

INDISPENSABLE YET INVISIBLE – WHY PERFORMANCE SUPPORT STAFF WELL-BEING AND WORKING CONDITIONS THREATEN PLAYER CARE IN PROFESSIONAL SOCCER

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INTRODUCTION

Professional soccer relies on a multidisciplinary performance support team to optimize athlete health and competitive performance. This team, comprised of physiotherapists, medical doctors, athletic trainers, strength and conditioning coaches, sport psychologists, nutritionists, and performance analysts, operates at the intersection of health and performance optimization (34). While indispensable, their working conditions and well-being have received little systematic attention in the sport science and sport medicine literature, particularly with regard to player availability. Surveys conducted across English professional soccer, Major League Soccer (MLS), and the National Strength and Conditioning Association (NSCA) report excessive working hours, chronic work-life imbalance, inadequate institutional support, and high turnover rates among performance support staff (6,24,27). Despite the field's growing acceptance of multifactorial approaches to injury that acknowledge organizational and human factors, the potential influence of performance support staff well-being and working conditions on injury incidence has not been examined as a risk factor (22,36). Using evidence from social and behavioral sciences, sport psychology, strength and conditioning, and sport medicine, this article argues that performance support staff well-being and working conditions represent a neglected but consequential dimension of the injury and performance equation in professional soccer. This article's aim is to raise awareness of this issue and to stimulate the organizational investment and governing body attention this issue requires.

LITERATURE REVIEW

Social and behavioral sciences have a long tradition of investigating the structural and organizational conditions shaping the experiences of practitioners in elite sport environments. Gibson's ethnographic investigation of an exercise physiology laboratory showed that sport science knowledge production is shaped by social and political values that tend to reduce the human body to measurable data (e.g., VO₂max scores, force outputs, and biological markers) while neglecting the practitioners producing that knowledge (12). Szedlak et al. reviewed the evidence on psychosocial coaching behaviors and argued that cognitive, relational, and ethical competencies contribute as much to coaching effectiveness as technical knowledge (35). Furthermore, a study including 13 researchers and 30 United Kingdom Strength and Conditioning Association (UKSCA) stakeholders (i.e., board members, tutors, assessors, and course developers) found that psychosocial competencies spanning pedagogical, philosophical, psychological, and sociocultural dimensions were poorly defined and misunderstood even among those responsible for designing coach education curricula (7). Despite stakeholders recognizing the importance of these competencies in daily practice, strength and conditioning education remained primarily focused on sport sciences and technical knowledge, with psychosocial

skill development occupying a negligible role within formal accreditation processes (7).

Building on this tradition, researchers have further examined how organizational structures including hierarchical positioning, precarious employment, and political alignment pressures shape practitioners within elite sport organizations (13,37). Wagstaff et al. conducted a two-year longitudinal study including 20 sport medicine and science practitioners in elite English soccer and cricket (37). It was concluded that elite sport is a volatile environment characterized by high personnel turnover, with practitioners' employability not only depending on their technical competence but also on their ability to navigate organizational politics and align with management (37). Gilmore et al. investigated this in the English Premier League, where sport psychologists described their employability as tied to each managerial appointment, a structural precarity that undermines the practitioner-athlete relationships (13). Larner et al. demonstrated that the frequency of organizational stressor (e.g., the situational demands, difficulties, and adversities that individuals encounter within their sport organization) exposure was positively associated with burnout, and that practitioners who suppressed authentic emotional responses to meet organizational expectations (i.e., surface acting) had a higher risk of burnout and turnover intention (10,21). Arnold et al. conducted a qualitative study including 40 sport scientists and management staff and identified four stressor domains: relationship and interpersonal issues, physical resource constraints, contractual and performance development pressures, and organizational structure and logistical challenges (1). In practice, these domains manifest as excessive workloads, limited job security, short-term contracts, role ambiguity, interpersonal conflict within multidisciplinary teams, and inadequate organizational support (1,28). These stressors are further intensified by the demands of irregular schedules, frequent travel, and the emotional labor of supporting athletes through injury and performance setbacks (28). Importantly, Arnold et al. found that sport science and medicine practitioners operate without the welfare provisions, mental health programs, and formal support structures provided to athletes (1).

The consequences of these structural conditions are visible in the burnout data documented across performance support staff populations, for whom organizational factors emerge as the primary drivers of distress. A systematic scoping review of 42 studies involving over 4,500 elite coaches found that burnout was the dominant mental health concern, with prevalence ranging from 22% reporting mild symptoms to over 40% meeting the criteria for anxiety or depression (11). Burnout was described as emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment. High workload, job insecurity, and work-life imbalance were the most identified risk factors, suggesting that burnout among elite sport practitioners is structurally produced rather than individually determined (11).

Within strength and conditioning, Snarr and Beasley surveyed 256 coaches and personal trainers and found that one third met criteria for personal burnout and 28.5% for work-related burnout, with workload volume and reduced work-life balance as the strongest predictors (33). Notably, client-related burnout was significantly lower than personal and work-related burnout, indicating that the primary source of distress lies in the organizational environment rather than in the coach-athlete relationship (33). Extending this evidence to the performance support team, Pilkington et al. surveyed 224 elite coaches and performance support staff and found that over 43% met the criteria for anxiety or depression (28). Emotional exhaustion and work-life imbalance were the most reported concerns, with performance support staff reporting symptom rates comparable to or higher than coaching staff despite receiving less institutional support (28). A systematic review of 51 studies found that burnout occurred across all athletic trainer subgroups, with work-life imbalance, role strain, poor salaries, long hours, and organizational politics as the primary causes, and noted that the relationship between burnout and quality of patient care in athletic trainers remained an emerging area of research (26). The National Athletic Trainers' Association (NATA) acknowledged these concerns in a position statement, noting that work-life imbalance among athletic trainers carries stronger negative consequences than in most comparable professions and is predictive of burnout, job dissatisfaction, and career attrition (23). Importantly, a subsequent study addressing this gap found that burnout was associated with the commission of medical errors among secondary school athletic trainers, suggesting an empirical link between practitioner occupational well-being and the quality of athlete care that the broader sport science and sport medicine literature has yet to fully integrate (26).

ORGANIZATIONAL ENVIRONMENT AND COMPETITIVE OUTCOMES

Understanding the consequences of these conditions for player health and team performance requires examining the organizational context in which performance support staff operate. Evidence from across elite sport suggests that performance support team effectiveness depends on conditions directly modifiable by organizational decisions, including trust, role clarity, psychological safety, and continuity of personnel, and that when these conditions are lacking, athlete health and performance can deteriorate (34). This is not merely theoretical. Clubs investing in staff relationships and organizational support have been shown to achieve higher player availability, which is associated with improved competitive outcomes in professional soccer (16,29,39). Taken together, these findings suggest that a system which normalizes underinvestment in performance support staff risks diluting the very quality of care it depends upon, a system design problem with direct consequences for player health and competitive performance that professional soccer organizations cannot afford to overlook.

It is important to acknowledge that some organizations may make a deliberate business choice to minimize investment in support staff, particularly where short-term cost reduction is prioritized over long-term performance sustainability. Research across industries shows that organizations focusing on short-term cost reduction tend to underinvest in human capital relative to their longer-term performance needs, often at significant cost to future competitiveness (3). The evidence base for the precise financial return on staff well-being investment in professional soccer remains limited, and this article does not claim otherwise. However, research indicates that injuries in professional soccer carry substantial financial consequences. Dallmeyer et al., in a seven-season analysis of the German Bundesliga, estimated the indirect financial costs of injuries at approximately €220 million per season, driven primarily by salary payments to injured players and lost competitive value (8). These figures are consistent with broader European estimates, with injury costs across the top five European leagues reaching an estimated €836 million in the 2023/24 season alone (20). This approach therefore carries hidden costs, including increased injury incidence and reduced team performance, higher staff turnover, and loss of institutional knowledge, that may ultimately outweigh the short-term savings (16,19,37).

STRUCTURAL DETERMINANTS AND ORGANIZATIONAL CONSEQUENCES

Understanding why these conditions persist in professional soccer requires looking beyond individual organizational failures to the structural forces that have shaped performance support staff roles over time. Historically, these practitioners emerged as adjuncts to coaching and medical departments, operating within hierarchical structures that positioned them as service providers rather than strategic assets (1,34). This subordinate positioning has limited their organizational influence and their capacity to advocate collectively for improved conditions. Several reinforcing structural factors sustain this disadvantage. First, short-term contracts tied to coaching tenures create chronic job insecurity, preventing experienced practitioners from building the organizational leverage needed to negotiate better working conditions (30). Second, a competitive labor market characterized by a large pool of qualified graduates and a limited number of elite positions reduces the market pressure on organizations to improve compensation or conditions (24,38). Third, unlike professional athletes who benefit from player associations and minimum wage agreements in most major professional leagues, performance support staff lack equivalent collective bargaining structures or governing body protections. The result is a workforce that is structurally vulnerable despite its qualifications and commitment.

These structural conditions contribute directly to the high turnover observed in elite soccer personnel (30). Short-term contracts allow organizations to replace entire support teams regardless of experience or competence, and organizations may also limit staffing levels and investment in prevention and research, decisions that can become costly when injuries

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outstrip staff capacity (30). The departure of senior practitioners represents what can be termed a knowledge drain, a significant and often underappreciated cost of high staff turnover in elite sport environments (4). When experienced performance support staff leave, they take with them years of accumulated expertise: an understanding of individual player responses, the specifics of the club's operational context, and the practical knowledge of which interventions work within that particular environment (2,18). This issue was documented in collegiate and professional sport settings, where the replacement of entire support teams following coaching changes frequently results in the loss of

institutional knowledge that cannot be quickly rebuilt (14,31). The vacant positions are often filled by junior professionals who, despite their qualifications, may lack the seasoned insight needed to manage complex issues, such as player availability in high-performance environments (4,5). Over time, repeated knowledge drain cycles erode the organizational memory that underpins effective player care (4,17). Within many elite soccer clubs, this turnover also disrupts continuity, weakening the practitioner-athlete relationships on which effective treatment implementation depends, a pattern that represents both a performance cost and a potential injury risk factor (2,9).

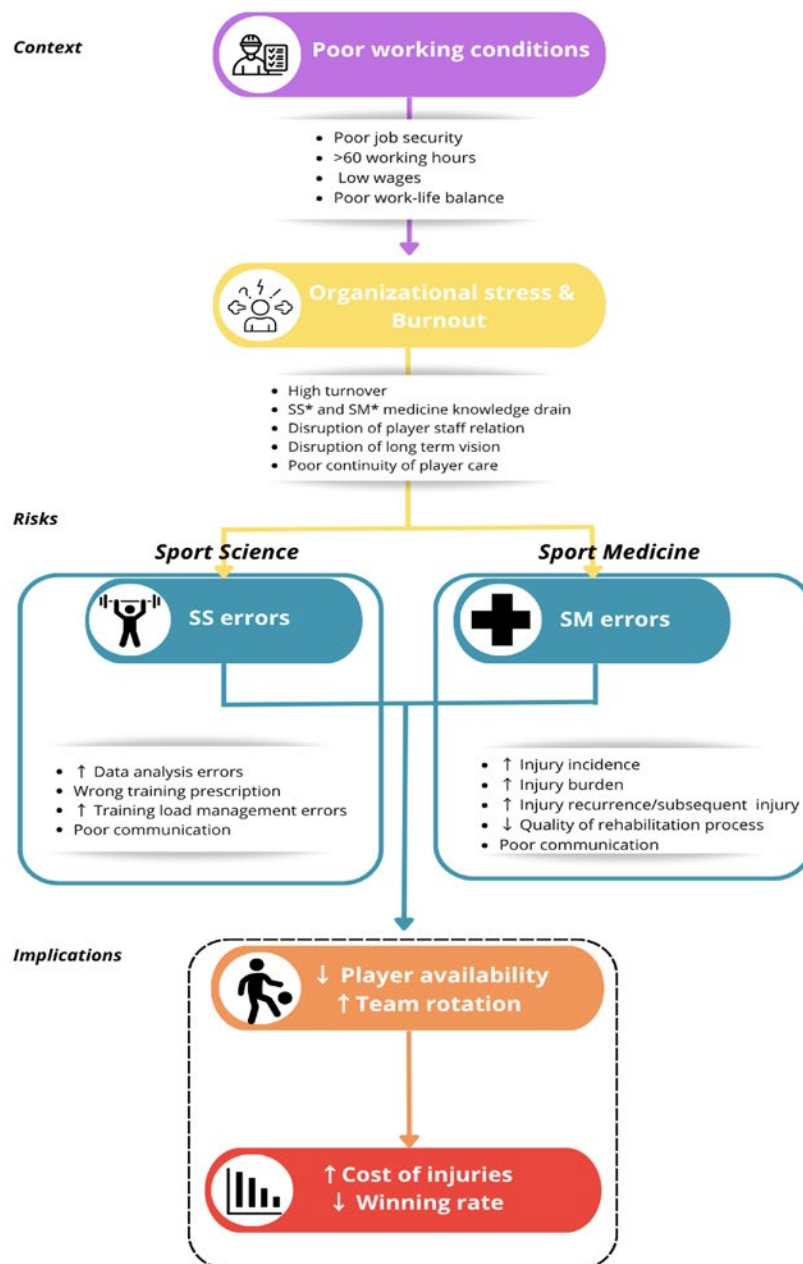


FIGURE 1. CONCEPTUAL MODEL ILLUSTRATING HOW POOR WELLBEING AND INADEQUATE WORKING CONDITIONS AMONG PERFORMANCE SUPPORT STAFF MAY COMPROMISE ATHLETE HEALTH AND TEAM PERFORMANCE IN PROFESSIONAL SOCCER. SS = SPORT SCIENCE; SM = SPORT MEDICINE. FIGURE DEVELOPED BY THE AUTHORS.

Figure 1 provides a conceptual overview of the argument developed across the following three sections: the structural conditions that produce poor working environments, the sport science and sport medicine risks that follow, and the implications for player availability and competitive outcomes.

SPORT MEDICINE AND SPORT SCIENCE RISKS

Within professional soccer, the organizational stressors and burnout documented among performance support staff may compromise the quality of sport medicine and sport science practice. While personal stressors are an inevitable feature of any practitioner's professional experience, it is specifically chronic occupational stress produced by the structural conditions that represents a modifiable organizational risk. Research on decision fatigue indicates that sustained cognitive and emotional load degrades the quality of professional judgment over time, increasing the likelihood of errors in time-sensitive clinical and performance decisions (15). Among athletic trainers, burnout has been associated with reduced quality of care provided to athletes, offering one of the few empirical links between practitioner occupational stress and athlete outcomes in sport (26).

In a professional soccer context, these risks manifest across two interconnected domains. Sport medicine errors may include slower injury detection, reduced quality of prevention and rehabilitation planning, increased injury recurrence, and delayed return to play. Sport science errors may include data management inaccuracies, suboptimal training prescriptions, and training load miscalculations. These errors carry real consequences for player availability and return-to-play timelines (16). Such errors may also partly explain the growing trend of athletes seeking external support outside the club structure, including private physiotherapists or personal fitness coaches, a phenomenon that raises legitimate concerns about liability, continuity of care, and the coordinated management of injuries (32).

PLAYER AVAILABILITY AND COMPETITIVE CONSEQUENCES

The sport medicine and sport science errors described above carry direct consequences for player availability in professional soccer (16). Decreased player availability forces increased squad rotation, with research demonstrating that rotation-driven disruptions to passing and shooting performance are associated with reduced competitive outcomes (39). While the precise causal pathway from staff occupational burnout to player unavailability has not yet been quantified, representing an important gap for future research, the convergence of evidence across decision fatigue, athletic trainer burnout, and injury incidence literatures suggests a plausible relationship warranting serious attention. As previously highlighted, player unavailability imposes substantial financial costs on professional soccer organizations, thereby strengthening the case for investment in the working conditions and well-being of performance support staff, given the strong potential for financial returns (8,29).

CALL FOR ACTIONS AND FUTURE DIRECTIONS

Addressing the performance and financial consequences documented above requires acknowledging first who performance support staff are and what they bring to the organizations that employ them.

Performance support staff are qualified professionals, holding degrees and postgraduate qualifications and specialist certifications, across medicine, sport science, and allied health disciplines, who operate under significant and sustained pressure in service of athlete health and team performance (28,34). Many remain in roles despite the structural disadvantages described above which reflect the value they place on working in elite sport environments, rather than an indication that current conditions are adequate or sustainable (38).

Given the evidence reviewed in this article, there is a compelling organizational case for investing in initiatives that protect and support this workforce. As demonstrated by Ekstrand et al., clubs investing in high-quality staff communication and functioning achieved higher player availability (9,16). Realizing these benefits requires that organizations move beyond treating performance support staff as dispensable, toward recognizing them as strategic assets whose well-being is integral to high-performance outcomes. Soccer governing bodies, professional leagues, academic institutions, and professional bodies should work collaboratively to facilitate research and implement policies that protect and formalize this recognition.

Translating this awareness into practice requires coordinated action across several domains. In terms of job security, professional leagues and federations could establish minimum contract length standards for performance support staff, for example guaranteeing contracts that extend beyond a single head coach's tenure, insulating experienced practitioners from wholesale replacement when head coaches change (30). Regarding working conditions, governing bodies could develop and mandate minimum standards for staff-to-athlete ratios, working hours, and rest periods, analogous to the duty-of-care frameworks already applied to players in most professional leagues. For mental health support, organizations could extend existing athlete mental health programs, such as those recommended by the International Olympic Committee and Federation International Football Association, to explicitly include performance support staff, ensuring access to employee assistance programs, structured clinical supervision, and peer support networks (28). In terms of professional development, governing bodies could establish structured career pathway frameworks, including continuing education requirements, mentorship programs, and clear progression criteria, reducing the precarity that currently drives experienced practitioners out of the field (38). While the feasibility of these changes will vary across leagues, nations, and organizational contexts, each has precedent in adjacent high-performance industries. Healthcare systems, aviation, and emergency services have each developed

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duty-of-care frameworks for practitioners working under sustained pressure that balance organizational demands with individual well-being, providing potential models for elite sport to draw upon (30).

As a potential outcome, sport organizations implementing the highest-standard policies could be awarded a recognized quality accreditation, analogous to existing club licensing frameworks operated by Union of European Football Association, or player welfare certification programs developed by domestic federations such as the English Football Association, United State Soccer Federation, or MLS, indicating their commitment to best practices in performance support staff well-being and working conditions. Professional bodies including the NSCA could develop parallel standards specific to strength and conditioning and sport science practitioners, with the NSCA's existing Education Recognition Program providing a clear institutional template. Establishing clear oversight responsibility would be essential to the credibility and consistency of any such program. Such recognition could not only stimulate policy implementation across clubs, but also provide a benchmark for continuous improvement within the elite soccer ecosystem.

To address the research gap this article identifies, several critical priorities emerge. First, longitudinal epidemiological studies are needed to examine the relationships between performance support staff turnover rates and injury incidence, as well as the associations between staff seniority and player availability metrics, providing the empirical foundation currently absent from this area (16,30). Second, cross-industry comparative studies could draw on staffing models from healthcare, aviation, and emergency services to identify evidence-based benchmarks for staff-to-athlete ratios, working hour standards, and well-being support structures that could inform practice in elite sport (28). Third, economic analyses are needed to quantify the return on investment of improved staff working conditions, including the financial costs of turnover, knowledge drain, and injury burden attributable to understaffing or staff burnout (8,29). Fourth, psychometric development of validated tools measuring performance support staff well-being in elite sport environments would substantially strengthen the evidence base, as current research relies on instruments developed for other populations, limiting the precision and comparability of findings across studies (11,28).

CONCLUSION

The neglect of performance support staff well-being and working conditions and their potential impact on player care represents both a research gap and an ethical concern. The objective of this article is not to paint a bleak picture of professional soccer organizations, but rather to raise awareness of structural conditions of practitioners that may have meaningful implications for player health and team performance. A secondary objective is to propose a call for action that encourages a more unified framework among clubs, governing bodies, and professional associations to support the well-being and working conditions of performance support staff. It is hoped that this article stimulates the necessary conversations between all stakeholders and contributes to the

design of a better player care model; one in which the well-being of the entire performance team ecosystem is recognized as a shared organizational responsibility.

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