies; and third, to identify extant gaps in the literature to advance conceptual, theoretical, methodological, and applied understanding.

A total of 55 studies were included within the final sample (see Tables S3-4). Reviewed findings suggest that athletes, coaches, and support staff experience a variety of organizational stressors, including those relating to interpersonal, environmental and logistical, personal, and leadership issues (e.g., Fletcher et al., 2012a, 2012b; Potts et al., 2019). Demographic factors (e.g., gender, skill level, sport type) can influence how organizational stressors are experienced (e.g., Arnold et al., 2016), which is unsurprising when considering these findings in light of transactional perspectives of stress (e.g., Lazarus, 1999; Lazarus & Folkman, 1984) that foreground the role of personal factors and individual differences during stress transactions. In particular, existing studies have strongly established the different types of organizational stressors encountered by various performer populations. Despite this, only a few studies (e.g., Arnold et al., 2016; Nicholls et al., 2007) have

examined and compared these demographic (i.e., gender, sport type, competition level) and situational (i.e., frequency, intensity, duration) differences in organizational stressors within athletes. This warrants further research to extrapolate and extend research across different stress properties (e.g., situational properties, dimensions), stress components (e.g., appraisals, emotions), and organizational contexts. One other demographic consideration is that only 14 of the 54 included studies explored coaches' experiences, whilst five other studies focused on the experiences of support staff. This is problematic when considering that coaches are performers in their own right (Thelwell et al., 2008), and when recognizing that support staff are often directly employed by sport organizations and are exposed to a plethora of organizational issues within their roles (cf. Arnold et al., 2019; Kerai et al., 2019). However, a promising observation was that approximately 54% of the coaches in our retrieved sample were women. This suggests that progress is being made toward the underrepresentation of women coaches in the samples of previous literature (Didymus et al., 2020).

The aforementioned voids were echoed in other areas of literature on organizational stress (e.g., appraisals, emotions, coping, well-being). Appraisals and emotions, for example, have both been afforded little research attention, which was surprising considering their conceptual significance and the role they play in determining the outcomes of stress transactions (see Lazarus, 1999; Lazarus & Folkman, 1984). Existing literature on appraising (e.g., transactional alternatives; Didymus & Fletcher, 2017b) has, however, explored this phenomenon alongside other components of stress (e.g., stressors, situational properties). Research into emotions within the context of organizational stress is moving toward the examination of emotions as a social, rather than individual, phenomenon (e.g., Tamminen et al., 2016), which is in keeping with existing seminal and contemporary models of stress and emotion (e.g., CMRT; Lazarus, 1999; DISC-R; De Jonge et al., 2012).

With reference to coping, researchers have studied this topic by either assessing the

intention and function of coping efforts (e.g., by examining problem-, emotion-, and appraisal-focused strategies), the specific individual strategies that individuals use (i.e., social support, humor), or the role that coping plays in adaptation (e.g., by examining families of coping). These different approaches to the study of coping bring to the fore a wider discussion about how best to categorize and understand performers' coping efforts. The answer is far from clear cut, however, examining coping from an adaptational perspective could help in moving toward a more relational view of stress and stressor characteristics, rather than studying coping and other stress concepts as discrete and isolated components (cf. Fletcher et al., 2006).

Existing studies that have examined well-being in the concept of organizational stress have typically explored hedonic dimensions of well-being (e.g., affect, performance satisfaction), which offers some insight to the links between organizational stress and well-being as an outcome of stress transactions. Some research has started to focus on eudaimonic dimensions of well-being, which has found organizational stressors has resulted in feelings of low environmental mastery and personal growth among athletes (Sohal et al., 2013), and that altered perceptions of eudaimonic well-being influenced the hedonic well-being of professional football coaches (Baldock et al., 2021). Despite these promising starts, the available literature and broader criticisms of well-being research in general, has not yet fully captured the essence of well-being (both eudaimonia and hedonia) in the context of organizational stress (cf. Dodge et al., 2012). Feasible future research options involve extending knowledge of eudaimonia and hedonia in this context and unpacking how well-being changes over time among individuals who are employed by or linked to sport organizations.

In summarizing the empirical contributions, the review reflects a volume and variety of literature that has explored organizational stressors in performance contexts (e.g., Arnold

et al., 2017a, 2017b; Fletcher & Hanton, 2003; Woodman & Hardy, 2001). The findings not only demonstrate the widely distributed nature of organizational stressors (Hanton et al., 2005) but also evidence the various types of organizational stressors that athletes, coaches (e.g., Olusoga et al., 2009), and support staff (e.g., Arnold et al., 2019) can experience. Despite the welcomed addition of literature with coaches and support staff to the more extensive evidence base with athletes, various characteristics (e.g., stressor dimensions; see, for review, Arnold & Fletcher, 2021) and situational properties of organizational stressors (e.g., novelty, imminence) have received scant attention (e.g., Didymus, 2017; Didymus & Fletcher, 2012). Developing knowledge in these areas will be critical to more expansively understand the personal and environmental facets of stress transactions and well-being. In addition, further research in these areas will afford a deeper understanding of the role of appraising in sport (Didymus & Fletcher, 2017b). Other underexplored areas relating to organizational stressors include the demographic factors (e.g., gender, skill-level, sport type) that influence stress transactions within athlete, coach, and support staff populations. Whilst some evidence in this area is available in athlete populations (e.g., Arnold et al., 2016; Nicholls et al., 2007), there is still some way to go before we fully understand the role of personal factors during individuals' transactions with their environment. In addition, a minority of studies (e.g., Larner et al., 2017; Tabei et al., 2012; Wagstaff et al., 2018; Wu et al., 2021) have explored burnout as a potential consequence of organizational stress. Considering the detrimental impact of burnout for athletes and coaches alike (e.g., decreased well-being; Wagstaff et al., 2018), it would be useful to direct future research attention toward the links between organizational stress and burnout in competitive sport.

The findings of this review highlight a range of organizational stressors that are experienced in various contexts and responded to through a range of emotional, attitudinal, and behavioral responses (e.g., personal stressors that have relevant meaning to athletes;

Fletcher et al., 2012b). Among the most commonly experienced stressors is interpersonal issues (e.g., Arnold et al., 2017b; Fletcher et al., 2011; Fletcher & Hanton, 2003) and the extant evidence points to the importance of better understanding the benefits and consequences of interpersonal interactions in performance sport. A compelling finding of this review is that interpersonal elements of organizational stress can act as both a stressor (e.g., coach-athlete interactions; Fletcher et al., 2012b) and a coping option (e.g., via informational and emotional social support; Kristiansen & Roberts, 2010). This points to the double-edged sword of interpersonal transactions (Staff et al., 2017), and highlights the importance of considering organizational stress from a social psychology perspective. Indeed, literature increasingly emphasizes the significance of relationships in acting as a vehicle for interpersonal stress transactions (e.g., Didymus, 2017; Leprince et al., 2018). For example, through a grounded theory of dyadic coping, Staff et al. (2020) found that when coach-athlete dyads appraised a stressor as significant and meaningful, they used dyadic coping to protect themselves and their relationships. This signals the importance for research to develop an interpersonal and nuanced understanding of organizational stress and its health-related outcomes (Didymus, 2017; Staff et al., 2017).

A key component of stress explored in this review was appraising. Our findings call for further attention to be directed toward the links between organizational stressors, their situational properties (e.g., ambiguity, imminence), and the transactional alternatives (i.e., challenge, threat, harm/loss, benefit) that can be experienced (e.g., Baldock et al., 2021; Neil et al., 2011). The findings of the review highlighted a range of transactional alternatives (i.e., challenge, threat, harm/loss) in evaluating organizational stressors (Didymus, 2017; Rumbold et al., 2018) and illuminated the potential of cognitive restructuring for optimizing athletes' appraisals (Didymus & Fletcher, 2017b). Despite this literature on appraising during organizational stress transactions, there remains a scarcity of research that has explored

appraising among performers. This could be due to the difficulties in capturing the idiosyncratic nature of appraisals (Hanton et al., 2012; Larner et al., 2017), and the often subconscious level on which appraising takes place. Future research should explore how appraisals are associated with organizational stressors and their underpinning situational properties, coping behaviors, and stress outcomes among different performance populations. Given that appraising forms an essential component of stress transactions (Didymus, 2017; Didymus & Fletcher, 2017b) and that various studies have advocated the importance and significance of these processes for well-being, emotions, and performance (e.g., Miles et al., 2016; Tamminen et al., 2019), future research would do well to explore this phenomenon in more detail. For example, using diaries (e.g., Didymus & Fletcher, 2012), longitudinal research designs (e.g., Rumbold et al., 2020), and temporally-bound studies (e.g., Stebbings et al., 2015) would allow appraising in relation with other stress components (e.g., coping, emotions, stress outcomes) to be captured over various time points (e.g., over time or within the moment a stressor occurs). Furthermore, the use of integrative qualitative methods (see Williams, 2018) would allow researchers to conceptually and methodologically advance understanding of the role of appraising, and more fully capture the dynamic and relational nature of stress and well-being. A similar point can be made about research on emotions in organizational stress contexts, which is limited and worthy of further research attention toward their multi-faceted roles within stress transactions (Tamminen et al., 2016). Understanding affective (e.g., Miles et al., 2016) and emotional contagion (e.g., Rumbold et al., 2021) among athletes, coaches, and support staff would also be beneficial. This could be achieved through methods that are sensitive to the dynamic nature of contagion such as: experience sampling methods (e.g., Rumbold et al., 2021), think aloud protocols (Oliver et al., 2020), and electronic activated recorders (e.g., Herbison et al., 2020)

Turning our attention to coping, one of the most recent criticisms of the intention-

function categorization system is that it lacks practical significance (Didymus, 2017) and, thus, a growing number of researchers have embraced coping families as a more adaptative view of coping (e.g., Baldock et al., 2021; Didymus, 2017; Potts et al., 2019). One of our findings that is cognizant of previous reviews (e.g., Nicholls & Polman, 2007) but is important to reiterate is the widespread use of problem-solving coping efforts among athletes (e.g., Didymus & Fletcher, 2017b), coaches (e.g., Didymus, 2017) and support staff (e.g., Rumbold et al. 2018). Interestingly, the few studies that have focused on coping effectiveness highlight that problem-solving alone may not necessarily be an effective way of managing organizational stressors. This supports the idea that coping strategies are neither inherently effective nor ineffective (Lazarus, 1991; Tamminen et al., 2021) and suggests that other elements of stress transactions (e.g., appraising, person, situation factors) play a part in determining the effectiveness of coping efforts. This raises questions regarding the discrete investigation of coping and calls for literature that focuses on the associations between different components of stress transactions. Such efforts may prove particularly fruitful among coach and support staff populations where a scarcity of coping research is evident. Future research should focus on understanding coping episodes in specific and defined contexts to build a clearer picture of person-environment transactions in sport, whilst developing a more comprehensive evidence-base for informing coping and stress management interventions. Indeed, the intervention evidence base in the context of organizational stress and well-being is weak so researchers would do well to develop a more robust evidence base of what works when aiming to optimize individuals' organizational stress transactions.

Well-being in the context of organizational stress in sport reflects promising empirical contributions within recent years but is still in short supply. This may be due in part to a lack of clarity about how well-being should be defined, conceptualized, and understood at both

global- and context-specific levels (Lundqvist, 2011). As this review reflects, researchers have generally investigated hedonic dimensions of well-being (e.g., performance satisfaction), which does not fully capture the essence of well-being because doing so overlooks eudaimonic components. Findings from this review echo the sentiments of Baldock et al. (2020) and Neil et al. (2016) in calling for researchers to consider the influence of key stakeholders (e.g., organizational staff, directors) who contribute to environments that can nourish or undermine well-being. In cognizance of recent research (e.g., Baldock et al., 2021), future research should continue to explore the interplay between stressors, coping, appraisals, and dimensions of well-being (eudaimonia and hedonia) to amass greater insight into the complexity of stress and well-being

Regarding theoretical implications, multiple frameworks have been employed in organizational stress research to date, which demonstrates the ever-evolving understanding and potential of research within this area. Researchers have typically favored transactional perspectives of stress (e.g,. Lazarus, 1999) but the underpinning principles of these approaches have not always been reflected in the literature. For example, despite being rooted in transactional psychology, some studies (e.g., Kristiansen et al., 2012b; Stynes et al., 2017) have gone little further than listing the stressors and coping strategies that athletes and coaches use. Others (e.g., Arnold et al., 2016; Didymus & Fletcher, 2014, 2017b; Rumbold et al., 2020) have similarly grounded their ideas in transactional perspectives but have attempted to find patterns in experiences of organizational stress among different people or populations. Such attempts are not fully cognizant of the underpinning theory (Lazarus, 1999; Lazarus & Folkman, 1984) that emphasizes the idiosyncratic and relational nature of organizational stress transactions and moves beyond stress-response dualisms. Researchers should, in future, ensure greater coherence between the foundations on which research is built, the research questions posed, and the methods used. A delicate balance between

advancing understanding in a meaningful way whilst appreciating idiosyncratic influences of person and situational variables in any given transaction will need to be achieved. To do so, researchers should use innovative methods (e.g., experience sampling) and forms of analyses (e.g., analytical pluralism) that illuminate the context-bound and dynamic nature of stress, and increases understanding of the role of well-being within this process. Interested researchers should brave unfamiliar territory by embracing wider theoretical perspectives (e.g., within relational and interpersonal psychology) to comprehend how stress manifests among and is spread between dyads, teams, and communities within competitive sport.

Regarding methodological considerations, 37 included studies used qualitative methods, 16 studies adopted quantitative methods, and two studies used mixed methods. These volume differences could relate to the appropriateness of qualitative methods for capturing the transactional and multi-faceted nature of stress (Lazarus & Folkman, 1984) and well-being (Dodge et al., 2012). Such methods have facilitated the answering of complex research questions and significantly extended knowledge among different sport populations. This review highlights that most studies were cross-sectional (n=39) or longitudinal (n=13), whilst a minority of studies used more innovative methods such as diaries (n=6), auto-biographies (e.g., Smith et al., 2018), and experience sampling methods (e.g., Rumbold et al., 2020). The latter examples demonstrate potential methods where research can be further developed, especially in resolving an identified methodological pitfall of qualitative interviews relating to retrospective memory bias.

Quality assessments using the SQAC-checklists found that quantitative studies showed strengths in relation to robust and well-defined outcome variables, while qualitative studies reported rich, detailed accounts of methods and findings. Quality criteria that were less frequently fully addressed by quantitative studies included the use of appropriate sample sizes, study designs, and confounding variables. Relating to the latter, a broader issue among

quantitative studies in organizational stress is the lack of controlling for personal and or situational factors that influence stress transactions (Lazarus, 1991). These should be studied in future research to begin to unpick the ways in which individual and situational factors influence various components (i.e., appraising, coping) of stressful encounters. To address sample size and study design shortcomings, future quantitative research could benefit from greater use of methods such as path analyses (e.g., Nicholls et al., 2012) to assess relationships between organizational stress components and outcomes over time and to inform stress management interventions and initiatives in sport organizations (Rumbold & Didymus, 2021). Quality assessments also highlighted that qualitative studies were weaker in reporting verification procedures to evidence credibility and reflexivity. To mitigate, future research could attempt to address and consider these qualities more thoroughly and seek to align further to more dynamic perspectives of stress using, for example, integrative qualitative methods (e.g., Williams, 2018) and analytical pluralism (Clarke et al., 2015). These methods could equip researchers with broader methodological tools and offer valuable insight into the relationships between one or more organizational stress components (e.g., stressors, emotions, appraisals, coping) and outcomes (e.g., well-being, performance, burnout) that could not be captured by one method or form of analysis alone.

In considering applied implications, there are notable recommendations that practitioners, decision-makers, and national governing bodies can consider. First, a range of organizational stressors are experienced by athletes, coaches, and support staff. Interpersonal elements of organizational stress were viewed as both a stressor and a coping option. Thus, sport organizations should consider how to optimize relationships between stakeholders (e.g., performers and employees). This could be achieved by implementing mentoring systems or by embracing a person-centered organizational culture whereby individual beliefs and values are at the heart of policy and practice. Second, only one paper (Didymus & Fletcher, 2017a)

reflects an organizational stress management intervention. This leaves a significant gap in knowledge and understanding and highlights the need for more intervention research that tests the efficacy and effectiveness of projects that are designed to optimize organizational stress transactions. Third, given the critical roles that coaches and support staff play (e.g., supporting athlete welfare), it is important for all concerned to consider the implications of stress transactions among these individuals. The aspiration of such considerations should be to create healthy environments, to facilitate the effective appraisal and management of organizational stressors, and to bolster individual and organizational functioning.

Limitations

Despite efforts in this systematic review to maintain a high level of rigor (e.g., by cross-verifying included studies, managing the risk of bias, and maintenance of a clear audit trail), some limitations are evident. Firstly, whilst this review did explore several factors that may mediate or moderate components of stress transactions (e.g., demographic differences, psychological resilience; Arnold et al., 2016; Wagstaff et al., 2018). Indeed, there may well be other mediating, moderating, and outcome variables that have not been fully explored in this review due to the keyword search strategy. For example, studies focusing on ill-being, personality, and mental toughness may not have been returned by the searches but may contain information that is relevant to the mediation and or moderation of stress transactions. Whilst we had, for good reason, reviewed the components and roles of stress transactions individually; readers should also be mindful that these factors are inter-related, inter-connected, and idiosyncratic, thus should be considered in keeping with underpinning transactional theories (e.g., Lazarus, 1999). A second limitation can be observed in the databases that were used to search for literature (Dundar & Fleeman, 2017). Whilst these databases mirrored those used in previous systematic reviews in sport psychology stress research (e.g., Norris et al., 2017), they did not pick up some studies that were included in the

final sample. To mitigate this limitation, we used failsafe techniques in the forms of citation pearl growing (e.g., of previous review papers; e.g., Arnold & Fletcher, 2012; Fletcher & Wagstaff, 2009; Potts et al., 2021; Wagstaff & Larner, 2015) and manual database searches (e.g., via Google Scholar) to retrieve additional papers. These strategies allowed a comprehensive retrieval of the available evidence, which was guided by the inclusion criteria and, thus, safeguarded the overall quality of the review.

Conclusion

The findings of this systematic review postulate that athletes, coaches, and support staff experience a myriad of organizational stressors that are underpinned by a range of situational properties. These situational properties influence how organizational stressors are appraised and appraisals have implications for coping, well-being, and performance. Individuals can appraise organizational stressors through a range of transactional alternatives, respond using an array of individual and group emotions, and cope with organizational stressors using a range of coping options (e.g., problem solving and social support). Limited literature has examined the roles of some key components of organizational stress (e.g., appraisals and emotions) or their links to well-being, especially within coach and support staff populations. Going forward, researchers should consider the interpersonal elements of stress, how multiple organizational stress components work in unison to influence individual and collective well-being, and the efficacy and effectiveness of stress management interventions that can bolster well-being in sport organizations. This could be achieved using innovative methods (e.g., longitudinal, integrative qualitative methods) and data analysis techniques (e.g., pluralism) with under-represented populations (e.g., coaches and support staff) to develop a more insightful and robust research landscape.

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