Why does teamwork execution break down? Experiences of university team sport athletes.

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Abstract

Teamwork is a dynamic process that can fluctuate over a team's time together, including within a competition. The purpose of the current study was to better understand why this process breaks down, whereby teams do not demonstrate effective teamwork execution. To do so, 18 British university athletes (11 men, 7 women; m_{age} = 21.4 years) from interdependent team sports were interviewed on two occasions and asked to describe experiences in which their team did not communicate, coordinate, or cooperate effectively during gameplay. Underpinned by a critical realist approach and through abductive thematic analysis, we developed seven themes (comprised of 16 subthemes) which reflected precursors to teamwork breakdowns. These included: (1) ineffective team preparation during training and during the pre-competition warmup; (2) ineffective team monitoring, problem solving, action planning, and conflict management during in-competition transition periods; (3) changes to the team's roster composition over the season and during games; (4) unhelpful leadership from coaches and athlete leaders during gameplay; (5) poor unity amongst team members regarding the team's instrumental objectives and social relationships; (6) problematic levels of confidence between teammates and among the team as a whole; and (7) poor performance of one's team and successful performances of one's opponent during the competition. The novel findings from this study extend current knowledge of teamwork and group dysfunction in sport and provide directions for future research on teamwork breakdowns. The potential applied implications for coaches and other team leaders (e.g., sport psychology consultants, athlete leaders) related to these findings are also highlighted.

Keywords: cohesion; group dynamics; leadership; performance; team effectiveness

Introduction

From 1998 to 2004 (the year before a league-wide salary cap was introduced), the New York Rangers spent more money annually on player contracts than any other team in the National Hockey League. Despite attracting some of the best hockey players in the world as a result of their colossal spending, the Rangers did not once qualify for the league playoffs during that span. The history of sports is littered with examples such as this wherein a team of highly skilled individuals ultimately fails to achieve its goals. There are likely myriad factors that explain why this underperformance occurs. Based on decades of research in sport psychology, those factors could include group and interpersonal variables such as faulty team selection, poor team unity, subpar leadership, a lack of clarity or acceptance of individual roles within a team, and—most relevant to the current paper—inadequate teamwork amongst team members (see Eys et al., 2019 for a review). With regard to the latter, research to date has shown that effective teamwork positively predicts a range of important consequences in sport such as team performance, team cohesion, collective efficacy, team resilience, enjoyment in one's sport, and commitment to one's team (Fransen et al., 2020; Lausic et al., 2009; McEwan, 2020). Although there are many times in sport where teams do not demonstrate effective teamwork, uncovering the reasons *why* and *how* this occurs has not yet received formal research attention. This query represents the focus of the current study.

McEwan and Beauchamp (2014) describe teamwork as a dynamic group process comprising the collaborative behaviours amongst team members that maximize the team's likelihood of achieving its purposes. During gameplay (i.e., 'action' episodes; Rousseau et al., 2006), these behaviours are known as teamwork *execution*, which comprises intrateam coordination (i.e., the sequence and timing of members' actions), communication (i.e., information sharing amongst teammates), and cooperation (i.e., working in unison and helping one another). To optimize teamwork execution, teams need to work effectively during 'transition' episodes that take place before and after gameplay. These include the team's *preparation* for team tasks (e.g., specifying team goals and action plans for the competition), its *evaluation* following execution (e.g., monitoring the team's performance and the conditions

that impacted its performance), and the *adjustments* that need to be made for subsequent gameplay (e.g., problem solving issues that are preventing team success, helping teammates better perform their individual roles). In addition to those four phases of teamwork—collectively known as the *regulation of team performance*—teams also need to effectively manage conflicts that arise between members and ensure that teammates support one another in dealing with any personal or shared stressors that impact them throughout the team's time together—collectively known as the *management of team maintenance (MTM)*.

Along with describing the process of teamwork, McEwan and Beauchamp (2014) provided a conceptual framework of team effectiveness wherein they expounded how teamwork relates to *inputs*, *emergent states*, and *outcomes*. Inputs are antecedent variables that enable (or constrain) the interactions between teammates (Mathieu et al., 2008). Some of the most prominent inputs that have been examined in relation to teamwork—primarily outside of sport—include team composition (i.e., the influence of team members and their personal attributes), teamwork training (i.e., interventions designed to improve teamwork), and leadership (in terms of both team members and the team's managers; Mathieu et al., 2008). These antecedents form the impetus to teamwork processes and emergent states which then predict outcomes. Emergent states (e.g., team cohesion, collective efficacy) have received extensive attention within team sport research (Eys et al., 2019) and involve the dynamic motivational, cognitive, and affective states that develop over a team's time together. Finally, outcomes of team effectiveness are the results of the team's tasks, which typically focus on team performance and member satisfaction (Mathieu et al., 2008). It is important to recognize that as opposed to viewing the relationships between the four categories of variables in a unidirectional fashion (i.e., inputs → team processes → emergent states → outcomes), the team effectiveness framework stresses that those variables can impact each other in a reciprocal manner as teams develop and go through various episodic cycles (e.g., from game to game; McEwan & Beauchamp, 2014). For example, leadership may indeed predict the extent to which team members work effectively together which, in turn, can predict how united teammates feel and, ultimately, the team's success. Over time, though, the team's unity and

success can impact how effectively teammates work as a group and can also lead to changes in coach and athlete leadership behaviours (e.g., if the team is not performing well).

To gain a comprehensive understanding of team effectiveness, we argue that it is important for researchers to not only examine the variables that lead to *high-quality* team functioning but also the contributors to *poor* team functioning. Various conceptual models propose why some teams become dysfunctional over time. One example stems from Worchel (1994) who suggested that as a team achieves its goals, it could decay due to members demanding recognition for their contributions, which leads to intragroup competition and individuals focusing more on their own needs instead of the team's. As a second example, Wilson et al. (2007) put forward a taxonomy of 11 markers of teamwork execution errors in military settings, such as insufficient team cohesion, adaptability, and mutual trust. In the context of sport, previous research has highlighted a range of influences to group dysfunction such as team cliques, detrimental player roles (e.g., team "cancers"), intrateam conflict, and a high ego-oriented climate (Eys et al., 2019). However, it does not appear that comparable research has yet been conducted on the construct of teamwork. Although the conceptual framework by McEwan and Beauchamp (2014) describes *what* teamwork comprises and how it relates to other variables, it does not explain *why* some teammates do not work effectively together. Considering that teamwork is positively associated with a range of positive consequences (e.g., team performance, team resilience, athlete enjoyment; Fransen et al., 2020; Lausic et al., 2009; McEwan, 2020), identifying the reasons why some teams do not demonstrate effective teamwork would appear to be an important next step in this research area. Indeed, sport teams may be unable to reach their full potential when teammates do not work well together; therefore, research examining teamwork breakdowns would enhance researchers' and applied practitioners' (e.g., coaches, team psychologists) understanding of the construct of teamwork and, more generally, group dysfunction in this context.

In summary, the purpose of the current study was to explore why teamwork execution breaks down during team sport competition. As a multidimensional construct comprising 14 dimensions, there was a need to delimit our analysis of teamwork breakdowns in some way.

We focused specifically on teamwork execution (i.e., communication, coordination, cooperation) instead of other facets of teamwork because these are the teamwork behaviours that occur during action episodes (Marks et al., 2001), which, in the context of sport, are the periods when teams compete against one another (i.e., gameplay). Hence, although teamwork preparation, evaluation, adjustments, and MTM are important components of teamwork, breakdowns in teamwork execution have the most immediate impact on team performance during action episodes (e.g., wins or losses in a game). We describe teamwork execution breakdowns as instances during the gameplay of a competitive match in which teammates fail to communicate, coordinate, or cooperate effectively with one another. To address our research question, we conducted semi-structured interviews on two occasions with team sport athletes who were invited to share their experiences of teamwork breakdowns, with a particular emphasis on what preceded the breakdown, why the breakdown occurred, and how other variables (from a group dynamics perspective) led to the breakdown.

Method

Transparency and Openness

No program code or syntax was used in this study. Data in the form of anonymised interviews are available upon request from the corresponding author. Journal Article Reporting Standards (JARS) for qualitative studies were followed throughout the study and manuscript preparation. Guided by Clarke et al. (2016), we sought a minimum sample size of 15 participants. Data were analyzed through reflexive thematic analysis (Braun et al., 2017; Clarke et al., 2016). Study materials in the form of interview schedules are available as a supplementary material. This study was not pre-registered.

Approach to Enquiry

A qualitative study design was deemed most suitable for addressing our research question due to the paucity of research on teamwork breakdowns in sport as well as the potential for this methodology to provide a deep and nuanced understanding of (what we viewed as) a complex phenomenon (cf. Silverman, 2006). With regard to our philosophical underpinnings in addressing the research question, we adopted critical realism (Archer et al.,

1998) whereby one reality is assumed to exist, although it is acknowledged that such reality might never be completely understood given that it is influenced by the subjectivity of researchers who carry out research. Critical realism focuses on potential 'causal mechanisms' of a phenomenon (cf. Archer et al. 1998; Fletcher, 2017) and, as such, aligned with our purpose of examining *why* teamwork breaks down. This approach relates to our ontological (i.e., what is the nature of reality?) and epistemological (i.e., what can be known and how is knowledge produced?) positioning. Specifically, ontological *realism* underpinned this research as we presumed that participants' accounts reflected their interpretations of reality—that is, their experiences of teamwork breakdowns. That said, adopting a *constructivist* epistemology, we recognize that accessing participants' experiences was only partially possible (i.e., could only be approximated) due to our backgrounds and experiences (Maxwell, 2012).

We propose that our ontological and epistemological underpinnings are demonstrated in four main ways. First, they informed how interview questions were created (interview schedule available in supplementary material)—namely, by drawing on existing theoretical frameworks and research that propose some of the potential predictors of teamwork (e.g., Mathieu et al., 2008; McEwan & Beauchamp, 2014). Second, they informed how themes and subthemes were developed—namely, taking an abductive approach to seek explanations for why teamwork breaks down (see 'Data Analytic Strategies'). Third, participant quotes are presented throughout the Results in the third person to capture participants' views and experiences of teamwork breakdowns whilst also emphasizing that these perspectives are interpreted by us (the researchers). Fourth, the findings are discussed in relation to the existing teamwork literature, and we acknowledge that both our interpretations of the data and subsequent comparisons with that literature were influenced by our own experiences (e.g., as researchers and former team sport athletes and coaches).

Data Collection Strategies

Following University Research Ethics approval, participants were recruited through purposive and snowball sampling of BUCS (British University & College Sport) interdependent team sport athletes. Potential participants were first sent an information letter about the study

via email. Those who indicated that they wished to participate in the study were included if they were over 18 years of age and had been part of an interdependent sport team at the university level for at least one year. After providing informed consent, an interview time was scheduled. We also asked participants to complete a demographic information sheet which requested their age, gender, sport, and tenure with their current team; all participants returned this form (via email), although one participant did not provide her age or tenure.

All interviews took place virtually from November 2020 to March 2021 and were recorded with a Dictaphone for subsequent transcription. We originally planned to conduct two semi-structured interviews, with participants taking part in one or more competitions between the interviews, as this could allow participants to describe experiences of teamwork execution breakdowns that may have occurred at a recent competition. However, all BUCS sport was eventually cancelled due to the Covid-19 pandemic around the time when we began data collection. Nonetheless, the multiple-interview approach was retained as we viewed this as an opportunity to build rapport and provide participants with additional time to deliberate further about their experiences with teamwork breakdowns in hopes that this would facilitate greater depth and nuance in the resulting data (cf. Chamberlain, 2012). We believed this approach would allow us to cover a breadth of potential influences on teamwork breakdowns in the first interview and then focus on greater detail in the second interview. A semi-structured interview schedule was created for the first round of interviews, wherein we asked participants to describe an occasion(s) when their current team did not engage in effective teamwork during gameplay, what led to the breakdown during the game, if there was anything that was done prior to the game (e.g., on the gameday or during training) that they perceived to contribute to the breakdown, as well as what—if anything—could have been done to prevent the breakdown. A modified interview schedule that was tailored to each participant—based on discussions in the first interview—was then developed and the second meeting took place 2 to 3 weeks thereafter.

Participants

The final sample consisted of 18 university-level athletes (11 men, 7 women) from four interdependent team sports, including rugby union (n = 8), football (i.e., soccer; n = 6), netball (n = 3), and field hockey (n = 1). The participants ranged in age from 20-23 years (mean = 21.4) and had been part of their current team for 14-39 months (mean = 27.2). Pseudonyms are provided throughout the Results section, with the participant's gender and sport included alongside quotes (e.g., P1.M.Football).

Data Analytic Strategies

The 36 interviews (two per participant) yielded 13hr 41min of audio content. The total mean interview time per participant was 45.6 minutes (range = 31-66 minutes), with a mean duration of 16.3 minutes for interview 1 and 29.3 minutes for interview 2. All recordings were transcribed which resulted in >105,000 words (221 pages of single-spaced text).

Reflexive thematic analysis (Braun et al., 2017; Clarke et al., 2016) was used to analyze the data, which comprises six stages: *familiarization, coding, searching for themes, reviewing themes, defining and naming themes,* and *writing the report.* The first author commenced data analysis by reading each interview transcript at least twice to enable immersion in the data. Notes on each interview were taken throughout this phase in a research journal, with overall observations noted at the end of the phase (Clarke et al., 2016). The second author also read through, and provided notes on, all interview transcripts. An abductive approach (Sparkes & Smith, 2014) was adopted during the coding stage, whereby we interpreted participants' perspectives of causal mechanisms (cf. Archer et al. 1998; Fletcher, 2017) of teamwork breakdowns through the lens of existing knowledge of teamwork (e.g., Mathieu et al., 2008; McEwan & Beauchamp, 2014) while remaining open to new ideas that may challenge or differ from that work. Specifically, we aimed to gain insight into athletes' experiences with teamwork breakdowns (inductive) and compare our interpretations of those descriptions with the literature (deductive). Thereafter, we sought to create a coherent thematic map by clustering similar provisional codes together into candidate themes and subthemes—that is, patterns of shared meaning that we interpreted as organizing around the core concept (teamwork breakdowns). We then reviewed the (sub)themes in relation to the (a) coded data (e.g., "does

the candidate theme provide a good fit with the apparent meanings in the coded data?"), (b) dataset as a whole (e.g., "do the candidate themes reflect the data content and address the research question?"), and (c) teamwork literature (e.g., "how do the candidate themes relate to theory/conceptual frameworks and research on teamwork?"). During this phase, the interview transcripts were re-read to assess alignment of those transcripts with the thematic map and working descriptions of (sub)themes. Following amendments to the (sub)themes and thematic map, we finalized the (sub)theme names and descriptions (see 'Results' section). Lastly, guidance for reporting thematic analysis (Braun et al., 2017) and qualitative research (Levitt et al., 2018) informed the final write-up.

We (the authors) sought to facilitate research quality and rigour across the data collection, analysis, and write-up of the study. We met throughout data collection, namely over the course of the first round of interviews, between the first and second round of interviews, and after the first few interviews of the second round of interviews. As 'critical friends' (Sparkes & Smith, 2014), we sought to describe and challenge our preliminary interpretations of the data, and brainstorm interview strategies that could promote greater depth, nuance, and alternative discussions in subsequent interviews. This continued through to the write-up of the paper to help ensure that our descriptions of (sub)themes and quotes from participants provided an accurate reflection of the data. We also considered it important to obtain feedback from individuals external to the research team as a means of encouraging further reflexivity—that is, challenging our interpretations of the data and contemplating alternative explanations (Smith & McGannon, 2018). As such, we presented our findings to three academic colleagues during stages 5 and 6 of the analysis who also served as critical friends—each had previously conducted research in sport psychology and/or through a critical realist lens. Changes were made throughout discussions with critical friends. For example, our original thematic map comprised 10 themes and 31 subthemes. As detailed in the Results section below, this thematic map was eventually revised to seven themes that comprised 16 subthemes.

Results

In this section, we describe seven themes and 16 subthemes that we interpreted from participant interviews as the key factors that led to teamwork execution breakdowns (thematic map available in supplementary material). As each theme aligns with variables that fall under one of teamwork, inputs, emergent states, or outcomes within a framework of team effectiveness in sport (McEwan & Beauchamp, 2014), we have used that framework to help summarize and organize the (sub)themes into four overarching themes (cf. Braun et al., 2017). We begin by illustrating our interpretations of the other teamwork behaviours that occur during the *preparation* and *transition* stages of a competition. Second, we describe *team composition* and *leadership* influences (input variables). Third, we note the impact of *team cohesion* and *team confidence* (emergent states). Fourth, we discuss the role of *team performance* during competition (an outcome variable). In addition to participant quotes on these precursors to teamwork breakdowns, we present contrasting quotes that reflect participants' perspectives of the ways in which those breakdowns could have been prevented.

Preparation (Teamwork)

We first focus on the ways in which teams prepared for competition both during training and on the day of the competition (before the game commenced), and how those preparation activities were viewed as leading to teamwork breakdowns during the match.

During Training

Several participants recalled that the activities during training sessions did not include practicing teamwork to a sufficient degree. For example, Owen (P2.M.Rugby) stated:

> I felt that the type of training we had made us lack in coordination…. The vast majority of our training was running moves or practicing certain set pieces…. I felt that that impacted us on the pitch. Everything was so scripted. We had to perform those set moves that we had trained so many times, [but] we didn't know what to do after.

Owen later noted that his team's training activities did not translate into effective teamwork during competition because during games "you might have one or two times where you've trained the move you are going to play; but the rest of the time it's open play, it's fluid, you need to think on the spot, you need to be reactive." Owen suggested that "practice games"

during training (i.e., a team scrimmage or simulation) could have enhanced the translation of teamwork from training to the competition setting:

> Not playing games in training and not experiencing those natural situations in training, particularly for the more inexperienced players, they didn't have that natural coordination in a game. They didn't know where to place themselves, and the natural coordination with the other players then lacked.

Thus, if teams do not practice coordinating, communicating, and cooperating sufficiently, they may be more likely to experience breakdowns in those behaviours during competition.

Participants further noted that the teamwork breakdowns their team experienced occurred due to the absence of an effective contingency/backup plan that they ultimately needed to employ during the competition. For example, Ming (P12.M.Rugby) recalled:

> It was the biggest game of the season and… [the opposing team] anticipated what we were going to bring to the game, like, our game-plan. They totally, totally shut it down and that led to a lack of clarity in what was our plan B. We didn't have a plan B.

Hence, teamwork breakdowns in competition may occur as a result of a team failing to prepare for contingency plans (i.e., a "plan B"). For instance, Owen (P2.M.Rugby) noted that "we didn't really do much preparation [for situations] when things start to go badly." Thus, identifying and practicing contingency plans during training sessions may decrease the likelihood of teamwork breakdowns occurring during competition.

Participants also recalled times during training sessions where their team was split into two subgroups—one being the team's "starters" and another being the team's "backup" players. Several participants suggested that this split, particularly during team scrimmages, contributed to teamwork breakdowns during competition. For example, Ming recalled:

> [We] train as a starting 15…. [We] do rotate in the subs, but I wouldn't say that they get nearly as much time…. We could've rotated the inexperienced players in and given them more opportunities to be training with the starting 15 [because] you get to know people, the way they move, the decisions they make.

Separating starters and substitutes was viewed as problematic because these individuals often still end up playing together during the team's games. To better prepare for competition, Olivia (P7.W.Football) suggested "having a bit more of a fluid team, mixing them more during training… so everyone gets involved rather than creating an exclusive starting 11. So then when something goes wrong you can maintain that [level of teamwork]". Thus, as opposed to having starters and backups split into subgroups, mixing all players into training activities—especially during team simulations—could enhance teammates' familiarity with one another and allow teams to avoid teamwork breakdowns when players are substituted.

Pre-game

In addition to training sessions, the pre-game warmup period was also noted as relevant to teamwork execution breakdowns in the impending game. Specifically, failing to practice teamwork execution behaviours as part of the team's pre-game warmup was viewed as problematic. For instance, Aliah (P5.W.Netball) explained "[our] warmup didn't run smoothly at all. Like, there was no communication whilst doing team drills…. Everyone was silent." As part of a team's warmup, failing to reiterate contingency plans in addition to primary game-plans was also seen to impact teamwork breakdowns. For example, Pierre (P17.M.Football) suggested that during pre-game warmups, his team should have discussed:

> What happens if we go down? What happens if we get a man sent off? What happens if, you know, the communication is not there and we're going quiet? We had not discussed the possibility of any of these happening…. We didn't really have like a concrete [backup] plan of action…. If you can have a plan before [it is needed], you save a huge amount of time…. You really don't want to be sorting that out in a game.

Hence, it would seem important that teams not only practice contingency plans during training sessions but also run through those plans as part of the team's pre-game brief.

Transitions During the Game (Teamwork)

In this section, we recount participants' experiences of how suboptimal team monitoring, problem solving, action planning, and conflict management during in-game transitions (e.g., between whistles, during halftime breaks) contributed to teamwork breakdowns.

Team Monitoring

Failing to adequately monitor and discuss (during transition periods) the team's previous performance was suggested to contribute to teamwork breakdowns in subsequent action episodes. For example, Miguel (P11.M.Rugby) recalled: "We weren't spotting those errors and actually talking to each other, like 'the quicker players should move out.' We just weren't communicating with each other." Thus, if teams do not engage in effective monitoring, they may be less likely to know whether they are on the right track in obtaining their mission (e.g., winning the game) or need to address any performance inadequacies before subsequent action episodes. In some cases, the absence of team monitoring discussions was due to players feeling that they were unable to provide honest feedback. When describing the teamwork execution breakdown that her team experienced, Melanie (P3.W.Netball) suggested that: "We weren't able to be honest and reflective [because] when a couple of girls said stuff, it would come across as insulting and belittling of our performance." As described further in this section, there is likely some nuance to effective team monitoring in terms of having an open and psychologically safe environment—whereby any member can share their perspectives if they believe they have valuable monitoring information—whilst avoiding information overload whereby players are bombarded with too many perspectives.

In other situations, participants noted that team monitoring took place but was deemed unhelpful. For example, Owen (P2.M.Rugby) suggested that "half time wasn't constructive at all. It was just very like, you know, 'this is terrible'. Really kind of just like saying how bad the first half had gone…. Not too constructive or specific." This suggests that it is likely unhelpful to provide team members with redundant feedback and only highlight the things that the team did poorly in previous team tasks. That type of feedback alone might even lead to teamwork breakdowns, as Owen suggested his team's teamwork execution did not improve over the remainder of the game; rather, a "downward spiral" of teamwork followed thereafter particularly in his team's communication.

Problem Solving

Some participants highlighted that although their team reflected on its performance in previous action episodes, this was not followed up with effective problem solving, whereby the team identified how it can improve. Recalling the teamwork breakdown that his team experienced in the second half of a game, Connor (P16.M.Hockey) suggested:

> We did not utilise the halftime period as well as we could have…. You look at what's happened—how do you react to it? How do you devise a solution quickly as a team? Having enough characters to overcome issues and empower yourselves. And that was the problem; our players did not show that kind of quality.

Hence, failing to problem solve as a team could make it less likely for teams to develop improved strategies, and enhance their performance, in subsequent action episodes.

Other participants explained that although their team did engage in problem solving, the process was ineffective. For example, Melanie (P3.W.Netball) illustrated that in her team's halftime meeting:

> [We] all sat together discussing literally what went wrong which was good. But at the same time, because she [the coach] was so autocratic, it was a little bit hard to say exactly what you thought because she was so stern, and you could be a bit intimidated by her.

Thus, the absence of a psychologically safe environment could result in less effective problem solving because players who may have valuable input do not feel that they are free to voice their perspectives. Melanie went on to suggest that although the team attempted to problem solve, the absence of psychological safety from her coach seemed to extend to a lack of psychological safety between teammates: "I would say that there were still times where I didn't feel very comfortable with saying certain things to a person." Hence, as with team monitoring, it seems that psychological safety is a key part of successful team problem solving.

Action Planning

Several participants remarked that teamwork breakdowns occurred due to the absence of a clear action plan arising from their team's in-game transitions. For instance, Miguel (P11.M.Rugby) suggested: "It's all about having clear action points as well. Like, if you're just

rambling on at them and there's no real action points, there's no real thing to work on, people start to zone out." Other participants highlighted that although action planning did occur to some extent, it was not useful to the team. In particular, several participants remarked that their action plans merely consisted of generic platitudes rather than specific instructions to players. For instance, Owen (P2.M.Rugby) recalled "all anyone would really say is that we need to start communicating better or like we need to get that chat up better all that kind of stuff which yeah, it's true but it didn't really help very much." Thus, developing action plans during in-game transitions that are clear and specific could decrease the likelihood of teamwork breakdowns occurring in subsequent action episodes.

It was also noted that action planning was ineffective when players were given too much information. For example, Amari (P10.M.Rugby) suggested "if you're just giving [players] lines and lines and lines, then you're at risk of giving them too much and it takes away from what they're actually saying." He believed that his team experienced breakdowns in teamwork execution because there were too many instructions to the team:

> Someone comes in, you know starts shouting 'we need to do this, we need to do this, and work on that.' You've got 15 players and you've just told them to do 15 different things. So, the 15 players can all be doing something different which, you know, if you're trying to play as a team, you're basically telling them not to play as a team.

Amari's perspective highlights the importance of shared mental models amongst teammates, which may not occur if there are too many instructions. To that end, Ming (P12.M.Rugby) described what he felt was an effective plan during his team's in-game transition:

> One thing I think they did really well is not bombard us with too many messages. Like there was no over-communication. It was a simple message which I think had two points related to everyone and was easy to understand and quite clear…. Everyone knew what they were meant to be doing.

Thus, in addition to having clear and specific action plans, it appears important to avoid plans that are overly extensive and complicated to ensure players have a shared understanding of the team's next steps.

Conflict Management

Conflict between teammates can occur during competitions; the absence of constructive conflict management was identified as a reason for subsequent teamwork breakdowns. For example, Sonny (P13.M.Football) suggested: “As soon as we start arguing, the teamwork just goes out the window because everyone sort of either goes into their shell or sort of goes out to do stuff on their own. So, they won’t pass to each other.” Thus, failing to manage conflict effectively, namely during transition episodes, can allow the issue to fester and impact subsequent gameplay. To illustrate, Pierre (P17.M.Football) recounted:

> We didn’t utilize [halftime] as well as we should have. We didn’t really address the issue…. It was on me and the other player to pull each other aside and have a quick chat before we went back on for the second half and put it to bed, which we should have done but we didn’t.

The absence of effective conflict management in this case appeared to carry over into the remainder of his team’s match, as the conflict made Pierre’s team “more reluctant to talk to each other [on the field] compared to before. I think that was the reason for the breakdown.” Thus, developing conflict management strategies may help reduce the potential deleterious impact of conflict on subsequent teamwork execution, with breaks in gameplay providing an opportunity (however brief) for teams to enact those strategies.

Team Composition (Input)

In this section, we recount how teamwork breakdowns can be impacted by the team’s composition, which includes changes to its roster over the course of its season as well as substitutions that take place during games.

Roster Changes

In the current study, changes to team rosters typically stemmed from players being called up from lower tiered competition or sent down from higher tiers (e.g., from the University’s 2nd team to its 1st team, or vice versa). Such roster changes were suggested to predict teamwork breakdowns by several participants. For example, Olivia (P7.W.Football)

recalled that new players lacked role clarity and were, therefore, unable to work within the team's system:

> Cooperation wise, people didn't understand what their specific role was with respect to the wider context of the team. So say it was the striker, they just thought that 'my job as a striker is to score goals' but didn't necessarily cooperate with the team.

This lack of familiarity and comfort was also noted as impacting on-field communication. When describing his team's breakdown in teamwork, Owen (P2.M.Rugby) noted:

> There were lots of new players. People didn't know each other and, therefore, if you don't know the players well enough and the other players don't know each other well enough, you're not going to communicate as well. You're not going to be comfortable communicating.

A lack of familiarity with one another due to roster changes can also result in players being uncomfortable in providing feedback to each other such as during in-game transitions, as pointed out by Miguel (P11.M.Rugby): "We were quite new to each other.… We weren't honest and open with each other."

Roster changes were also viewed to impact teamwork due to suboptimal relational efficacy. For instance, Olivia explained how her other-efficacy beliefs (i.e., confidence in her teammates) were impacted by recent modifications to the team's roster:

> I definitely had a lack of confidence in the new players because we had such a good team before and when the new players came in, they weren't at such a high skill level because they were from the team below [our division].

The above perspectives reiterate the importance of teamwork preparation. For example, in reflecting on a situation where teamwork broke down with a new player, Rohan (P8.M.Rugby) suggested it occurred because the team "didn't really train with this particular player, and then he got put straight into the team on match day." Thus, team training sessions provide opportunities for new players to learn and practise their role responsibilities in their team, as well as for new teammates to become more comfortable with, and confident in, each other.

Substitutions During Game

In many interdependent team sports (e.g., football, basketball), substitutions take place over the course of a game. Pierre (P17.M.Football) recalled that player substitutions undermined his team's "rhythm":

> I noticed a massive breakdown from that because all of the partnerships that were established had been changed and the rhythm of the game was disrupted because of these new people who did not know their place within the game and within the team.

This disruption can be especially prominent with players who lack familiarity with the team's approaches, such as those that are new to the team or its level of competition. As Ming (P12.M.Rugby) explained:

> There were quite a lot of boys who came off the bench that day who hadn't played much first-team rugby. So for a specific example, in terms of the lineouts, there was obviously lots of different calls and those boys coming on hadn't communicated that they didn't know certain calls, which would lead to myself making the call and then it being too late, and they didn't know what to do, which would lead to the lineout going wrong.

It was also noted that substitutions can disrupt teamwork execution through decreased relational efficacy. Specifically, Owen (P2.M.Rugby) explained that this could occur when a highly-skilled player "gets subbed for someone who is less experienced, not as good…. You didn't have the confidence in that person and that was just going to affect the team dynamic."

We noted that there appeared to be nuance in this subtheme, as other participants suggested that substitutions are sometimes beneficial. Miguel (P11.M.Rugby) suggested: "It can go one of two ways—it can have both a detrimental effect [or] a positive effect…. Sometimes you have people who come on and they just lift you." Miguel later recalled a specific example when this occurred with his team: "You could really see a change in the game because they [the substitutes] have a presence on the pitch. People's attitude on the pitch change because they know that they were players they could count on." As such, rather than avoiding substitutions altogether, the challenge for coaches in preventing teamwork breakdowns involves identifying the ideal *mix* of players in a given situation.

Leadership (Input)

In this section, we recount participants' descriptions of how coach and athlete leadership during gameplay led to teamwork breakdowns.

Coach Leadership

Effective coaching during gameplay was viewed as essential to facilitating teamwork. As Miguel (P11.M.Rugby) described: "You very much need a strong coach to direct the team…. You need someone to… get people communicating with each other." Ming (P12.M.Rugby) described the "framing of messages" from coaches during gameplay as important: "Let's say you're just being like really, really negative and always on people's backs and like everything you're saying is criticizing… You're just not going to get the best out of people." Some participants felt that their coach's emotions while communicating could be "contagious" to players. For example, when describing his team's breakdown, Pierre (P17.M.Football) recounted the impact of his coach's negativity towards the team during gameplay:

> Our coach was absolutely furious, and I don't think that that helped. He met the situation with a lot of anger and frustration…. I think a lot of the team saw how annoyed the coach was, how frustrated and probably embodied that themselves when they perhaps wouldn't have otherwise.

Coaches could also influence team emotions in a more positive manner. When providing a contrasting situation where he thought his team avoided a teamwork breakdown despite emotions running very high in the competition, Sergio (P15.M.Football) recalled that his coach "calmed the whole situation down and he didn't give us like a massive kick up the ass…. [He] made us all calm down as well and change our type of attitude."

It was further suggested that coaches' interactions with individual players can impact the rest of the team. Pierre recalled his coach's reactions to an error he made:

> The first thing he did was just have a massive go at me personally. Like, you know, it was not encouraging really; the opposite of what a player needs…. They [my teammates] then suddenly think 'oh, if I make a mistake, how is he going to react? Is

> he going to react like that in the same way he does to me?'. So they became a lot more cautious of making mistakes.

The coach's reaction and the team's subsequent cautious approach were seen as deleterious to teamwork execution, as Pierre reasoned:

> If you're constantly nervous about making mistakes… that's when your coordination in a team breaks down because everyone is focused on [avoiding mistakes]…. That's really how the leadership made it worse. When that happens, the focus of each individual player shifts more towards their individual performance as opposed to how well we're going to work together as a team.

Thus, it would appear that the way in which coaches communicate with players during gameplay not only impacts the recipients of that feedback but the team as a whole as well.

Athlete Leadership

In addition to coaches, athlete leaders were also viewed as important insofar as they provide—as Amari (P10.M.Rugby) described—"clarity and direction on the pitch". Specifically, Owen (P2.M.Rugby) suggested:

> Obviously, the coach has got a lot of input but he's kind of just watching on the sidelines and, you know, the players are actually playing the game…. If [an athlete leader] knows what he's on about and he's a good leader on the pitch, people are going to kind of respect that more and listen to that more.

When summarizing his team's teamwork execution breakdowns, Owen suggested that they seem to arise "when there isn't someone to organize people." Owen also alluded to the importance of shared leadership instead of having one task leader:

> Some of the time you have other people that take other kind of leadership roles or add to the leadership within a team, and we didn't really have that. So it was kind of one person, one voice trying to get everyone to work together, which doesn't work.

Participants also suggested that it is important to have leaders who motivate the team in order to prevent teamwork breakdowns. When describing these types of leaders, Melanie (P3.W.Netball) suggested that "they are the kind of person that if there is a low point during

the game, even a simple comment like ‘come on girls, heads up’ can really lift the spirit of the team.” Similar to task leadership, the importance of having a shared leadership style rather than simply relying on a single player (e.g., the team’s captain) was also noted. As Owen suggested: “When the teamwork starts to break down, people’s heads start to drop, that kind of thing, [the team captain] wasn’t the kind of person to you know rile the team up.” Hence, it appears that subpar athlete leadership can lead to teamwork breakdowns and that the provision of multiple task and motivational leaders can help offset those breakdowns.

Team Cohesion (Emergent State)

In this section, we recount participants’ descriptions of how inadequate unity amongst teammates around the team’s instrumental objectives (i.e., task cohesion) and in their social interactions (i.e., social cohesion) influenced teamwork breakdowns.

Task Cohesion

A lack of unity around instrumental objectives was thought to impact teamwork execution. Yui (P9.W.Netball) suggested that low task cohesion predicted teamwork breakdowns because some members ended up playing in a more individualistic—rather than team-oriented—manner: “We didn’t agree on what should happen going forward so instead of cooperating together, we started to just play as individuals instead of collectively as a team which clearly isn’t that effective in netball when you rely on each other.” It was also noted that the misalignment of task objectives with even one player can disrupt teamwork execution. Rohan (P8.M.Rugby) recounted: “We all realized that there was one individual there who wasn’t wanting to play as a team. When he was substituted everyone sort of increased their standard and was more effective in the game.” Reflecting on her experiences with her team, Melanie (P3.W.Netball) indicated: “What was frustrating is that we had a great coach and great individuals, we just didn’t have any team cohesion…. The way we played didn’t necessarily gel with everybody.” Thus, an absence of task cohesion could prevent a team from executing effectively and, in turn, reaching its full potential.

Social Cohesion

In addition to task cohesion, a team's unity in terms of its social relationships was also perceived to impact teamwork breakdowns. In particular, clashes between individuals can create conflict amongst the team which leads to teamwork breakdowns. Miguel (P11.M.Rugby) suggested this was particularly impactful "when stuff starts going wrong":

> When you have a poor relationship with someone and they say something, you sort of take it to heart. You think… they're having a go to point out that 'it's your fault, not my fault'. Whereas if you have a good relationship with them, with your team, it kind of bonds you together and allows you to actually take on board criticism.

In addition to creating intrateam conflict itself, the lack of social cohesion could further impact teamwork by impeding the effective management of that conflict. When reflecting on her team's breakdown in teamwork, Yui (P9.W.Netball) suggested: "If we had that team relationship in the grounding, I think we would have overcome that disagreement to still play for each other rather than break down and just lose our heads." Teams need to also be aware of cliques forming due to relationship conflicts, as this was also suggested to create division between groups of players during gameplay. As Amari (P10.M.Rugby) summarized:

> You do get different characters within the team… which can be difficult and create [sub]groups in the team. It's about being able to make sure those groups don't kind of clash against each other and become two separate groups rather than one.

Further to the above, it was suggested that developing social cohesion within a team off the field could prevent teamwork breakdowns by helping teammates become more comfortable with each other on the field, especially in new teams. For instance, after his team's formation, Owen (P2.M.Rugby) felt that social outings were beneficial to his team and that these benefits included better on-field teamwork because "everyone becomes more comfortable and then this translates into a game. You're going to communicate better because you are comfortable giving criticism, taking criticism, helping each other." Social cohesion can also help foster an environment of openness and honesty which—as discussed earlier—was viewed as particularly important in creating effective discussions amongst team members during in-game transitions. As Melanie (P3.F.Netball) illustrated: "It's really instrumental;

having relationships with team members breaks down that barrier to actually voice what you think." Thus, it appears that poor social cohesion can carry over to ineffective teamwork on the court/field and, as such, efforts should be made to build strong social connections amongst team members.

Team Confidence (Emergent State)

In this section, we discuss the influence of a second emergent state, team confidence, on teamwork breakdowns. This includes both the beliefs that team members hold in the ability of the group as a whole to execute and produce given levels of attainment (i.e., collective efficacy), as well as teammates' confidence in one another (i.e., relational efficacy).

Collective Efficacy

Some participants suggested that low collective efficacy was detrimental to their team's performance, due to the formation of a poor "mindset" or decreased motivation. Interestingly, though, with regard to teamwork breakdowns specifically, multiple participants seemed to suggest that those breakdowns were due to *over*confidence (or arrogance) rather low collective efficacy. In particular, participants recounted that the team's overconfidence going into, and during the initial stages of, a game created a sense of complacency and "sloppy" teamwork. For instance, Pierre (P17.M.Football) noted that his team's overconfidence when facing a perceived weaker opponent led to poor team communication:

> We weren't aware of the importance of communication as much. So, if you're playing a team that's not as good, I think you could take those things for granted, right? Take the basics of the game, they're very foundational, but you can forget them quite easily if you don't actively try to [focus on] them.

Thus, excessively high levels of collective efficacy can result in a team straying away from its typical focus on teamwork execution.

Participants also suggested that overconfidence led to teamwork breakdowns due to increased intrateam conflict when the game ended up being more difficult than anticipated. Sergio (P15.M.Football) recalled:

> We just assumed that we were going to win and as soon as things went the wrong way, people started arguing, bickering, because we weren't used to it [trailing]. It was just like little kids throwing their toys out the pram. We weren't used to it, so we all started arguing instantly.

This reiterates the point that effective conflict management is critical to help prevent conflict from hindering teamwork. Moreover, the accounts highlighted above imply that *more* might not always mean *better* with regard to team confidence. Rather, there may be an *ideal* amount of team confidence between low and excessively high. As Harry summarized:

> We thought that we won the game before the ball was even kicked. It doesn't matter what level you are playing at, you can't go into a game just thinking that. You can be confident that you are going to win a game, but there is a difference between being confident and being borderline arrogant.

Hence, it would seem that collective efficacy can be beneficial to a team *if* players retain a focus on teamwork and manage conflict effectively in case it arises.

Relational Efficacy

Teamwork execution breakdowns were also suggested to arise due to poor relational efficacy beliefs—self-efficacy, other-efficacy, and relation-inferred self-efficacy (RISE). For one, it was noted that low levels of self-efficacy could diminish teamwork due to players doubting themselves and playing more tentatively than they normally would. For example, Aliah (P5.W.Netball) suggested that some team members' low self-efficacy "definitely did change the way we played because… we were like 'what if they intercept this?' and just that worry and anxiousness about letting balls go and letting goals in." Pierre (P17.M.Football) also suggested that inadequate confidence in oneself can lead to poorer teamwork because players engage in avoidance behaviours: "You're all so focused on *not* making this mistake, you then forget to talk because… you don't want to be that person who's making that mistake and letting the team down."

A lack of confidence between teammates was also viewed as detrimental to teamwork execution. Hugo (P14.M.Football) explained that low levels of other-efficacy "changes it

[teamwork] quite drastically really because if the team's lost confidence in one player specifically then that eliminates like a person to pass to…. Then you're basically playing with one less player." It was also suggested that when a team member believes that teammates are not confident in them (i.e., the team member has low levels of RISE), this can impact their own confidence which then results in poorer teamwork. For example, Sian (P4.W.Rugby) recalled how the communication between her teammates and herself dwindled due to her low levels of RISE: "If someone knows they're having a bad game—like, for example, I was—and no one like picked up on anything good I kind of did that whole game, my head would just be down the whole game." Thus, it appears vital that teammates demonstrate their beliefs in one another as a means of facilitating relational efficacy and preventing teamwork breakdowns.

Team Performance (Outcome)

In this final section, we recount participants' perceptions of how poor performance outcomes of their own teams and the successful performance of their opponents within a match led to subsequent teamwork execution breakdowns in that match.

Our Team's Poor Performance

Participants suggested that their team's poor performance impacted subsequent teamwork execution in a variety of ways. One reason was that poor performance created frustration and anger amongst players. Connor (P16.M.Hockey) suggested:

> In hockey, quality play stems from quick decision making…. When you have that pent-up anger, it prevents you from seeing the game clearly and that even sort of split-second decision really affects the fluidity of the team and how quickly we can get the ball into space.

Member frustration can also lead to discord within the team which, if not managed effectively, can then impact teamwork. For instance, Sonny (P13.M.Football) detailed how poor performance diminished team coordination due to clashes between teammates:

> Because we were so frustrated with the mistakes and easy goals, you just find yourself not being able to do things that you normally can do with ease. So, like even

687 just a short pass you'd mess up because you're so like angry or just nervous really
688 that someone's going to have a go at you.
689 Poor performance can also decrease team communication and cooperation as a result of
690 reduced team morale. As Pierre (P17.M.Football) explained: "It flows into communication
691 because morale is so low and we're so lost, so we stop talking to each other…. We're just
692 focused on wanting to win… without using any teamwork."
693 Participants suggested that when the team is not performing well, coach and athlete
694 leaders are particularly important in managing emotions. For example, Sergio (P15.M.Football)
695 identified the importance of team leaders in "keeping people's heads level. That's when this all
696 like gets pulled back down and everyone calms down." In addition, the importance of
697 maintaining focus on teamwork despite being previously unsuccessful in the match was
698 emphasized. For example, Pierre suggested: "If something does go wrong, are we continuing
699 to do those basic things? Are we continuing to communicate, are we continuing to cooperate?"
700 These perspectives highlight the importance of developing interpersonal emotion regulation
701 strategies in addition to conflict management strategies, with coach and athlete leaders
702 appearing to play a prominent role in enacting those strategies.
703 ***Opposing Team's Success***
704 While some participants focused on the impact of their own team's poor performance,
705 others suggested that it was the opposing team's success during the game that impacted their
706 team's teamwork. There was some overlap between these two subthemes, particularly in
707 terms of the effects of both types of performance outcomes on intrateam conflict and emotions
708 (e.g., frustration, agitation) which, in turn, was detrimental to teamwork. For example, Owen
709 (P2.M.Rugby) suggested that when his team's opponent had several consecutive successes,
710 "a couple particular players like lost their heads a bit after just a couple of scores and really
711 couldn't… join in with the team communication." Notwithstanding the similarities between the
712 two subthemes, opposing team success seemed to impact teamwork in additional ways. For
713 one, some participants noted that opponent success decreased drive within their team, which
714 then resulted in poorer teamwork. For instance, Miguel (P11.M.Rugby) recounted: "As soon as

we started losing, people just lost their heads… [and] there was a lack of communication within the team to work on what we needed." Moreover, participants reported feeling reduced perceptions of control in the match and its final outcome when opponents were successful. Ming (P12.M.Rugby) noted why the teamwork within his team eventually declined despite some early success for his own team:

> When you lose control of a match that you've been in control of, it's really difficult to get that back…. We were winning and [then] we were suddenly losing control of it, and it feels like everything is going a million miles an hour.

It was also noted that opposing team success can result in team members straying away from their team-oriented strategies. For instance, Amari (P10.M.Rugby) recalled that members of her team panicked and started playing more individualistically following a few scores from their opponents:

> It got worse and worse to the point where people started… going off script because they're in their heads, they're trying to solve the issues themselves instead of, you know, communicating with each other and trying to solve the whole issue together…. You just get a team of fifteen players all trying to do something different.

Thus, teams that focus on their team-oriented approaches in spite of opponents' success may be more likely to recover from those setbacks and avoid subsequent teamwork breakdowns. Participants also proposed that teams need to practice dealing with opposing team's success during training. For instance, after being undefeated throughout the season, Olivia (P7.F.Football) felt that her team was not adequately prepared for dealing with the unfamiliar situation of falling behind in a game, which occurred in one of the final games of her team's season. "We needed to know what it was like to be losing and come back from losing because we didn't know what it was like to go a goal down…. In training, we could have done hypothetical scenarios [like that]." Thus, a team can be better prepared for managing opponent success by working through this type of challenge during training sessions.

Discussion

Researchers, coaches, and team psychologists are all concerned with knowing how team effectiveness can be maximized. With regard to teamwork, a notable limitation of the existing research within sport was the absence of research examining why teams do not work together effectively. Guided by a framework of team effectiveness in sport (McEwan & Beauchamp, 2014), seven themes and 16 (sub)themes were organized into four overarching themes that we interpreted from participant interviews as reflecting the reasons why their teams did not communicate, coordinate, or cooperate effectively. *Teamwork* comprised the ways in which teams prepared for a competition and engaged in (in)effective transitions during the game. *Inputs* encompassed team composition as well as coach and athlete leadership during gameplay. *Emergent states* included team cohesion and team confidence. Finally, *outcomes* focused on the impact of team performance within the game.

In some cases, our interpretations of the data corroborate existing research on teamwork in sport. As one example, teamwork execution has been shown to be associated with important consequences such as collective efficacy, task and social cohesion, and team performance (Lausic et al., 2009; McEwan, 2020). Moreover, the findings reiterate the importance of effective team preparation (e.g., practicing teamwork execution during training and pre-game warmups) and in-game transitions (e.g., providing simple and specific feedback to team members during breaks within a match) in facilitating effective teamwork during gameplay. What is perhaps more notable though is the ways in which the findings extend or differ from previous knowledge. For one, these findings add to previous research regarding the influence of team composition on teamwork. For instance, Swaab et al. (2014) found that individual talent facilitates team performance up to a certain but can become detrimental at very high levels due to breakdowns in team coordination. In the current study, we interpreted that changes to team composition during games and over the course of a season can also lead to teamwork breakdowns. This suggests that coaches and organizational personnel (e.g., those in charge of player transfers) need to carefully manage changes to team rosters over a season. When roster changes do occur, it appears critical that coaches facilitate role clarity (see Eys et al., 2019), and allow time for teammates to become comfortable, familiar, and

confident with one another. This provision of time could allow teams to maintain their level of teamwork when substitutions are made during games. Moreover, it would seem important that coaches continually develop their own familiarity with their roster, as this can enable them to make suitable decisions in terms of substitutions that need to take place. Specifically, in reflecting on participants' perspectives, we do not offer a simplistic takeaway that substitutions are inevitably *good for* or *detrimental to* teamwork. Rather, teams likely need to focus on identifying the ideal *mix* of players that are required for a given competitive situation.

Secondly, although *identity leadership* has been previously shown to predict teamwork execution (Fransen et al., 2020), we interpreted that ineffective leadership behaviours from coach and athlete leaders during gameplay may lead to breakdowns in team communication, coordination, and cooperation. Specifically, when coaches berate players and are overly negative in response to player or group errors—as opposed to providing constructive corrective feedback—it can be detrimental to both individual players and the team as a whole by creating more tentative/overcautious play as well as by decreasing players' confidence. Previous work has also shown that coaches' emotions (e.g., anger) can be "contagious" to the rest of the team, impacting players' emotions as well as team performance (van Kleef et al., 2019). Our findings suggest that those coach emotions might also lead to teamwork breakdowns. Regarding athlete leadership, the absence of task leaders (i.e., those in charge of tactical decision-making) and motivational leaders (i.e., those who steer the team's emotions; Cotterill & Fransen, 2016) can also be problematic. Previous research by Fransen and colleagues (2014; 2018) suggested that shared leadership appears to benefit team effectiveness and performance, such as by enhancing collective efficacy and team identification. Our interpretations of participants' experiences in the current study support those findings and suggest that shared task and motivational leadership may also be key in reducing the likelihood of teamwork breakdowns. In sum, the results reiterate the importance of developing effective leadership behaviours within teams (Burke et al., 2006). To that end, a challenge for future research within the context of sport involves identifying how exactly coach and athlete leaders can facilitate effective teamwork and prevent teamwork breakdowns.

A third contribution of this work concerns the impact of team cohesion (Carron et al., 1985) on teamwork breakdowns. Previous research found that teamwork execution has a larger positive relationship with task cohesion than with social cohesion (McEwan, 2020). Interestingly, though, we observed that participants tended to identify, and discuss in more detail, an absence of social cohesion in their accounts of why teamwork execution broke down on their team. Although more research is clearly needed, this might suggest that task cohesion does indeed have a stronger relationship with teamwork *in most situations*, while social cohesion comes into prominence in protecting teams from teamwork *breakdowns*. Thus, from our perspective, it would appear important that teams develop both task and social cohesion such as through team-building strategies that target the team's environment (e.g., fostering distinctiveness), structure (e.g., enhancing role acceptance), and/or processes (e.g., team goal setting activities; see Paradis & Martin, 2012). Namely, task cohesion could help optimize high-quality teamwork, while social cohesion might help sustain teamwork when, as one participant put it, "stuff starts going wrong." In particular, social cohesion might reduce the likelihood of breakdowns by helping players become comfortable with one another (which is especially relevant when new players are added to the roster), facilitating interpersonal support and on-field communication, fostering a psychologically safe environment characterized by open and honest communication (McLaren et al., 2021), and preventing, or managing the potential negative effects of, team "cliques" (Martin et al., 2014).

A fourth novel contribution of this research involves the seemingly nuanced relationship between team confidence and teamwork execution. On the one hand, it appeared that low collective efficacy had a negative impact on teams, which aligns with previous research (LePine et al., 2010). On the other hand, it appears that there may be a point at which team confidence becomes *too* high, turns into arrogance, and the usual benefits of team confidence plateau or potentially even reverse in the form of teamwork breakdowns. While previous research has shown that overconfidence can impact individual performance (e.g., committing more errors in a task; see Vancouver et al., 2002), our study appears to be the first (to our knowledge) to suggest that overconfidence might also be related to teamwork breakdowns in

sport. We interpreted that this negative effect of overconfidence was due to a sense of complacency forming within the team, a divergence from team-oriented task approaches, and a greater likelihood of intrateam conflict emerging if the team performs poorly especially against perceived weaker opponents. In addition, our findings indicate that there may be a link between relational efficacy (Lent & Lopez, 2002) and teamwork in sport. Specifically, we noted that players' self-efficacy can be influenced by the confidence that they believe teammates have in them. These observations add to the findings from previous studies on relational efficacy in sport, which has shown that these efficacy beliefs predict a range of individual (e.g., commitment to one's team) and group (e.g., team performance) outcomes (Habeeb, 2020). Our interpretations suggest that insufficient other-efficacy and relation-inferred self-efficacy amongst teammates can be detrimental to subsequent teamwork execution because players can become more tentative and engage in avoidance behaviours (i.e., trying to not make a mistake). Therefore, it would seem important that coaches aim to foster the sources of relational efficacy (e.g., performance accomplishments, social persuasion).

Finally, although a reciprocal effect between teamwork and team performance was proposed in the team effectiveness framework (McEwan & Beauchamp, 2014), this study appears to be the first to suggest that team performance outcomes during competition can indeed impact subsequent teamwork. Specifically, we interpreted that a team's own poor performance can result in frustration, anger, and conflict within the team, which may increase the likelihood of subsequent teamwork breakdowns. In line with participants' suggestions, it appears that coach and athlete leaders play prominent roles in managing emotions and intrateam conflict following poor team performance. This highlights the importance of developing interpersonal emotion regulation strategies and conflict management strategies, both of which can positively impact goal achievement (see Tamminen et al., 2021 and Downes et al., 2021, respectively). In addition, even when one's team is performing well, the success of one's opponent can lead to subsequent teamwork breakdowns via decreased work ethic, drive, team confidence, and perceptions of control. Again, team leaders appear to play a critical role in these situations insofar as preventing members from straying away from team-

oriented strategies towards more individualistic gameplay, whereby some players go beyond their role on the team and try to overcome deficits by themselves. Moreover, it could prove useful for coaches to create situations in training that provide players with opportunities to practice teamwork in the face of performance-related setbacks (e.g., team simulations where players need to overcome a score deficit).

Despite the contributions of the current study, there are limitations that should be recognized. First, it should be reiterated that the findings are based on our (the researchers') interpretations of participants' accounts. Additional research is necessary to examine these interpretations and accompanying suggestions, as they are bound by our own subjectivity. In addition, the study sample was rather homogenous, namely in terms of all participants being part of university-level teams from four interdependent sports. As a result, some of the findings may not apply, for instance, to other sports (e.g., those with fewer in-game transitions than rugby, football, field hockey, and netball) or other competitive levels (e.g., professional sport). As one example, the social aspect of sport is an important part of the university sport experience; therefore, social cohesion might have a stronger influence on teamwork breakdowns in this population compared to professional sport. Thus, it would be worth investigating teamwork breakdowns across other sports and competitive levels in future studies. It should also be noted that most participants had not competed in their sport for several months, as a result of BUCS sport being cancelled due to the Covid-19 pandemic. As such, the discussions within interviews were more retrospective in nature than originally anticipated, which may have influenced participants' recall of certain details from their experiences. Relatedly, we recognize that some interviews were somewhat short. Although having two shorter interviews was meant to facilitate breadth (particularly in interview 1) and depth (particularly in interview 2), it could be argued that the level of detail obtained was questionable. Hence, it would seem valuable to examine (qualitatively or quantitatively) perceptions of teamwork breakdowns closer to the time at which those situations occurred. Furthermore, many participants provided additional information that, although interesting, was beyond the focus of the current study and, therefore, not presented in this paper. For example,

some participants detailed how they thought teamwork breakdowns could be overcome after their onset. While we focused on the factors leading to teamwork breakdowns, identifying potential solutions to those breakdowns could be a beneficial avenue of future study.

In conclusion, the current study extends existing knowledge of teamwork by presenting some key factors that may explain why team sport athletes experience decreased coordination, communication, and cooperation during gameplay. We hope that the findings from this study spark additional work on this topic, improve our understanding of group dysfunction in sport, and, ultimately, help researchers and applied practitioners identify how teams can reach their full potential.

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Supplementary Material: Interview Schedule

(Welcome and brief introduction to each other)

Thank you for participating in this interview. This study is interested in your experiences with teamwork and specifically when teamwork breaks down within your university BUCS team during competition. For the purposes of this study, we are focusing on the communication, coordination, and cooperation between team members during competition. In a moment, I will ask you a series of questions related to your experiences with teamwork and specifically when teamwork on your current team breaks down or is compromised.

Please be reminded you are welcome to withdraw from this study at any point without a need for explanation and can withdraw your data for up to 2 weeks after participation. You can choose not to answer any question if you feel like it will cause you distress in any way.

Is this all clear? Do you have any questions before we begin?

MAIN QUESTIONS

1a) Can you tell me about an experience you have had with your university BUCS team when you thought that there was a breakdown in teamwork during competition
b) What do you think were the specific reasons for the breakdown in teamwork?

2a) How long did the breakdown in teamwork last?
b) To what extent was your team able to recover from the breakdown?
c) If your team was able to recover, what changes occurred to enable the recovery?

3) When your teamwork suddenly began to breakdown, please describe any specific feelings you felt individually and collectively as a result of this?

4) Do you think your team's preparation for the match contributed to the breakdown in teamwork and, if so, how?

5a) How important do you feel a strong team relationship is needed in avoiding teamwork breakdowns?
b) What influence do you believe communication within a competitive environment has on the relationships within your team?

6a) How does your team utilise half-time/quarter time breaks?
b) Do you think this influenced the breakdown in teamwork?

7a) When the teamwork broke down, what was your coach's reaction to the situation?
b) How did their reaction influence the behaviour/performance of you and your teammates?

8) To what extent do you believe that the presence of a strong leader (player/coach) could help mediate teamwork breakdowns?

Thank you for completing this first interview! Your responses are highly valued. Please take time to reflect on these questions before the next interview about any further information you could share with us. We will be in contact within the next few weeks to arrange the second interview.

POTENTIAL FOLLOW UP QUESTIONS (to obtain further depth, detail and clarity)

1. *How did this occur?*
2. *Why do you think this is the case?*
3. *How do you think the coaches/players preparation impacted the breakdown in teamwork? Were any pre-game rituals skipped in this preparation period? (question 4)*
4. *Was there a change in the feedback provided by the coach due to the situation and how do you think this may have influenced your teamwork, by providing examples? (question 8)*

PROBES

1. *Can you tell me more about that?*
2. *Can you give an example of this?*
3. *Repeat last few words of participant's response in question tone*
4. *You said the word ____, what do you mean by this?*

Interview 2: A similar set of questions will be asked for the second interview largely based on the information provided in the first interview and where we feel more clarity/detail is needed. The first set of questions will form the basis of the second interview; however, some questions may be reworded to improve clarity of responses and facilitate further, more specific recall.

An example set of questions for one of the second interviews is provided on the following page:

Example Second Interview

Interviewer: Thank you for the first interview, your answers were extremely helpful. Once again, today we are going to talk about teamwork and focussing on situations when your team does not communicate, coordinate, or cooperate well. Once again you can choose not to answer any questions if you wish not to, and you can withdraw at any time. First, I just wondered if after we finished the last call, if anything came up for you?

Leadership

Interviewer: So firstly, we will be discussing leadership. During our last interview you mentioned that your captain was a great physical player and "led by example" but did not encompass certain other traits that you thought were important. Can you explain why you think the captain was not best suited to the role?

Interviewer: In your opinion, how much of an impact should a captain have compared to a normal team player when teamwork breakdowns occur?

Interviewer: With regard to your coach, I noticed that we didn't really talk much about them. Were they perceived as an authority figure and how did their leadership style impact teamwork breakdowns?

Interviewer: How would your coach intervene when teamwork breakdowns would occur?

Preparation

Interviewer: During the previous interview, you said about how the training preparations for the [opposing team's name] game was different, and that people were training in positions they had never played in before. In what way do you think the team could have prepared differently to avoid the occurrence of a breakdown during the game?

Interviewer: As a team did you have anything prepared in case of a breakdown in any game?

Interviewer: Then in terms of communication, you mentioned off field relationships have a positive impact when it comes to preventing team breakdowns. Can you elaborate on this?

Attitudes towards teammates/within team

Interviewer: Now we will talk about attitudes towards teammates. So last time you talked about how mistakes in the backline were common and that this was reflected in certain teammates' body language. How did this impact your perception and other players perceptions towards this kind of attitude?

Coordination

Interviewer: Now in regard to coordination, from your experience with the BUCS team you currently represent, do you believe your team is efficient when it comes to coordination? So, having a sense of where your teammates are on the court and feeling in sync with one another.

Interviewer: You also mentioned in our last interview that communication and cohesion where two of the main factors that led to teamwork breakdowns. How could these two factors be focused on in training to overall improve coordination?

Interviewer: Keeping in line with your thought that more games and fluidity in training would have led to better coordination in games, how much of an impact, if any, do you think this would have also made in increasing the team's performance?

Physical changes in team members

Interviewer: The next subsection is physical changes in team members that you mentioned, like substitutions and injuries for example. Was there a specific time point in a game where the changing of certain members had a significant impact on the game?

Interviewer: So, for the [opposing team's name] game, did substitutions or injuries have an impact in that game?

Team hierarchy

Interviewer: You also mentioned there was a hierarchy in the team. In what way might this have influenced the breakdown?

Expectations/confidence

Interviewer: Moving on to expectations and confidence that you mentioned. Do you think that the expectation of winning or losing certain games throughout the season and within the league impacted the team's teamwork?

Final Question

Interviewer: The final question just to round up now. If you think of the whole situation and could go back and replay it, what could be done differently to avoid the breakdown in teamwork, such as during the [opposing team's name] game?

Supplementary Material: Thematic map of teamwork breakdowns encompassing four overarching themes, seven themes, and 16 subthemes.