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10	Developing Team Resilience: A Season-long Study of Psychosocial Enablers and Strategies
11	in a High-Level Sports Team
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1 Abstract 2 Objectives: Previous research exploring team resilience has advanced our definitional, 3 conceptual and theoretical understanding of this construct in elite sport. Although more is 4 known about the psychosocial processes that underpin the resilient characteristics of sports teams, less is known about the contextual enablers that stimulate these mechanisms and the 5 6 associated pathways to team resilience. The purpose of this study, therefore, is to explore the 7 psychosocial enablers and strategies that promote the development of team resilience within a 8 high-level sport team. 9 Design and method: Through prolonged fieldwork, a season-long ethnography (11 months) 10 was conducted. The sample consisted of a leading English national league-winning semi-11 professional rugby union team (n = 27 participants). Multiple data collection methods were 12 employed (i.e., observation, interviewing, field notes, reflexive diary) as part of a holistic ethnographic approach. An iterative process of content data analysis was employed to 13 14 identify key themes. 15 Results: Findings revealed five categories comprising multiple practical strategies, actions, 16 and enablers for team resilience development: Inspiring, motivating, and challenging team 17 members to achieve performance excellence; developing a team regulatory system based on 18 ownership and responsibility; cultivating a team identity and togetherness based on a selfless 19 culture; exposing the team to challenging training and unexpected/difficult situations; and 20 promoting enjoyment and keeping a positive outlook during stressors. Cultural expressions 21 and folk terms were identified to illuminate the context of the ethnography. 22 Conclusions: This study advanced team resilience research in sport by identifying key 23 psychosocial strategies throughout a season as part of building team resilience. The findings 24 provide practitioners with a platform for creating team resilience interventions in sport. *Keywords:* culture, development, ethnography, excellence, group, performance 25

1 Developing Team Resilience: A Season-long Study of Psychosocial Enablers and Strategies 2 in a High-Level Sports Team 3 The scientific study of teams and group dynamics is an intriguing topic for sport 4 psychology researchers and practitioners. In a review of dynamic group environments in 5 sport and exercise, Eys, Bruner, and Martin (2019) presented two reasons why the study of 6 group dynamics is important. First, the pervasiveness of groups (i.e., the extensiveness of 7 team and group sport), and second, the central role of relationships within groups (i.e., the 8 need to belong) and its potential positive (e.g., friendship) and negative influence (e.g., fear 9 of rejection) on cognitions and emotions. The advancement of knowledge of team 10 psychology in competitive sport is also essential in better understanding the processes that 11 underpin collective functioning that precedes optimal team performance in a dynamic, 12 competitive environment (Beauchamp & Eys, 2014). Kleinert et al. (2012) discussed a 13 number of well documented scientific constructs associated with positive team outcomes 14 including cohesion (Carron, Widmeyer, & Brawley, 1985), team roles (Eys, Beauchamp, & 15 Bray, 2006), and team efficacy and potency (Gully, Incalcaterra, Joshi, & Beubien, 2002). 16 However, Kleinert et al. (2012) and others (see e.g., Martin, Bruner, Eys, & Spink, 2014) have also argued that several challenges remain in this area such as the general 17 18 underrepresentation of team-level psychology, the need for a greater variety of team psychology perspectives (cf. Eccles & Tran, 2012), and more investigations which reflect 19 20 'real-world' practice needs. One particular need concerns a team's ability to overcome 21 adversity and avoid its potentially harmful effects (e.g., poor morale, low prosocial 22 behaviour, chronic performance slumps). 23 Since the relational fabric of teams is fundamental to group functioning, 24 understanding how to support teams to withstand shared experiences of adversity and maintain effective collective functioning offers practical appeal for researchers and 25

1 practitioners. This topic has been recently addressed through the study of team resilience 2 (see, for a review, Morgan, Fletcher, & Sarkar, 2017). Emanating from other psychology 3 disciplines such as organizational behaviour (cf. Blatt, 2009, West, Patera, & Carsten, 2009) 4 and occupational health psychology (cf. Bennett, Aden, Broome, Mitchell, & Rigdon, 2010), 5 team resilience has emerged as an "intriguing new subject" (Eys et al., 2019, para. 3) and a 6 new scientific construct in sport psychology research (Strauss & Ntoumanis, 2015). In other areas of psychology, researchers have proposed that team resilience can be developed 7 8 through structured training programmes and interventions via various strategies and actions 9 (Alliger, Cerasoli, Tannenbaum, & Vessey, 2015; Amarel, Fernandes, & Varajão, 2015). It is, 10 therefore, somewhat surprising, that seeking a better understanding of team resilience and recognizing its importance in sport has been overlooked until relatively recently (Decroos et 11 12 al., 2017; Galli, 2016; Morgan, Fletcher, & Sarkar, 2013, 2015, 2017; Yukelson & Weinberg, 13 2016). 14 In the first known study of team resilience in sport, Morgan et al. (2013) reported 15 findings that defined and characterized team resilience in elite sport teams. Team resilience 16 was defined as "a dynamic, psychosocial process which protects a group of individuals from 17 the potential negative effect of the stressors they collectively encounter. It comprises of 18 processes whereby team members use their individual and combined resources to positively adapt when experiencing adversity" (Morgan et al., 2013, p. 552). Four resilient 19 20 characteristics of elite sport teams emerged from the study: group structure (i.e., conventions 21 that shape group norms and values), mastery approaches (i.e., shared attitudes and behaviours 22 that promote an emphasis on team improvement), social capital (i.e., the existence of high 23 quality interactions and caring relationships within the team), and collective efficacy (i.e., the 24 team's shared beliefs in its ability to perform a task).

To better understand the psychosocial processes underpinning team resilience,

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1 Morgan et al. (2015) subsequently conducted the second known study of team resilience in 2 elite sport using narrative analyses of the autobiographies of eight members of the 2003 3 England rugby union World Cup winning team. Five psychosocial processes were revealed: 4 transformational leadership (i.e., leaders of teams employing inspirational, personal, and emotional approaches with team members during stressors); shared team leadership (i.e., 5 6 distributing team leadership to enhance wider accountability during stressors); team learning 7 (i.e., acquiring and acting on new knowledge following setbacks); social identity (i.e., 8 building a strong, distinctive team identity to bolster team members during stressors); and, 9 positive emotions (i.e., promoting humour and banter during difficult situations). Overall, 10 Morgan et al. (2015) described team resilience as a dynamic process that fluctuates over time 11 in accordance with the stressors that the team is encountering and the stage of the team's 12 development. 13 The growth in team resilience research in elite sport over the last five years or so has 14 generated clearer definitional and conceptual clarity. However, understanding how team 15 resilience can be practically developed remains a captivating topic for researchers and those 16 working with teams. Indeed, at the individual level, researchers have discussed how 17 psychological resilience can be developed in sport performers (see Fletcher & Sarkar, 2016a) 18 with the aim of providing practitioners with sound information (e.g., evidence-based 19 strategies) about developing resilience that is immediately applicable to their work (see, e.g., 20 Fletcher & Sarkar's, 2016b, mental fortitude training program). While existing sport 21 psychology research certainly points to potential ways of enhancing team resilience (e.g., profiling a team's resilient characteristics), the identification of evidence-based practical 22 strategies to improve team resilience requires specific investigation. In their discussion of 23 24 future research directions, Morgan et al. (2015) proposed that "creative qualitative

approaches such as ethnography offer intriguing possibilities to study 'first-hand' the

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underlying team resilience mechanisms . . . and how they are developed (p. 76)". Such an approach could provide a valuable 'vantage point' from which to capture the strategies and actions used to improve team resilience in a team sport context. Furthermore, longitudinal research conducted over the cycle of a team's existence would advance our knowledge of its temporal, unfolding nature (Morgan et al., 2017).

In summary, research investigating team resilience in elite sport has begun to describe what resilient teams 'look like' (i.e., their characteristics) and how they function (i.e., their processes). However, less is known about the psychosocial enablers and cues that stimulate such mechanisms and the associated pathways to team resilience (Morgan et al., 2017; Wagstaff, Sarkar, Davidson, & Fletcher, 2017). Advancing knowledge of this area is a pivotal phase in developing an evidence-based understanding of impactful interventions in team sport contexts. The purpose of this study was, therefore, to explore the enablers and strategies that promote the development of team resilience within a high-level sport team. To effectively address this aim, we believe that an immersive, longitudinal, and prolonged approach to inquiry is needed. Such methods should enhance sensitivity to the contextual and subtle psychosocial dynamics that likely characterise team resilience development.

17 Method

Research Design and Ethnographic Inquiry

This study adopted an interpretive approach guided by a relativist ontology and a subjectivist, constructivist epistemology. Specifically, we believe that there are multiple interpretations and subjectivist aspects of group environments that influences psychosocial processes and knowledge creation (cf. Burke, 2016; Hammersley & Atkinson, 2007). Since team resilience is described as a dynamic, psychosocial process (Morgan et al., 2013, 2015), an investigation of its underlying mechanisms requires a methodological approach that facilitates in-depth study of a psychosocial setting. Ethnography was selected as a particularly

- appropriate method to address the range of collective actions and enablers employed in a
- 2 'natural' setting over an extended period (cf. Hammersley & Atkinson, 2007). Moreover, the
- 3 variety of data collection methods associated with ethnography (e.g., prolonged fieldwork,
- 4 observation, informal interviews) can illuminate the complexity of psychosocial processes in
- 5 teams (cf. Rock, 2001).

Sample

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Purposive sampling was primarily employed to select a case appropriate for a study of team resilience in competitive sport. Initially, a number of teams were considered as cases for the study based on the following criteria: evidence of encountering team adversity and positively adapting to stressors over time in competitive sport. While the sampling was primarily based on a purposive approach, there was also a practical and convenient element due to the aforementioned nature of ethnography. Rugby union was selected as an appropriate sport for the present study and was used to extend team resilience research in this sport (Morgan et al., 2015). Specifically, rugby union is a dynamic collision sport requiring high levels of interaction and coordination that presents numerous structural and tactical pressure situations. Based on reviews of potential cases (e.g., researching their performance history, reputation), four clubs were 'shortlisted'. Several coaches and managers were consulted about each team's suitability for a study of team resilience. Eventually, the sample case selected for this study was a leading semi-professional rugby union team ranked in the top 50 clubs in England with a national reputation for success and for developing players and coaches who have progressed to a professional and elite level. To assist further with the judgement about the appropriateness of the sample, the views of one former Head Coach of the team and athletes who possessed detailed knowledge of the club were sought. In the previous seven years prior to this study, the team retained a strong national reputation for performance while experiencing performance slumps, relegation, a severe disciplinary

incident, frequent changes to coaching personnel, and a particularly difficult period involving
 a Head Coach dispute.

Team. The team competed in the English Rugby Football Union National League. During the season under investigation, the team won their league and they were promoted to the third tier of English rugby. Despite this success, the team suffered setbacks including defeats to lower ranked opposition, fluctuating morale, injuries to key players, and disruption of momentum due to adverse weather conditions. The team (including coaches) consisted of 27 participants who ranged in age between 20 and 57 years (M = 27.6, SD = 9.0). Playing experience in the team ranged between 1 and 9 years (M = 2.4, SD = 2.5). Two players were former professionals and four had national representative honours at under 19 and under 21

age groups. All players were British except one who was Australian.

Procedure

Institutional ethical approval was granted prior to the study. Before the investigation, two informal meetings were held with the Head Coach to explain the purpose of the research. The first author had previously met some players and coaches, which helped to build relationships. The Head Coach introduced the first author to the squad at the start of a preseason training session. Participants were given hard copy information sheets about the research and all team members provided informed consent to take part in the study.

Data Collection

The first author was knowledgeable of rugby union and an experienced team resilience researcher. This knowledge was used to formulate foreshadowed problems (Delamont, 2007) or "guiding hypotheses" (Gobo, 2008, p. 88) that are commonly employed in ethnography (Gobo, 2008). This provided an initial broad focus for the study. For example, referring to guiding areas of the team resilience literature (cf. Morgan et al., 2015), a broad framework was formulated to identify potential enablers and strategies that enhance a team's

- 1 resilience while remaining open-minded and flexible about new ideas that could emerge
- during the ethnography. The following data collection methods were employed during the 11-
- 3 month study: observation; field notes/reflective diary; and, interviews. While these are
- 4 described separately here for ease of the reader, data collection was conducted as part of a
- 5 holistic ethnographic approach (Mannay & Morgan, 2015).
- 6 **Observation.** Observations were conducted three days per week between 2 and 8
- 7 hours each day. This occurred in team situations including training, pre-match routines, team
- 8 selection meetings, travelling to competitions, and during matches. Initially, observations
- 9 provided context for the team's operation, language, and patterns of behaviour (cf. Fetterman,
- 10 2010). Later, observations narrowed towards specific team resilience incidents (e.g.,
- setbacks). Throughout, a "habitual presence" (Krane & Baird, 2005, p. 94) was maintained,
- 12 not only to collect data but also to display commitment to the team. For example, during poor
- 13 weather, the first author attended training to show the same commitment as expected by team
- 14 members.

15 Field notes and reflexive diary. Field notes consisted of oral and written records of incidents, events, documents, and unusual occurrences. Field notes were composed on a 16 17 regular basis immediately after observations. They included electronic diary entries, oral 18 records using a digital voice recorder, and handwritten notes. Raw notes were transferred to a 19 formal written field log and imported into NVivo 10 software for organizational purposes. 20 Concurrently, a separate reflexive journal was kept to maintain an analytical distance and to 21 review theoretical ideas (Delamont, 2007). Specifically, a reflexive journal was used to record personal thoughts, reactions, and questions about encounters and interactions with 22 23 participants. Audio recordings were completed immediately after episodes and interactions 24 and later written up in an electronic diary. The process of completing this diary helped to

stimulate self-awareness, criticality, and flexible thinking during data collection

(Hammersley & Atkinson, 2007).

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Interviews. Ethnographic interviewing explores the meanings that participants ascribe to events in their social setting, expressed in their own language (Roulston, 2010). Unstructured, semi-structured, and spontaneous 'ethnographic conversations' were employed (Silk, 2005). Unstructured and informal interviews were conducted during routine moments using broad questions (e.g., how did the team feel about the defeat?). These techniques built rapport and provided insight about particular episodes (Berg & Lune, 2016). Everyday 'folk' terms were identified to capture the cultural meanings and expressions of team resilience development. Finally, ten formal semi-structured interviews were conducted with team members considered influential for the team's resilience (e.g., Head Coach, senior players), which ranged between 55 to 88 minutes. Formal interviews explored specific enablers, cues, and strategies that promoted the team's resilience based on observations and reflections during setbacks. To capture the temporal nature of the team's resilience, interviews were conducted between months seven and ten of the investigation following the first half of the season. The nature of the interviews were shaped by an ethnographic approach where sufficient rapport was developed for an open exchange of views to explore participants' meanings and experiences of their team's resilience development (cf. Heyl, 2001). Initial interview questions were of a general nature (e.g., "Can you tell me about what progress you feel the team has made this season?") before moving onto more specific focus on the team's resilience development (e.g., "A few weeks ago, I remember Simon and David saying that the team felt quite different [positive/a buzz] this year that's made a difference during setbacks. What enabled this? How was this supported?", "Following the period where there was a performance slump, can you tell me what action was taken? (why?)", "Could you tell me specifically how this was developed? (e.g., how, who, what steps)?". Interviews were conducted at the club before, during, or after training.

Data Analysis

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2	Hammersley and Atkinson (2007) argued that ethnographic data analysis is not a
3	distinct stage of research; rather, it commences prior to fieldwork and continues informally
4	and formally throughout the research process. Data analysis consisted of an iterative process
5	of idea-formation and theme-building (Fetterman, 2010). To illustrate, during data collection
6	field notes and the reflexive diary were studied to form initial thoughts and patterns. In vivo
7	codes directly from participants' discourse were also used (e.g., "buzz about the place").
8	Memo-making and annotations helped structure these thoughts and initial analytic focus by
9	elaborating codes. These codes were compared over time (e.g., using comparisons of
10	observations, field notes, reflexive diary) and across situations (e.g., setbacks). All written
11	and oral records were transcribed and imported into NVivo 10 software to assist with data
12	management. Repeated readings and reflections of recurrent patterns of data were completed
13	with a specific focus on 'development', 'strategies', 'actions', and 'enablers' that facilitated
14	team resilience during stressors. Data were content analyzed through coding and
15	interpretation of these patterns (Fetterman, 2010). Key themes were eventually generated
16	through an iterative process of memoing, open coding, triangulation of evidence, inductive
17	reasoning and drawing on theoretical and conceptual ideas (Lofland, Snow, Anderson, &
18	Lofland, 2006). The first author also held regular dialogue with the co-authors who acted as
19	critical friends throughout the investigation to 'challenge' observations and ideas by playing
20	'devil's advocate'. This process encouraged reflexivity and recognition of multiple
21	perspectives and interpretations (cf. Smith & McGannon, 2018).

Methodological Integrity

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In terms of reviewing and judging the quality of qualitative research and demonstrating that the claims made from the analysis are warranted, concerns exist regarding scholars that "frequently utilize inflexible sets of procedures and provide contradictory

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feedback when evaluating acceptability" (Levitt, Motulsky, Wertz, Morrow, & Ponterotto, 2017, p. 2). Within the qualitative research literature in sport psychology, these issues are further compounded by the varying use of related terms, such as rigor, validity, trustworthiness, and credibility (Smith & McGannon, 2018; Sparkes, 1998). To address the aforementioned concerns, the American Psychological Association Task Force on Resources for the Publication of Qualitative Research proposed the concept of methodological integrity and recommended its evaluation in qualitative research via two composite processes: (a) fidelity to the subject matter, and (b) utility in achieving research goals. To this end, we draw on Burke's (2016) recommendations to evaluate qualitative research and associated 'markers' of quality. First, the present study demonstrates *credibility* through the significant amount of time that the lead author spent with the team. Second, rigor was achieved through the width and *comprehensiveness* of evidence. For example, comparisons of information from different sources (e.g., observations, interviews) and temporal phases were made throughout the investigation. Third, the reader is invited to evaluate the *impact* of the first author's experiences of conducting a season-long study of team resilience. Prolonged immersion, rapport, and displays of commitment facilitated deeper exchanges with the team. Jachyra, Atkinson, and Washiya (2015) argued that the ethnographer's degree of rapport with participants ". . . markedly affects the content, breadth, and quality of the data collected" (p. 248). Indicators of rapport included being provided with team kit to wear by the players, social conversations throughout the season, being welcomed into intimate team discussions and huddles, and being regarded as a 'friend' by one senior player. It is hoped that this study elucidates the benefits of such approaches for future team resilience research.

23 Results

The results derived from the longitudinal ethnographic fieldwork carried out in this investigation present the psychosocial enablers and strategies that promoted the development

- Running head: DEVELOPING TEAM RESILIENCE 13 1 of team resilience within a high level sports team. Team participants' own voices are used to 2 portray events, and pseudonyms are used to ensure confidentiality. Table 1 provides a 3 summary of cues and strategies to promote the development of team resilience and, to 4 illuminate the context of the ethnography, the table includes cultural expressions, folk terms, 5 and illustrations of the interactions between team resilience and stressors. 6 Inspiring, Motivating, and Challenging Team Members to Achieve Performance 7 Excellence 8 During the season, team resilience was developed by team members feeling inspired 9 and motivated. Team members were excited about the prospect of success and the journey 10 ahead as a group. Many team members were often heard saying, "there was a buzz about the 11 place" that energized them and intensified their effort. A fundamental aspect of this related to 12 team members experiencing a significant change in direction from the new coaching team. 13 When one of the coaches (Will) was asked about how the setbacks of past seasons had been 14 negotiated, he said, "The old regime fu**ed it up!". Will was frustrated at the team's past disappointments and warned, "it's much quicker to fu** it up than to build it up again". Early 15 16 in the season, it was noted how Will spoke with much passion. Another assistant coach (Ed) reasoned that by "getting rid of the old regime", it signalled a desire for higher expectations. 17
 - One team member (Daniel) also explained how the team's resilience was improved as a consequence of the coaching team's complementary strengths and their ability to motivate the group throughout the season and during difficult periods as shown in the following quote:

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They all [the 3 coaches] bring their own unique approaches to managing setbacks. Sometimes you need an arm round you, even though we're grown men, you still need support sometimes – we have Danny (Head Coach) for that. Ed gives you the feedback on how to improve, and then there's Will who is just going to draw out the passion in you and if he doesn't see passion, then you aren't going to play.

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Team resilience was cultivated through a team vision, collectively agreed "team protocols", and regular reinforcement of team goals during stressors. One team member (Andy) commented that the coaches "had brought a professional environment to a semiprofessional team" and that Danny frequently emphasized the need to "maintain our high standards" since "the goal is automatic promotion, it's not to get to the play-offs, it's about setting high standards in everything we do". On one occasion, despite achieving a victory, the team produced a disappointing performance and Danny reinforced their expectations for higher standards commenting that, "for any other team, winning by 60 points would be fine but not for this team because we have aspirations and expectations". The team's resilience also developed by collectively reminding each other of their shared expectations. At one point in the season, "we (the team) recognized we had too much of a swagger and arrogance off the pitch and a drop in performance on the pitch" and "we needed to flip that around". One team member, Mike, explained that their team's resilience was developed by individuals making sure that they aligned their own goals with the team's goals and, "because they are so clear and they have been contracted up front from the start, people accept that and are totally committed". Weekly post-match emails underlined the team's collective performance standards as highlighted in the quote below from Danny, following one poor team performance: It was a win on the road in very difficult playing conditions. However, I know we all felt that the performance was below our normal high standards. I'm not so worried about the bonus point [extra point for scoring more than four goals] but we need to live up to the high standards we are setting ourselves in terms of performance, and with that as a context, it was a disappointing day. Another team member (Pete) said that, when setbacks occurred, "it all comes back to

that goal where we want to get promoted. So, we work through those tough times and rebuild

around that goal". Danny also illustrated the importance of setting individual and collective expectations as shown in the following quote:

We had higher expectations this year. I've always gone into competitions with the expectation that you're going to win it, regardless of what people say. But we set out high expectations at the very beginning. While our goal in the previous season was a top four finish, we said very firmly this year that it was promotion or nothing. That was a key difference and it created a bit of a buzz about the place, in terms of "Right, well the expectations are high, therefore I've got to match those expectations" and this can be important when things go wrong. For some of these guys, this may be their one opportunity to be promoted and they recognize that, and that's one of the reasons why we built it up like we did. We wanted to set those expectations because people then start to believe it.

Develop a Team-Regulatory System based on Ownership and Responsibility

The team's sustained ability to withstand stressors was enhanced by coaches and team members monitoring their performances, actions, and responses to difficult periods. The Captain, Michael, explained that his "job as captain was not a one-man job, it was a collective". Having "so many 'captains' on the field" developed the team's resilience because "the more people you can involve in the leadership of a rugby team that are consistent under pressure in their roles, the more likely the team will overcome challenges". Ed explained that giving more responsibility through defined leadership roles helped the team to withstand pressurized situations as highlighted in the quote below:

To help us deal with the different types of pressurized moments in a match, we've created leadership roles as rugby divides itself up nicely into different areas . . . it's about developing these leaders in key strategic roles and encouraging them to communicate with each other . . . because the sum of all those parts make up a

1 successful team – if the team feels some ownership in their roles, that can be 2 important when the pressure is on. 3 The team's resilience was also developed by team members exchanging honest 4 feedback with one another. Ed commented that "we're not getting honest feedback from the 5 team, they are a bit spongy in their responses". Regular briefings encouraged team members 6 to share honest feedback following setbacks. Will explained that this helped to avoid "finger pointing" because "if a blame culture exists, the resilience levels drop right off". Coaches 7 also provided individual feedback to team members "... so while there is that kind of 8 9 security around a resilient team, there is – it's not fear – but team members recognize that, 10 "yeah, I have got to be accountable. There is a great deal of accountability". Accountability 11 was also reinforced through imagery. For example, in the changing room, a sign read, 12 "character is defined when you think no one's looking" (quote from J. C. Watts, former American politician). The importance of encouraging honest feedback was highlighted in one 13 14 team meeting and recorded in field notes: 15 The atmosphere was subdued after the defeat. There was an unusual silence rather 16 than the normal buzz. Sensing the atmosphere, Danny asked, "do any of you want to add anything in a constructive and controlled way, do any of you want to offload?" 17 18 He paused. Michael [Captain] said, "we've got to get on with it, let's move on". Daniel then commented, "As the coaches were talking, people were looking at the 19 20 floor. Look at your teammates in the face, accept it, and move on." Martin (team 21 member) said, "it was the lack of intensity that killed us . . ." Will then intervened, "this is what we have to cut out, we need to be brutally honest with each other, we 22 23 need to be accountable to each other. I know you are all mates but if anyone falls 24 short of the standards expected, we have to be honest with each other. 25 As the season went on, Will thought that the team were not taking ownership of

to think for themselves". Danny also said ". . . the more they come up with the answers when things aren't working, the better decisions they'll make on the field". Will said that the coaches were "passing stronger messages to the team that it was their responsibility to step up". Ed explained that "what's the point of having experienced players if you don't give them the chance of gaining experience [of managing challenging situations]?". He continued, "if we are going to give players responsibility, then we've got to make sure that collectively we go back and if things don't work, we take some of the responsibility too". This evolving shift in responsibility was recorded in fieldnotes in the build-up to one match that followed a setback:

The coaches seemed more conscious of not directing everything. This was a change in approach. Following the pre-match briefing Danny said abruptly, "it's your game now guys" - suddenly they left the changing room and left the final preparations to the team. This hadn't happened before and took everyone by surprise. It seemed symbolic of a change in approach. There was a silence and players looked at each other. I wasn't sure the players knew what should happen next but gradually, they began to talk to each other, they reminded each other of their responsibilities and roles. The coaches had made their point without saying so and the team had got the message.

Cultivate a Team Identity and a Togetherness based on a Selfless Culture

Throughout the season, the team's resilience was developed through frequent verbal and behavioural expressions of their collective emotional and relational ties to each other.

During stressors, team members frequently expressed the need to "put your body on the line" and to demonstrate their collective "intensity". The strength of the team's physical and emotional commitment to each other that was developed during stressors was illustrated by Luke (team member) in the quote below:

1 When we are in the really tough situations, it's like you are a family and I know I 2 would do anything for my family if anything was to happen to them. That's the kind 3 of feeling we have developed in this team. We'd do anything we can for each other; 4 we'll put our heads in where it hurts, because that's what you'd do for your family 5 and mates. 6 Simon (team member) also commented on how seeing others' physical commitment in pressure situations "encouraged others to do the same for the team". The use of team 7 8 rituals further developed close emotional attachments. This included recognizing the need to wear "team kit", performing "the Team Song", enacting a team "squeeze" [i.e., huddle] 9 10 during training and matches, and the first and second team training together as "One Club". 11 Team resilience was also developed by promoting a "selfless culture" as shown in the 12 following quote by Will: During difficult situations, we reinforce the importance of our emotional attachment. 13 14 I've always said to the players that when you come to the club, you've got to develop 15 an emotional attachment to the place, and certainly an attachment to the players and 16 the coaching staff and that you want to win for them as much as for yourself. I think that selfless team members are the best ones to have; even if they are not as talented, 17 18 they're going to be honest in what they do. We want to be able to look over the shoulder and know that the person behind is there for you. And that's a skill. We 19 20 won't pick players that don't have that approach because it's a spanner in the works, 21 it's a weak link in our chain, and we can't have weak links. During the season, the promotion of a selfless team culture to enhance the team's 22 resilience was evident through references to "The Team" during difficult situations such as 23 24 individual disappointments. Team members often reminded each other that "no individual is bigger than the team". Indeed, team resilience was developed by individuals sacrificing their 25

1 own frustrations and expressing support for the team as highlighted in the following quote by 2 Ryan (team member): 3 I got dropped but I was fine with it because I understood that he was playing better 4 than me, I had gone off the boil a bit . . . as a result, I got dropped, and it gave me a 5 kick up the arse because I wanted my position back . . . but I knew why I had been 6 dropped, I'd had a phone call and it was explained to me. All I wanted was the best 7 for the team . . . I could see through my personal disappointment of being dropped, 8 because I knew it was the best decision for the team and I knew what I had signed up 9 for with the team. 10 The strong emotional team attachments, formed over several seasons, enhanced the 11 team's resilience during performance slumps. Team members developed strong ties to each 12 other and new members were encouraged to "buy in" to the team's philosophy. The development of the team's resilience through a welcoming approach for new team members 13 14 and displaying a strong togetherness was illustrated by James (team member) below: 15 Although my previous professional clubs were great, the bond of the players that has 16 been built up here over five years and the way new team members have come into the 17 squad and just signed up for it straight away has made a difference. We're playing for 18 each other, we're great friends. In clubs, you always get the "you don't want to let your teammates down" thing but we truly are. When I got my injury, I got a phone 19 20 call from everyone in the squad whereas I only may have got two or three calls in 21 other [professional] teams I have played in. But this was a genuine "hope you're OK", "great season so far", and you don't get that very often. 22 23 **Expose the Team to Challenging Training and Unexpected/Difficult Situations** 24 The development of team resilience was facilitated by creating a training environment

that exposed the team to pressurized situations. In the pre-season, one team member, Gavin

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said that "the team deliberately chose a tough warm-up campaign of six matches and it's left us battle-hardened". During the season, the team simulated specific challenging situations. Team members were expected to train under "the same kind of pressure as a matchday" (Luke) and "switch on". The team was also expected to "switch on" immediately at the start of each training session to replicate the pressure of taking control from the start of each 6 match. It was observed how team members verbally reminded each other if they were not simulating sufficient communication in such pressure situations. At the very start of one 7 training session, Will shouted "Show some intensity! We train with the same intensity as a match . . . not one of you fu**ers said anything!". The instruction was intense but the training session suddenly 'felt' more like a competitive match. Team members immediately responded through increased "noise" [communication]. Team members described their environment as "challenging training" and practiced adjusting to difficult moments as the following quote by Ed illustrates: When we're facing challenges, it's about letting the players know that these pressurized situations are going to arise . . . we remind them that the reason why we are practicing a situation is because something hasn't gone to plan and they must learn how to get themselves out of it. We prepare the players to learn that things aren't always going to go well, but we don't need to be concerned because there are things we can do to turn it around. They understand why we do it in training so when it happens in a game, it's important that they can react and remember that there's a system in place. Repetition of specific "chaotic" situations was vital since "you've got to be able to perform under pressure with your eyes shut so that "nothing is a surprise" (Michael). Weekly match analysis was also used to help team members 'see' the connections between training in "chaotic" situations and individual and collective responses to stressors during competition.

1	Match analysis was also important to "reflect on and work out what could have gone better or
2	what really did go wrong". Reflecting on the team's general approach to training in
3	pressurized situations, Mark (team member) described how being exposed to setbacks more
4	effectively coordinated the team's future responses:
5	It's very much a shared mindset thing. We practise playing in pressure situations
6	where things go against us. We do a thing called 'what from where' [the practise of
7	pressurized events] and we spend a lot of time in training making sure we're making
8	the right decisions in the right areas of the pitch so we're all on the same page under
9	pressure.
10	Throughout the season, the team frequently reminded each other to "focus on the

Throughout the season, the team frequently reminded each other to "focus on the process, not the outcome" (James). In one pre-match meeting before a vital fixture, it wasnoted how the team emphasized the need to maintain "calm heads under pressure as they [their opponents] are a nasty team that are likely to use cheap shots [illegal foul play], but "we need all players on the pitch at all times" (Will). During a difficult part of the season, the pressure had, in turn, increased on the team to win all of their remaining games to achieve their goal of promotion. Following a defeat because of poor officiating, the team were encouraged to "reset" their team focus during one team meeting by adopting a process approach as the following quote from Danny illustrates:

We have a big challenge ahead but we need to just focus on one game at a time. If we win every game we play from now until May [season end] then we will be there.

There is no point worrying about what results other teams are getting. Let's just worry about ours. What's happened has happened. There's no point in dwelling on it. Let's look forward and worry about the things we can make a difference. There are always external factors such as the referee but next time it happens, let's be in a position that we are so far ahead it doesn't matter.

Promoting Enjoyment and Keeping a Positive Outlook during Stressors

2	The development of team resilience involved boosting positive feelings, wellbeing,
3	and enjoyment during challenging situations. The team exhibited humour, banter, and
4	comical rituals to promote enjoyment. Team members said that they "handed out the banter,
5	and if you can't take it, you're not a big enough boy as we don't suffer fools gladly" (Mike).
6	Humour reminded players "not to take things too seriously" (Ryan). Jake (team member)
7	stated that humour was "something to fall back on [following setbacks] because if we take
8	ourselves too seriously, you take out the enjoyment factor". Team members also expressed
9	how players' positive moods "rubbed off on each other" (Michael). Coaches reinforced
10	"getting the fun back into our performances and play with a smile on our faces again" (Ed).
11	Danny said that promoting enjoyment was essential because "even though we play at a fairly
12	high level, you've still got to go out there and enjoy yourself, especially following setbacks.
13	If it becomes a chore, then you're not really doing it justice."
14	At another challenging point in the season, it was noted how team members displayed
15	a positive outlook by relishing the prospect of one of their most difficult away fixtures as
16	illustrated in a diary extract:
17	Entering the player area, the team was seated in two lines of chairs with their coffees
18	and light food. There was general banter. They gave me (first author) a round of
19	applause for making the long trip. Spirits were good. This was a big match, their
20	biggest away challenge against a physical team and opposing fans infamous for being
21	hostile but the mood was relaxed, focused, enjoying each others' company and the
22	forthcoming challenge. Danny said, " we need to be strong mentally and
23	physically there will be mistakes today but it's all about days like this. Love it.
24	Enjoy it". There was a brief silence and a strong sense of excitement.
25	The role of enjoyment was often highlighted by team members during their long,

pressurized season. Matt (team member) remarked on this before one training session:

People are mainly here because they enjoy it. I've noticed on a few occasions that if we aren't enjoying it, our form dips a bit. You look for the reasons why you lost and you start questioning things, heads can go down. The vibe that was making us play so well can be lost and you have to start again. We play well because we are having fun, we're happy. The second that goes, it all changes [less chance of being promoted].

The team's last match of the season involved a head-to-head encounter against opponents they had suffered their biggest defeat against earlier in the season. Both teams needed victory to win the league. During the week, there was an emphasis on "staying calm", "maintaining perspective", and treating it as "business as usual" (Ed). In training, Danny said, "there's no need to be anxious or thinking about it too much, let's just focus on the task". A record number of spectators attended and public expectations were high. Upon arrival at the club, team members seemed distracted by the media and the large number of fans. In the prematch briefing, the Club Director (Andrew) said, "enjoy it, we are all proud of you, and what you have done in the last ten weeks". Ed remarked, "you have all done something different today but from this moment, just do what you usually do". The team's focus on maintaining a positive outlook despite setbacks and embracing the pressure was highlighted in the following match report after the team's success:

Danny believes the seeds of his side's success were sowed in the dressing room after their last loss. That day the team were beaten . . . but it forged a steely determination amongst the squad to win the rest of their fixtures. Their opponents had led the league for much of the campaign but the team's win saw them leapfrog their opponents on the final day of the season and win promotion. Danny said, "We made a collective agreement not to lose another game and that's what happened. We set our stall out very clearly that we wanted to win this league. There were a couple of wobbles along

the way where we thought we might have blown it but it's league rugby where it's a long haul." Following the game, players hugged each other and formed a huddle. Danny said there were "massive celebrations" long after the game with emotions running high. "Some players said the hair on the back of their necks stood up when they ran out. They hadn't experienced anything like that and for some it's the biggest crowd they had ever played in front of. But I think we dealt with the pressure pretty well [high public expectations, playing in front of a record crowd, experiencing a very heavy defeat to the same opponents earlier in the season] and were determined nothing was going to get in the way."

10 Discussion

Via a season-long ethnography, we explored the enablers and strategies that promote the development of team resilience within a high-level rugby union team. The results indicate that multiple, and often contextual and subtle, psychosocial enablers stimulate pathways to team resilience. Specifically, team resilience development strategies included: inspiring, motivating, and challenging team members to achieve performance excellence; developing a team-regulatory system based on ownership and responsibility; cultivating a team identity and togetherness based on a selfless culture; exposing the team to challenging training and unexpected/difficult situations; and, promoting enjoyment and keeping a positive outlook during stressors. To explain these findings, the discussion is structured into two broad areas, which are discussed forthwith.

The first key message generated from the results is that team resilience was developed through numerous actions and enablers that produced strong coordinative influences on collective functioning during stressors. A range of strategies helped the team's functioning during stressors including: establishing team protocols for pressurized situations; reinforcing high expectations; and encouraging accountability. This offers support for team resilience

1 research that has identified transformational and shared leadership as psychosocial processes 2 underpinning team resilience (Morgan et al., 2015). For example, inspiring the team to 3 reinforce high expectations of success during stressors resonates with the concept of 4 transformational leadership. However, the findings of the present study also pointed to 5 specific actions and cues that mobilize these processes (e.g., creating "protocols" for pressure 6 situations). Moreover, the findings suggested the importance of the whole coaching team's 7 complementary expertise and roles rather than one individual leader. 8 One potential explanation for the findings of the present study is the concept of 9 "coordinating mechanisms" (Salas, Sims, & Burke, 2005, p. 564) that are associated with 10 successful team outcomes. Salas et al. (2005) proposed that three coordinating mechanisms influence broader aspects of teamwork: shared mental models (cf. Cannon-Bowers, Salas, & 11 12 Converse, 1993), closed-loop communication (cf. Eccles, 2010), and mutual trust (cf. Webber, 2002). In the present study, team resilience enablers and strategies included 13 regularly exposing the team to challenging training and unexpected/difficult situations, which 14 15 enhanced the team's shared mental model during stressors (i.e., a common understanding of 16 actions). Team members often stated that they "knew what to do" during stressors "where nothing was a surprise". Salas et al. (2005) stated that, "the importance of this coordinating 17 18 mechanism [shared mental model] increases in teams that must perform in stressful conditions" (p. 567). Interestingly, exposing the team to regular unexpected, difficult, 19 20 pressurized scenarios in training appeared to provide a practical aspect with regards to the 21 development of team resilience compared with the abstract/conceptual findings of Morgan et al. (2015). For example, Morgan and colleagues explained that team learning was a key 22 psychosocial process underlying team resilience. However, the results of the present study 23 24 provide more specific enabling strategies (e.g., using pressurized scenarios) that enhance the 25 application of collective knowledge during stressors.

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Research in medical and organizational settings also shows that closed-loop communication and mutual trust improves team performance (e.g., through error reduction) during stressful situations (cf. El-Shafy et al., 2018). The present study's findings reported how the team held regular communications about minimizing errors and putting "systems in place" to clarify actions under pressure. Mutual trust was cultivated through enablers such as having a shared vision, encouraging honest feedback, and distributing responsibility during difficult periods. This resonates strongly with Hodge, Henry, and Smith's (2014) study that identified the role of ownership, accountability, and "dual management models" (Hodge et al., 2014, p. 64) for the 2011 Rugby World Cup champions, New Zealand. The findings also offer support for the role of shared leadership processes for team resilience (Morgan et al., 2015); however, employing ethnography in the present study also seemed to offer greater insight about how ownership and responsibility is enacted over time through specific strategies (e.g., create defined leadership roles, coaches allowing team members to take responsibility during setbacks, encouraging honest feedback, holding team briefings to discuss team functioning following setbacks). The influence of numerous coordinative factors during stressors illuminated how team resilience developed differently in different situations. Specifically, during the pre-season, team protocols aligned team members' commitment to shared goals through enhanced team members' collective sensemaking (cf. DeChurch & Mesmer-Magnus, 2010). Later in the season, team resilience was developed by activating practical strategies to emphasize the importance of the team enjoying their sporting challenges. These findings suggest that harnessing a range of coordinative factors over time, and in different situations, is critical for team resilience development. This resonates with team resilience research in organizational behaviour; West et al. (2009), for example, found that team resilience only developed following prolonged multiple interactive experiences. The findings of the present study

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suggest that team resilience is developed through ongoing multiple team-environmental interactions (cf. Egeland, Carlson, & Sroufe, 1993).

The second overarching message generated from the results of the present study was the salience of team culture. This refers to the values, beliefs, standards, and power distribution within a team environment (Dew, 1998). Numerous enabling actions and cues nurtured a culture that helped develop team resilience and mobilize constructive shared perceptions and responses during stressors. For example, team members' collective ambition created a "buzz about the place" and they frequently reminded each other to instil a "culture of confidence without arrogance and complacency". The results also showed that collective actions were employed to harness a "selfless culture" during setbacks. These findings provide support for Morgan et al.'s (2015) research that cultivating a team's social identity is a key underlying team resilience process. Further support was offered for the role of intense physical and affective commitment within a collision sport such as rugby union. However, in comparison to Morgan et al. (2015), the findings of this study point to the importance of team culture, possibly because ethnography provided a 'first-hand' deeper immersion into a team's functioning. The psychosocial enablers and strategies used to cultivate the team's identity and togetherness (e.g., phoning team members who were injured to provide support, putting the team first and "sacrificing" individual disappointment if not selected) illustrates the numerous 'acts' of their selfless team culture (see also Table 1). A potential explanation for the role of culture for team resilience development is its influence on enabling constructive team member actions, promoting ownership, and monitoring power relations during challenging situations (cf. Cruickshank & Collins, 2012; Driskell, Salas, & Johnston, 1999).

Although the findings of the present study reinforced the role of strategies that fostered a strong work ethic and "accountability" for team resilience development, the team's culture placed a high value on 'enjoyment'. Positive emotions have been associated with

- 1 resilience at both the individual (Gonzalez, Newton, Hannon, Smith & Detling, 2018; Tugade
- 2 & Fredrickson, 2004) and the team level (Meneghel et al., 2016; Morgan et al., 2015).
- 3 Interestingly, Meneghel et al. (2016) suggested that *collective* positive emotions develop
- 4 team resilience through affective sharing mechanisms such as emotional contagion (see e.g.,
- 5 Hatfield, Cacioppo, & Rapson, 1992). This offers support for the findings of Morgan et al.
- 6 (2015) who suggested that the use of humour and banter throughout a team helped to absorb
- 7 the potential harmful effects of stressors. In comparison to Morgan et al's (2015) findings, the
- 8 broader theme of 'enjoyment' and 'a positive outlook' emphasized that maintaining team
- 9 members' satisfaction, pleasure, and wellbeing during a season of intense competitive sport
- was essential to withstand stressors. Extending this explanation further, the findings may
- suggest that team resilience is developed through group-based appraisals and their influence
- on collective emotions (cf. Kuppens & Yzerbyt, 2012). Specifically, Kuppens and Yzerbyt
- 13 (2012) argued that when there is a strong team identity, "people start seeing their social
- environment through some sort of group lens" (p. 21), and this can lead to group-based
- appraisals and group emotions.

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Strengths and Limitations

17 A particular strength of this study was the use of ethnographic inquiry to explore team

18 resilience development during a competitive sport season. Prolonged immersion illuminated

- how team resilience was developed in different situations through multiple team interactions.
- 20 Indeed, a significant strength of the study was that the investigation involved full access to
 - the team each week during the season where the first author was present as much as the
- 22 participants themselves. This elicited a degree of "immersion and concrete detail . . .
- 23 necessary to ascertain tacit knowledge . . ." (Tracy, 2010, p. 843). Another strength of the
- 24 present study was the selection of ethnography to address real-world practices of teams to
- offer a deeper insight into the strategies, enablers, and actions for team resilience

- development. It is hoped that the triangulation and depth of research 'evidence' enabled
- 2 naturalistic generalizability (cf. Smith, 2018) for readers engaged in team sport settings. A
- 3 further strength of this study was that team resilience development strategies were captured
- 4 across multiple time points. To date, and to the best of our knowledge, no other study in
- 5 psychology has investigated team resilience over such a prolonged period. Salas et al. (2005)
- 6 argued that team-level investigations should assess team processes during "a variety of
- 7 conditions and situations" (p. 587). A season-long study allowed appropriate time to explore
- 8 team members' interactive experiences on multiple occasions rather than a snapshot of team
- 9 resilience (cf. Galli & Gonzalez, 2015; Morgan et al., 2017).

A limitation of the present study, perhaps, lies in the positive emphasis of team resilience development. While team resilience is a desirable construct, dysfunctional aspects of team resilience can exist (Galli, 2016). For example, the findings illuminated the discourse associated with the physical commitment required in a collision sport (e.g., "put your body on the line"). A potentially 'darker' portrayal of team resilience development was not reflected in this ethnography; for example, while a selfless culture is important for team resilience, it should not be at the expense of one's health and wellbeing and seen as a 'badge of honour' (Fletcher & Sarkar, 2016b). Furthermore, while we consider that a strength of the present study is the richness of longitudinal 'evidence' and naturalistic generalizability (cf. Smith, 2018), we acknowledge that the findings of the study might be peculiar to a collision sport's culture. The engagement of critical friends was a valuable part of encouraging reflexivity. However, for a longitudinal study of this nature, a wider range of critical friends (e.g., coaches of other team sports, researchers in other group settings) might have broadened one's interpretations of the data (cf. Smith & McGannon, 2018).

Future Research

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There are a number of avenues for future research arising from the present study.

1 First, the ethnographic approach utilized in this study could provide a foundation for pre-2 intervention evaluations of team resilience development (cf. Schensul, Schensul, & 3 LeCompte, 2013). Indeed, the findings have offered support for the psychosocial team 4 resilience processes identified by Morgan et al. (2015) together with some additional 5 considerations (e.g., exposure to challenging training situations). The present study's 6 concentration on identifying contextual enablers that stimulate these mechanisms and 7 associated pathways to team resilience might act as a bridge for interventions that assess 8 pre/post quantitative improvements. Indeed, future research should design team resilience 9 interventions using pre-post intervention quantitative analyses. Interventions should involve 10 enacting multiple team resilience development enablers, cues, and strategies (e.g., using 11 Table 1 as a guide) to enhance the protective characteristics and processes found in previous 12 studies in this area (see Morgan et al., 2015). To date, no team resilience interventions have 13 been conducted in sport psychology and this represents an exciting opportunity for 14 researchers (Morgan et al., 2017). To measure pre/post changes in team resilience, a valid and 15 reliable scale is required. The CREST inventory developed by Decroos et al. (2017) might 16 offer researchers a basis to assess changes in team resilience. 17 Second, since team resilience is defined as a dynamic, temporal process, further 18 longitudinal research conducted over the cycle of a team's existence would enhance our 19 understanding of how team resilience is developed and whether it is more effective at one 20 time point in a team's history than another (Morgan et al., 2017). This points to the value of 21 conducting team resilience research over numerous time points. Galli and Gonzalez (2015) argued that, "if the goal is to truly understand resilience as a process that unfolds across time, 22 "one-shot" . . . studies of sport resilience will necessarily lack depth compared to studies . . . 23 24 at multiple time points" (p. 252). Moreover, Mathieu, Maynard, Rapp, and Gilson (2008)

recommended that researchers embrace the complexity of team investigations and proposed

- 1 research methods which are sensitive to time (e.g., the use of diaries, time-sampling). Team
- 2 resilience researchers might also apply the notion of resilience trajectories (Bonanno &
- 3 Diminich, 2013) to capture the varying effects of different forms of stressors when
- 4 developing team resilience.
- 5 Third, future research should explore the relationship between team culture and team
- 6 resilience. The role of strategies to inspire, motivate, and challenge team members to achieve
- 7 performance excellence could be examined using quantitative and qualitative approaches.
- 8 These strategies resonate with previous team resilience research, which identifies
- 9 transformational leadership as an important team resilience process (cf. Morgan et al., 2015;
- 10 Rodríguez-Sánchez & Perea, 2015). Indeed, research suggests that transformational
- leadership instils a proactive and resilient culture in organisations (Rodríguez-Sánchez &
- Perea, 2015). This also resonates with the role of coaches' use of character-building efficacy
- in elite rugby union teams (cf. Hodge et al., 2014). Observation studies should be conducted
- 14 to assess effective coaching strategies to influence team members' behaviour during stressors.
- 15 Finally, case studies might be employed to explore the relationship between team resilience,
- culture, and the factors that influence its development (cf. Vargo & Seville, 2011).

Practical Implications

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- The findings of this study provide sport psychologists, coaches, and those working in
- 19 teams with multiple psychosocial enablers and strategies to stimulate pathways to team
- resilience. First, sport psychologists should spend sufficient time with 'gatekeepers' (e.g.,
- Head Coach) to understand a team's strengths and acquire the contextual intelligence
- 22 necessary for effective interventions (cf. Brown, Gould, & Foster, 2005). Observing a team's
- behaviour during different stressors and noting strengths and weaknesses will provide a
- 24 stronger platform for interventions.
- Second, when developing team resilience, practitioners should implement the

1 psychosocial strategies described in this study. Inspiring team members to achieve 2 performance excellence during a team's pre-season could be enabled by collectively agreeing 3 team protocols. This could involve discussion about how team members should positively 4 adapt to challenging situations (e.g., adjusting to the loss of key players, how to communicate 5 when losing (and winning) during a match, and how to individually and collectively respond 6 to poor officiating). During stressors, these protocols should be reinforced and further 7 developed so that team members are encouraged to see "the bigger picture" as part of their 8 overall psychological and performance development. Coaches should reflect on how they 9 lead by example during setbacks, and express confidence in the team to promote some 10 perspective in difficult moments. 11 Third, as a team develops, individuals should be given opportunities to take 12 responsibility during challenging situations. Coaches should foster a resilient team culture based on accountability and support to each other during stressors. Leadership roles and 13 groups will promote accountability (cf. Hodge et al., 2014) and a wider sharing of knowledge 14 15 to respond effectively during adversity. To ensure that team members are "on the same page" 16 during stressors, teams should be regularly exposed to "challenging training" and rehearse pressurized situations (cf. Fletcher & Sarkar, 2016b). The use of "what-ifs", match analysis 17 18 (i.e., individual and group responses to setbacks) and debriefs to discuss the benefits of new 19 knowledge of setbacks can enhance the development of team resilience through increased 20 learning and coordination (Alliger et al., 2015). 21 Fourth, the findings of this study showed that cultivating a strong team identity and selfless culture was vital for team resilience development. This could be nurtured through 22 displays of the team's physical and emotional commitment during stressors (e.g., using 23 24 noticeboards, social media). Celebrating 'moments of team resilience' can boost connectivity during setbacks. Those working with teams should recognize the importance of time for a 25

resilient culture. It is possible to achieve 'quick wins' through the establishment of team

protocols (e.g., how will we collectively act when we lose a key team member to injury or

disciplinary penalty?); however, creating a sense of belonging, cultivating constructive

relationships, and developing psychological safety during stressors (cf. Edmondson, 1999)

will require ongoing application. Coaches should also ensure that they promote enjoyment.

Coaches could plan to provide players with adequate opportunities for rest at suitable points

in the season, consider timings of social occasions, and monitor body language during

stressors.

Finally, this study involved a top-level semi-professional team. While team resilience enablers and strategies might be similar at both elite and semi-professional levels, their emphasis might be different. Moreover, the intensity of stressors is likely to vary. Therefore, team resilience interventions might be similar across competitive levels but the development and sophistication of implementing these strategies may differ. To illustrate, Hodge and Smith (2014) suggested that the limited resources of amateur teams might restrict coaches' abilities to implement a range of anti-choking strategies. A team resilience intervention at lower levels of team sport could utilize a staged approach by focusing on one or two strategies at a time. Interestingly, the present study reported how team resilience was developed by creating a 'professional environment' within a semi-professional setting.

Concluding Remarks

This study has explored the enablers and strategies that promote the development of team resilience within a high-level sport team. A season-long ethnography identified multiple, and often contextual psychosocial enablers that stimulate pathways to team resilience. The results were categorized into five main themes: inspire, motivate, and challenge team members to achieve performance excellence; develop a team-regulatory system based on ownership and responsibility; cultivate a team identity and togetherness

- based on a "selfless" culture; expose the team to challenging training and unexpected/difficult
- 2 situations; and promote enjoyment and a positive outlook during stressors. It is hoped that
- 3 this study advances knowledge of the psychosocial enablers that promote the development of
- 4 team resilience and contributes towards an evidence-based understanding of impactful
- 5 interventions in team sport contexts.

1	References
2	Alliger, G. M., Cerasoli, C. P., Tannenbaum, S. I., & Vessey, W. B. (2015). Team resilience:
3	How teams flourish under pressure. Organizational Dynamics, 44, 176-184.
4	Amaral, A., Fernandes, G., & Varajão, J. (2015). Identifying useful actions to improve team
5	resilience in information systems projects. Procedia Computer Science, 64, 1182-
6	1189.
7	Beauchamp, M. R., & Eys, M. A. (Eds.). (2014). Group dynamics in exercise and sport
8	psychology. New York City, NY: Routledge.
9	Bennett, J. B., Aden, C. A., Broome, K., Mitchell, K., & Rigdon, W. D., (2010). Team
10	resilience for young restaurant workers: Research-to-practice adaptation and
11	assessment. Journal of Occupational Health Psychology, 15, 223-236.
12	Berg, B. L. & Lune, H. (2016). Qualitative research methods for the social sciences. Harlow,
13	UK: Pearson.
14	Blatt, R. (2009). Resilience in entrepreneurial teams: Developing the capacity to pull through.
15	Frontiers of Entrepreneurship Research, 29, 1-14.
16	Bonanno, G. A., & Diminich, E. D. (2013). Annual research review: Positive adjustment to
17	adversity – trajectories of minimal-impact resilience and emergent resilience.
18	Journal of Child Psychology and Psychiatry, 54, 378-401.
19	Brown, S. R., Gould, D., & Foster, S. (2005). A framework for developing Contextual
20	Intelligence (CI). The Sport Psychologist, 19, 51-62.
21	Burke, S. (2016). Rethinking 'validity' and 'trustworthiness' in qualitative inquiry: How
22	might we judge the quality of qualitative research in sport and exercise sciences? In
23	B. Smith & A. C. Sparkes (Eds.), Routledge handbook of qualitative research in
24	sport and exercise (pp. 330-339). London: Routledge.
25	Cannon-Bowers, J. A., Salas, E., & Converse, S. (1993). Shared mental models in expert

1 decision making. In N. J., Castellan Jr. (Ed.), Current issues in individual and group 2 decision making (pp. 221 – 246). Hillsdale, NJ: Lawrence Erlbaum. 3 Carron, A. V., Widmeyer, W. N., & Brawley, L. R. (1985). The development of an 4 instrument to assess cohesion in sport teams: The Group Environment Questionnaire. 5 Journal of Sport Psychology, 7, 244-266. 6 Cruickshank, A., & Collins, D. (2012). Culture change in elite sport performance teams: 7 Examining and advancing effectiveness in the new era. Journal of Applied Sport 8 Psychology, 24, 338-355. 9 DeChurch, L. A., & Mesmer-Magnus, J. R. (2010). The cognitive underpinnings of effective 10 teamwork: A meta-analysis. Journal of Applied Psychology, 95, 32-53. 11 Decroos, S., Lines, R., Morgan, P. B. C., Fletcher, D., Sarkar, M., Fransen, K., Boen, F., & 12 Vande Broek, G. (2017). Development and validation of the Characteristics of 13 Resilience in Sports Teams Inventory. Sport, Exercise, and Performance 14 Psychology, 6, 158-178. 15 Delamont, S. (2007). Ethnography and participant observation. In Seale, C., Gobo, G., 16 Gubrium, J. F., & Silverman, D. *Qualitative research practice* (pp. 205-217). 17 London, UK: Sage. 18 Dew, J. R. (1998). Managing in a team environment. Westport, CT: Quorum. 19 Driskell, J. E., Salas, E., & Johnston, J. (1999). Does stress lead to a loss of team perspective? 20 *Group dynamics: Theory, Research, and Practice, 3*, 291-302. 21 Eccles, D. W. (2010). The coordination of labor in sports teams. *International Review of Sport and Exercise Psychology*, *3*, 154-170. 22 23 Eccles, D. W., & Tran, K. B. (2012). Getting them on the same page: Strategies for 24 enhancing coordination and communication in sports teams. Journal of Sport 25 Psychology in Action, 3, 30-40.

- 1 Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams.
- 2 *Administrative Science Quarterly*, 44, 350-383.
- 3 Egeland, B., Carlson, E., & L. A. Sroufe (1993). Resilience as process. *Development and*
- 4 *Psychopathology*, *5*, 517-528.
- 5 El-Shafy, I. A., Delgado, J., Akerman, M., Bullaro, F., Christopherson, N. A. M., & Prince, J.
- 6 M. (2018). Closed-loop communication improves task completion in pediatric
- 7 trauma resuscitation. *Journal of Surgical Education*, 75, 58-64.
- 8 Eys, M., Beauchamp, M. R., & Bray, S. R. (2006). A review of team roles in sport. In S.
- 9 Hanton & S. D. Mellalieu (Eds.), Literature reviews in sport psychology (pp. 227-
- 10 256). Hauppauge, NY: Nova Science Publishers.
- Eys, M., Bruner, M., & Martin, L. J. (2019). The dynamic group environment in sport and
- exercise. *Psychology of Sport and Exercise*, 42, 40-47.
- 13 Fetterman, D. M. (2010). *Ethnography step-by-step*. Thousand Oaks, CA: Sage.
- 14 Fletcher, D., & Sarkar, M. (2016a). An introduction to the special issue: Developing
- resilience. *Journal of Sport Psychology in Action*, 7, 133-134.
- 16 Fletcher, D., & Sarkar, M. (2016b). Mental fortitude training: An evidence-based approach to
- developing resilience for sustained success. *Journal of Sport Psychology in Action*,
- *7*, 135-157.
- 19 Galli, N. (2016). Team resilience. In R. J. Schinke, K. R. McGannon, and B. Smith (Eds.),
- 20 Routledge international handbook of sport psychology, (pp. 378-386). Abingdon,
- 21 UK: Routledge.
- Galli, N. & Gonzalez, S. P. (2015). Psychological resilience in sport: A review of the
- 23 literature and implications for research and practice. *International Journal of Sport*
- 24 and Exercise Psychology, 13, 243-257.
- 25 Gobo, G. (2008). Doing ethnography. London, UK: Sage.

1 Gonzalez, S., Newton, M., Hannon, J., Smith, T. W., & Detling, N. (2018). Examining the 2 process of psychological resilience in sport: performance, Cortisol, and emotional 3 responses to stress and adversity in a field experiment setting. International Journal 4 of Sport Psychology, 49, 112-133. 5 Gully, S. M., Incalcaterra, K. A., Joshi, A., & Beubien, J. M. (2002). A meta-analysis of team 6 efficacy, potency, and performance: Interdependence and level of analysis as 7 moderators of observed relationships. Journal of Applied Psychology, 87, 819-832. Hammersley, M. & Atkinson, P. (2007). Ethnography: Principles in practice (3rd Ed.). 8 9 London, UK: Routledge. 10 Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1992). Primitive emotional contagion. In M. 11 S. Clark (Ed.), Emotion and social behaviour (pp. 151-177). Newbury Park, CA: 12 Sage. Heyl, B. S. (2001). Ethnographic interviewing. In P. Atkinson, A. Coffey, S. Delamont, J. 13 14 Lofland, and L. Lofland (Eds.), Handbook of ethnography. London, UK: Sage. 15 Hodge, K., & Smith, W. (2014). Public expectation, pressure, and 'avoiding-the-choke': A 16 case study from elite sport. The Sport Psychologist, 28, 375-389. Hodge, K., Henry, G., & Smith, W. (2014). A case study of excellence in elite sport: 17 18 Motivational climate in a world champion team. The Sport Psychologist, 28, 60-74. Jachyra, P., Atkinson, M., & Washiya, Y. (2015). 'Who are you and what are you doing 19 20 here': Methodological considerations in health and physical education research. 21 Ethnography and Education, 10, 242-261. 22 Kleinert, J., Ohlert, J., Carron, B., Eys, M., Feltz, D., Harwood, C., ... Sulprizio, M. (2012). 23 Group dynamics in sports: An overview and recommendations on diagnostic and 24 intervention. The Sport Psychologist, 26, 412-434. 25 Krane, V., & Baird, S. M. (2005). Using ethnography in applied sport psychology. *Journal of*

- 1 Applied Sport Psychology, 17, 87–107.
- 2 Kuppens, T., & Yzerbyt, V. Y. (2012). Group-based emotions: The impact of social identity
- 3 on appraisals, emotions, and behaviors. Basic and Applied Social Psychology, 34,
- 4 20-33.
- 5 Levitt, H. M., Motulsky, S. L., Wertz, F. J., Morrow, S. L., & Ponterotto, J. G. (2017).
- 6 Recommendations for designing and reviewing qualitative research in psychology:
- 7 Promoting methodological integrity. *Qualitative Psychology*, 4(1), 2-22.
- 8 Lofland, J., Snow, D., Anderson, L., & Lofland, L. H. (2006). Analyzing social settings: A
- 9 guide to qualitative observation and analysis. Belmont, CA: Wadsworth.
- 10 Mannay, D. & Morgan, M. (2015). Doing ethnography or applying a qualitative technique?:
- 11 Reflections from the 'waiting field'. *Qualitative Research*, 166-182.
- 12 Martin L., Bruner, M., Eys, M., & Spink, K. (2014). The social environment in sport:
- 13 Selected topics. *International Review of Sport and Exercise Psychology*, 7, 87-105.
- 14 Mathieu, J., Maynard, T. M., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007:
- A review of recent advancements and a glimpse into the future. *Journal of*
- 16 *Management, 34*, 410-476.
- Meneghel, I., Salanova, M., & Martínez, I. M. (2016). Feeling good makes us stronger: How
- team resilience mediates the effect of positive emotions on team performance.
- 19 *Journal of Happiness Studies*, 17, 239-255.
- 20 Morgan, P. B. C., Fletcher, D., & Sarkar, M. (2013). Defining and characterizing team
- 21 resilience in elite sport. *Psychology of Sport and Exercise*, 14, 549-559.
- 22 Morgan, P. B. C., Fletcher, D., & Sarkar, M. (2015). Understanding team resilience in the
- world's best athletes: A case study of a rugby union World Cup winning team.
- 24 Psychology of Sport and Exercise, 16, 91-100.
- 25 Morgan, P. B. C., Fletcher, D., & Sarkar, M. (2017). Recent developments in team resilience

1 research in elite sport. Current Opinion in Psychology, 16, 159-164. 2 Rock, P. (2001). In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, & L. Lofland (Eds.), 3 Handbook of ethnography (pp. 26-38). London, UK: Sage. 4 Rodríguez-Sánchez, M. A., & Perea, M. V. (2015). The secret of organization success: A 5 revision on organizational and team resilience. *International Journal of Emergency* 6 Services, 4, 27-36. 7 Roulston, K. (2010). Reflective interviewing: A guide to theory and practice. London, UK: 8 Sage. Salas, E., Sims, D. E., & Burke, C. S. (2005). Is there a "Big Five" in teamwork? Small 9 10 Group Research, 36, 555-599. 11 Schensul, S. L., Schensul, J. J., & LeCompte, M. D. (2013). *Initiating ethnographic research:* 12 A mixed methods approach. Plymouth, UK: AltaMira Press. 13 Silk, M. (2005). Sporting ethnography: Philosophy, methodology and reflection. In D. 14 Andrews, D. Mason, & M. Silk (Eds.), Qualitative methods in sports studies (pp. 15 65-103). Oxford, UK: Berg. Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities 16 and recommendations for the sport and exercise sciences. Qualitative Research in 17 18 Sport, Exercise and Health, 10, 137-149. 19 Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems 20 and opportunities within sport and exercise psychology. *International Review of* 21 Sport and Exercise Psychology, 11, 101-121. 22 Sparkes, A. C. (1998). Validity in qualitative inquiry and the problem of criteria: Implications 23 for sport psychology. The Sport Psychologist, 12(4), 363-386. 24 Strauss, B. & Ntoumanis, N. (2015). Our PSE journey: Looking back and forward.

Psychology of Sport and Exercise, 16, 181-182.

1	Tracy, S. J. (2010). Qualitative quality: Eight "big tent" criteria for excellent qualitative
2	research. Qualitative Inquiry, 16, 837-851.
3	Tugade, M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to
4	bounce back from negative emotional arousal. Journal of Personality and Social
5	Psychology, 86, 320-333.
6	Vargo and Seville (2011). Crisis strategic planning for SMEs: Finding the silver lining.
7	International Journal of Production Research, 18, 5619-5635.
8	Wagstaff, C. R. D., Sarkar, M., Davidson, C. L., & Fletcher, D. (2017). Resilience in sport: A
9	critical review of psychological processes, sociocultural influences, and
10	organizational dynamics. In C. R. D. Wagstaff (Ed.), An organizational psychology
11	of sport: Key issues and practical applications (pp. 120-149). Abingdon, UK:
12	Routledge.
13	Webber, S. S. (2002). Leadership and trust facilitating cross-functional team success. <i>Journal</i>
14	of Management Development, 21, 201-214.
15	West, B. J., Patera, J. L., & Carsten, M. K. (2009). Team level positivity: Investigating
16	positive psychological capacities and team level outcomes. Journal of
17	Organizational Behavior, 30, 249-267.
18	Yukelson, D. & Weinberg, R. (2016). Team resiliency in sport: Research to practice. In R. J.
19	Schinke, K. R. McGannon, and B. Smith (Eds.), Routledge international handbook
20	of sport psychology, (pp. 547-558). Abingdon, UK: Routledge.

Table 1
Strategies and Indicators of Team Resilience Development

Descriptor	Development strategies and indicators	Folk terms
Inspiring, motivating, and challenging team members to achieve performance excellence	Build complementary coaching strengths and roles Build commitment to, and alignment with, team goals Define and reinforce collective "team protocols" during stressors Reinforce high standards, shared expectations, and team values during stressors Profile and recruit "team players" who will adopt a team approach Communicate with enthusiasm and express confidence in the team during setbacks Role model by leading by example during pressurised situations	"right people in the right places" "professional culture" "setting the standards" "buzz about the place" "confident, not arrogant" "values led by those at the top" "see the bigger picture" "raised expectations" "step it up"
Develop a team-regulatory system based on ownership and responsibility	Define leadership roles and responsibilities Give team members responsibility for team functioning and communication during stressors Hold regular team briefings to openly discuss team functioning following challenging situations Encourage and monitor individual and collective performance and tasks Encourage creativity within a broad structure Exchange honest feedback and avoid blame Create leadership groups to transfer responsibility for solutions to stressors	"character is defined when no one is watching" "on the same wavelength" "captains on the field" "chat" "take responsibility" "don't be the one that puts us all at risk"
Cultivate a team identity and a togetherness based	Frequently reinforce the importance of physical commitment and "intensity" Promote a sense of belonging and emotional	"your body on the line" "put your head in

on a selfless culture	Attachment during difficult circumstances Nurture quality, supportive squad relationships during setbacks Frequently reinforce the importance of a "selfless team" Display media reports in the changing rooms of team successes and celebrate "resilience" moments through team imagery, mantras, logos	where it hurts" "man up" "do it for your mates" "squeeze" "grab a shirt" "family" "sacrifice" "No egos here"
Expose the team to challenging training and unexpected/difficult situations	Develop a shared understanding of systems and coordination to withstand pressurised situations Replicate pressurised scenarios Hold regular discussions about errors to encourage learning and problem-solving	"we know what to do" "nothing is a surprise" "intensity!" "chaos" "accuracy under pressure" "noise" "dynamic" "repetition" "what from where" "systems in place" "process not outcome" "Keeping our structure"
	Practise 'resetting' the team's focus following challenging situations Rehearse specific situations (what-ifs) and skills during pressurised conditions Take ongoing action, analysis and adjustments to continuously improve despite setbacks	
Promoting enjoyment and keeping a positive outlook during stressors.	Promote the importance of enjoyment and wellbeing during challenging situations Use humour and encourage banter during challenging situations Plan and organise social occasions during setbacks or during fatigue Promote perspective during stressors Develop pre-match routines using a "business-asusual" approach during pressurised occasions	"banter" "recharge the batteries" "let's enjoy it" "keep the fun factor" "let's play with smiles on our faces again" "lighter"