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5 Sport medicine and sport science practitioners' experiences of organizational change

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### Abstract

Despite the emergence of and widespread uptake of a growing range of medical and scientific professions in elite sport, such environs present a volatile professional domain characterized by change and unprecedentedly high turnover of personnel. This study explored sport medicine and science practitioners' experiences of organizational change using a longitudinal design over a two year period. Specifically, data were collected in three temporally-defined phases via 49 semi-structured interviews with 20 sport medics and scientists employed by three organizations competing in the top tiers of English football and cricket. The findings indicated that change occurred over four distinct stages; anticipation and uncertainty, upheaval and realization, integration and experimentation, normalization and learning. Moreover, these data highlight salient emotional, behavioral, and attitudinal experiences of medics and scientists, the existence of poor employment practices, and direct and indirect implications for on-field performance following organizational change. The findings are discussed in line with advances to extant change theory and applied implications for prospective sport medics and scientists, sport organizations, and professional bodies responsible for the training and development of neophyte practitioners.

*Keywords:* organizational change, resistance to change, management of organizational change, employee turnover

## Introduction

The globalization and commercialization of sport has been intertwined with its medicalization and scientization (Stewart & Smith, 2008) with performers becoming increasingly dependent upon sophisticated systems of innovative medical and scientific support as they seek a competitive edge (Waddington & Smith, 2009). Further, in response to requirements for establishing systems which instantly and consistently deliver success, those leading elite sport organizations have increasingly sought innovative practices for talent management and asset maximisation (Gilmore, 2009; Gilmore & Gilson, 2007). Much of this innovation relates to advances in sport medicine and sport science (SM&SS) and includes medical, therapeutic, psychological, technological, analytical, physiological, and nutritional expertise (i.e., sport medics and scientists; SMSs). The value of these SM&SS practices is indicated by the widespread emergence of and substantial financial investment in SM&SS departments, which are often labeled the “team behind the team” (e.g., BBC, 2012).

Despite the widespread emergence of SM&SS, elite sport remains a volatile professional domain (Fletcher & Wagstaff, 2009), characterized by personnel and organizational change due to demands for sustained success. Indeed, a common characteristic of such environs is unprecedentedly high turnover of performance department staff (i.e., players, coaches, managers, performance directors). For example, as noted by Audas, Dobson, and Goddard (1997) and more recently by Day, Gordon, and Fink (2012), one of the most enduring characteristics of the football manager’s job is its chronic insecurity (Bruinshoofd & ter Weel, 2003; Cruickshank & Collins, 2012; Day, Gordon, & Fink, 2012; Flores, Forest, & Tena, 2012). In line with these observations, the average tenure of a manager in English league soccer is currently estimated at 1.55 years (League Managers Association, 2013) with more than half of the 92 clubs in the English league structure having a different manager to the one that started the previous season in 2012-2013.

1           The pressures for sustained ‘on-field’ performance are not experienced solely by  
2 football as professional cricket has also experienced increased volatility in its operational  
3 environment. Whilst not experiencing the same degree of dynamism and global exposure as the  
4 English Premier League (EPL), coaching and management departures within the English  
5 County League system appear to be increasing - as witnessed at Surrey and Northants during  
6 the 2013 season (BBC, 2013b) - with commentators stating that it was becoming more common  
7 for coaches to be sacked mid-season if relegation from a division was looming and making  
8 parallels with managerial sackings in the EPL. This suggests that staff departures are more  
9 likely as competition intensifies and rewards for elite performance increase. Naturally, SMSs  
10 are not immune from these changes given that those responsible for leading and integrating  
11 their practice into coaching, rehabilitation, and performance are those with the highest turnover  
12 (i.e., Managers, Performance Directors, Head Coaches) with managers increasingly bringing  
13 with them Assistant Managers, Coaches and other staff they have worked with before and are  
14 trusted advisors in an environment more noted for the absence of trust.

15           Indeed, it is common for substantial changes to backroom and SM&SS staff following  
16 managerial changes in professional sport. For example, Waddington and colleagues (e.g.,  
17 Waddington, 2002; Waddington, Roderick, & Naik, 2001; see also Gilmore & Sillince, 2014)  
18 have highlighted the nepotistic and ethically questionable employment practices of doctors and  
19 physiotherapists in professional football. Moreover, beyond job security and integration  
20 concerns, SMSs are likely to react to change in a range of emotional, behavioral and attitudinal  
21 ways. For example, in their study of an English Premier League football club Gilmore and  
22 Sillince (2014) illustrated how rapidly previously embedded SM&SS practices can be  
23 deinstitutionalized following managerial change. The authors illustrated how SM&SS practices  
24 that had been embedded for seven years were disestablished within a matter of months  
25 following a change of manager, with a community of enthusiastic young SM&SS professionals  
26 quickly leaving the organization. The authors proposed that the SMSs reactions to change were

1 triggered by a combination of factors. These included the previous manager's customizing of  
2 SM&SS in order to make it inimitable for reasons of competitive advantage, the new manager's  
3 failure to engage and understand these SM&SS practices, and the Chairman's desire to cut  
4 costs. Such findings offer a vivid illustration of the importance of understanding SMSs  
5 experiences of major organizational change in elite sport – especially because of the potentially  
6 negative impact on team performance caused by SMSs departures and the potential disruption  
7 to continuity of good SM&SS practices, as well as the consequences for individual SMSs  
8 careers.

9 Change can be studied from a range of perspectives allied to differences in terms of unit  
10 of analysis; at the macro level, the organizational and environmental factors that induce change  
11 are usually the research focus. These tend to be associated more with 'prescribed' forms of  
12 change with the organization often having little choice but to change with the prescription often  
13 extending to which choices of direction and response are viable. Alternatively, change can be  
14 generated within the organization by – for example – pursuing an innovative idea, with internal  
15 actors having the potential for greater involvement in the direction of travel (Beech &  
16 Macintosh, 2012). This has led to researchers adopting micro or a meso level approaches in  
17 order to focus on more change processes, including how employees respond to change. Within  
18 this line of inquiry, it is the understanding of the psychological and behavioral roots of  
19 individuals' reactions to change that is considered pivotal to better management and support of  
20 employees at such times (Stuart, 1995). Further, researchers have postulated that the roots of  
21 understanding employees' affective reactions to, ability to cope with, and tendency to resist  
22 change lie with those who experience it and how they make sense of it (Armenakis & Bedeian,  
23 1999; Fineman, 2003; Judge, Thoresen, Pucik, & Welbourne, 1999; Klarner, By, & Diefenbach,  
24 2011; Oreg, 2003; Weick, Sutcliffe, & Obstfeld, 2005).

25 Much of this recent focus on change experiences is based on process models of change  
26 that also incorporate how the phenomenon affects organizational members during its

1 implementation and how they make sense of the change over time (e.g., Isabella, 1990; Jaffe,  
2 Scott, & Tobe, 1994). Isabella's model consists of four stages describing experiences with  
3 change and suggests that organizational members interpret key events related to a change as it  
4 unfolds. The first stage is anticipation, which reflects individuals compiling information relating  
5 to change into a realistic perspective. The second stage is confirmation, during which  
6 assumptions are established and become ingrained. The third stage is culmination, in which  
7 leaders compare pre-change and post-change conditions. The fourth stage is aftermath, which  
8 reflects a review and evaluation of change consequences. In line with the view of change as a  
9 process, it is likely the moving events during change will present different stimuli for different  
10 appraisal and response. Thus, a phase analysis of organizational change that is inductively  
11 derived from the experiences of those that traverse it may allow for the identification of  
12 different patterns of experience, sense-making and sense-giving that characterizes change as a  
13 single event could not (Klarner et al., 2011).

14 Jaffe et al. (1994) proposed a similar stage-based model of how individuals construe  
15 change over time. Their model uses the labels of denial (i.e., refusal that change is necessary or  
16 will occur), resistance (i.e., withholding participation, attempting to delay implementation, or  
17 challenging change ideas), exploration (i.e., experimentation with new behaviors to test the  
18 change), and commitment (i.e., embracing the change). This approach resonates with that of  
19 Buchanan and Badham (2008) which highlights the political skills required when leading and  
20 engaging in change, highlighting the need to understand issues of power as well as the  
21 emotional and social costs (as well as the benefits) of more politicised, Machiavellian change  
22 management methods.

23 As noted by Day et al. (2012), for those interested in studying management and  
24 organizational behavior, sports organizations offer an interesting and relevant context to  
25 examine change because they arguably simplify many of the complexities of organizational life  
26 with clear rules and quick, unambiguous results. However, although the ability to study

1 organizational life in a simplified manner is alluring, it is still unclear as to what has been  
2 learned so far about behavior in organizations from studying teams in sport contexts. Questions  
3 remain about what can be learned from those studying relevant issues through different  
4 theoretical and methodological lenses collected under the broad heading of sport science (and  
5 especially sport psychology). And perhaps of greatest interest for researchers across disciplines  
6 is identifying where the potential for future contributions might lie.

7         Despite recent calls for the exploration of organizational change in sport (see Wagstaff,  
8 Fletcher, & Hanton, 2012a) and a growing body of literature showing sport organizations to  
9 place numerous demands on athletes (Fletcher & Hanton, 2003), coaches (Thelwell, Weston,  
10 Greenlees, & Hutchings, 2008) and parents (Harwood & Knight, 2009), research on employees'  
11 (e.g., SMSs) experiences of such phenomena remains an area for further development. The  
12 value of such development also lies in the acknowledgment of tensions within SM&SS practice.  
13 That is, debates continue and as the professionalization of SM&SS continues social closure  
14 (Larson, 1977) still eludes many sports science disciplines. Such social closure within SM&SS  
15 would restrict admission or practice to 'ineligibles' who do not possess the requisite, accredited  
16 skills and knowledge. It is pertinent to note the work of Malcolm and Scott (2011), who argue  
17 that the development of sports medicine in the UK has been hampered by continual resistance  
18 from the medical establishment (see also Reynolds & Tansey, 2009). Therberge (2009) also  
19 argued that within professional sport, performance 'role' demands are likely to result in the  
20 blurring of professional boundaries typically experienced in medical settings. However,  
21 Nancarrow and Borthwick (2005) note that the everyday lived experiences of professional  
22 boundaries are often less conflict-ridden than assumed.

23         It is also pertinent to note that the legacy of amateurism has been hard to jettison.  
24 Waddington, Roderick, and Naik (2001) highlighted how many doctors in professional football  
25 clubs were GPs with limited or no sports medicine training or prior experience. Such findings  
26 were echoed by Malcolm (2006) concerning rugby union club doctors who lacked sport-specific

1 expertise. However, Malcolm contrasted this picture with the existence of specialist  
2 physiotherapy capabilities servicing the sport and highlighted the improvements in medical help  
3 that attended the professionalization of the sport as well as the willingness of players to make  
4 use of it.

5         Given these observations the salience of findings from such research endeavors lies in  
6 the holistic training, support, wellbeing, and performance of SMSs, whilst also being aware of  
7 the wider agendas their careers are caught up in. Moreover, the exploration of SMSs  
8 experiences of change might raise awareness of the duty of care sport organizations have to  
9 their employees, support and better prepare practitioners (e.g., neophytes, trainees) for  
10 employment within such domains, and facilitate opportunities for job role enhancement during  
11 change through organizational development, learning and intervention. Therefore, this study  
12 aimed to better understand the experiences of SMSs during organizational change. Specifically,  
13 we examined SMSs experiences of organizational change and **sought to elucidate** SMSs  
14 emotional, behavioral and attitudinal responses to change over time and how this impacted their  
15 performance.

## 16 **Materials and Methods**

### 17 **Participants**

18         Data was collected over three phases between March 2011 and May 2013 via 49 semi-  
19 structured interviews with 20 (19 male, 1 female) SM&SS employees located in three elite sport  
20 organizations. All of the organizations were competing in the top domestic leagues within  
21 England for their respective sports; football and cricket. That is, participants were SMSs from  
22 two Premier League football teams (n = 7 and n = 7) and a County Championship Division I  
23 cricket club (n = 6). Although these teams were, and remain, in the top divisions of their sports,  
24 they are not the richest, most powerful or most successful clubs within their leagues – although  
25 they have clearly been successful in terms of their presence in the elite domestic league



1 competition in their sport. In many ways these organizations were representative of the majority  
2 of teams within their leagues in that they have mixed historical success, are resource  
3 constrained in comparison to the elite teams in their division, and as such, they consistently  
4 perform above expectations. All of the participants were paid employees of their respective  
5 organization, operated within a SM&SS department, and fulfilled roles as medical practitioners  
6 (e.g., doctor, physiotherapist), sport scientists (e.g., psychologist, performance analyst), or  
7 coaches whose work was densely infused by sport science activities (e.g., strength and  
8 conditioning).

9         The organizations included in the sample were selected due to the research team having  
10 pre-change working relationships as applied sport and exercise psychologists and change  
11 management specialists. This pre-change relationship is important given the difficulties  
12 academic researchers often face when securing access to elite sports teams and allied  
13 professional staffs for an extended period of time. These contacts and associations facilitated  
14 access to these rare research sites. Participants were fully informed of the research question,  
15 requirements of participation, and provided voluntary written informed consent prior to data  
16 collection. The research received ethics approval from the authors' institution.

17         **Football organization 1.** Despite limited financial resources, the club aspired to be the  
18 best sport science and medicine team in the EPL. In the preceding 12 months substantial  
19 financial investment had been made in the SM&SS Department, with a new Head of  
20 Department coordinating innovation and driving cutting-edge practices and interacting with the  
21 manager. The Department included physiotherapists, doctors, performance analysts, strength  
22 and conditioning coaches, and a sport and exercise psychologist. For the previous three seasons,  
23 the club had consistently finished in the top half the English Premier League and had secured a  
24 place in the UEFA Cup (one of the most prestigious pan-European Cup competitions).  
25 However, the club had also encountered substantial change due to managerial turnover. This  
26 began with one manager voluntarily leaving the organization 10 months before data collection

1 began. The replacement manager had been in position for 8 months at the beginning of data  
2 collection and left post in month 4 of data collection (June 2011), and was replaced a few days  
3 later by the club's third manager in 13 months.

4 **Football organization 2.** The club had experienced a turbulent recent history. Data  
5 collection started almost two years after the club had been relegated to the third tier league of  
6 football for the first time. This was just six years after being FA Cup runners-up, UEFA Cup  
7 participants and the eighth placed team in the EPL. The team's fortunes were largely influenced  
8 by the parent company of the football club going into administration and thus triggering point  
9 penalties for the organization. However, with a new consortium in control, two managers were  
10 hired and fired in the two year period prior to data collection with one decision described by the  
11 Club Chairman as "part of a wider strategic plan being implemented to improve all aspects of  
12 the club's operations, both on and off the field". Data collection began approximately 12 months  
13 later amid a period of success for the club, who were in the process of achieving successive  
14 promotions to the Championship (the 2<sup>nd</sup> highest league in England) and Premier League 5  
15 months before and 7 months after immersion within the organization commenced. Despite  
16 successive promotions, the manager was sacked amid controversy and immediately replaced  
17 halfway through the organization's EPL return campaign. Participants from this organization  
18 were eight full time SM&SS employees and included: the head of medicine, physiotherapist,  
19 medical doctor, strength and conditioning coach, assistant strength and conditioning coach,  
20 performance analyst, and assistant analyst.

21 **Cricket organization.** Due to the limited financial resources available within top flight  
22 cricket, the SMSs within the cricket organization often held dual specialist coaching roles (e.g.,  
23 bowling coach). However, the Department comprised full time physiotherapists, strength and  
24 conditioning coaches, a welfare and lifestyle coach, and part time performance analysts, and a  
25 sport and exercise psychologist. In the previous three seasons the club had experienced a  
26 decline in performance and largely mixed results. As a result of these mixed fortunes, during

1 the 2011 off-season, shortly after data collection began, a major change initiative began. This  
2 entailed appointing a new Director of Cricket, Head Coach, Captain, Assistant Coach and  
3 Specialist Bowling Coach and trading several senior players.

#### 4 **Procedure**

5 The first author was granted access by the Head of SM&SS at the respective  
6 organizations. These individuals were key actors within the change process and acted as  
7 gatekeepers to participants as change was instigated and implemented. Semi-structured  
8 interviews were conducted in three phases, although contact with the participants was ongoing.  
9 Phase 1 was at the time of or planning and initiation of managerial change and focused on  
10 participants' understanding of and immediate reactions to the organizational changes. Phase 2  
11 occurred 2-3 months after the onset of change and focused on participants' emotional,  
12 behavioral and attitudinal responses to the change process as it progressed. Phase 3 focused on  
13 participants' reactions to the change process and occurred between 6-9 months after the onset of  
14 change (see Figure 1 for data collection timeline). Each participant was sent a copy of the  
15 interview guide (see below) 1 week prior to each interview.

16 All participants provided interviews during at least two data collection phases, with nine  
17 being interviewed at all three phases. Specifically, 5 participants were only interviewed at phase  
18 1 and 2 (not phase 3), and 6 participants were only interviewed at phases 2 and 3 (not phase 1).  
19 This lack of completeness was due to participants leaving the organization ( $n = 6$ ) and being  
20 unavailable for interview ( $n = 5$ ). All interviews were conducted face-to-face by the same  
21 researcher who was trained in qualitative techniques. Each interview lasted between 48 and 108  
22 min ( $M = 70.35$ ,  $SD = 10.37$ ). All interviews were recorded in their entirety and transcribed  
23 verbatim.

24 **Interview guide.** A semi-structured interview guide was used to facilitate the interview  
25 process. This guide was adapted and refined at each phase of data collection. The guide  
26 provided a consistent structure for interviews whilst allowing for a point of deviation when

1 salient topics arose. The structure of the guide emanated from a review of extant theory and  
2 change management literature. For example, the interview guide used in similar change  
3 research (e.g., Isabella, 1990; see also, Jaffe al., 1994) provided the rationale for many basic,  
4 open-ended questions (e.g., “help me understand what it is like to be in the organization at this  
5 time?”). The guide was piloted with 3 sport scientists working in elite sport but not employed  
6 by the organizations or included in the present sample. Feedback led to minor structural and  
7 content refinements to enhance the clarity and comprehensiveness of the guide.

8         The guide consisted of four sections. Section 1 intended to build rapport and set context  
9 and asked participants to discuss the thoughts and feelings that they associated with anticipated/  
10 current/ previous organizational change. This section was intended to highlight any pre-  
11 conceptions and beliefs about or understanding of change initiatives. Section 2 invited  
12 participants to discuss the perceived impact of change on scientific support practitioners’  
13 emotions, behaviors, attitudes, and performance. This section was intended to understand the  
14 participants’ current evaluations of and responses to change. Section 3 requested participants to  
15 describe which of these issues are most amenable to change by the organizations or educators.  
16 The fourth section of the guide provided participants with the opportunity to suggest practical  
17 recommendations for others when attempting to regulate their own or others’ emotions in sport  
18 organizations. This section intended to glean information relating to what interventions SM&SS  
19 providers or training and development bodies might provide to best prepare and support SMSs  
20 for applied practice. Where necessary, the interviewer departed from the guide to gain more in-  
21 depth descriptions of the participants’ attitudes and experience. When this occurred, the  
22 interviewer attempted to avoid biasing or subtly directing the athlete’s responses by using  
23 neutral non-directional probes.

#### 24 **Data Analysis**

25         We adopted a content analysis procedure to analyze and represent participants’  
26 responses in a coherent form (see Miles & Huberman, 1994; Tesch, 2013). The goal of content

1 analysis is to provide knowledge and understanding of the phenomena under study by  
2 representing participants' responses in a coherent form (Tesch, 2013). The advantage of  
3 traditional content analysis lies in gaining direct information from participants without  
4 imposing preconceived theoretical perspectives. Content analysis has also been employed in  
5 similar research exploring organizational psychology in sport (e.g., Fletcher, Hanton, &  
6 Wagstaff, 2012; Hanton, Wagstaff, & Fletcher, 2012; Wagstaff, Fletcher & Hanton, 2012b).  
7 The analysis process began with the researchers independently reading all data on several  
8 occasions to achieve immersion and obtain a sense of the whole (Tesch, 2013). Immersion  
9 within the data was facilitated by adopting a reflexive "indwelling" stance: listening to the  
10 interview tapes, reading transcripts several times, jotting notes and thoughts. In line with the  
11 procedure reported by Wagstaff, Fletcher and Hanton (2012c), the researchers read through  
12 transcripts and attached memos to each segment of narrative, indicating preliminary, tentative  
13 connections. Extracted segments of potential importance allowed a number of initial themes and  
14 meanings to emerge regarding participants' experiences at each phase of data collection.  
15 **Subsequent comparison of initial themes and debate between the research team gave rise to a**  
16 **range of concepts and was, in part, inevitably influenced by extant organizational change theory**  
17 **and literature. A process of social validation was also undertaken via the presentation of themes**  
18 **to participants and where feedback assisted the co-construction and interpretation of findings.**

19 Tracy (2010) proposed eight criteria for judging the quality of qualitative research; (a)  
20 worthy topic, (b) rich rigor, (c) sincerity, (d) credibility, (e) resonance, (f) significant  
21 contribution, (g) ethics, and (h) meaningful coherence. Attempts to satisfy many of these  
22 criteria have been made in the preceding sections (i.e., the worthiness of topic, rich  
23 rigorousness, sincerity, and ethicality), leaving four criteria for further attention; credibility,  
24 resonance, significant contribution, and meaningful coherence. Attempts to establish credibility  
25 were made through the use of a reflexive diary, "critical friends," member checking, and  
26 multivocality of participant quotations. Content analysis procedures also provide emergent

1 themes that can be logically traced back to raw data. In an attempt to promote resonance data  
2 are presented using rich quotations in the hope of allowing participants' complex experiences to  
3 vividly emerge. It is for the reader to decide the extent to which the content overlaps with their  
4 own experiences. In evaluating the significance of contribution of the research, one might  
5 consider the theoretical (e.g., implications for conceptual understanding), heuristic (e.g.,  
6 stimulation of curiosity, discourse, and further exploration), and practical (e.g., utility of  
7 knowledge for practitioners) significance of the findings (Wagstaff et al., 2012c). In attempt to  
8 achieve a meaningful coherence, we feel that the study achieved its stated purpose, used  
9 methods and representation practices that matched the domain and research paradigm, and  
10 attentively interconnected extant literature with research foci, methods, and findings.

### 11 **Results**

12 The results derived from the data analysis procedures represent the collated interview  
13 responses from all 20 participants. They are presented as a narrative using rich quotations to  
14 illustrate themes. **Specifically, the findings are divided into four distinct stages of change**  
15 **derived from our analysis and interpretation of the data:** anticipation and uncertainty, upheaval  
16 and realization, integration and experimentation, normalization and learning. Anticipation and  
17 uncertainty can be defined as the process of attempting to gather information to understand the  
18 change and was characterized here by a climate of sensitivity, rumor, speculation and gossip.  
19 Upheaval and realization can be defined as the process of confirming assumptions and gaining  
20 perspective regarding the implications of change for extant practice and was characterized here  
21 by a focus on past practices varyingly resulted in resistance to new practices, opportunism, and  
22 protective behaviors. Integration and experimentation can be defined as the process by which  
23 assumptions regarding change were challenged and new practices developed, and was  
24 characterized here by a focus on assimilating previous and current practices. Normalization and  
25 learning can be defined as the process of establishing norms that align with emerging practices  
26 and reflecting on the change as a past event and was characterized by a focus on translating

1 one's knowledge, skills, and abilities to relevant others. It is worth noting that participants'  
2 occasionally included reference to experiences that transcended time periods (i.e., past and  
3 present); we feel that such transcendence adds to the ecological validity of participants' lived  
4 experiences and learning and contributes to the presentation of more holistic stories, unlikely to  
5 be gleaned via snapshot retrospective interview. Pseudonyms have been used throughout.

#### 6 **Phase one: anticipation and uncertainty**

7 At the onset of change, participants reported a climate of gossip, rumor and speculation as  
8 individuals attempted to gather information to understand about the change. One participant stated,  
9 "there is a really heightened sensitivity and suspicion in people", with another adding, "there is loads  
10 of gossip right now... recently it is like everyone is talking quietly in corridors, in the changing rooms,  
11 over coffee. It's really escalated during this period". The foci of speculation were the individual and  
12 organizational consequences of change, as the following quotation indicates:

13 There had been rumors that [last manager] was on his way and a camera crew had been  
14 outside the gate all week. Things were quiet from the management, but everyone in the  
15 SM&SS department was talking and considering the consequences of a change of  
16 manager. There was a lot of uncertainty about how SM&SS practices would be  
17 impacted and who'd leave. Then, the manager leaving was confirmed on Sky Sports  
18 News. To be honest, by the time it actually happened I'd chosen my course of action.

19 Participants reported a range of cognitive and affective reactions during this period, the  
20 assembly of which largely influenced each individual's short-term behavior. The following  
21 quotation reflects one participant's uncertainty during the initial period of change and due to a  
22 perceived need for consistency within the SM&SS department:

23 Our consistency is important, and if the change is substantial it can be quite detrimental.  
24 It depends if there is great upheaval; we have three different managers in three years, but  
25 we have had a consistent department so it allows for consistent player support and,  
26 ultimately, selection. That has had a massive impact. The last manager was able to

1 maintain consistency in the team he picked because we were able to keep players fit and  
2 relatively injury-free; as a result the team learned to play together and had great success.

3 The following quotation reflects another participant's uncertainty and concern shortly after the  
4 previous manager had left the organization:

5 I had a two year relationship with the last manager. He's moved on and there is massive  
6 uncertainty; a lot of people don't realize that if a manager leaves the medical and fitness staff's  
7 jobs are probably over. So, there is a worry that you don't know the new guy or his backroom  
8 staff. Will he bring in his own team and push you out the door or to the side, leaving you  
9 twiddling your thumbs? After so much time spent educating players on medical and scientific  
10 recovery - all the things the players know off the top of their head - will it all get wiped?

11 Feelings of disappointment and uncertainty were also common where a perceived lack of information  
12 sharing or consultation regarding the change process existed. **The following quotation** illustrates one  
13 participant's disappointment with poor change planning and consultation:

14 My experiences of the changes are quite negative and I'm disappointed how it has been  
15 managed, but I am not surprised... I don't believe people think about it. The regime  
16 change has been driven by egos and their response to us is "just toughen up and get on  
17 with it". There is no security. It has been five weeks and I would have liked to have been  
18 spoken to; I think a lot of the SM&SS staff have the feeling that they are not a priority.

19 Where communication about change was perceived to be infrequent or uninformative, SMSs reported  
20 being confused and unprepared, which led to a reduction in proactive and innovative practice:

21 It is hard for us to engage in something when we don't know what we are trying to do. At this  
22 moment in time I couldn't tell you what our goals are, what our philosophy looks like and how  
23 we are going about business differently to get there. It is quiet de-motivating and we are just  
24 going with the flow... a lot of the guys have gone into a survival mentality and we've found  
25 ourselves sitting around more; we are just hanging in there until things settle, making sure we  
26 don't stick our heads too far above the parapet... it's more like our heads are 'in the sand'.



1 Several participants also reported experiencing heightened emotional responses to their feelings of job  
2 insecurity, with one stating:

3 I've found the last few weeks very stressful. I have no idea whether I'll have a job next week  
4 as I half expect to either be taken with [old manager] to his new club or get moved on by [new  
5 manager] if he wants his own team. All together, it's worrying, distracting, unsettling.

### 6 **Phase two: upheaval and realization**

7 Participants' reactions and responses to change differed substantially over the early  
8 course of the change process. These responses appeared to be influenced, in part, by  
9 participant's assumptions about change in light of previous experiences of change and length of  
10 employment at the sport organization. For example, the following quotation illustrates a senior  
11 physiotherapist's views of colleagues' responses a month after the onset of change, "there are  
12 different attitudes at the moment. Certain people are quite happy to stay the same; some have  
13 gone for more control and have climbed the ladder, those that don't get more power will  
14 eventually look to leave". Other participants stated clear expectations for the change process:

15 It'll take around six months for people from SM&SS to really buy in... last time it  
16 started in August and it took until Christmas for everyone to take to it and really drive it  
17 forward and now I see change happening again it will be the same.

18 Another participant suggested that the process would be shorter, but alluded to the dangers of  
19 **slow or ineffective change** management and indicated that coping strategies were beneficial:

20 I would say it would normally take around three months to settle and feel acclimatized in any  
21 normal working environment. But in football you don't get three months to fit in; you get a  
22 matter of weeks whether you are a player or backroom staff. You get weeks to fit in...

23 Fortunately over time I have managed to find coping strategies for dealing with that.

24 This phase of change appeared to be where resistance was most common with participants deciding  
25 whether they would align with or resist new practices and be proponents or opponents of the change.

26 One participant made reference to individuals who had acted as obstacles to change, "there are the

1 cynics; those who say “yes but that will never work, we tried that before”. Throughout the transition,  
2 they’ve acted like terrorists, blocking and sabotaging new ideas from within, but secretly so the new  
3 management doesn’t notice”. Another participant summed, “it is so hard getting people to buy into the  
4 new environment... people say that they are buying in but they don’t”. **Similarly, the following**  
5 **quotation** highlights the implications for SM&SS department relationships and role performance  
6 associated with not “buying in” to change:

7       You only need one person resisting the changes and it can break down the [SM&SS]  
8       practices; it takes years and years and years to build up and as soon as there is instability  
9       when a new manager comes, it takes just days to destroy.

10       Another pertinent response during this phase that appeared intertwined with resistance to  
11 change related to a perceived unfairness regarding new employees being hired (“brought in”) and  
12 others being fired (“moved on”), with one stating, “The new manager has brought in his own  
13 backroom staff and coaches, but they’re approach is so old school. The new guys have got the players  
14 doing Cooper runs. Unbelievable! I don’t know if I can work with that”.

15       Although many participants reported a largely negative experience of initial change due to  
16 uncertainty, several participants, particularly SMSs who had previously encountered similar change,  
17 accepted the process as an inherent characteristic of working in elite sport:

18       I have seen three managers in as many years and the coaches, backroom, and SM&SS staff  
19       change each time. I have started to get used to the initial period of uncertainty... The change  
20       has been there but in a positive sense. Yes there have been a few hiccups but we have a new  
21       way of doing things. I think it’s the nature of the sport industry; you have got to be prepared  
22       for the changes and the personalities you will have to manage. To have that positive reaction to  
23       change, you have got to monitor and understand these things and how they evolve.

24       Indeed, it would appear that SMSs who had experienced repeated cycles of change, had  
25 become more resilient **in their** response to change. Here, SMSs still experienced an  
26 overwhelmingly negative emotional reaction to change but with some demonstrating emotional

1 resilience with regards to job attitudes and what one participant termed “emotional bounce-  
2 back”. However, despite these resilient responses to change regarding job attitudes, many  
3 participants indicated their attitudes towards the employer did not return to their previous levels.  
4 The following quotation provides an illustration of a sport psychologist’s changing attitudes in  
5 the later phases of the change process:

6 I’ve found myself becoming more battle-hardened with each change of manager. Every  
7 time it happens you get a little bit tougher – there’s a quicker emotional bounce-back. It  
8 still sucks initially, but your attitude towards the job just becomes better informed – you  
9 ‘get’ the job. Although, to be honest, I can’t say my attitude towards the club has  
10 remained the same. Each time it happens, it takes a chip out of your trust in those  
11 running the organization, and a big chunk out of your loyalty and willingness to invest  
12 your efforts again. And that’s why you get some more experienced people leaving; they  
13 love the job, but don’t love the club, because they feel let down. When you’re in your  
14 first job you don’t know that you’ll get another, so you don’t take that risk of leaving;  
15 the more experienced guys have a network they can mobilize if they want out.

16 Given the above, it would appear that the emergence of a more brittle, less trusting  
17 psychological contract between SMSs and their employers occurred over repeated cycles of  
18 organizational change.

19 At this stage, the reality of the change process became apparent and individuals coped in  
20 various ways with their emotional, attitudinal, and behavioral responses to the change, with some  
21 seeking voluntary turnover and others being opportunistic in line with their varying emotional and  
22 attitudinal responses:

23 Since the last manager left we have lost about six staff. [The previous manager] has taken a  
24 couple with him and for others it has been a rat race to get more control. I would say of twenty  
25 other people in the [SM&SS] department, two or three won’t be here at the end of season; ten

1 per cent isn't too bad. That isn't the wholesale change that people normally expect in football  
2 where the manager brings in new heads of each department and moves the current heads on.

### 3 **Phase three: integration and experimentation**

4 During this phase previous assumptions regarding change were challenged and  
5 participants developed new norms and practices. These experiences often required an  
6 assimilation of previous and current practices often in light of a realization that old practices  
7 must be changed to align with the new regime. Such processes often impacted heavily on the  
8 SM&SS staff, as one participant explained:

9 This has been the hardest transition because we have a different structure altogether. It  
10 hasn't been very positive; it has taken about eight to nine weeks of pure negotiation with  
11 the coaching staff and finding out where they are at, their different methods and  
12 different ideas. It has impacted on the performance of our specific department  
13 enormously. Crazy really. For a while it ended up with us barely having a role. [the  
14 previous manager] would be meeting us twice a week, but this is different.

15 Later, the same participant indicated that their previous confusion and frustration had given way  
16 to greater clarity and realization:

17 What you have got to is reassess. Change takes time. You have just got to go with it.

18 The gaffer is the number one man apart from the CEO; regardless of whether you like or  
19 dislike him or don't approve of his methods you have got to sing from the same hymn  
20 sheet. We have to be as consistent as possible; we don't like the changes but we have  
21 had to portray a positive outlook to the players and try the new ways of doing things.

22 For some participants these changes were unsatisfactory and their comparisons with pre-change  
23 practices were unfavorable. One stated, "I feel real disappointment because we [the SM&SS  
24 Department] were given a good opportunity by the last manager and things were going quite  
25 well. But then it stops and you have to start all over again". Participants also reflected on the  
26 consequences of such ineffective or inefficient change:

1           It's taken a long time and a lot of persuasion and there is still an element of fallout from  
2           the change. People aren't happy. People's petty jealousies and defensiveness have meant  
3           that the new regime's way of doing things still isn't fully supported by the SMSs.

4   Other participants illustrated felt that the process of integration had occurred:

5           After the early resistance, turnover of staff and people putting their head in the sand, we  
6           have reached a point where we are building. Some of the new ways have become the  
7           norm, people feel less threatened and are therefore being more innovative and vocal  
8           about best practice with coaches. I think some people have had their eyes opened.

9   Interestingly, there was variation in the cognitions and emotions of SMSs during this phase of  
10   change, which appeared to be influenced by experience as one neophyte practitioner indicated:

11           Typically, after that initial uncertainty it has been the more experienced [SM&SS]  
12           people who have been more vocal in terms of contributing to the new changes. Most of  
13           us who are going through this for the first time have stayed silent, and to be honest, I  
14           think that has been my best move during the whole process – just staying quiet. I can't  
15           say it's been easy, but at least I haven't lost my job by voicing my opinions too loudly.

16   A reflection on the considerable negative impact of organizational change on SM&SS practices  
17   was articulated by a physiotherapist:

18           One person came in and put everyone's noses out of joint. It dragged on for months and  
19           we were on a losing streak, people weren't getting on, there was backstabbing and it  
20           destroyed the team's morale. It is only now - 6 months on - that we are back to being as  
21           effective as we were before the change of manager.

22   Other participants were eager to illustrate the need for SM&SS patience when integrating old  
23   and new regimes due to managerial change:

24           I think it is a slow burner; I think it takes time for a new managerial or coaching group  
25           to understand what you do, its value, and what you are trying to achieve.

26   **Phase 4: normalization and learning**

1 In the final phase of change, typically characteristic of the third phase of data collection,  
2 participants were able to view the change as a past event and reflect on the process. SMSs  
3 evaluations of the consequences of change were heavily influenced by the perceived challenges  
4 allied with building new professional relationships associated with the need to “educate”,  
5 “justify”, or “prove your value and necessity” to each manager:

6 Every time a new manager comes to the club you have to reassert the value of your  
7 position and you convince them of what you do and depending on the outcome, you will  
8 know if you have a future or not. That is the way it is; you explain what your role is and  
9 see what they want to do. That process is never easy or good for morale.

10 Similarly, a consequence of change was the frequent need to “scrap all the previous practices” and  
11 develop new ways of integrating SM&SS into coaching, rehabilitation and recovery procedures:

12 [the previous manager] left and all the consistency and education that we spent twelve months  
13 developing, the rapport, relationships and trust, the whole lot was just gone. I don’t know [the  
14 new manager] and that is quite fatiguing; it is hard work as medical staff building new  
15 relationships every year and then it is gone. Players need people looking after their fitness,  
16 mental preparation and rehab they can trust.

17 In an attempt to prevent disruption to performer support during change, a psychologist argued:

18 There is no reason why sports medicine, physios, analysts, fitness coaches etc., can’t remain  
19 stable, then just hire a manager to coach the players. Because of the staff turnover, cultural  
20 upheaval and tearing apart of SM&SS that occurs every time a new manager comes in, it  
21 means that you are forever taking three steps forward and two steps back.

22 Following the change integration, participants’ evaluations of the change also provided advice  
23 for optimizing the change process:

24 You have got to be very open-minded and adaptable to change and you can’t have  
25 preconceptions of what you think the environment is going to be like. You can’t become

1 rigid in your routines. What you should say is “I am willing to try this, I am willing to  
2 try that” and in time you build trust and get clarity on how your expertise will be used.

3 A participant whose role required the translation of complex information to coaches advised:

4 I think communication is really important. Communicate and try to integrate all the  
5 ideas about coaching and rehab as soon as possible. Be willing to think about or do  
6 things in a different way. I think the coaches have to do that as well; the coaches have to  
7 be on board with what you are doing; there is no point disagreeing with what you want;  
8 I think that is more infectious and poisonous to the team.

9 A physiotherapist also highlighted the importance of incoming managers and coaches being  
10 receptive to SS&SM expertise and facilitation of autonomous working practices:

11 The process of educating the new manager or coaches about your role – well the whole  
12 change process in fact - is so much smoother when they create a transparent, “open-  
13 door” culture, but allow you to work autonomously and seek your input on new changes.

14 Another participant emphasized the salience of communication and SM&SS team relationships:

15 With so many staff in contact with the players, communication is the most important  
16 thing. It doesn't take much for staff to see things differently and cause issues with the  
17 players. When the cracks start to appear, it is often down to communication. If staff  
18 don't communicate the same practices or philosophy it will be picked up straight away  
19 by the players and it makes any meaningful change very difficult. The relationships in  
20 our team off the pitch are really important and the success of our team is mirrored by the  
21 success of the team on the pitch.

22 In echoing these sentiments, another participant stated the importance of progressive but  
23 measured change initiation due to the negative impact of SM&SS change on SMS role and on-  
24 field performance:

25 No one likes and no one can cope with complete change; the players couldn't cope with  
26 it. Players are very detailed and rigid and suddenly changing their routines will upset

1           them. You need an understanding of how you can change your input progressively and  
2           delicately by carefully diluting things with ideas from the new regime. If you change  
3           SM&SS practices quickly; ultimately it affects performance and the players.

4 Despite the commonality of evaluations regarding stability, some participants warned against a  
5 generic solution to the change process for SM&SS:

6           People want an opportunity to be heard; if it's a democratic process where your input  
7           counts and is valued great, you can then mould it to what will work for you. An off-the-  
8           shelf, top down change to how SM&SS integrates with coaching is not going to work.

### 9                           **Discussion**

10           This study explored organizational change in three professional sport organizations  
11 throughout a managerial change. In light of the findings, we present an inductively-derived  
12 model of change that provides a pragmatic yet transient insight into how SM&SS construe  
13 events over time and how these experiences relate to the process of change. The salience of  
14 such information lies in its value for practicing and prospective SMSs, those responsible for  
15 managing and leading SM&SS departments, professional bodies responsible for the training,  
16 development and preparation of SMSs for work in elite performance environments.  
17 Additionally, our model offers an insight to managers and management teams in elite sport as to  
18 the likely responses to change by their new staffs.

### 19           **Phases of change**

20           The findings of the present study indicate that the change process in sport organizations  
21 occurs over four distinct stages; anticipation and uncertainty, upheaval and realization,  
22 integration and experimentation, normalization and learning. The transition from one stage to  
23 another appeared to be dependent on appraisals of a number of factors including, information  
24 sharing, sense-making, educating and asserting the value of SM&SS practices, practitioner  
25 resilience and experience, management openness, and commitment to and integration of old and  
26 new approaches to create new ways of working. Moreover, the stages of change and factors



1 impacting progression between them appeared to be consistent at a professional level across  
2 multiple sports (i.e., football and cricket).

3         These findings support and extend previous non-sport change research (e.g., Isabella,  
4 1990; Jaffe et al., 1994) in highlighting the importance of cognition and affect during the  
5 change process. Indeed, these findings help understand how affective experiences and  
6 appraisals of events evolve as organizational change evolves and how these factors influence  
7 the change process, and ultimately, SMS 'role' and 'on-field' performance in elite sport  
8 environments. Although there is resonance with the cited process models of organizational  
9 change, our findings are located firmly within the elite sport domain and as such highlight the  
10 specific responses to change coming from within this field. Much of this affective side of  
11 change has hitherto been overlooked within the sports science literatures and offers a potentially  
12 fruitful avenue for future research and extension of extant change process models within the  
13 sports management domain.

#### 14 **The impact of change**

15         The findings highlight the potentially negative impact of organizational change on  
16 SM&SS practice and both 'role' and 'on-field' performance regarding the upheaval of  
17 previously institutionalized practices during managerial change. Specifically, given the  
18 perceived importance of consistency of SM&SS practice reported by participants, it would  
19 appear that organizational change might indirectly impact on-field performance via disruption  
20 to medical, recovery, rehabilitation, fitness, psychological, and performance analysis support.  
21 Given these outcomes, the findings have important implications for those leading change in  
22 elite sport organizations. CEOs and Performance Directors must be aware that the change  
23 initiatives they instigate and implement via managerial change have a direct impact on  
24 productivity, creativity, engagement, and turnover in SM&SS staff. Indeed, these data indicate  
25 that although repeated cycles of change may provide opportunities for a more resilient SM&SS  
26 department, we would expect a parallel development of a more brittle and less trusting

1 psychological contract between SMSs and their organization. For some, particularly neophytes,  
2 silence was perceived to be an effective coping mechanism, but for others, particularly  
3 experienced practitioners, vocalization, mobilization of support networks, and turnover, were  
4 common.

5 Further, the ripple effect of this change often indirectly influences on-field performance  
6 through changes to personnel, practices, and philosophies. These findings support the value of  
7 research and interventions that include individuals from multiple levels of governance in sport  
8 organizations. That is, in accordance with the findings presented here, if the executive board of  
9 a sport organization sacks their manager, the ripple effect from that change will have direct  
10 (e.g., training, coaching) and indirect (e.g., SM&SS practices, personnel, and philosophies)  
11 implications for performance. These findings highlight limitations in recent claims by sport  
12 scientists that “the performance department is a discrete and autonomous system” (Cruickshank  
13 & Collins, 2013, p. 13).

#### 14 **Study limitations**

15 Despite these promising findings, several potential limitations should be noted. First, the  
16 incompleteness of the data due to unavailability and turnover of SMSs may have biased the  
17 findings toward those who remained within the organizations for the entirety of data collection.  
18 However, it should be noted that the lines and depth of questioning was comparable irrespective  
19 of the participants’ mortality or turnover, and attempts were made to provide a balanced  
20 portrayal of participants’ narratives. Moreover, given the data collection period lasted over two  
21 years in elite sport organizations, it is perhaps not surprising that participant mortality occurred  
22 or that some participants were stretched in terms of their availability.

23 A second potential limitation of the present research relates to issues of gender. It would  
24 be highly informative to examine both the data and engage in detailed processes of researcher  
25 reflexivity regarding our engagement with the organizational settings to examine how  
26 representations of gender are constituted/constitutive within these settings and our own

1 enactments of gender here.

## 2 **Conceptual advancement**

3       The findings and stage-based model presented here advance current organizational  
4 psychology knowledge regarding change for individuals, professions and workplaces in high  
5 performance domains. Specifically, during phase 1 (anticipation and uncertainty) the  
6 experiences reported by participants reflect threats to ontological and professional security in  
7 two ways; by threatening employees' security of self as a professional within an insecure  
8 environment and the security of professional status and practices. Further, employees'  
9 responses to anxiety experienced during this phase arguably exacerbate this insecurity and are  
10 seemingly pivotal to the resilient responses reported by those who have navigated the change  
11 process over time. It is likely that the provision of effective communication and the  
12 development of psychosocial capital (cf., Wagstaff et al., 2012b) by relevant managerial staff  
13 will determine whether a generally adaptive response to change occurs or a more brittle  
14 psychological contract is embedded and institutionalized. Necessarily, such responses and  
15 support would have longer-term implications. Phase 2 (upheaval and realization) offers a very  
16 interesting change process and may be more significant than the present data indicate.  
17 Employees' decisions to "block" or "buy-in" to change made during this phase and may be  
18 mediated by effective change communication. Indeed, we would argue that organizations are  
19 less likely to encounter wholesale deinstitutionalization of SM&SS practices if other employees  
20 within the organizational hierarchy have a clear understanding of such work and its outcomes.  
21 What appears to be occurring during this phase of organizational change in sport is a "fight" to  
22 maintain the SM&SS institutions at individual, disciplinary, and departmental levels, which is  
23 influenced by practitioner's professional identity. The result of such "fights" is a more brittle  
24 psychological contract, which might be ameliorated or avoided by smoother phase transitions.

25       Phase 3 (integration and experimentation) presents a pivotal process by which alignment  
26 between the changing environment and employee is required. This alignment places demands

1 on employees to engage with change, make concessions, and try new ways of working in order  
2 to keep the organization stable. A unfortunate likely consequence of such acts is an increase in  
3 emotional labour and burnout in employees. Phase 4 (normalization and learning) offers  
4 individuals and organizations a pivotal process for learning via constructive, information  
5 sharing, whereby reflections can be aired. This learning opportunity is essential for promoting  
6 resilience among employees and for developing a sense of self and professional identity having  
7 undergone a process of personal and professional change. Certainly, there is potential for such  
8 change experiences to lead to more or less effective outcomes for SMSs; where these  
9 experiences of change are less effective and nuanced, one might still see employees become  
10 more resilient to change, but with a more brittle psychological contract, thus increasing the  
11 likelihood of turnover. However, where change is led by incoming managers and their staff  
12 together with individuals already placed within an organizational hierarchy there is the potential  
13 to promote the likelihood of greater engagement and more effective individual and change  
14 outcomes.

### 15 **The implications of findings for practice**

16 From an applied perspective, a number of implications might be conferred given the  
17 present findings. First, practicing and prospective SMSs must be aware of the prevalence of  
18 organizational change and staff turnover in elite sport environments. Perhaps of greater salience  
19 are the stage-defined connotations for the culture and climate in which SMSs operate. There is a  
20 likelihood of instability and deinstitutionalization of previously embedded SM&SS practices,  
21 uncertainty, considerations and turnover of colleagues, resistance to change, and power  
22 struggles when a new managerial regime begins. In response, practitioners are likely to have to  
23 “educate”, “manage upwards” and “sell” their practice to the incoming manager and any  
24 backroom staff they may bring with them. Moreover, there may be a need to overcome  
25 perceptions of nepotism in employment practices during such periods through the installation of  
26 transparent, fair and appropriate recruitment and selection practices. Additionally the use of a

1 shared rhetoric between SM&SSs may assist in preventing the deinstitutionalization of extant  
2 SM&SS regimes through the clear articulation of SM&SS philosophies and practices to the  
3 incoming manager and any associated staff. As the stages of the change progress, the promotion  
4 of reflexivity on readiness to change, the integration of new practices, the development of  
5 norms, and avoidance of comparison with pre-change practices might facilitate alacrity and  
6 expedite successful integration of change.

7         Second, in addition to the applied considerations for current and future SMSs are those  
8 that might benefit sport organizations. The professional sport organizations sampled here did  
9 not appear to understand the debilitating implications managerial change had for other  
10 employees (e.g., SMSs) and therefore failed to provide adequate support during this process.  
11 Where employees are starved of good quality and quantity of change communication, they are  
12 likely to respond with cynicism, resistance, and apathy which, in the present study, suppressed  
13 engagement, commitment, and innovation - all of which are vital to performance. Moreover, as  
14 employers, sport organizations must be cognizant of their legal duty of care to protect SMSs  
15 from workplace health and safety risks (e.g., stress and stress-related illnesses, as well as  
16 employee burnout). Hence, organizations should work hard to ensure adequate and valuable  
17 change consultation and communication is provided to all employees at all stages of the change  
18 process. Additionally, organizations must be cognizant of the interrelationships between SMSs  
19 role performance and on-field sport performance; the effectiveness of the individuals in SMS  
20 roles have substantial consequences for on-field settings. In order to limit disruption to  
21 performers, change leaders and incoming managers should be proactive in integrating SM&SS  
22 and coaching structures, practices and philosophies early in the change process.

23         Given the potentially negative consequences of organizational change, those responsible  
24 for managing and leading sport organizations (e.g., CEO) or their operations (e.g., Performance  
25 Director, Director of Sport) might also consider developing stable structures and enduring  
26 SM&SS departments that are less vulnerable to managerial change. That is, sport organizations

1 might seek to embed SM&SS practices into coaching, recovery, and physical development  
2 systems, which should be the sole remit of the Head of SM&SS and remain outside the remit of  
3 managers with a matrix reporting relationship to the club's management structures as well as  
4 those of the sport department. In turn, the retention of SM&SS staff should be a greater priority  
5 given the reliance of performers on these individuals for their day-to-day routines. Such an  
6 approach might see SM&SS and Performance Directors institutionalizing practices which  
7 reflect the "organizational DNA" (Head of Medicine, this study) and philosophy of the  
8 backroom staff. In this vein, managers could be hired to fit the organizational culture, ethos and  
9 performance strategy as coaches, rather than managers (cf. Gilmore & Sillince, 2014). This  
10 might limit incoming managers with little formal managerial or leadership experience making  
11 sweeping changes to the culture, climate, ethos, philosophy and medical and scientific practices  
12 during what is typically a short term period of employment before vacating the position. Such  
13 changes are likely to limit SM&SS and performance upheaval during and following managerial  
14 or organizational change reported here.

15         If SM&SS departments are able to work independent of performance departments (i.e.,  
16 athletes and coaches), SM&SS staff could focus on retaining familiar practices, norms and  
17 routines, whilst fostering innovative medical and scientific performance optimization initiatives,  
18 rather than being preoccupied with job insecurity and concerns regarding threats to the  
19 previously embedded nature of their expertise. Of course, all incoming managers will vary in  
20 their practice and integration of SM&SS, but with an embedded department and practices,  
21 organizations can retain control over such key support systems and leave less to the vacillating  
22 behaviors of differing managers. Indeed, such endeavors will be challenging and may lead to a  
23 broader culture change in elite sport.

24         Third, there are important implications for the professional bodies responsible for the  
25 training, development and preparation of SMSs for work in elite sport environments.  
26 Specifically, it could be argued that such bodies have an ethical obligation to better prepare

1 SMSs for the volatile environments in which they aspire to operate, the likelihood of job  
2 insecurity, and the common affective experiences they may have during periods of change.  
3 Currently, little career guidance and employment advice is offered by professional bodies  
4 within this domain to assist prospective and current practitioners during change or turnover.

5 **This arguably places the onus for such provision onto the shoulders of University  
6 SM&SS providers given that these overwhelmingly produce the SM&SS staff interviewed here.**

7 The findings address calls for more systematic collection of medical practitioners'  
8 experiences of employment practices to generate an empirically grounded literature  
9 (Waddington et al., 2001). However, given the organizations here were studied under the lens of  
10 change, future research efforts should systematically examine SM&SS employment practices  
11 and experiences across the breadth of professions. Future research efforts might also examine  
12 factors that promote progression through stages of the change process identified here and act as  
13 mediators of change. For example, research is required to ascertain the respective impact of  
14 commitment to and readiness for change on change success and other associated outcomes such  
15 as intention to leave, SM&SS turnover, job satisfaction, stress, and SM&SS and performance  
16 department outcomes.

17 In 2001, Waddington et al. highlighted a catalogue of poor employment practice of club  
18 doctors and physiotherapists in English professional football. Over a decade later, the  
19 substantial advances in SM&SS have led to the creation of SM&SS departments, yet those  
20 employed within such teams who seek the institutionalization and longevity of their work are  
21 highly vulnerable to the volatile climate of professional sport. Indeed, we would echo  
22 Waddington et al.'s sentiment that many of the practices associated with SM&SS need careful  
23 re-examination; currently, these processes appear to demonstrate evidence of poor employment  
24 practice. Moreover, the experiences of SMSs appear to have salient implications for  
25 performance and the success of organizational change following managerial turnover. Although  
26 substantial improvements have been made regarding qualifications and experience of SMSs

1 through the development of accrediting and regulatory governance bodies, poor employment  
2 practices remain and levels of job insecurity and turnover are seemingly high. These concerning  
3 issues are exacerbated during change and are seemingly low-level priorities for sport  
4 organizations or SM&SS accrediting and regulatory bodies. Thus, whilst some of the quality  
5 assurance issues highlighted by Waddington et al. appear to have been partially addressed, yet a  
6 duty of care toward SMSs appears to have become a major concern.

### 7 **Perspective**

8 The longitudinal design employed here allowed the researchers to capture SMSs  
9 experiences of the change process as it occurred and influenced their thoughts, behaviors and  
10 practice over time. The rich findings highlight that the poor employment practices identified in  
11 professional football over a decade ago by Waddington et al. (2001) arguably still remain.  
12 Moreover, sport medics and a range of new sport science professionals appear to be vulnerable  
13 to the continual change processes within professional sport. Specifically, the findings indicate  
14 that SMSs responses to organizational change vary across four distinct phases of change  
15 following managerial change (e.g., anticipation and uncertainty, upheaval and realization,  
16 integration and experimentation, normalization and learning). These findings have implications  
17 for SMSs, sport organizations, and those responsible for training and developing neophyte  
18 practitioners for employment in the volatile environments that characterize professional sport.  
19 Indeed, the high level of SM&SS turnover, employment procedures and practices, and stress  
20 demands imposed by change require immediate consideration by researchers and organizations.  
21 It is hoped that the findings will inform service providers (e.g., sport organizations, national  
22 institutes of sport) or training and development bodies (e.g., American College of Sports  
23 Medicine, European College of Sport Scientists, British Association of Sport and Exercise  
24 Sciences) support and prepare SMSs for the realities of applied practice in the volatile domain  
25 of contemporary sport.



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1 **Figure 1.** Data collection timeline

2

<b>Event</b>	Football club 1 and Cricket club immersion begins			Football club 1 sack manager			Football club 2 immersion begins	Cricket club make managerial and coaching change		
<b>Data collection</b>			Football club 1 Phase 1			Football club 1 Phase 2		Cricket club Phase 1		
<b>Month</b>	1	2	3	4	5	6	7	8	9	10

3

4

5

<b>Event</b>										Football club 2 sack manager	
<b>Data collection</b>	Cricket club Phase 2			Football club 1 Phase 3			Cricket club Phase 3			Football club 2 phase 1	
<b>Month</b>	11	12	13	14	15	16	17	18	19	20	

6

7

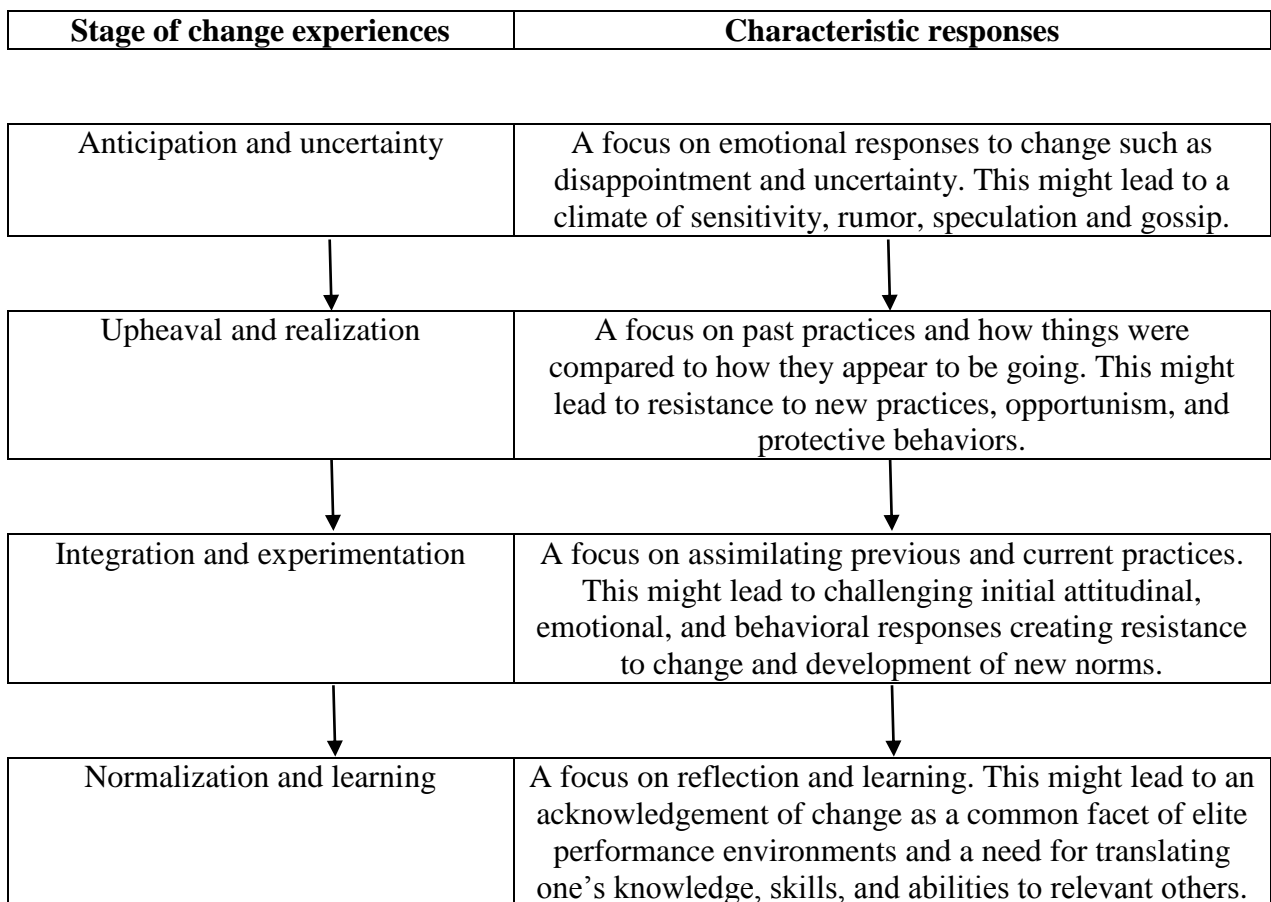
8

<b>Event</b>							9 10
<b>Data collection</b>		Football club 2 phase 2			Football club 2 phase 3		Data collection for all clubs ends
<b>Month</b>	21	22	23	24	25	26	

11

1 **Figure 2.** A stage-based process model of organization change experiences in professional sport  
 2 medicine and science departments.

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