An exploration into pre-game speeches and their influence on psychological and performance outcomes in basketball

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Abstract

This thesis details a narrative review and five empirical studies with the overall aim to examine the use, content, and effects of pre-game speeches in basketball. Chapter 1 found that pre-game speech research, although emerging, is limited despite its common use throughout team sports. Chapter 2 used a cross-sectional survey design and found that pre-game speeches are common within basketball, and that the majority of basketball players find them enjoyable, useful, and influential on their individual and team confidence and performance. Chapters 3 and 4 applied a qualitative approach with professional basketball players and coaches respectively. Players perceived pre-game speeches as a valuable part of their pre-game routine, that individual and team needs could be met during pre-game speeches, and that players engage in various behaviours to compensate if those needs are not met. Coaches' delivery of pre-game speeches depended on context and purpose, and after games they engaged in a reflective process that influences subsequent speeches. Both coaches and athletes perceived that pre-game speeches effect cognitive, affective, and behavioural variables and ultimately performance. Chapter 5 used a novel concept mapping approach and found six types of pre-game speech content: strategic information, collective team support, emotional appeal, concentration/focus, negative/critical, and pre-game speech preparation. Coaches and athletes rated strategic information as most effective for enhancing collective efficacy and performance. Chapter 6 used a mixed-methods approach throughout a season with a professional basketball team. Although the effect of pre-game speeches on performance was not statistically significant, the effect size was large. Participants perceived that pre-game speeches influence performance via four main psychological factors: efficacy, focus, energy, and support. Evidence provided in this thesis demonstrates the use and perceived importance of pre-game speeches within basketball, underlying mechanisms, and the potential effect on psychological and performance outcomes.

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Oh great mountain move out of my way!

Philippians 4:13
Matthew 7:8

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Chapter 1:

‘Remember What Got You Here’: A Narrative Review of Pre-Game Speech Literature and Associated Theories

Abstract

Physical and mental preparation are important factors to achieve competitive success (e.g., Franchini & Takito, 2014; Gould & Maynard, 2009; Orlick & Partington, 1988; Vaughan & Laborde, 2021). Although there are various methods of preparing athletes on the day of a competition, the pre-game speech is one tool that coaches may employ. The aim of this narrative review was to identify and critically synthesise research that has explicitly examined pre-game speeches, along with wider literature that may help inform and develop understanding of this interaction. To meet these aims, the review focused on (1) '*game-day*' communication and the pre-game speech; (2) cognitive, affective, and behavioural factors that may be influenced during pre-game speeches and the associated theories; and (3) the current gaps within literature and implications for the overall thesis. The review found that pre-game speeches can comprise different content, but research has typically focused on information and emotion (e.g., Vargas-Tonsing & Guan, 2007). Pre-game speeches are perceived to influence performance (Savović et al., 2018; Vargas & Short, 2011), self-efficacy (Vargas-Tonsing, 2009), team efficacy (Vargas-Tonsing & Bartholomew, 2006), motivation (Adegbesan, 2001; Savović et al., 2018), emotional control and inspiration (Gonzalez et al., 2011; Smith et al., 2018), and affective states (Van Kleef et al., 2019). Despite this evidence, relatively little research has examined '*what*', '*how*' and '*why*' coaches deliver pre-game speeches, the experiences and perceptions of coaches and athletes, and specific effect on performance outcomes, but there is a broad body of evidence and theories that may help to better understand this phenomenon. To inform theory and practice, further research is needed to extend understanding on the use, content, delivery, and effect of pre-game speeches.

Keywords: Communication, efficacy, emotions, basketball, performance

Introduction

> "There's a tradition in tournament play, not talk about the next step until you've climbed the one in front of you. I'm sure going to the state finals is beyond your wildest dreams, so let's just keep them there. Forget about the crowds, the size of the school, their fancy uniforms, and *remember what got you here*. Focus on fundamentals that we've gone over time and time again, and most importantly don't get caught up thinking about winning or losing in this game. If you put your effort and concentration into playing to your potential, to be the best you can be, I don't care what the scoreboard says at the end of the game, in my book, we're going to be winners!"

This pre-game speech, delivered by Coach Dale in the movie Hoosiers (Anspaugh, 1986), helps spur on his small high school basketball team to defeat a powerhouse school and become state champions. Although fictional, it encompasses the ideals of what many may think pre-game speeches are: intense and passionate orations full of belief and emotion. However, do these fictitious speeches reflect reality? Do coaches deliver rousing words that enhance performance? Or are these anecdotal portrayals best suited as cinematic folklore? To answer those questions a coach may conduct a Google search of 'pre-game speeches' which returns over 17 million results. Many include terminology such as '*fire you up'*, '*inspirational*', '*pump-up*', and '*motivational*' in their title. Although those terms could be considered appealing to some coaches, it is imperative that empirical studies provide evidence on the use, content, and impact of pre-game speeches in real-world sport settings.

Competitions, or '*game-days*', are the fruition of athletes' hard work and a coach's preparation, that hopefully results in success. During '*game-days*', athletes receive information

from a myriad of sources, which may impact their performance (e.g., Horn, 2008; Kim & Park, 2020; Narwal, 2014; Smith et al., 1995). In many sports, one main source of information is the coach, who can interact with their athletes during pre-game speeches, time-outs, half-time talks, calls from the side-line and debriefs to help enhance performance (e.g., Avugos, et al., 2020; Brown et al., 2020; Evans et al., 2018; Macquet et al., 2015; McArdle et al., 2010; Ortega et al., 2010; Trudel et al., 1996; Vargas & Short, 2011). Of particular interest in this thesis are the interactions prior to a competition, which have been found to influence an athletes' mental readiness and physical preparation, two areas influential on performance success (e.g., Baker et al., 2000; Fletcher et al., 2021; Phylactou, 2019; Shalar et al., 2019). Research that has examined pre-game speeches has provided insight into content (Macquet & Stanton, 2021; Mesquita et al., 2008; Savović et al., 2018), athlete perceptions and preferences (Breakey et al., 2009; Vargas-Tonsing & Guan, 2007; Vargas & Short, 2011), and effects on various outcomes including motivation, efficacy expectations, and performance (Adegbesan, 2001; Gonzalez et al., 2011; Vargas-Tonsing, 2009; Vargas-Tonsing & Bartholomew, 2006). However, it is important to review the pre-game speech literature and associated evidence to synthesise understanding, identify (or resolve) discrepancies, and help direct future research. Therefore, the primary aim of this review was to synthesise and critique the evidence on '*game-day*' interactions, specifically pre-game speeches. The secondary aim was to review wider research and associated theories to offer different lenses through which to view, and advance understanding of, pre-game speeches. In doing so, the review sought to follow Coach Dale's advice and '*remember what got us here*', to identify gaps in the literature and directions for future research.

Methods

A preliminary search identified an emerging body of research that has examined pre-game speeches, but that it is potentially limited by a lack of specificity regarding the interaction. There was, however, a diverse range of literature that may provide insight into the processes and factors that might influence this interaction. Therefore, to maintain a clear focus but allow for the complexity of the topic, a narrative literature review was conducted to "accurately synthesise the relevant literature in a comprehensive, transparent and objective manner" (Byrne, 2016, p.1). Although narrative reviews have been criticised for not following standard guidelines like systematic reviews (Dixon-Woods et al., 2006), this review followed the guidelines of Green and colleagues (2006) on writing narrative literature reviews for peer-reviewed journals. For example, an abstract was included, and databases and keywords reported for transparency. Furthermore, a comprehensive literature search was conducted and periodically updated throughout the course of the PhD to include any recently published literature.

Literature searches were conducted using the following databases: SPORTDISCUS, PsychARTICLES, CINAHL Complete, Taylor and Francis Online, and Google Scholar. Keywords were identified for the initial focus on '*game-day*' and pre-game speech research (e.g., pre-game speech, pre-game talk, pep talk, pre-game meeting, coach communication during competitions). Subsequent keywords were added based on the emergent findings of the review. For example, self- and collective efficacy were identified as potential variables associated with pre-game speeches (Vargas-Tonsing, 2009; Vargas-Tonsing & Bartholomew, 2006), and verbal persuasion is a key predictor of efficacy expectation (Bandura, 1997), so additional searches were undertaken for self- and collective efficacy and verbal persuasion. A full list of keywords searched can be found in Appendix A. Furthermore, consistent with the recommendations of

Slavin (1995), no strict inclusion criteria were applied to ensure flexibility and allow for a broad range of relevant literature to be integrated, emerging issues to be pursued, and relevant insight to be assimilated.

The findings of this narrative review are presented within three main sections. The first section synthesises research focused on communication, '*game-day*' communication and pre-game speeches. The second section integrates the wider literature associated with pre-game speeches, including: self- and collective efficacy, team cohesion, coach-athlete relationship, leadership, emotion, motivation, and social support. The third section provides a summary of research, including limitations, current gaps in the literature, and the implications for the thesis.

Results

Communication

Communication is "the act of expressing ideas, information, knowledge, thoughts, and feelings, as well as understanding what is expressed by others" (Burton & Raedeke, 2008, p. 16). Effective communication is an extremely important element of the coaching process (e.g., Cherubini, 2019; Haselwood et al., 2005; Kim & Park, 2020; La Voi, 2007; Moen & Kvalsund, 2013; Spink, 1991), with Wang and Ramsey (1997) describing it as the most important skill needed by coaches to be successful. Ineffective communication has been found to be a main sign of poor coaching (Gearity & Murray, 2011), and associated with coach-athlete conflict (Mellalieu et al., 2013; Wachsmuth et al., 2017). Coaches may communicate with their athletes for various reasons, including informing, persuading, evaluating, and motivating (Weinberg & Gould, 2003; 2019), through verbal and non-verbal messages that can be both sent and received (Eccles & Tenenbaum, 2004; Subarkah, 2018). Verbal communication can consist of language,

writing and words, whereas non-verbal communication includes signs, signals, body language, movement, facial expressions, and touch (Subarkah, 2018; Weinberg & Gould, 2003).

The Communication Behaviours Evaluation System (CBES; Gomes et al., 2020), which drew on past coach evaluation systems, notes 16 communication behaviours that are either positive or negative or spontaneous or reactive. For example, these behaviours include: vision (e.g., what can be achieved), encouragement, instruction, feedback, control, comprehension, disagreement, and ignoring success. Communicative behaviours displayed by coaches have been linked to athletes' performance (Horn, 2008), self-talk (Zourbanos et al., 2011), stress (Gearity & Murray, 2011), and burnout (Vealey et al., 1998). However, communication from coaches can positively or negatively influence athletes (Jowett & Cockerill, 2002; Kassing & Infante, 1999). Positive feedback, corrective instruction, and encouragement have been found to evoke positive reactions from athletes (Smoll & Smith, 2006), and positive communication has been linked to positive performance (e.g., Di Berardinis et al, 1983; Hague et al., 2021). Criticising errors, critical instruction on how to fix mistakes, and failure to praise effort has been linked to negative responses in athletes (Smoll & Smith, 2006).

Additionally, how a coach communicates to their athletes can influence the transfer of knowledge (Anshel, 2012), and effective coach communication should consider both content and context (Hardy et al, 2005; Yukelson, 2015). Cherubini (2019) argued that coaches should develop an understanding of '*what*' they want to communicate, '*why'* they want to communicate it, to whom they will be communicating to, and '*how'* it will be communicated; all factors that may play an important role in how '*game-day*' interactions are delivered, perceived, and their potential impact on outcomes (Amorose, 2003; Coatsworth & Conroy, 2009; Turman, 2003).

'*Game-Day*' Communication

In many sports, coaches have several opportunities to communicate with their athletes on the day of a competition, including pre-game speeches, time-outs, in-game direction, half-time talks, and post-game debriefs. Messages conveyed during these interactions can provide technical and tactical information, motivation, and inspiration (e.g., Avugos, et al., 2020; Brown et al., 2020; Carpentier & Mageau, 2013; Evans et al., 2018; Macquet et al., 2015; McArdle et al., 2010; Ortega et al., 2010; Trudel et al., 1996; Vargas & Short, 2011), in an attempt to prepare athletes, make valuable adjustments, and provide performance feedback (e.g., Middlemas et al., 2018; Russell et al., 2015). Furthermore, these interactions have been found to influence physiological and psychological outcomes. For instance, research has found that teams who utilise a time-out experience beneficial effects on performance (Sampaio et al., 2013), whereas opponents experience a decrease in performance (Roane et al., 2004). Half-time talks, or intermission talks in some sports, can inspire athletes (Thrash & Elliot, 2004), and lower threat appraisal and avoidance goal orientations in athletes who receive a rational talk (Evans et al., 2018). There may even be a curvilinear relationship between a coach's unpleasant displays during a half-time talk and performance, with moderate amounts most beneficial (Staw et al., 2019). Further, post-game debriefs can highlight positive and negative performance points and areas for improvements (Chan & Mallett, 2011; Middlemas et al., 2018), which can influence self-efficacy (Bilgin et al., 2015). However, further insight is needed into the specific mechanisms through which these interactions exert beneficial effects.

Coach-athlete interactions, prior to the start of a competition are of particular importance due to their potential influence on athletes' preparation, style of play, and performance (e.g., Bloom et al., 1997; Gallmeier, 1987; Gould et al., 1999; Gould et al., 2002). For instance, perceived coach leadership (González-García et al., 2021) and the coach's emotional displays

(Van Kleef et al., 2019) prior to the competition may both influence the affective states of athletes during competition. Further, these interactions within pre-competition routines can support athletes in attaining optimal psychological states (Mesagno et al., 2015). To better understand the extant evidence on pre-game speeches it will be synthesised under three sections: content and delivery, perceptions and preferences, and potential effects.

Content and Delivery

Previous research has often classified and examined pre-game speech delivery as containing content that is either informational or emotional (e.g., Berkowitz, 2003; Bloom et al., 1997; Vargas-Tonsing & Guan, 2007). However, as alluded to at the start of the chapter, anecdotal evidence, such as sports films and news reports, typically depict pre-game speeches as highly inspirational and motivational, using rhetoric that is "flowery, ornamental speech laden with metaphors and other figures of speech" (Foss, 2004, as cited in Hettinger, 2010). This highlights one key area of contention within pre-game speech research, as some coaching literature has argued that this type of delivery might do more harm than good, due to over-arousing athletes and taking them out of their ideal pre-competitive states (Cox, 1994; Gilbert et al., 2001; Martens, 1987). A less emotional and more informational approach was supported by Bloom et al. (1997), who found that 21 expert coaches reported preference for delivering speeches that were 'even-tempered', short and concise, provided key points, reviewed the game plan, and used emotional deliveries sparingly.

Informational pre-game speech content can comprise references to instruction, feedback, and strategy. For example, Vargas-Tonsing and Guan (2007) presented athletes with informational content that included scouting reports, game plans, and tactical and technical information. Mesquita et al. (2008) provided insight into pre-match coach instruction in a judo

competition and found that informational content included prescriptive, descriptive, positive evaluation, and negative evaluation. Prescriptive information provided the athlete with solutions and mistakes to avoid, descriptive information detailed past successful performances, positive evaluation included praise and encouragement, and negative evaluation involved the coach's disapproval. Informational content was delivered to athletes verbally, visually, kinaesthetically, or through a combination of the three. For example, some coaches presented information just by speaking with their athletes, using visual 'non-verbal' facial expressions or gestures, and/or kinaesthetically through moving their athletes' bodies. Further, Jackson (2020) examined coach feedback throughout a competition and found that descriptive feedback was used more often than prescriptive feedback during the pre-game meeting.

Emotional pre-game speech content may comprise of numerous psychological aspects, such as motivation (Savović et al., 2018), pride (McCarthy, 2007), and inspiration (Gonzalez et al., 2011; Smith et al., 2018). Emotional pre-game speech content can be delivered in various ways, including the use of social significance regret and individual performance regret messages (Turman, 2005), emotional pleas (Vargas-Tonsing & Bartholomew, 2006), epideictic orations (Hettinger, 2010), and include specific strategies such as showing inspirational movie clips (Broch, 2015), or use of strong language, emotional appeals, and analogies (Vargas-Tonsing & Guan, 2007). Additionally, examination of a pre-game speech delivered prior to an under-20 World Cup football final identified various emotional and motivational content including attempts to reduce pressure, encouraging enjoyment of the game, supporting the use of instincts and self-confidence, defining goals and the rewards of achieving those goals, gathering players together, and promising support (Savović et al., 2018).

Beyond informational and emotional content, research has also examined the behaviours displayed by coaches during pre-game speeches or prior to competitions. For instance, Van Kleef and colleagues (2019) reported that coaches displayed expressions of anger and happiness during their pre-game speeches. Further, Macquet and Stanton (2021) examined nine national team head coaches' pre-game '*briefings*' through the application of transformational leadership theory. Results revealed that coaches displayed individual consideration, inspirational motivation, intellectual stimulation, fostering acceptance of group goals, high-performance expectations, and appropriate role modelling. In contrast to these positive leadership behaviours, Delrue et al. (2017) found athletes perceived that their coaches displayed need-thwarting behaviours during pre-game speeches, which included the coach pressuring athletes, blaming athletes for mistakes, and being critical or showing disappointment. The study also found that the coaches' behaviours significantly changed game-to-game. It is important for future research to identify how content and delivery behaviours vary across games, why these variations may occur, and what effect they may have on athletes.

Despite the debate regarding the content of pre-game speech, coaches' pre-game speech delivery and choice of content may be dependent on what they are comfortable delivering (Cherubini, 2019) and the context in which they find themselves. For instance, Hettinger (2010) examined championship game pre-game speeches delivered by three well known collegiate basketball and football coaches. Results revealed six common aspects of their pre-game speeches, including the use of visual aids, sport specific jargon, associate language, anticipation, ideographs, and narratives. However, highly important games, such as championships, may elicit different delivery and content needs from coaches than regular season games (Bloom et al., 1997). Furthermore, in addition to the content, the context may influence if a message is

effectively communicated (Hardy et al., 2005; Yukelson, 2015). For instance, a coach may use more in-depth descriptions when delivering information during training sessions (Becker & Wrisberg, 2008), however, this type of content may not be suitable in the limited timeframe of a pre-game speech.

Perceptions and Preferences

Although aspects of pre-game speech delivery and content provide important insight into '*what*' may be occurring during this specific '*game-day'* interaction, communication and pre-game speech research has found that athletes may have varying perceptions and preferences of what they receive (e.g., Sagar & Jowett, 2012; Turman, 2003; Vargas-Tonsing & Guan, 2007). For instance, athletes perceived their coaches' communication after losses and during training to have both positive and negative aspects, such as performance feedback and hostile reactions (Becker, 2009; Sagar & Jowett, 2012). Furthermore, Turman (2003) examined high school wrestlers and found that players perceived their coach to display more autocratic behaviour at the end of the season, which they preferred. Specific to pre-game speeches, Vargas-Tonsing and Guan (2007) examined athletes' preferences for informational and emotional pre-game speech content based on different game scenarios. To assess these preferences, 208 collegiate varsity athletes were asked to imagine themselves in different game situations and report how much informational or emotional content they would like delivered during the pre-game speech. Game scenario heavily influenced their preferences, with championship games and games against higher ranked opponents evoking more emotional content needs, whereas games against unknown opponents and opponents who had previously narrowly won, elicited preferences for more informational content. Further, preferences differed between athletes and coaches and based on athletes' gender. Athletes preferred greater emotional content than coaches, and female

athletes preferred more informational content than male athletes. Identifying such preferences may enable coaches to make evidence-informed decisions in developing and delivering pre-game speeches, which may prevent miscommunication and conflict. For example, Fletcher (2006) examined coach-athlete interactions prior to basketball games and a coach reported using colourful language to emphasis their message in an attempt to challenge their team and get their attention. However, the team interpreted this as 'aggressive', and left one player feeling 'offside' with the coach, as they preferred to be left alone and not challenged immediately before a game.

Breakey et al. (2009) also examined perceptions of '*game-day*' speeches (pre-game and intermission) and found that female collegiate ice hockey players positively perceived genuine displays of emotion by their coach, short and meaningful speeches, and references to team values. Long or poorly timed speeches, when they disagreed with what the coach delivered, or when information they felt should be mentioned was omitted or was unexpected were perceived negatively. Athletes' and coaches' perceptions of pre-game speeches also include perceived influence on performance (Savović, 2018; Vargas & Short, 2011). For instance, following the under-20 FIFA World Cup, players from the Serbian national team identified the motivational speech delivered by their coach as being an important factor in them winning the game (Savović, 2018). Vargas and Short (2011) used a cross-sectional survey design and found that the majority of participants (151 soccer players) not only liked the pre-game speech they received (90%), but also perceived it to influence their performance (65.5%). A potential reason for these perceptions may stem from participants also reporting that the pre-game speech they received met their emotional (70.7%) and psychological needs (83.1%).

Effect

Although Vargas and Short (2011) and Savović et al. (2018) found that athletes perceived pre-game speeches to influence performance, they did not measure the effects on objective performance outcomes. Any effects on performance are difficult to measure and quantify given the myriad of variables, both internal (e.g., psychological variables) and external (e.g., opponents, officials), that may contribute to competitive performance. However, athletes perceived pre-game speeches to influence psychological factors, such as focus, desire, confidence, arousal, and effort (Vargas & Short, 2011). Further, Vargas and Short argued that any potential influence might not last throughout a game but could initiate a beneficial '*positive cycle*' of performance. An example of this would be a team starting the game positively, and it in turn leading to subsequent positive plays. This '*positive cycle*' could be beneficial to overall performance outcome, as leading after the first quarter in National Basketball Association (NBA) games was found to be a significant indicator of game outcome (Ruiz et al., 2014), and using data across 20 seasons Kayhan and Watkins (2018) found that NBA teams who won the first quarter had a 69.8% probability of winning the game.

Beyond the pre-game speech, studies have examined the effects of pre-task interventions and messages on performance. For instance, Damali (2014) had participants view either a motivational or non-motivational video before attempting to complete a plank hold. Participants who viewed the motivational video showed significant improvement on their muscular endurance performance compared to those who viewed the non-motivational video. Cook and Crewther (2012) randomly assigned rugby union players to three different interventions prior to a competitive match: 15 minutes of their successful performances with scripted positive coach commentary, 15 minutes of opposition players' successful performance with scripted instructional coach commentary, and no video or coach present. Although all three interventions

had a significant influence on the participants' free hormonal states, the two video interventions had the largest response and better player performance ratings on their previously established key performance indicators and overall performance indicators. Finally, Moll et al. (2017) examined five different types of support delivered to participants prior to a golf putting task and found that participants who received visible esteem support (e.g., encouragement and positive reinforcement) outperformed participants in other conditions.

Research has examined the effects of pre-game speeches on a range of psychological outcomes. Vargas-Tonsing and Bartholomew (2006) found that pre-game speeches influenced team-efficacy beliefs, particularly for participants who received an emotionally persuasive speech compared to those who received an informational or control speech. Further, 151 soccer players were asked to complete a self-efficacy and emotion survey before and after a pre-game speech, and results revealed that information received predicted changes in both factors (Vargas-Tonsing, 2009). In contrast, Rubio et al. (2018) adjusted for age and game scenario and found that pre-game speeches produced no changes in self-efficacy.

Pre-game speeches have also been found to impact emotional and motivational outcomes. Pep talks delivered during pre-game speeches increased the inspiration and motivation levels of Nigerian university athletes (Adegbesan, 2001). Further, Gonzalez et al. (2011) found that American football players who viewed inspirational video clips of a pre-game speech delivered in a movie were more inspired to compete and reported increased emotional control than those who viewed a video of the same coach and movie giving instructions. Inspiration, which involves being inspired by and inspired to (Thrash & Elliot, 2004), may be influenced during pre-game speeches through a coach showing belief in the team's ability to win, being an

underdog, and the promotion of pride and unity (Smith et al., 2018), and through informational guidance on how to perform positively (Figgins et al., 2016).

Coaches' affective and behavioural displays pre-game have also been found to potentially influence athletes' affective states and subsequent performance. Van Kleef et al. (2019) examined baseball and softball players and coaches (n = 268 / n = 29) and soccer players and coaches (n = 376 / n = 30) and found coaches' expressions of anger and happiness predicted players reported levels of anger and happiness, objective team performance outcomes and first half performance (those exposed to happiness). Furthermore, coaches use of need-thwarting behaviours during pre-game speeches were found to result in athletes' displaying more antisocial behaviour towards opponents, officials, and their teammates within a game (Delrue et al., 2017). Although not explicitly aimed at behaviours displayed during pre-game speeches, Cook et al. (2021) conducted a systematic review of 25 studies that analysed Olympic coach behaviour and its perceived effect on athlete performance. The 25 studies included qualitative and quantitative data from 207 Olympic coaches and 925 Olympic athletes and found 38 behaviours that were identified as having either a facilitative or debilitative effect on athlete performance. Examples of facilitative coach behaviours include conscientiousness, agreeableness, openness, optimism, praise and encouragement, trust, tailored communication, and confident body language. Examples of debilitative coach behaviours include being noticeably unfocused, stressed, uncaring, and lack of knowledge. Pre-game speech literature may benefit from examining whether these behaviours are present during pre-game speeches, and potential facilitative or debilitative effects.

Summary

Pre-game speech research, along with coach behaviour and communication literature, has provided insight into delivery styles, content, athlete and coach perceptions and preferences, and potential effects of '*game-day*' coach-athlete interactions. However, many questions remain unanswered. Based on the research findings above, a number of theories and concepts may help advance understanding of pre-game speeches and how they might influence athletes. Therefore, the next section will review associated theories and concepts, and explore how they relate to and inform the three factors of pre-game speeches discussed above: delivery and content, athlete and coach perceptions and preferences, and effects.

Associated Theories and Concepts

Self-Efficacy

One variable that has been investigated within pre-game speech research is self-efficacy (e.g., Rubio et al., 2018; Vargas-Tonsing, 2009). Situated within social cognitive theory, Bandura (1977) defined self-efficacy as an individual's belief in their ability to execute behaviours required for specific performance attainments on a task. According to theory, self-efficacy is influenced by six sources of information: performance accomplishments, vicarious experiences, verbal persuasion, physiological states, emotional states, and imaginal experiences (Bandura, 1977; Feltz et al., 2008). Within the sports context, all sources can boost an athlete's self-efficacy and influence performance (Feltz et al., 2008). For instance, past performance accomplishments can influence self-efficacy beliefs by providing athletes with examples of previous success (Samson, 2014; Shipherd et al., 2021). Vicarious experiences, in which athletes observe the actions of someone else through mediums such as modelling and social comparison, have also been found to influence self-efficacy (Barzouka et al., 2007). Physiological states provide athletes with an assessment of their physical feelings (e.g., strength, fatigue) and

emotional states provide athletes with an assessment of their emotions (e.g., happy, calm, angry), both of which have been found to be an important source of self-efficacy for endurance athletes (Anstiss et al., 2020).

Regarding pre-game speeches, verbal persuasion has been suggested to be the most likely and easily reproduced source of efficacy information available to coaches (Vargas-Tonsing, 2009). Recent research has found that instructional and positive feedback from a coach, can increase athletes' self-efficacy (Donald et al., 2019). Furthermore, individuals who receive positive feedback (e.g., knowledge of results, appreciation) typically experience higher self-efficacy and, in turn, better performance (Saemi et al., 2012; Valiante & Morris, 2013; Vargas-Tonsing, 2009). Informative feedback has also been found to enhance athletes' self-efficacy beliefs (Amorose & Weiss, 1998), and when this informative feedback was delivered in a positive manner, athletes perceived self-competence and their belief in their team's ability increased, which led to improved performance (Allen & Howe, 1998). In contrast, negative feedback has been found to have the opposite effect and decrease self-efficacy (e.g., Wise et al., 2004; Woodgate & Brawley, 2008) and performance (Stirling & Kerr, 2013).

Coaches have ranked social/verbal persuasion as one of the most effective methods for increasing self-efficacy beliefs in their athletes (Feltz et al., 2008). However, it should be noted that the athletes' perception of their coach, particularly their credibility and expertise, may be a factor in how much influence verbal persuasion has on self-efficacy (e.g., Anstiss et al., 2020; Feltz & Lirgg, 2001; Wise et al., 2004). Athletes may also engage in cognitive processes that lead them to interpret or perceive others' beliefs that they themselves are capable (Lent & Lopez, 2002). This perception stems from relation-inferred self-efficacy (RISE; Lent & Lopez, 2002), in which an athlete perceives if their coach has confidence in their ability to be successful, with

verbal and nonverbal behaviours acting as sources of these perceptions (Jackson et al., 2009). McMullen et al. (2020) identified seven coaching behaviours that high school athletes used as sources of their RISE beliefs: encouragement, instruction, task-oriented statements, creating challenges, interpersonal attention, expressiveness, and efficacy supporting statements. These coaching behaviours along with feedback and other sources of efficacy information may be integrated in pre-game speeches to help boost athletes' self-efficacy.

Higher levels of self-efficacy have been linked to numerous favourable outcomes, including performance. Self-efficacy influences not only willingness to engage in or avoid a behaviour (Bandura, 1992), but also the effort an individual exerts (Zimmerman et al., 1992), and the persistence displayed when faced with difficulties (Bandura, 1986). For instance, Gilson and Curnock (2012) found self-efficacy was related to the amount of effort that athletes exerted during strength training. Self-efficacy can also influence physiological and psychological outcomes, such as enhancing muscular endurance performance (Gould & Weiss, 1981), logical reasoning (Dupret, 2016), heart rate and VO_2 max (McAuley & Mikhalko, 1998), goal setting and motivation (Lola & Tzetzis, 2020), objective and subjective performance (García-Naveira, 2018), and specific skill development (Sivrikaya, 2018). Further, self-efficacy and sports performance are positively correlated (e.g., Bandura, 1977; Bandura, 1986; Feltz et al., 2008; Moritz et al., 2000; Samson & Solmon, 2011; Weinberg et al., 1981). Moreover, self-efficacy has not only been categorised as a determinant of performance, but also a consequence (McAuley et al., 2013). This is similar to the proposed '*positive cycle*' that may be initiated by pre-game speeches, as high self-efficacy can positively influence performance, thus providing mastery experiences, which can further enhance self-efficacy and thereby create a cyclical pattern (Feltz et al., 2008).

Collective efficacy

Closely linked to the theoretical underpinnings of self-efficacy, Bandura (1997) proposed that collective efficacy, a team's collective perception that together they can successfully accomplish a goal (Lindsley et al., 1995), has the same main sources of information: performance accomplishments, vicarious experiences, verbal persuasion, and physiological states. Feltz and Chase (1998) also added motivational climate and group cohesion as sources of collective efficacy within sports. These sources of collective efficacy beliefs may be applicable in pre-game speeches, as coaches may reference past performances, use verbal persuasion to convey emotional or informational messages regarding their athlete's preparation and ability to win, and display positive feedback behaviours, and video analysis may be a source of vicarious experiences (Hays et al., 2007). A positive motivational climate may be developed and reinforced by coaches using motivational slogans, setting team goals, referencing team values, and creating a team culture that values positive motivational expressions prior to the game (Ames, 1992; Olympiou et al., 2008). Although the various strategies outlined above may be employed to deliver sources of collective efficacy information, research is needed to empirically examine the use and impact of each strategy within pre-game speeches.

One pre-game speech study has examined team efficacy and found that emotionally persuasive speeches delivered by the head coach led to the highest reported collective efficacy beliefs in both male and female athletes, compared to those who received informational speeches or control speeches (Vargas-Tonsing & Bartholomew, 2006). Further, the coach has been found to be the main contributor to collective efficacy (Kavussanu et al., 2008), and Hampson and Jowett (2014) found that athletes' perception of the coach-athlete relationship could predict their collective efficacy. Additionally, Price and Weiss (2013) found that coach leadership was more

influential than peer leadership when predicting collective efficacy, although team member prosocial and antisocial behaviours towards teammate norms may influence collective efficacy as well (Leo et al., 2015; Pizzi & Stanger, 2020). More generally, when examining athletes' perceptions of behaviours and events during volleyball games, Fransen et al. (2012) found that supportive communication, coach interventions, and positive emotional displays by players acted as sources of collective efficacy, with 'discouraging' body language detrimental to collective efficacy.

Like self-efficacy, collective efficacy can influence the amount of effort an individual and/or team exerts and for how long they persist before quitting (Bandura, 1997). George and Feltz (1995) also found that high collective efficacy groups tend to outperform low collective efficacy groups. Additionally, research has found a positive relationship between collective efficacy and performance throughout multiple team sports (e.g., elite football, Leo et al., 2022; collegiate American football, Myers et al., 2004; women's ice hockey, Myers et al., 2004b; professional volleyball, Ramzaninezhad et al., 2009).

Team Cohesion

Team cohesion was defined by Carron et al. (1998) as "a dynamic process that is reflected in the tendency of a group to stick together and remain united in the pursuit of its' instrumental objectives and/or for the satisfaction of member affective needs" (p. 213). Chelladurai (1990) argued that coaches' behaviours may influence the level of cohesion within a team, and a recent scoping review of 82 studies examining coach influence on team dynamics, revealed that 67% of the studies focused on how coach leadership impacted team cohesion (Hague et al., 2021). For instance, athletes reported that coach leadership styles that were autocratic, democratic, instructional, and socially supportive were positive aspects and indicators

of team cohesion with collegiate athletes (Mohamed et al., 2018), and Kim et al. (2021) found that collegiate soccer players reported authentic leadership as having a significant positive relationship with group cohesion.

Weiss and colleagues (2021) also found that coach motivational climate was associated with team cohesion, and recommended coaching strategies such as praising effort, eliminating negative wording, defining each athlete's role, providing autonomy, highlighting teammate recognition, and promoting servant leadership to foster a task-involving climate. Furthermore, positive feedback behaviours have been linked to higher levels of team cohesion (Yusof & Vasutheran, 2007), as has instructional feedback (Turman, 2003), and clearly communicated athletes' roles (Høigaard et al., 2006). An examination of how coaches can meet their athletes' basic psychological needs of autonomy, competence, and relatedness, produced the Basic Needs Coaching Paradigm (BNCP), which provided recommendations to coaches looking to build team cohesion (Hook & Newland, 2018). Recommended coaching behaviours included motivational speeches to aid task cohesion by promoting aspects of unity, teamwork, and family. Further, allowing teammates to discuss tactics, motivate each other, or come together in group huddles may encourage group cohesion (Ryskka et al., 1999).

Team cohesion has been found to influence numerous physical and psychological outcomes, including team performance and team relationships (e.g., Black et al., 2018; Carron et al., 2007; Evans & Dion, 2012; Eys & Kim, 2017; Hoath, 2012; Karreman, 2010; Park et al., 2021). Greater cohesion within teams has also been linked to reduced anxiety (Eys et al, 2003; Oh & Gill, 2017) and athletes' ability to cope with anxiety (Teymori et al., 2014). Further, greater team cohesion has been linked with more favourable player mood, which then impacted individual and group performance (Lowther & Lane, 2002). In contrast, poor team cohesion can

be a source of stress for individual athletes (Mellalieu et al, 2009). Regarding team cohesion's relationship with collective efficacy, interventions implemented to increase team cohesion were also found to enhance collective efficacy (Mach et al., 2010), and high collective efficacy and team cohesion are valuable tools for promoting positive performance in sports teams (Heuze et al., 2006; Ramzaninezhad et al., 2009; Spink, 1990). Research might, therefore, examine whether strategies are used within pre-game speeches to boost feelings of team cohesion, and in turn collective efficacy and performance.

Coach-Athlete Relationship (C-A-R)

Coaches have a large amount of influence and responsibility for their athletes and teams (Cushion, 2010; Johnson et al., 2011), and the role they play in preparing athletes to overcome mental and physical obstacles during competition is vital to success (Lyle, 2002; Mallett, 2010). Indeed, a healthy and positive coach-athlete-relationship (C-A-R) often provides a foundation for success (Isoard-Gautheur et al., 2016; Petho, 2017). This dyadic relationship between a coach and their athletes is considered a social situation that is continually forged throughout their interactions (Jowett & Shanmugam, 2016), and communication is an effective strategy for creating and maintaining quality relationships (Gilbert, 2017). However, the C-A-R is dynamic, interpersonal, and different for every partnership (Duchesne et al., 2011). Jowett and Ntoumanis (2004) defined the C-A-R as "the situation in which coaches' and athletes' emotions, thoughts, and behaviours are mutually and causally inter-connected." (p. 245). In addition, Moradi (2004) argued that athletes' performance, motivation, and satisfaction are interlaced with that of their coach, so cultivating a positive and healthy relationship can be rewarding.

Jowett and Shanmugam (2016) provided the 3+1Cs coach-athlete relationship model, which includes the aspects of closeness (e.g., interpersonal feelings), commitment (e.g.,

interpersonal thoughts), complementarity (e.g., interpersonal behaviours), and co-orientation (e.g., interdependence). The COMPASS model presents communication strategies that can be used to support the closeness, commitment, and complementary aspects of the C-A-R (Rhind & Jowett, 2010; Rhind et al., 2012), including conflict management, openness, motivation, assurance, preventative, support, and social networks. Further, Davis et al. (2019) found that support and motivation strategies had significant effects on the quality of the C-A-R and athletes' sport satisfaction.

Within the C-A-R, congruency between what is being communicated and how it is being perceived may provide valuable insight into the effectiveness of pre-game speeches. There can, at times, be a lack of congruency between what coaches believe they are portraying (stating and displaying) and athletes' perceptions (VanSickle et al., 2010). A cause of lack of congruency may revolve around conflict that occurs due to a breakdown in communication, and this may subsequently impact on the C-A-R (Mellalieu et al., 2013; Wachsmuth et al., 2017). However, conflicts between coaches and athletes do not always necessarily have to lead to negative responses, as certain conflicts have been found to assist in skill development and personal growth (Tamminen et al., 2013). Coaches may enhance congruency through compatibility, as athletes who feel compatible with their coaches are more likely to evaluate their coach's communication in a positive way (Kenow & Williams, 1999).

A positive C-A-R can improve athletes' satisfaction (Davis et al., 2019), motivation (McGee & DeFreese, 2019), mental health outcomes (Powers et al., 2020), perceived coach-autonomy support (Cho & Baek, 2020), performance (Côtè & Gilbert, 2009; Jowett et al., 2010), and reduce anxiety (Kamis et al., 2021). Quality relationships between coaches and their athletes are also vital to effective and successful leadership (Hampson & Jowett, 2014; Schruijer &

Vansina, 2002). Further, the 3+1Cs model has been positively related to perceptions of performance (Jowett & Don Carolis, 2003), team cohesion (Jowett & Chaundry, 2004), and motivation (Olympiou et al., 2008). Research has not, however, examined whether the C-A-R influences the effectiveness of pre-game speeches.

Leadership

Although there are a positive number of leadership theories, including authentic, spiritual, and servant leadership (Mills et al., 2013), transformational leadership theory (TFL; Bass, 1999) is currently the only leadership theory to have been applied to the examination of pre-game speech delivery (Macquet & Stanton, 2021). Within TFL, coach behaviours are those that empower, inspire, and challenge athletes to reach optimal performance, and encompass appropriate role modelling, fostering group goals and teamwork, intellectual stimulation, inspirational motivation, high performance expectations, and individualised consideration (Bass & Riggio, 2006; Callow et al., 2009). When examining these transformational leadership behaviours during pre-game speeches, Macquet and Stanton (2021) found that coaches displayed all six dimensions, but that fostering group goals and teamwork were the most frequently exhibited. Additionally, behaviours were used to create a game plan and show team leadership ability through a range of content strategies (e.g., managing athletes' stress, providing motivation, encouraging athletes to analyse opponents and develop a game plan, giving players roles). However, the study did not assess athletes' perceptions of coach the behaviours nor the impact on objective outcomes. The inclusion of athletes' perceptions of coach behaviours could be an important future direction, as coaches and athletes may perceive coaching strategies differently (d'Arripe-Longueville et al., 1998), and athletes within a team may also have different perceptions of coach behaviours (Smith et al., 2009).

The type of leadership and coaching style adopted by a coach can influence a range of outcomes, including athletes' preparation and performance (Côtè & Sedgwick, 2003). Recent research has found that athletes perceive the transformational leadership behaviours of individualised consideration, appropriate role modelling and fostering group goals and teamwork to be positively related to the quality of the C-A-R (López de Subijana et al., 2021). Further, transformational leadership has been found to influence performance (Charbonneau et al., 2001), collective efficacy (Price & Weiss, 2013), effort (Arthur et al., 2011), behaviour (Tucker et al., 2010), motivation (Arthur et al., 2011), and development (Vella et al., 2013).

Emotion

Within sport, a wide range of emotions may occur prior to and throughout a competition based on the various stimuli and interactions an athlete encounter, both internally and externally (Nicholls et al., 2014). For example, athletes may experience hope (Yang et al., 2020), excitement (Fuss et al., 2010), fear or anxiety (Correia & Rosado, 2018) before a competition. According to cognitive-motivational-relational theory (CMRT; Lazarus, 1991, 1999), athletes cognitively appraise the significance of situations for their personal well-being and their ability to cope with the demands. The appraisal process shapes the emotional response to the situation (Siemer et al., 2007). One appraisal approach is The Theory of Challenge and Threat States in Athletes (TCTSA; Jones et al., 2009). If an athlete perceives that they have the resources to meet the demands of the situation, they experience a challenge state. If an athlete perceives that they do not have the resources to meet the demands of the situation, they experience a threat state. Challenge appraisals can lead to more functional emotions (e.g., happiness and hope; Smith & Ellsworth, 1985, 1987), whereas threat appraisals can lead to less functional emotions (e.g., anxiety and dejection; Skinner & Brewer, 2002) and avoidance coping (e.g., disengagement and

avoidance; Dias et al., 2012). Furthermore, how athletes interpret their emotions (facilitative or debilitative) plays a role in the appraisal process, and this interpretation of emotions can direct behaviour (Lazarus, 1999, 2000).

Although a different '*game-day'* interaction, Evans et al. (2018) examined the effects of rational (e.g., strong preferences, anti-awfulizing, acceptance, high frustration tolerance) or irrational (e.g., demandingness, awfulizing, low frustration tolerance, and depreciation) half-time talks on collegiate aged football players and found that rational talks significantly lowered threat appraisal compared to athletes that received an irrational talk. This study indicates that the messages coaches deliver during '*game-day'* interactions may alter athletes' appraisal of situations they face, and that coaches can use language that encourages challenge appraisals (Cerin, 2003). Regarding pre-game speeches, coaches could emphasise opportunities for gain and their athletes' ability to manage situational demands.

Along with '*what'* coaches say during pre-game speeches, '*how'* they deliver speeches may also have an effect on athlete emotion. Breakey et al. (2009) found that athletes perceived their coach's display of genuine emotion to be a positive aspect of '*game-day*' speeches, and that interpretations of genuineness were influenced by the coach's tone of voice. Bock (1987) also found that affect arousing words from coaches were more often retained and recalled than words that were not emotional. Even though athletes have reported liking emotion and a desire for more emotion from their coaches (Vargas & Short, 2011), these findings contradict recommendations in some coaching literature for less emotion during '*game-day'* interactions (e.g., Bloom et al., 1997; Martens, 1987).

Emotions are increasingly being viewed as interpersonal (e.g., Friesen et al., 2013; Niven et al, 2009; Tamminen & Bennett, 2017; Van Kleef, 2009), and theories of emotional contagion

(Hatfield et al., 1994) and emotions as social information model (EASI; Van Kleef, 2009) may help us understand how the emotions of one individual can influence another person. Emotional contagion is "a tendency to automatically mimic and synchronise expressions, vocalisations, postures, and movements with those of another person's and, consequently, to converge emotionally" (Hatfield et al, 1994, p. 5). Athletes can be influenced by the emotional disposition of both a coach (Hatfield et al., 1994; Sy et al., 2005) or a teammate (e.g., Fransen et al., 2014; Tamminen et al., 2021; Totterdell, 2000) prior to a game. Further, recent research has found that female athletes may be more susceptible to emotional contagion (Cotterill et al., 2020). Similarly, female ice hockey players reported that their emotions often matched their coach's emotions during '*game-day'* speeches (Breakey et al., 2009), which could have positive or negative effect depending on the emotion displayed. EASI postulates that an individual's emotional expressions will provide information to others, possibly influencing their behaviours and affective and cognitive states (Van Kleef, 2009).

Emotional expressions can allow for social interactions to be synchronised (Keltner & Haidt, 1999) and for emotions to be inferred (Lange et al., 2022). Coaches have the ability to influence the emotions of athletes (Botterill & Brown, 2002) and provide athletes with reference points (Høigaard et al., 2015). When analysing a professional hockey coach throughout a season, Gallmeier (1987) found that the coach attempted to purposefully control and manipulate athletes' emotions. When delivering content during pre-game speeches, coaches should be aware of their emotional expressions, as athletes may derive information or receive a transfer of emotions during this time (Breakey et al., 2009). Recent research has found that emotions can be inferred from various verbal and non-verbal expressions (Lange et al., 2022) and that coaches intentionally use non-verbal displays to influence athletes (Friesen et al., 2020). More

specifically, Van Kleef and colleagues (2019) found that coaches' emotional displays of happiness and anger were linked to their players' experiences of those two emotions, and happiness predicted team performance at the start of the game. Emotions can also transfer amongst teammates (Tamminen & Crocker, 2013; Tamminen et al., 2021; Wolf et al., 2018), as Wolf et al. (2018) found that communication between teammates was a primary source of influence on pre-competitive psychological states (e.g., emotions and motivations), with genuine and supportive communication being perceived as beneficial. Additionally, Tamminen and Cook (2013) reported that athletes are aware of how their emotions could influence their teammates, and that some athletes engage in a form of self-censorship to regulate their emotions and limit potential negative emotional transfer. Therefore, coaches may wish to cultivate a positive environment within the team to limit the potential transfer of negative emotions and promote the transfer of positive emotions prior to a competition.

Pre-game speech researchers have argued that coaches should be aware of the emotional demands of their sport (Gonzalez et al., 2011) to facilitate athletes' experiencing favourable emotions (Vargas-Tonsing & Bartholomew, 2006). Athletes can require optimal levels of emotion for peak performance (Hanin, 2007), and so it may be important to assess individual athletes' emotional needs for optimal performance and consider if the pre-game speech can facilitate those needs and aid performance. For instance, Lane and colleagues (2010) reported that emotions of vigour, happiness, and calmness were associated with optimal performance, while anger, confusion, depression, and tension were associated to dysfunctional performance. Further research is needed, however, to understand the role of emotions in pre-game speeches and the subsequent impact on performance.

Motivation

It is beyond the scope of this review to examine all motivational theories, but Self-Determination Theory (SDT; Ryan & Deci, 2017) may help in the understanding of certain psychological needs that may be met during pre-game speeches. SDT addresses motivation through a number of 'mini theories' (Standage et al., 2019; Standage & Ryan, 2020). Basic Psychological Needs Theory (BPNT; Ryan & Deci, 2000) proposes that all humans have needs for autonomy, competence, and relatedness, and that when those needs are met, individuals experience increased intrinsic motivation and well-being. When not met, individuals may experience reduced engagement and diminished development (Ryan & Deci, 2017). Within sport, when an athletes' basic psychological needs are met, they can experience autonomous motivation (Sylvester et al., 2018), positive affect (Mack et al., 2011), increased confidence (Ryan & Deci, 2000), concentration (Deci et al., 1994), and increased persistence and effort (Smith et al., 2011).

A coach's interpersonal style and non-verbal behaviours can contribute to the motivational climate experienced by athletes (Buning & Thompson, 2015; Van Puyenbroeck et al., 2018). For example, an autonomy-supportive coach can enhance an athletes' autonomy and motivation (Amorose & Anderson-Butcher, 2007). Specific coaching behaviours that cultivate an autonomy-supportive climate, include providing choices and rationale to athletes, acknowledging feelings, providing opportunities for athletes to take initiative, and providing feedback that is 'non-controlling' (Mageau & Vallerand, 2003). A competence-supportive coach provides clear instructions and belief in their athletes (Mageau & Vallerand, 2003). Coaches' whose style includes critical feedback, and a distant relationship may not meet their athletes' needs of competence and relatedness (Bartholomew et al., 2011). Autonomy-supportive coaching training could help coaches become aware of their behaviours, and lead to numerous benefits including

increased use of autonomy-supportive coaching, improved athlete performance (Cheon et al., 2015), lower athlete burnout (Langan et al., 2015), and improved athlete motivation (Reynders et al., 2019). Reynders and colleagues (2019) developed a need-supportive training intervention (called 'M-factor') consisting of an initiation session that explored tenets of SDT, followed by practical workshops that explored motivating styles during training and competitions, such as promoting dialogue and clarifying expectations. Coaches who participated in the intervention reported positive effects on autonomy support and control, and their athletes reported perceiving their coach as autonomy-supportive and 'less chaotic', and they themselves experienced increases in autonomous motivation and engagement.

Social Support. Social support has been recognised as an important factor in sport and linked to a range of psychological and performance outcomes (for detailed reviews, see Freeman, 2020; Sheridan et al., 2014). Social support are the social resources that individuals perceive or receive from other individuals (Cohen et al., 2000). More specifically, social support comprises structural and functional aspects, with most of the research in sport focused on the latter. Functional aspects of support include aspects such as quality of support, affective support, instrumental support, and confidant support (Martins et al., 2022). In interviews with high-level athletes, Rees and Hardy (2000) identified four dimensions of support: emotional support (e.g., provision of comfort and security), esteem support (e.g., bolstering one's sense of competence), informational support (e.g., advice and guidance), and tangible support (e.g., practical and instrumental assistance).

These functional aspects of support and dimensions within them have been assessed as perceived support (the perception of support as available if needed) and received support (actual exchange of support) (Freeman et al., 2011, 2014; Gottlieb & Bergen, 2010). Perceived support

has been linked with numerous beneficial outcomes, such as increased performance (Freeman & Rees, 2008; Sarkar & Fletcher, 2014), skill development (Rees et al, 2016), confidence (Freeman & Rees, 2010), motivation (DeFreese & Smith, 2013), and flow states (Bakker et al., 2011). Perceived support may also help limit stress (stress prevention model; Barrera, 1986) or contribute to more favourable cognitive appraisals (Freeman & Rees, 2009). It is important that coaches, therefore, cultivate strong perceptions of support within teams.

In contrast to the consistent, positive effects of perceived support, evidence for the effects of received support are more mixed. This may be because of provider, recipient, and contextual factors. For instance, the provider's knowledge, expertise, and experience may play a role in its impact (Haslam et al., 2012). Furthermore, the recipient's demographics (e.g., age, gender), or how much support they wanted, could also influence the effectiveness of received support (Joseph et al., 2016; Bar-Kalifa & Rafaeli, 2013). Fu et al. (2021) examined the support adequacy model on a golf-putting task and found that participants who did not receive the amount of support they wanted (too little or too much) experienced lower self-confidence and performance compared to those who received adequate support (wanted = received support). Further, the optimal matching model (Cutrona and Russell, 1990) proposes that specific dimensions of support should be matched to the elicited needs of stressful situations. Specifically, informational support may be particularly beneficial in controllable situations, whereas emotional support may be more beneficial in uncontrollable situations. This may help understanding of athletes' preferences for pre-game speech content in different scenarios. (cf. Vargas-Tonsing & Guan, 2007). Finally, the effectiveness of support may also depend on when and how it is communicated. When examining esteem and informational support, Moll et al. (2017) found that esteem support was more effective when direct and visible, whereas

informational support was most effective when indirect and invisible. Implications for pre-game speeches are that the effectiveness of supportive messages may depend on who provides them, the extent to which the team wants them, how they meet the needs of the situation, and how the messages are communicated.

Conclusion

This narrative review has demonstrated that coaches communicate with their athlete(s) at many different time points before, during, and after a competition. Pre-game speeches are one type of communicative interactions and may influence psychological, physiological, and performance outcomes. Although research that has explicitly examined pre-game speeches is emerging, further research is needed to develop a better understanding of the use, content, and effect of this phenomenon. This thesis will address these potential gaps, build on existing evidence in communication and pre-game speech research, and draw on a range of concepts and theories.

Gaps in Literature

Previous research has typically focused on informational or emotional content (e.g., Vargas-Tonsing, 2009; Vargas-Tonsing & Bartholomew, 2006; Vargas-Tonsing & Guan, 2007; Vargas & Short, 2011), but recent studies have highlighted motivational aspects (Savović et al., 2018), inspirational aspects (Gonzalez et al., 2011; Smith et al., 2018), and transformational leadership behaviours (Macquet & Stanton, 2021) as content that may also be used in pre-game speeches. As such, a more detailed understanding is needed into the breadth of specific content delivered by coaches, including '*what*', '*how',* and '*why'*. Further, many studies have focused on only one pre-game speech, such as pre-game speeches delivered before championship games (Hettinger, 2010; Savović et al., 2018), but coaches' behaviours and pre-game speech delivery

may vary across a season (Delrue et al., 2017). Therefore, it is important to better understand this variation and reasons for it across longer time frames. Pre-game speech research has also provided insight into athlete and coach preferences and highlighted that these needs may not always align (Vargas-Tonsing & Guan, 2007). However, studies have typically used hypothetical game scenarios rather than focusing on natural game settings and favoured quantitative surveys. The use of qualitative methods will provide a richer, more in-depth understanding of pre-game speech experiences and perceptions of both coaches and players. Finally, pre-game speeches have been linked with beneficial effects on self-efficacy and team efficacy beliefs (Vargas-Tonsing, 2009; Vargas-Tonsing & Bartholomew, 2006), inspiration levels and emotional control (Gonzalez et al., 2011), motivation (Adegbesan, 2001), emotions (Van Kleef et al., 2019), and perceived performance (Savović et al., 2018; Vargas & Short, 2011). Research examining such effects in professional sport, however, is rare and no studies have examined the effects of pre-game speeches on objective measures of performance.

Implications for Thesis

To complement and extend the extant literature on pre-game speeches, the overall aim of this thesis was to explore pre-game speeches and their influences on psychological and performance outcomes in basketball. Specific objectives are to gain an understanding of the current use of pre-game speeches, investigate types of pre-game speech content utilised by current basketball coaches, examine professional basketball players' and coaches' experiences and perceptions of pre-game speeches, and to explore the effects of pre-game speeches on psychological and objective performance outcomes. To address the aims and objectives, five empirical studies were conducted and are reported in this thesis followed by a general discussion. Chapter 2 adopted a cross-sectional survey design to explore the use, content, and perceived

influence of pre-game speeches within basketball. Chapters 3 and 4 used qualitative methods to provide in-depth understanding of professional basketball athletes' and coaches' experiences and perceptions of pre-game speeches. Chapter 5 used a novel concept mapping approach to examine the specific strategies used during pre-game speeches by basketball coaches, how these converged within similar content clusters, and the perceived effect they have on collective efficacy and performance. Chapter 6 used a mixed-methods case study approach to examine the use, content, and effect of pre-games speeches in a professional basketball team throughout a season. Chapter 7 synthesises the main findings and reflects on the significance and implications of the research, limitations, and provides directions for future research. Table 1.1 lists the rationales and aims for each of the chapters.

Table 1.1

Chapter Rationales and Aims

Chapter	Rationale	Aim
2	Previous research has not examined PGS use in basketball and prior to conducting further research, it was important to establish their use and value in the sport.	To examine the use, content, and effect of PGS in basketball.
3	Past PGS research has typically used quantitative methods, and a more in-depth and detailed understanding of athletes' experiences and perceptions of PGS is needed.	To examine professional female basketball players' experiences and perceptions of PGS using a qualitative approach.
4	Past PGS research has primarily focused on athletes' perceptions and preferences. Limited research has explored head coaches' experiences and perceptions of PGS.	To examine professional head basketball coaches' experiences and perceptions of PGS using a qualitative approach.
5	Previous research has focused on informational and emotional dimensions of PGS, without exploring specific strategies within these and whether other dimensions exist.	To identify and classify the specific PGS strategies used in basketball and their perceived effect on collective-efficacy and team performance.
6	The previous chapter identified a variety of PGS strategies and dimensions that have not been examined before. Further, limited research has examined PGS across multiple games or their influence on objective performance outcomes.	To explore the use and effect of PGS strategies in professional basketball across a season.
7	It is important to convey the originality and significance of this PhD and its contribution to the evidence-base and practice	To critically synthesise the main findings, discuss their significance and implications and reflect on limitations and future research directions.

Chapter 2:

Basketball Players' Perceptions of the Use, Content, and Influence of Pre-Game Speeches

Abstract

On the day of a competition, coaches may utilise pre-game speeches to help optimise the final preparations of their athletes. Previous research has found that athletes perceive pre-game speeches to be influential on psychological and performance outcomes (e.g., Savović et al., 2018; Vargas-Tonsing & Bartholomew; Vargas & Short, 2011). Although research is emerging on this specific interaction, it is still limited. Therefore, the purpose of this study was to gain insight into the use, content, and impact of pre-game speeches in basketball. Participants were 227 basketball players (Females = 119, Males = 107, Not Reported = 1) across a range of competitive levels who completed a pre-game speech questionnaire that was designed for this study. Results indicate that within basketball, pre-game speeches are frequently utilised and delivered by basketball head coaches, using various types of content and delivery styles. The majority of basketball players perceived pre-game speeches to be enjoyable, useful, and influential on their personal and teams' confidence and performance, with perceptions of greater influence on team outcomes than personal outcomes. No significant differences were found between genders and competitive levels regarding pre-game speech use, type of content delivered, individual and team needs being met during pre-game speeches, and perceived enjoyment, usefulness, and influence of pre-game speeches. However, there was a difference found, between competitive levels, regarding supportive and calm delivery styles, with professional/international basketball players reporting higher use of supportive and calmer delivery styles than collegiate/university basketball players. The findings provide insight into the current use of pre-game speeches within basketball, basketball players' perceptions of this interaction, and future research directions to explore regarding this important sporting phenomenon.

Keywords: Game-day communication, coach communication, coaching

Introduction

In the lead up to a competition, coaches play a vital role preparing their athletes to perform at a high level (e.g., Bloom, 2014; Bloom et al., 1997; Côté & Sedgwick, 2003; Durand-Bush & Salmela, 2002; Eklund, 1996; Olusoga et al., 2012; Short & Short, 2005). This preparation can include technical and tactical information (e.g., Mesquita et al., 2008; Seifried, 2004), player and team performance feedback (e.g., Martens, 2004; McGregor & Winter, 2017), and mental preparation strategies (Gould et al., 1999). The way coaches use these preparation techniques can impact athletes in various ways, including the coach-athlete relationship (Kassing & Infante, 1999), self- and collective efficacy (Fransen et al., 2012; Vargas-Tonsing, 2009; Vargas-Tonsing & Bartholomew, 2006), perceived ability (Horn, 2008), motivation (e.g., Carpentier & Mageau, 2013; De Backer et al., 2015; Schunk, 1995; Smith et al., 2016), and performance expectations and experiences (Gould et al., 1999; Turman, 2001). Further, how coaches communicate these aspects of preparation can impact athletes' performance (Horn, 2008) and coaches should be aware that developing '*what'*, '*why'*, '*how'*, and to whom they communicate can influence how their communication is received (Cherubini, 2019; Hardy et al., 2005). Although past research has referenced the use of pre-game speeches across a number of sports, including soccer (Savović et al., 2018; Vargas-Tonsing, 2009, 2011), football (Gonzalez et al., 2011; Turman, 2005), ice hockey (Breakey et al., 2009; Gallmeier, 1987), baseball and softball (Van Kleef et al., 2019), basketball (Fletcher, 2006; Hettinger, 2010; Turman, 2007), Judo (Mesquita et al., 2008), handball (Broch, 2015), field hockey (Sacco, 2016), rugby (Light, 2000), and national level team sports (Macquet & Stanton, 2021), only a few have explicitly examined this '*game-day*' interaction.

Anecdotal examples often portray pre-game speeches as momentous, emotion inducing, performance enhancing monologues that propel athletes to perform beyond expectations. Indicating, an importance for awe-inspiring content and delivery, and arguably acting as the prevailing standard. Some examples are based on real pre-game speeches, for example the speech delivered by ice hockey coach Herb Brooks in the semi-final of the 1980 Olympics and played by Kurt Russell in the movie Miracle (O'Connor, 2004). Herb Brooks stood before the United States ice hockey team, made up of university students and recent graduates, before they played the Soviet Union, the world number one made up of experienced international players. In his speech, he implored his players to take notice of the journey they had been on to reach this game, which included playing the Soviet Union in an exhibition game and losing 10-3. Coach Brooks did not shy away from the challenge ahead, however, and instead insisted that it was their time to be victorious, saying,

> "if we played'em ten times, they might win nine. But not this game. Not tonight. Tonight, we skate with them. Tonight, we stay with them. And we shut them down because we can! Tonight, WE are the greatest hockey team in the world…this is your time. Their time is done. It's over. This is your time!"

And their time was indeed done, as the United States went on to win 4-3, move on to the final and secure gold.

Past general coaching literature has typically provided the antithesis to anecdotal evidence (e.g., Salmela, 1995; Thompson, 1995). Bloom et al. (1997) examined pre- and post-competition routines of expert coaches of team sports and found coaches utilised pre-game speeches, perceived them to be an important strategy, and favoured calm and direct communication, with emotional/inspirational content occurring occasionally. Pre-game speeches

were described as an "even-tempered approach in their final address before the game, recapitulating three or four of the most important points stressed in the previous week's preparation" (p. 139). Additionally, Martens (2004) cautioned against pre-game speeches that are delivered as "oratorical firestorm" (p. 136) to limit potential disruption to athletes' optimal performance states. These descriptions of pre-game speeches favour informational, reflective content that is delivered in a calm manner, a stark contrast to anecdotal evidence and other researchers who have reported that coaches' messages are effective when they can inspire (Hardy et al., 2005) and that emotion is necessary to excite players into a state of optimal performance during other '*game-day*' interactions (e.g., half-time talks, Kuchenbecker, 2003).

Despite these two contradicting perspectives, pre-game speech literature aimed at understanding broader factors around their use, content, and delivery (e.g., '*what'* is said, '*why'*, '*how'*, and '*when*') is relatively limited, with focus more on examining effect. Vargas-Tonsing has significantly contributed to pre-game speech literature, finding that pre-game speeches can impact athletes' self-efficacy and emotions (2009), collective efficacy (2006), and that athletes enjoy the pre-game speech and feel it influences their performance (2011). Other research has found that pre-game speeches can influence inspiration and emotional control (Gonzalez et al., 2011), motivation (Adegbesan, 2001), mental preparation and performance (Fletcher, 2006), and typically contains aspects that athletes find positive or negative (Breakey et al., 2009). Further, Vargas-Tonsing & Guan (2007) found that athletes have preferences for the types of pre-game speech content they receive based on game scenario. For instance, athletes reported wanting more informational content when facing a new opponent, an opponent that had previously beaten them in a close game, and before a championship game. Athletes reported wanting more emotional content when facing an opponent with a higher rank, when they were considered an

'underdog', and before a championship game. Additionally, when coaches were presented with the same game scenarios, discrepancies emerged. For example, athletes reported higher emotional content needs than coaches on four game scenarios: playing a team for the second time after beating them by a large and small margin previously, a championship game, and an important tournament. These findings, highlight that both parties involved with pre-game speeches may have different needs and perceptions. The literature discussed above focused on a range of sports and competitive levels. To our knowledge, only three studies have examined pre-game speeches within basketball (Fletcher, 2006; Hettinger, 2010; Turman, 2007), and all only assessed the delivery of pre-game speeches prior to one game and with their main aim not explicitly directed at pre-game speeches. Fletcher (2006) aimed to better understand all coach-athlete interactions prior to a basketball game by investigating four coach-athlete dyads, assessing coaches' actions in the lead up to the game, prior training and the warm-up, athletes' perceptions of their coach prior to the game, and coaches' explanation and reflection on their pre-game actions and communication with athletes. Hettinger (2010) utilised video of three collegiate coaches, two of which were basketball coaches, delivering speeches prior to a championship game to better understand pre-game rhetoric and results indicated that there are six common features of the coaches' pre-game speeches: visual aids, sport-specific jargon, associative language, anticipation, ideographs, and narratives. Turman (2007) examined all '*game-day*' interactions (i.e., pre-game speech, half-time, debrief) for the presence of regret messages and found that individual performance and social significance regret were used most often during pre-game speeches. Although these studies and pre-game speech literature more generally provide important insight, it is imperative to develop a more detailed understanding of

the current use, content, and impact of pre-game speeches to inform theory and coaching practice.

Therefore, the overall purpose of this study was to explore the role of pre-game speeches in basketball and to help inform future research directions for this PhD. Specific aims included: (1) gain insight into the current use of pre-game speeches in basketball, (2) further understand the content used during pre-game speeches, (3) examine athletes' perceptions of the influence of pre-game speeches on both personal and team confidence and performance. Based on previous literature referencing the use of pre-game speeches in basketball and team sports, it was hypothesised that pre-game speeches would be commonly used in basketball and that basketball players would report pre-game speeches as influential on personal and team confidence and performance. It was also hypothesised that use would be similar across all competitive levels and genders, but content and perceptions of pre-game speeches may differ due to the athletes' experience levels and gender, as past research has reported factors such as gender (Vargas-Tonsing & Guan, 2007) could moderate pre-game speech preferences.

Methods

Participants

Due to the aims of the study, key inclusion criteria were that participants had to be currently competing in basketball and be at least 18 years old. The sample comprised of 227 (Female = 119, Male = 107, Not Reported = 1) basketball players, with a mean age of 22.9 (*SD* = 5.0) years. Many of the athletes were either British (*n* = 101) or American (*n* = 71), with most currently competing in England (*n* = 138) and America (*n* = 63). Participants' current competitive level varied, with the majority playing at the collegiate/university level (*n* = 86), national league/professional level (*n* = 104), and international level (*n* = 26).

Measures

Participants completed a questionnaire developed for this study that comprised demographic information and questions pertaining to pre-game speeches. Demographic information collected included: age, gender, nationality, competitive level, geographical location, and playing position. Pre-game speech questions included 19-items which examined pre-game speech use, delivery, timing, duration, content, and personal perceptions of pre-game speech influence on personal and team confidence and performance (Appendix B). Pre-game speech questions used three different response scales. Questions focused on use, deliverer (Head Coach, Assistant Coach, Captain, Other), content (Motivational, Inspirational, Informational), delivery (Supportive, Calm, Aggressive), delivery recipients (Individual, team, small group), and meeting individual and team needs used a sliding scale of 0-100. Questions focused on pre-game speech timing (How long prior to game and for how long) used pre-filled time options (Less than 15 minutes, 15-29 minutes, 30-59 minutes, 1-2 hours, more than 2 hours / Less than 5 minutes, 5-14 minutes, 15-30 minutes, more than 30 minutes). Questions focused on enjoyment, usefulness, and impact of pre-game speeches on self- and team-confidence and performance used a five-point Likert scale (1 = Not at all, 2 = Slightly, 3 = Moderately, 4 = Very Much, 5 = Extremely). Content and delivery styles were identified throughout previous pre-game speech and coach literature as potentially being common practice (e.g., support, Fletcher, 2006; calm, Breakey et al., 2009; aggressive, Van Kleef et al., 2019; motivational, Savović et al., 2018; Vargas-Tonsing & Guan, 2007; inspirational, Gonzalez et al., 2011; Smith et al., 2018; and informational, Mesquita et al., 2008; Vargas-Tonsing, 2009; Vargas-Tonsing & Bartholomew, 2006; Vargas-Tonsing & Guan, 2007). Participants were asked to complete all questions based on the pre-game speeches being delivered in their current basketball season.

Procedure

A university ethics committee approved the study prior to data collection. Initially, a pilot study was conducted with two male and two female basketball players to assess if the questions were appropriate and easy to understand (Van Teijlingen & Hundley, 2001). These athletes completed the survey alone and were then invited to provide feedback and comments. This led to minor amendments to some items to improve clarity and comprehension. Participants, in the main study, were recruited to participate via in-person at basketball games and via social media. Handouts were given to participants by the researcher at basketball events throughout the 2017-2019 season, and each handout included a participant information sheet, informed consent form, the questionnaire, and a study debrief. On social media, brief information about the study was given with a web link to the on-line survey (Qualtrics, Provo, UT), which contained the above elements.

Confidentiality and anonymity were assured, and data were anonymised-at-source with no names or IP addresses (on-line version) recorded. Handouts were returned to the researcher privately. Participants were able to withdraw their data at any point throughout the data collection phase by contacting the lead researcher with their memorable word (recorded at the end of the questionnaire), but no participants did and therefore all data were included in analysis.

Data Analysis

An exploratory position was applied with an initial focus on descriptive analyses. Within cross-sectional studies, a descriptive approach can offer important insight into the prevalence and trends within the data (Alexander et al., 2014), such as the use, duration, and content of pre-game speech data. Exploratory inferential analyses, including a series of two-way between-subject ANOVAs and multivariate MANOVAs, were conducted to examine whether there were

differences in the outcome variables across gender and competitive level (university/college vs. professional/international). Prior to running the main analyses, preliminary checks on the data were conducted to assess missing values, outliers, and distributions. Outliers were retained, as it was assumed it represented true participant responses (Hair et al., 1998). Where data did not meet the assumption of normality, indicated by a significant Shapiro-Wilks' test, bias-corrected bootstrapping was used to create 95% confidence intervals. Bootstrapping is a robust method which is less dependent on normal and symmetrical sampling distributions, thus providing advantages over traditional parametric approaches (Mooney et al., 1993). All data analyses were completed using IBM SPSS Statistics 27.0 for Mac.

Results

Pre-game Speech Delivery

Participants reported that pre-game speeches are conducted most of the time within basketball (M = 88.0%, SD = 21.8). A two-way ANOVA found that there was no statistically significant difference in pre-game speech use between male and female players, F(1,203) = 1.73, p = .19, η_p^2 = .01, $mean_{diff}$ = -4.31, 95% CIs [-12.24, 2.95]. There was also no statistically significant difference in pre-game speech use between university/collegiate level players and professional/international level players, F(1,203) = 1.38, p = .24, η_p^2 = .01, $mean_{diff}$ = 3.85, 95% CIs [-11.66, 3.03]. There was no statistically significant interaction effect on competitive level and gender on reported pre-game speech use, F(1,203) = 1.07, p = .30, η_p^2 = .01.

The head coach was the main deliverer of pre-game speeches (M = 74.2%, SD = 20.6), with the captain of the team (M = 11.7%, SD = 14.0) and the assistant coach of the team (M = 9.8%, SD = 11.8) also making contributions. Pre-game speeches are mostly delivered to the team as a whole (M = 87.6%, SD = 20.4), as opposed to individual players (M = 9.7%, SD = 17.5) or

smaller groups within the team (*M* = 2.8%, *SD* = 7.6). Pre-game speeches were mostly conducted 30-59 minutes prior to the start of competition (40.1%), with 28.2% of participants reporting that they occurred 15-29 minutes prior to competition, and 25.1% less than 15 minutes prior to the start of competition. The majority of participants reported that pre-game speeches were between 5-14 minutes (58.1%) or less than 5 minutes (36.1%) in duration.

Pre-Game Speech Content

To gain insight into the content and delivery of pre-game speeches, participants were asked to rate how often certain types of content were delivered (Motivational, Inspirational, Informational) and how the pre-game speech was delivered (Supportive, Calm, Aggressive). Descriptive statistics are shown in Table 2.1 and Table 2.2. Two-way MANOVA were run with competitive level and gender as independent variables, with content type and delivery style variables entered as dependent variables in turn. For content type, there was no main effect for gender, $F(3, 176) = 1.66$, $p = .18$; Wilks' $\Lambda = .97$, no main effect for competitive level, $F(3, 176) = 2.60$, $p = .05$; Wilks' $\Lambda = .96$, and no significant interaction effect between competitive level and gender, $F(3, 176) = 1.68$, $p = .17$; Wilks' $\Lambda = .97$.

For delivery style, there was no main effect for gender, $F(3, 158)$, 1.92, $p = .13$; Wilks' $\Lambda = .97$, and no significant interaction effect between competitive level and gender, $F(3, 158) = 1.24$, $p = .29$, Wilks' $\Lambda = .98$. However, there was a significant effect for competitive level, $F(3, 158) = 6.06$, $p < .001$; Wilks' $\Lambda = .89$. Univariate analysis found that there was a significant difference found for calm delivery between university/collegiate and professional/international level players, $F(1, 186) = 15.83$, $p < .001$, $\eta_p^2 = .08$, and a significant difference found for supportive delivery between university/collegiate and professional/international level players,

F(1, 199) = 4.91, p = .03, η_p^2 = .02, with professional/international players reporting higher supportive and calm delivery styles during pre-game speeches than university/collegiate players.

Table 2.1

Descriptive Statistics of Reported Pre-Game Speech Content

Content Type	N	M (SD)
Motivational	212	62.3 (28.2)
Inspirational	195	46.5 (30.9)
Informational	209	67.0 (30.9)

Table 2.2

Descriptive Statistics of Reported Pre-Game Speech Delivery Style

Delivery Style	N	M (SD)
Supportive	214	66.8 (28.1)
Calm	199	55.8 (29.6)
Aggressive	183	27.8 (24.2)

Pre-game Speech Perceptions

Participants felt pre-game speeches met their individual needs just over half of the time (*M* = 58.3, *SD* = 26.4). This was slightly lower than their reported belief that pre-game speeches met their team's needs (*M* = 68.2, *SD* = 25.8). A two-way ANOVA on whether individual needs were met found that there was no statistically significant difference between male and female players, F(1, 180) = .48, p = .49, η_p^2 = .003, $mean_{diff}$ = -3.06, 95% CIs [-11.76, 5.63], nor

between university/collegiate and professional/international level players, F(1, 180) = 2.26, p = .14, η_p^2 = .01, $mean_{diff}$ = -6.62, 95% CIs [-15.31, 2.08], and no significant interaction effect, F(1, 180) = .50, p = .48, η_p^2 = .003. A two-way ANOVA on whether team needs were met found that there was no statistically significant difference between male and female players, F(1, 180) = .65, p = .42, η_p^2 = .004, $mean_{diff}$ = -3.47, 95% CIs [-11.97, 5.03], nor between university/collegiate and professional/international level players, F(1,180) = 1.32, p = .25, η_p^2 = .007, $mean_{diff}$ = -4.94, 95% CIs [-13.44, 3.56], and no significant interaction effect, F(1, 180) = .29, p = .59, η_p^2 = .002.

Athletes were also asked to report their personal enjoyment and perceived usefulness of pre-game speeches on a 5-point Likert scale. 41% of participants stated that they 'moderately' enjoy pre-game speeches, while 29.5% stated that they enjoy the pre-game speech 'very much'. For reported usefulness, 37.4% responded 'very' useful and 30% responded 'moderately' useful. A two-way ANOVA on personal enjoyment found that there was no statistically significant difference between male and female players F(1, 197) = 2.41, p = .12, η_p^2 = .01, $mean_{diff}$ =-.23, 95% CIs [-.58, .13], nor between university/collegiate level players and professional / international level players, F(1, 197) = .04, p = .83, η_p^2 = .00, $mean_{diff}$ =-.03, 95% CIs [-.37, .31], and no significant interaction effect, F(1,197) = 1.12, p = .29, η_p^2 = .01. A two-way ANOVA on perceived usefulness found there was no statistically significant difference between male and female players, players, F(1, 198) = .66, p = .42, η_p^2 = .00, $mean_{diff}$ =-.12, 95% CIs [-.38, .14], nor between university/collegiate level players and professional/international level players, F(1, 198) = 1.24, p = .27, η_p^2 = .01, $mean_{diff}$ =-.16, 95% CIs [-.43, .12], and no significant interaction effect, F(1, 198) = .67, p = .42, η_p^2 = .00.

Further, athletes were asked to report their perceptions of pre-game speech influence on their personal and team confidence and performance. Table 2.3 reports the descriptive statistics for these measures, and two-way MANOVA were run with competitive level and gender as independent variables, with confidence and performance variables entered as dependent variables in turn. For personal and team confidence there was no statistically significant effect for gender, $F(2, 196) = 1.92$, $p = .15$; Wilks' $\Lambda = .98$, nor competitive level $F(2, 196) = 1.63$, $p = .19$; Wilks' $\Lambda = .98$, and no significant interaction effect, $F(2, 196) = 1.08$, $p = .34$; Wilks' $\Lambda = .99$. Similarly, for performance, there was no statistically significant effect for gender, $F(2, 196) = .24$, $p = .79$; Wilks' $\Lambda = .99$, nor competitive level, $F(2, 196) = 1.25$, $p = .29$; Wilks' $\Lambda = .99$, and no significant interaction effect between competitive level and gender, $F(2, 196) = .47$, $p = .62$; Wilks' $\Lambda = .99$.

Table 2.3

Perceived PGS Influence on Personal/Team Confidence and Performance

Influenced Variable	N	M (SD)
Personal Confidence	211	3.27 (1.01)
Team Confidence	210	3.59 (0.97)
Personal Performance	210	2.90 (1.09)
Team Performance	210	3.43 (0.97)

Discussion

The aims of this study were to gain insight into the current use of pre-game speeches, further understand the content used during pre-game speeches, and examine athletes' perceptions of this game-day interaction within basketball. The findings show that pre-game speeches are

frequently delivered by head coaches to the whole team, are typically short in duration, potentially comprise of a range of content and delivery styles, are perceived by basketball players to be enjoyable and useful interactions that generally meet their teams' needs slightly more than their personal needs and influence their teams' confidence and performance slightly more than their personal confidence and performance. Inferential analyses found no differences between genders, and only one difference between competitive levels. Players at higher competitive levels perceived pre-game speeches to be delivered in a more supportive and calmer manner.

Results confirm our hypothesis and anecdotal evidence that pre-game speeches are being frequently utilised by basketball coaches within their pre-game routines and aligns with previous coaching literature which has made reference to pre-game speeches as part of a '*game-day*' routine (e.g., Fletcher, 2006; Bloom et al., 1997). Despite the widespread use, however, pre-game speeches are delivered at different times and for different durations. For example, 40% of participants reported that pre-game speeches took place 30-59 minutes prior to the start of a game, 28% reported they occur 15-29 minutes prior, and 25% that they occur less than 15 minutes prior. Additionally, the most common durations were 5-14 minutes or less than 5 minutes. Logistical factors may be of interest to coaches and researchers as they attempt to develop pre-game routines in which pre-game speeches are ideally situated for optimal benefits. Past pre-game speech research has questioned how long any potential pre-game speech effects would last (Vargas & Short, 2011), and when assessing the retention of information delivered by coaches before a judo competition, Mesquita et al., (2008) found that almost 40% of information was not retained by the athletes. Similarly, Cloes et al. (1990) found that athletes only recalled, on average, 19-36% of feedback statements at the end of a class, and statements, that were

recalled, were information and feedback points which were regularly repeated. Furthermore, athletes appear to prefer shorter pre-game speeches as longer speeches were reported to result in focus and key messages being lost and longer speeches being disruptive to the players' routine (Breakey et al., 2009). The ability to retain information and feedback may underpin recommendations for coaches to keep pre-game speeches 'brief' and information concise, while developing pre-game routines that situate the pre-game speech in a timeframe that also aids retention.

Although past research has examined pre-game speech content as either informational or emotional (e.g., Berkowitz, 2003; Gonzalez et al., 2011; Savović et al., 2018; Vargas-Tonsing & Bartholomew, 2006; Vargas-Tonsing & Guan, 2007), it is important to develop further understanding of '*what'* is actually being said and '*how*' it is being communicated. Findings indicate that informational, motivation, and inspirational content are all utilised and delivered in ways that are perceived to be supportive, calm, and sometimes aggressive. Although not examined within this study, previous research has provided examples of what informational and emotional content may include. Informational content may provide athletes with a review of previously discussed game plans, key points, and cues to aid focus (e.g., Bloom et al., 1997; Fletcher, 2006; Vargas & Short, 2011), that are prescriptive, descriptive, positive or negative evaluation, delivered in verbally, visually, kinaesthetically, or combination of all three (Mesquita et al., 2008). Emotional content may encompass both motivational (Gonzalez et al., 2011; Savović et al., 2018; Vargas & Short, 2011) and inspirational aspects (Gonzalez et al., 2011; Smith et al., 2018), that may contain a variety of strategies used by coaches to evoke emotional and arousal states (e.g., Broch, 2015; Gallmeier, 1987; Savović et al., 2018; Vargas-Tonsing & Bartholomew, 2006). However, the relative balance between informational and emotional

content has not been examined. A number of researchers (Martens, 1987; Cox, 1994; Bloom et al., 1997), have all suggested that pre-game speeches should use emotion sparingly, as too much may lead to detrimental effects on athletes' emotional and arousal levels. In contrast, Gonzalez et al. (2011) found that inspirational content may increase emotional control and that athletes may use pre-game speeches to regulate their arousal levels. Similarly, Vargas-Tonsing and Short (2011) found that 70% of athletes perceived speeches were not '*emotional enough*' or failed to get the athletes '*pumped up*', which led to '*poor arousal regulation*'. A balance of informational and emotional content, therefore, may be best, with coaches considering various aspects such as game scenario (Vargas-Tonsing & Guan, 2007), and sport (Gonzalez et al., 2011; Vargas-Tonsing & Guan, 2007).

Beyond the content of pre-game speeches, the current study explored different delivery styles. Results indicated that content was often 'supportive' and 'calm'. Both supportive and calm delivery may encompass any content, behaviours, or language that potentially left athletes perceiving support and calmness being present during pre-game speeches. As such, upon reflection, the words 'supportive' and 'calm' may have benefitted from further explanation to fully understand their role as either content or delivery style. However, results did suggest that higher competitive level athletes (professional/international) perceived the pre-game speech to be slightly more supportive and calmer than athletes at the collegiate/university level. This may be due to professional/international level coaches having a better understanding of how their communicative style can influence athletes and therefore, identifying a need to be more supportive and calmer in the way they communicate (Horn, 2008). An understanding of content and delivery style may allow coaches to identify how to communicate with their athletes prior to a competition and limit negative responses that may arise from incongruency regarding what

they deliver and what athletes' perceive (VanSickle et al., 2010). An example of this potential incongruency was noted by Fletcher (2006) in an example where a coach attempted to challenge a player in a motivational way during the pre-game speech, but the player reported that they felt that challenge was aggressive. Additionally, Jowett (2005) and Gould et al. (2002) found that coaches and athletes may perceive coach behaviours differently and that this may then have a negative effect on performance.

The present study found that athletes perceived pre-game speeches to be enjoyable, useful, and influential on personal and team confidence and performance. These findings are consistent with previous research that found pre-game speeches may impact on athletes' self-efficacy (Vargas-Tonsing, 2009), team efficacy (Vargas-Tonsing & Bartholomew, 2006), and performance (Savović et al., 2018; Vargas & Short, 2011). In a study with junior elite soccer players, Vargas-Tonsing and Short (2011) found that just over 65% of participants reported that they perceived a coach's pre-game speech to influence their performance. Similarly, in the current study, the majority of participants reported that they perceived pre-game speeches to influence their personal and team's performance and their personal and team's confidence. Past research has indicated that informational content may be particularly impactful on self-efficacy and focus (Vargas-Tonsing, 2009; Vargas & Short, 2011), whereas emotional content may aid energy levels and arousal regulation (Vargas-Tonsing & Guan, 2007; Vargas & Short, 2011). Furthermore, current findings suggest that teams' needs were perceived to be met more than individual needs, and that impact on confidence and performance were greater at the team-level. This may be because most of the time pre-game speeches were delivered to the team as a whole. This team approach to delivery may therefore provide stronger impact on team constructs, such as collective efficacy, team identity, and social support. For example, Fransen et al. (2012) found

that volleyball players perceived supportive communication, positive indications, and coach interventions to be sources of collective efficacy. Therefore, coaches could consider whether a greater balance between content aimed at team and individuals during pre-game speeches would enable individual athlete needs to be met more fully. Future research, utilising a qualitative approach, may be able to explore these possibilities in greater depth.

The findings from this study shed light on the importance of this frequently used interaction, within basketball, and offer a number of implications for coaches and researchers. Pre-game speeches were perceived as useful, enjoyable, and influential on individual and team confidence and performance. As such, coaches should continue to use pre-game speeches to prepare their athletes prior to competition. Furthermore, pre-game speeches may benefit from being short, clear, concise, and tailored to meet the needs of the team and the individual athletes within the team. However, further research is needed into '*what'* type of content and delivery style athletes may want or prefer to receive during pre-game speeches, and if these needs are influenced by extenuating circumstances such as game scenario, time of season, the team's record, or personal aspects such as personality types or the coach-athlete-relationship. Additionally, a better understanding of specific strategies that coaches use to help bolster their message may help uncover if there are additional types of content being delivered and if there are specific strategies that have beneficial or harmful influence on psychological or physical factors and performance outcomes. As mentioned, it is important to understand the perceptions of both coaches and athletes, as these may differ. Further, the majority of pre-game speech literature has focused on athletes' perceptions and preferences, but there are two parties present during pre-game speeches. Focusing on both coaches and athletes may help shed light on any discrepancies in perceptions and preferences (Kenow & Williams, 1999; Lorimer & Jowett, 2009; Vargas-

Tonsing et al., 2004), and the use of qualitative methods may be particularly useful in this regard, to provide rich and detailed insight and help address current gaps in the literature around coach-athlete communicative interactions. The findings of such research could help inform theory and coaching practice.

This study has provided insight into the current use and perceptions of pre-game speeches in basketball. However, it does have some limitations. First, the sample comprised only of basketball players, and including basketball coaches may have provided a fuller picture of the current use of pre-game speeches to be established. Second, the sample size was relatively small. Basketball is one of the most popular sports in the world, with millions of participants across the globe. A larger sample size would have provided a more representative depiction of the current use of pre-game speeches and enhanced generalisability of the findings. Third, due to limited previous research, the scope of the study was quite broad, and it was necessary to design measures for this study due to the absence of a validated pre-game speech questionnaire. Fourth, the inclusion of previously noted types of content and delivery styles from past research as the only options available, in a questionnaire, may have limited insight into any additional types or styles currently being used during pre-game speeches or provide a deeper understanding of athletes' perceptions.

The overall purpose of this study was to develop understanding of pre-game speech use within basketball, basketball players' perceptions of pre-game speeches, and to help inform future research directions. The findings demonstrate that pre-game speeches are frequently used within basketball, and that different timings, type of content, and delivery styles are present. Furthermore, results confirm previous research that athletes perceive pre-game speeches to be enjoyable, useful, and influential on personal and team confidence and performance, with

participants perceiving team performance and confidence to experience more influence than personal performance and confidence. Results provide general recommendations to coaches, and future research within this thesis will build on these findings and address some of the gaps in the literature. For instance, Chapter 3 and Chapter 4 will adopt a qualitative approach to explore players' and coaches' perceptions of pre-game speeches in more detail. Table 2.4 provides a summary of the two previous chapters and a preview of the upcoming third chapter.

Table 2.4

Summary of Previous Chapters and Preview of Upcoming Chapter

C.	Rationale	Aim	Main Findings
1	Orientate the reader to the structure and content of PhD, by introducing PGS and associated research.	To synthesise and critique the evidence on 'game-day' interactions, specifically pre-game speeches, and wider research and associated theories.	Demonstrated coach 'game-day' communication, in particular PGS, may influence athletes.
2	Previous research has not examined PGS use in basketball and prior to conducting further research it was important to establish their use and value in the sport.	To examine the use, content, and effect of PGS in basketball.	PGS are commonly used within basketball, with various content and delivery styles used. Basketball players perceive PGS to be enjoyable, useful, and influential on their individual and team confidence and performance; with team outcomes perceived to experience greater influence than individual outcomes.
3	Past PGS research has typically used quantitative methods, and a more in-depth and detailed understanding of athletes' experiences and perceptions of PGS are needed.	To examine professional female basketball players' experiences and perceptions of PGS using a qualitative approach.	

Chapter 3:

An Interpretative Phenomenological Analysis of Professional Female Basketball Players' Experiences and Perceptions of Pre-Game Speeches

Abstract

Despite pre-game speech research revealing athletes have content preferences based on game scenario (Vargas & Guan, 2007), perceive positive and negative aspects of their coach's game-day speeches (Breakey et al., 2011), and find pre-game speeches enjoyable, useful, and influential on psychological and performance outcomes (e.g., Chapter 2; Savović et al., 2018; Vargas & Short, 2011), studies have not attempted to explain why athletes hold these perspectives. Therefore, the purpose of this study was to explore professional female basketball players' pre-game speech experiences and perceptions. A qualitative approach was adopted, including the use of semi-structured interviews and the application of Interpretative Phenomenological Analysis (IPA; Smith, 1996, 2004). Fifteen female professional basketball players participated. Analysis revealed four superordinate themes of participants' experiences and perceptions of pre-game speeches: delivery, needs, athlete engagement, and effects; as well as the coach-athlete relationship as a contextual factor that influenced and interacted with each theme. Findings highlight that professional female basketball players' value pre-game speeches within their pre-game routines and these interactions can meet numerous individual and team preparation needs. However, when those needs are not met, athletes engage in behaviours to compensate and help themselves and their teammates. Further, participants perceived that pre-game speeches can positively or negatively influence their affect, cognitions, and behaviour, resulting in subsequent performance effects. Coaches may facilitate positive effects by maintaining consistency in pre-game speech delivery, being aware of their own emotions, asking players about their individual and team needs, and allowing a section of their pre-game speeches to be 'player-only' or 'player-led'.

Keywords: Game-day interactions, game-day communication, performance influence

Introduction

Coaches' communication, behaviour, leadership, and coaching philosophies can impact athletes' learning, development, well-being, personal perceptions and behaviours, affective states, motivation, and performance. (e.g., Cook et al., 2021; Côte & Sedgwick, 2003; De Backer et al., 2015; Feltz et al., 2008; Gonzalez-Garcia et al., 2021; Horn, 2008; Jímenez et al., 2019; Mageau & Vallerand, 2003). Coaches communicate with their athletes at different times during a game-day, in which their behaviour, leadership and personal philosophy are displayed (e.g., Half-time, Avugos et al., 2020; Debriefs, Macquet et al., 2015; time-outs, Gutiérrez-Aguilar et al., 2016; pre-game, Vargas & Short, 2011). Evidence is emerging around the importance of one specific game-day interaction: the pre-game speech. This interaction between coaches and their athletes, prior to a performance can influence athletes' mental preparation and readiness (Fletcher, 2006; Gould et al., 1992), both of which are important for achieving high performance (Hardy et al., 2018; Mesquita et al., 2005; Orlick & Partington, 1988; Vargas & Short, 2011). A more detailed understanding is needed, however, of athletes' experiences of pre-game speeches and their perceptions of how they impact psychological and performance outcomes.

Chapter 2 found that pre-game speeches are a common interaction within basketball and that basketball players report them to be influential on their individual and team performance and confidence. This was consistent with previous research that found junior elite soccer players (Savović et al, 2018; Vargas & Short, 2011) and senior volleyball players (Mesquita et al., 2005) perceived pre-game speeches to influence their performance. For instance, Savović et al. (2018) found that players reported their coaches' motivational speech was one reason for positive performance during a FIFA U-20 World Cup final. Vargas and Short (2011) found that 65.5% of 151 elite junior soccer players reported they felt their performance was influenced by the pre-

game speech delivered to them prior to a specific game. Within the overall perception that pre-game speeches are beneficial, athletes may have preferences for different informational and emotional content based on game scenario (Vargas-Tonsing & Guan, 2007). Studies, however, have typically utilised quantitative research designs, such as surveys and asking participants about hypothetical scenarios. Although such designs have provided invaluable knowledge, it is not clear why athletes have these perceptions or how they experience pre-game speeches.

An exception was Breakey et al. (2009), who conducted a qualitative case study with female collegiate ice hockey players and examined their perceptions of positive and negative aspects of their coaches' game-day speeches (pre- and intermission). Findings revealed that athletes favoured short, meaningful speeches that were delivered by their coach using genuine emotion and referred to their team values. Negative aspects included long or mis-timed speeches, where players disagreed with the message their coach was delivering, or when the coach did not include information the players were expecting or utilised an 'unexpected approach'. This study was important to the advancement of understanding athletes' perceptions, as results offered insight into why athletes' may (dis)like certain aspects of their coaches' game-day speeches. However, the study was conducted after two home stands, and coaches' behaviours have been found to change game-to-game (Delrue et al., 2017). Furthermore, the combination of both pre- and intermission speeches may have inhibited the discovery of particular nuances of pre-game speeches, as coaches' half-time and pre-game speeches may contain contrasting delivery styles and messages (e.g., Staw, et al., 2019; Turman, 2005).

Developing a more detailed and nuanced insight into athletes' perceptions and preferences of pre-game speeches will strengthen the evidence-base. A better understanding of these factors would provide coaches with resources and information beyond informal learning

mechanisms, such as drawing on anecdotal examples and personal past experiences, which appear to be the current standard reference points (e.g., Holmes et al., 2021; Nelson et al., 2006; Stodter & Cushion, 2017; Walker et al., 2018). This insight could help coaches understand how to plan and implement pre-game speeches to help prepare their team and individual athletes. Therefore, the overall purpose of this study was to investigate in-depth professional female basketball players' experiences and perceptions of pre-game speeches.

Methods

Research Design

The value of qualitative research has become increasingly recognised in sport and exercise psychology (Smith & McGannon, 2018). Within qualitative research, however, it is important to identify the paradigm in which the research resides and how researchers view the world around them (Ponterotto, 2005). To allow for individual responses to be considered, combined with an effort to represent a common reality across players regarding pre-game speeches, rather than a certain and objective "truth", the subtle realism paradigm was adopted, which recognises that individuals have unique views and experiences that are all equally valid (Hammersley, 2002a, 2002b). Ontologically, subtle realism is focused on a common reality, and even though individuals may not express the same reality from a similar experience, there are experiences, perceptions, and knowledge which are common and can represent more than one individual (Hammersley, 1992a, 1992b; Kirk & Miller, 1986). Indeed, Pope et al. (2007) argued that although the findings from individuals are unique to some extent, they share an underlying reality. Through the application of a subtle realism lens, insight into any common underlying reality around pre-game speeches may emerge, along with representing the unique experiences and perceptions of the individuals involved.

Epistemologically, subtle realism involves "subjective perceptions and observations and concedes that different methods will produce different pictures of the participant(s) being studied" (Duncan & Nicol, 2004, p. 455). One methodology that fits within the subtle realism position is phenomenology, which allows for research questions to look to explore, explain, describe, or be emancipatory (Merleau-Ponty, 2013; Shutz, 1967). Specifically, Interpretative Phenomenological Analysis (IPA; Smith, 1996, 2004) was applied, as the aim of IPA is to "attempt to explore personal experience and is concerned with an individual's personal perceptions or account of an object or event" (Smith & Shinebourne, 2012, p. 53), and as Reid et al. (2005) suggested, IPA allows us to learn from experts: the research participants.

Participants

Participants were 15 current female professional basketball players, with a mean age of 26.3 (*SD* = 4.20), and 3.7 years' experience (*SD* = 3.04) at the professional level. Further, eight participants had competed in the National Collegiate Athletic Association (NCAA) Division I basketball programmes, four in NCAA Division II programmes, and nine had represented their country internationally.

Procedure

Prior to data collection, a university ethics committee approved the study. Initially, pilot testing was completed by interviewing two female professional basketball players from a different league to the main sample. The individuals in the pilot testing were informed of the purpose of their interview, provided consent, and at the conclusion of the interview were asked to provide feedback on the interview questions, overall process, and to discuss any parts of the interview they felt were unclear. This led to minor changes to the questions to enhance clarity and enabled the lead researcher to gain further experience in qualitative interviewing and an

opportunity to critically reflect on the process. This was done by the lead researcher transcribing the interviews, the lead researcher and lead supervisor listening to the interviews and reading the transcripts, and then discussing all materials as part of the reflexivity process. This allowed the lead researcher to explore the appropriateness of questions and prompts, their verbalised reactions to the participants' responses, as well as their overall interviewing technique. The pilot data was not included in the main study.

For the main study, the inclusion criteria were: (a) females who competed in a professional basketball league in Europe, (b) aged 18 years or over, (c) able to discuss and reflect upon their personal experiences and perceptions of pre-game speeches. The lead researcher emailed or approached in-person 20 individuals who met the inclusion criteria and provided them with an information sheet. This outlined the purpose of the study, what participation entailed, that confidentiality and anonymity was assured, interviews would be recorded, transcribed, and analysed, and that anonymised excerpts might be used in publications. Individuals who agreed to participate were contacted to arrange a convenient time for an individual interview, sent the interview guide prior to the interview, and encouraged to read the questions and highlight any potential questions that they felt needed clarifying. All participants provided written consent in advance and verbal consent at the start of their interview. All interviews took place via phone due to geographical restrictions.

The Interviews

The interviews were semi-structured. This provided a general framework of open-ended questions focused on the aim of the study (Longhurst, 2003; Smith & Osborn, 2003, 2008), but with flexibility to use follow-up prompts to encourage elaboration and exploration on any topics

that participants discussed, which may not have been in the original interview guide (Barriball & White, 1994).

To begin each interview, participants were asked to discuss their playing careers, current season, and answer some demographic questions. The aim was to not only gather information, but also build rapport. The interview progressed to questions focused on their personal experiences and perceptions of pre-game speeches. (See Appendix C for full interview guide) Participants were encouraged to provide detailed and honest responses. The interviews lasted an average of 53:45 minutes. Once the interviews finished, participants were thanked for their time and asked if they were happy to be contacted later, should any questions arise during data analysis.

Data Analysis

Following the verbatim transcription of all interviews by the lead researcher, IPA was applied following the step-by-step approach detailed by Smith and Shinebourne (2012). First, each interview transcript was read multiple times by the lead researcher for familiarisation. During this preliminary stage, analysis consisted of commentary that was broad: writing summarising, association, and initial interpretations on one margin of the transcripts. After conducting multiple read throughs, emerging potential themes were listed on the opposite margin. This process was done one interview at a time.

At the conclusion of the preliminary stage, all emergent themes were taken from the margins of the transcripts and listed individually on separate cards. These cards were assessed as a full list, with similar themes clustered together and potential connections between themes noted. Numerous discussions between the lead researcher, the lead supervisor, and '*critical friends*' reflected on emerging issues and informed the final superordinate and subordinate

themes. Throughout this stage of analysis, an additional document was created that placed relevant participant quotes into the respective themes. (An example of this process can be seen in Appendix D)

Rigour and Reflexivity

Rigour is an important marker of quality in qualitative research (Tracy, 2010). However, as Smith and McGannon (2018) stated, rigour has numerous meanings and can be enhanced through different methods. In the present study, Smith and McGannon's (2018) recommendations of member reflections and '*critical friends*' were utilised to ensure better levels of rigour. The use of member *checks* and their ability to aid credibility of qualitative research has been questioned (Smith & McGannon, 2018; Thomas, 2017), and the use of member reflections has been suggested (Braun & Clark, 2013; Smith & McGannon, 2018). Member *reflections* involved contacting participants to discuss information they had previously given with the aim to engage in a 'practical opportunity' to explore responses and interpretations of findings (Schinke et al., 2013). This differs from member checks as member reflections are not used to verify results. The use of '*critical friends*' involved discussing interpretations with other researchers (3) and experienced coaches (3) throughout the research process to engage in the reflexivity process and to be challenged (Smith & Sparkes, 2006) to address different explanations and interpretations that could emerge from the data (Smith & McGannon, 2018).

Reflexivity allows researchers to assess their role in the research (Gouldner, 1971) and is significant in many qualitative methodologies (Dowling, 2006). This assessment is a continuous process throughout a study and enables the researcher to better understand and explain how their personal experiences may influence the research process (Koch & Harrington, 1998). Although, the use of empathy and prior relevant experience can help with data analysis and interpretation of

meanings (Sloan & Bowe, 2014), reflexivity helps limit the potential for previous knowledge being imposed on to participants' own narratives (Pillow, 2003). In the current study, alongside regular interactions with '*critical friends*', the lead researcher kept a reflexive journal that organised thoughts, highlighted personal experiences, acted as an audit trail, and listed questions to explore with '*critical friends'.*

Results

IPA identified four superordinate themes, each with subsequent sub-themes, and one further theme that influenced and interacted with all others: contextual factors. Table 3.1 illustrates the themes. The results will present the four superordinate themes in turn, with example raw quotes to provide richer detail. Within each superordinate theme, examples of how context shapes experiences will be provided, but key contextual factors will be presented in more detail at the end of the results.

Pre-Game Speech Delivery

The first superordinate theme comprised how athletes perceived their coaches' delivery of pre-game speeches, including '*what'* is said, '*how*' it is communicated, and '*why*'. Specific sub-themes include pre-game speech logistics, aims, content, and observable coach behaviours. Participants perceived themselves to have little control over some elements, such as the specific content, delivery timing, and duration of pre-game speeches. For some participants, this added a degree of uncertainty around their pre-game preparation.

PGS Logistics

Participants indicated that pre-game speeches are utilised by professional basketball coaches, are delivered to the whole team, with players perceiving them as a *staple* in their game-

day routines. However, the timing of speeches varied from an hour before the start of the game to 30-minutes

Table 3.1

Table of Themes

Superordinate Themes	Sub-Themes
PGS Delivery	PGS Logistics
	PGS Aims
	PGS Content
	Observable Coach Behaviours
PGS Needs	Individual Needs
	Team Needs
	'Needs' Recommendations
PGS Athlete Engagement	Interpreting Others
	Asking Questions
	Motivating Teammates
	Adapting
	Utilising Mental Skills
PGS Effect	Affect
	Cognition
	Behaviour
	Performance
Contextual Factors	Coach-Athlete Relationship
	Coach-Athlete Communication

or closer to tip-off. More consistency was apparent in the length of the speeches, with all participants indicating that they are relatively short in duration, typically less than 10 minutes. The pre-game speech was perceived as an important feature of game-day routines, despite timing and duration, as they provided a sense of consistency that enhanced preparation.

> I think because it's so routine for me, there have been times…if we've hit traffic or something and are late for the game, or we've had to skip through our routine and we haven't had time to talk, that throws me a little bit. (P7)

Only one participant stated that their coach did not use a pre-game speech at the start of the season, creating a sense of something missing from the player's and team's '*game-day*' routine. After a bad performance early in the season, they approached their coach to express that a pre-game speech may be useful moving forward. The coach then implemented pre-game speeches for the remainder of the season, although the player was not further consulted regarding delivery aspects.

> I actually approached coach after a couple of games and asked them to do one, because I feel like it does help. I took the opportunity to say 'look, we had just driven 4 or 5 hours and we just rocked up and stretched and then were just expected to warm-up and turn it on. Like it might have been good to have a bit of a chat and bring us in and refocus us, rather than just rocking up and playing'. (P9)

PGS Aims

Many participants indicated that a central aim of the pre-game speech was to ensure everyone was on the '*same page*'. This not only included tactical and technical elements of a game plan, but also all players being mentally on the '*same page*'. For example, participants' felt that their coaches used the pre-game speech to initiate the team's collective focus on the game.

> I would say it's actually more used as a time to just make sure that nothing else is (in) anyone else's head, we're just concentrating on the game and it's more of a

> moment of peace before the game starts and just making sure we're on the same page. (P3)

Furthermore, motivation and inspiration were aspects of the mental '*same page*', that participants noted as a pre-game speech aim of their coaches. Some participants described how this would bring the group together to work towards a common goal.

> I think the motivational part of it plays a bigger role because you want to feel like you're a part of something, like a whole group thing, because that unites you as well as ultimately that aspect of coming together, both in terms of know what you're doing as a group and being out to execute that and also just feeling like a part of you wants to work to make that group successful. (P1)

PGS Content

Players reported that coaches used a variety of content and strategies to achieve the above aims. Tactical game plans, scouting reports, focus exercises, motivational tools, and coach role modelling (e.g., intensity, excitement, positivity) were often mentioned. Participants reported that some coaches varied their content across games, while others were more consistent or even repetitive. Variation in pre-game speech content was perceived by participants to be contingent on the game scenario (higher ranked vs lower ranked opponents / regular season vs post season games) and recent performances (coming off a previous win or loss and training performances). For example, the amount and depth of content typically increased in post season games and against higher ranked opponents.

> For the final and the semi-final, where the motivation was clearly very high at that point for everyone involved, there was a lot more detail…so it really switched on your mind exactly how we might be defending certain actions. But that was very

> rare…the general information throughout the year was pretty much the same most of the time and the tactics didn't change a whole lot depending on who we played, but it really made a difference when it did in those two games. (P5)

Content also sometimes shifted from a (own) team focus to opponent focus as the quality of the opponent increased. "I remember with (higher ranked opponent) it was very much like tactical. We very much focused on them and how we're going to stop them. When we play(ed) (lower ranked opponent), coach was kind of like focus(ed) more on what we had to do." (P7)

Observable Coach Behaviours

Participants described observable behaviours that their coaches displayed during pre-game speeches, such as tone of voice and body language. Positive coach behaviours included a calm and relaxed demeanour, a good level of intensity in their tone (not too high or too low), and a sense of confidence. Most participants felt their coach's behaviour was consistent throughout the season, but similarly to content, slight changes of behaviour appeared based on game scenario and the team's past performances. Post-season games saw coaches have an increase in intensity, emotion, and stress, while they displayed an increased sense of urgency when their team was coming off poor performances. Sometimes behaviour was perceived as less than ideal, including extreme levels of intensity (too high or too low), an anxious demeanour, a lack of confidence, or a 'negative mood'. Further, participants' interpreted inconsistency in behaviours and emotions negatively because it created a sense of confusion and worry.

> There has been times where maybe coach will come in and just be in a crappy mood for no reason, just before the game, and we have no idea why and (that) influences the team a lot. Last year it would be up-and-down a lot and it's tough

> as a player because you don't know what's coming and there's no consistency and you kind of start losing trust in your coach… (P12)

Pre-Game Speech Needs

The second superordinate theme reflected participants' perceptions of what is needed during pre-game speeches. Specific sub-themes included individual and team preparation needs, and recommendations for coaches on how these needs could be met. Participants most often highlighted needs that revolved around psychological factors, such as enhancing focus and confidence, and a need for game plan information.

Individual Needs

Although there was variation in the needs amongst participants in the amount (a lot vs a little) and specificity (personal vs team) for informational content, all participants stated they needed to receive clear information prior to the game, which in turn influenced confidence, mental preparation, and performance. However, participants indicated that there is an optimal amount of information, as too much information was perceived to convey a lack of preparation and inhibit the participants' ability to prepare due to a loss of focus. "I've always, no matter who I've been coached by, I've always had that thought process really of it's too late. Almost if you're trying to cram so much information at that point of the game, 30-minutes before, it's almost too late." (P10)

Typically, clear and concise information was favoured, but the optimal amount was contingent on specific individuals and the stage of their careers. One participant spoke of how they are now more receptive to informational content, which was not always the case earlier in their career.

> When I was younger, I didn't really want or couldn't really deal with the complex information. It was kind of like just go out there and play, I don't want to have to overthink anything too much. But as you progress through and play against better players, it (information) kind of gives you more confidence if you do have a pre-game talk and you do go through what you're supposed to do as a team and as an individual. (P13)

Alongside a need for information, some participants also highlighted a need for motivational content. Although this need also appeared to be contingent on individuals and the stage of their career (often more motivation earlier on), with recognition that athletes are typically self-motivated, participants still described how they needed some sort of motivational content from their coach to feel prepared for the game.

> They (the coach) need to somehow make every game feel like it's important…somehow it's really important that you can pull out something motivational from it. Whatever you can. When it's really flat and really complacent I think that can just take all of the fun and all of the motivation out of it. And just those things can kind of throw you off mentally and physically. (P5)

Team Needs

Team needs typically centred on ensuring everyone was on the '*same page*' and a sense of togetherness. Some participants stated that this was best accomplished through informational content because individuals were more likely to have varying emotional needs. "I think the directives are definitely the most important for our team as a unit. We work best when the emotion is removed and we just all know exactly what we're doing, because there are so many different personalities, and so many different responses to the emotion." (P13)

Participants also perceived that their teams needed to feel that their coach (and teammates) had genuine confidence in their ability to perform well.

> "Just a confidence in each other and coach's confidence in ourselves and confidence from the coach. Like just feeling that coach has faith in us…and not a scripted faith, like actual faith, I think we would have been much better off from just having that little bit of confidence." (P15)

'Needs' Recommendations

Regardless of whether needs were individual or team-based, participants provided several recommendations that could enable coaches to meet their players' needs during pre-game speeches. Clarity of message was highly important, and could be enhanced through preparation, specificity, and only the coach delivering the pre-game speech rather than being delivered by multiple individuals. As P13 stated, when their coach was prepared, fewer player concerns emerged.

> The pre-game talk helps if it is very well thought out and kind of tailored to the team that we're playing. If it's too broad or too brief then everyone is kind of like 'whoa, why didn't we get more information, why aren't they (the coaches) prepared'?

Additionally, a lack of specificity was highlighted by some individuals as a reason for players not being clear on what they had to do, and that direct and explicit coach communication could resolve confusion.

> "The thing with coach is that they don't always tell us exactly what they want from us. So, for example, they'll show us everything on the other team, but they won't tell us like what offences they really want us to run…but I think they forget

> sometimes that they're sort of the leader we're looking to, so I think that it would just be more useful if they kind of said 'we're going to run this look'. Maybe if you (the coach) just straight up said, 'this is what you guys need to be doing', maybe it would be a bit clearer." (P7)

Furthermore, participants also emphasised that coaches should be in control of their emotions during pre-game speeches, preferably displaying positivity no matter the game situation or personal circumstances.

> I think as a coach you do have to watch your tone and you can't bring your personal feelings into it because it's not about you at the end of the day. It's about the bigger group that you're overseeing and you kind of have to put everything that's going on in your life to the side…but, when you enter that pre-game speech, it has to be 100% about the game, no matter how you think we're going to do, you have to be positive and think it's a new day and that we have the skills to kind of win every game. Just control your negativity, as hard as that must be, your kind of in that role, that leadership role, you have to put it to the side. (P13)

Participants appreciated the difficulties that coaches face when attempting to deliver a pre-game speech that meets the needs of all individual players and the team as a whole and felt that coaches and players need to understand and adapt to each other, with both parties sharing responsibility for optimal '*game-day*' preparation. One recommendation participants suggested was that there should be a designated 'players-only' time, at the beginning or end of the pre-game speech, with no coach involvement. Although this slightly contradicts the need for a coach to be the leader, participants explained that this 'player-only' time is helpful to provide them with a sense of ownership and control, and an opportunity to attempt to meet the team's needs of

positivity and togetherness, if not met by the coach. For example, a coach who delivered a tactical pre-game speech in a monotonous tone, with no words of encouragement, may have met some players' need for information, but not for emotion and motivation; an incongruency that the 'players-only' time could address.

> I think the part at the end, with just the players, is sometimes just as important as the (part of) the pre-game speech with the coaches. Just having our own sense of kind of ownership. Not the complete pre-game talk, I definitely still think the coach has to be present, but I think there needs to be a time for the players just to come together and just motivate each other and pump each other up. I definitely think that is important as well, you just need that time as a unit. We're going into battle for each other…that is kind of important. (P12)

Pre-Game Speech Athlete Engagement

The third superordinate theme comprised athletes' personal behaviours that they engaged in during their pre-game speech experiences. This included how they listened to, engaged with, and reacted during pre-game speeches. This entailed active participation, or engagement with pre-game speeches, and incorporates a number of common behaviours that participants implemented under their own volition: actively reading and interpreting their coaches' and teammates' behaviours, asking clarifying questions, attempting to motivate teammates, adapting to whatever is delivered by the coach, and utilising personal mental skills. These contrasted with elements within the first two superordinate themes, which athletes perceived themselves to have little control over. However, some of these behaviours were contingent on the situation.

During the pre-game speech some participants assessed the readiness and focus of their teammates and the level of belief that their coach has in the team's ability to perform positively

and responded if something appeared to be lacking. One such behaviour was asking clarifying questions to the coach, particularly to facilitate all teammates being on the '*same page*' tactically. "Every once in a while, I will just ask questions to clarify things to the group. Even if maybe I already know what coach means, just to make sure everyone is on the same page about things." (P7)

Participants also noted that sometimes if they assessed their coach's behaviour to be negative or unsupportive, they felt it could spread throughout their team. In these situations, participants attempted to display motivating behaviours, such as saying something positive, bringing the team together to have a team shout before they left the speech, or just providing a feeling of togetherness and support.

> That's when we really needed to depend on each other to get ourselves motivated and ready. So it was kind of like as soon as the coach had left the room, that's when we would look at each other and be like 'look, let's just go out and do it and have fun'. (P7)

However, this particular participant did not always perceive their coach's behaviours negatively, and they added "seeing that calm, calms us. We're definitely looking at how coach is carrying themselves and it kind of shows us that we can like play comfortable and play to ourselves and be alright."

In line with their recommendation, all participants accepted that they had to be adaptable to what their coach delivered, especially when it did not meet their personal needs but was useful for the team. For example, participant P12 discussed how if their coach delivered a pre-game speech that met the needs of their teammates, but not them, then that was fine as they would sacrifice that part of their game preparation to help the team.

> It's never going to be exactly how you want. You're going to have to give things up and sometimes there are sacrifices in the team. It's part of being part of a team. You have to sacrifice your personal interest(s) in what you want personally and what works for you, for the team. You have to sacrifice.

Adaptability appeared to not only be a personal characteristic for some participants, but also an active choice and action to protect themselves from any aspects of the speech that might negatively impact their mental preparation. "I sort of adapted to the coaches I've had…if the coach is giving me loads and loads of pointers and still going into more detail during the pre-game, at that point, I just sort of…I have to clock out." (P14)

Lastly, the majority of participants referenced how they utilised their own personal mental skills as a response to pre-game speeches that didn't meet their needs or had instances in which negative perceptions of their coach or teammates arose. For example, participant P9 felt that although their coach started using pre-game speeches, they were strictly informational with little emotion. This led them to engage in self-talk to review the reasons they were excited to play and increase a sense of motivation.

Pre-Game Speech Effect

The final superordinate theme comprised participants' perceptions of the effects of pre-game on themselves and their teammates. Specific sub-themes include cognitive, affective, and behavioural variables, along with the direction of effects (i.e., beneficial or detrimental).

Affective and Cognitive Outcomes

All participants described how pre-game speeches influenced a number of psychological aspects. These aspects included knowledge of the game plan, efficacy beliefs (self- and collective), mental preparation, focus, motivation, reassurance, and feelings of

support/togetherness. Pre-game speeches that clearly stated concise game plans and tactical elements enhanced participants sense of role clarity, task cohesion, and focus. “Having those details kind of pinpointed, it calms my head down when I know for sure and gets me zoned in on the game”. (P5)

Coaches who gave participants examples of their past successes, both individually and collectively, facilitated efficacy beliefs and a sense of reassurance of players’ capability to perform well.

> Coach will give examples like ‘you’re a great shooter, let it go, don’t think about it’, things like that or be like ‘last time you played them you were successful doing this and this, look for it again’, stuff like that and that normally helps players and gets them ready and (in) that positive mindset going into the game, (which) is always helpful. (P12)

The act of bringing the team together during the pre-game speech allowed players to feel a connection with their teammates and supported as they headed into the game.

> I think it’s quite powerful. I think it’s a moment when you are like ‘ok, this is game day, we’re going to go out there and play as hard as we can and play together’, and I think it is that moment when you feel united. (P2)

However, participants who felt certain aspects of their coaches’ pre-game speech content became repetitive over the course of the season, reported that pre-game speeches became less efficacious. This included loss of focus and reduced motivation or energy. “They are kind of repetitive and coach does say the same thing a lot, so as a team we kind of…we’re just going through the motions now with the pre-game speech. Just really not good for us going into playoffs.” (P6)

Participants also reported being influenced by teammates. Certain behaviours such as fidgeting, not paying attention, or not being ready to go led to participants feeling annoyed, anxious or worried, and those feelings could carry over into their performance.

> I start to think ‘what’s going on?’ or ‘why are you not looking forward?’. Our emotions can affect us big time on this team, especially this year, so I think I start to worry because that’s another job for me. Like if someone’s got their head out of the game, if they’re already going into the game looking negative or unenthused, I know that during the game I’m going to be concerned about that and how to pick them up. (P10)

Behavioural Outcomes

Participants reported that enhanced affective and cognitive variables in turn influenced their behaviours and physical performance, including the execution of skills and tactics, energy levels, effective warm-ups, effort, and teammate interactions. The effects were particularly apparent during the remaining warm-up time and in the performance at the start of the game. Regarding remaining warm-up time being influenced, participants noted that the feeling of being mentally prepared during the pre-game speech led to increased focus, and a more efficient and effective warm-up occurring. Further, an understanding of game tactics and feeling motivated during pre-game speeches led to participants exerting more effort.

> The game is physically taxing, so sometimes you feel like you’re tired or you feel like hurt and the motivation part can kind of inspire you to push through that, don’t let your body be your boundary limit. So, I think that can physically impact the game. (P3)

Although most participants stated that a pre-game speech delivered with clarity leads to better execution of tactical game plan elements, P1 provided an example of when the team were told not to shoot, even when wide open, by their coach during the pre-game speech. This resulted in players being confused and annoyed at the coach's statement, and negatively influenced skill execution during the game: "we went out into the game and everyone just froze".

Additionally, a pre-game speech that left players feeling supported by their teammates and a sense of 'togetherness' led to more positive teammate interactions throughout a game. For instance, positive touches (high fives), communication (in-game and during huddles), and displayed support (cheering, picking up teammates).

Directional Factors

Specific factors that determined the direction of effect included the amount and type of information, the coach's behaviour, and the use of certain strategies. Although participants often deemed information to be valuable, it was considered detrimental if too much or too little was delivered, or when new information was presented. New information sometimes pertained to the opposing team, but participants also described instances of changes in tactics from what the coach had previously implemented and the team practised in training sessions.

> I think that it actually a big problem that we've had as a team. We'll have done a film session or worked in practices on a certain tactic or something that we know the team is going to do and then we get in the locker room and part of the information that coach gives on how we're guarding screens or something is a different tactic than we had previously talked about. And I think that usually adds a lot of confusion to our team, which has shown in games a lot, because people are, because of that, people are not on the same page. (P5)

Coach behaviour was also considered a key directional factor. For example, some participants described how the coach's energy and tone of voice could set the tone for the rest of the game, with excitement from the coach linked to increased energy and motivation, and the absence of excitement leading to a drop in intensity.

A final factor that influenced whether positive or negative effect occurred was the participants' perceptions of certain strategies used by their coach. Strategies that they deemed distracting or as shifting focus from important aspects of the game, such as a 'quote of the day' or prayer circle (especially for athletes who were not religious), appeared to have detrimental effects. Although not explicitly stated, one reason participants' may have held negative perceptions of certain strategies was if they felt the coach was using a specific strategy to benefit themselves more than the team.

> I feel like the coaches like to hear their voices a lot and they would sort of waffle on a lot and then use (specific identifying strategy removed) and I just don't see how this is helping. (P7)

Contextual Factors

Beyond the contextual factors discussed within the superordinate themes (e.g., game scenario, recent performances), two inter-related contextual factors emerged as particularly influential on participants' pre-game speech experiences: the coach-athlete relationship and coach-athlete communication. The coach-athlete relationship and communication factors were described by different participants as ranging from positive and strong to negative and weak, and they influenced their interpretations of pre-game speech delivery, whether personal or team needs were met, athlete engagement, and effects. The factors appear positively correlated: a positive coach-athlete relationship was typically associated with positive communication.

When a positive relationship was reported, participants appeared more likely to enjoy the pre-game speech and perceive that their needs were met. When a negative relationship was reported, participants were more likely to dislike the pre-game speech and perceive that their needs were not met. “I think that level of relationship has really affected the way those interactions (pre-game speeches) go” (P1). Participants all mentioned that integral to a positive relationship were trust and respect, and that these factors could reduce potential negative pre-game speech effect. To minimise any disparity between what players’ need and what the coach provides, it is important for the coach to build strong relationships with their players early on and throughout the season.

> Everyone reacts differently to different aspects of the team talk. I think that what a coach can do to kind of minimise the effects of different individuals is, it’s not anything specific, but something building up during the whole season, is really good clear communication and good rapport with the players to ensure that coach can talk to them individually. (P3)

Participants discussed how the relationships between the coach and the athletes on a team differed from player to player, and how the ability to communicate with the coach appeared dependent on that relationship. For instance, some participants felt confident that they had a good enough relationship to speak with their coaches about their needs, but that there were other players on their teams who did not have that same relationship.

> Coach was open to that and did take it on board a little bit, but I think there are certain people who can communicate to coach better than others. Like coach will listen to me, but will get very defensive towards other people. The people coach has known longer, coach’s definitely a little bit more open to. (P5)

Even participants who felt they had a positive relationship with their coach stated that they would often alter the way they spoke or expressed their needs or opinions if they had previous experiences in which the coach had responded negatively to player feedback or did not act upon this feedback. “I definitely change the way I talk to coach when I speak to them about things…I kind of have to watch what I say a lot and make sure that I’m really respectful of their ideas and opinions.” (P5) A further example was provided by P15, who recalled that throughout the season, because players felt their coach was not willing to listen to them, communication became ‘*cookie cutter*’, as players just began to say what they felt the coach wanted to hear in order to not experience any negative responses. This instance and the athletes’ descriptions of how they would alter the way they communicated with their coaches seemingly caused a barrier between athletes discussing their pre-game speech needs with their coaches.

The importance of the coach-athlete relationship and coach-athlete communication led to many participants providing a specific recommendation to coaches: allow players to discuss their needs with them and be open to changing the delivery of their pre-game speeches to meet those needs. Participants felt this would ensure pre-game speeches could be tailored towards the specific needs they and their team have, rather than the coach’s perceptions of these needs.

> I guess they (the coach) made their own idea of what the players need or what the team needs. But maybe that should also be discussed with the team and the coach should be interested in what the players have to say and ask the players what they need to hear before the game, because it is (a) very important 10 minutes. I don’t know where those coaches got those ideas from, but I don’t think any players on the team like that or was beneficial for them. So, I think it’s definitely important

to understand what the players need individually and as a team and that should be discussed pre-season. (P4)

Discussion

The aim of this study was to explore in-depth professional female basketball players' experiences and perceptions of pre-game speeches. Interpretative phenomenological analysis revealed four superordinate themes, as well as contextual factors that influenced and interacted with each theme. The themes were pre-game speech delivery, needs, athlete engagement, and effects. Key findings include that professional female basketball players perceive that pre-game speeches are important interactions within their pre-game routines, help meet personal and team preparation needs (e.g., information, motivation, support), that athletes engage in behaviours to further help meet their personal and team needs, and that pre-game speeches can have a positive or negative effect on cognitive, affective, and behavioural outcomes, which can then subsequently effect performance.

The findings revealed that pre-game speeches are an integral part of players' game-day routines, typically short in length, but not always delivered at a consistent time across teams. The use of pre-game speeches in professional basketball is consistent with previous research across other team sports and competitive levels (e.g., Bloom et al., 1997; Breakey et al., 2009; Macquet & Stanton, 2021; Mesquita et al., 2005; Savović et al., 2018; Vargas & Short, 2011). However, participants did not perceive variation in timing as beneficial nor detrimental but did favour shorter durations. Similarly, Breakey et al. (2009) also found that athletes valued shorter speeches, with longer speeches associated with a loss of focus. Pre-performance routines are utilised by athletes to increase focus, improve affective and cognitive states (e.g., lower anxiety, increase confidence) and mentally prepare them (Hobson et al., 2018; Mesagno et al., 2015;

Weinberg & Gould, 2003). During an athletes' pre-performance routine, they may engage in various rituals (Bartošová et al., 2017; Hagan Jnr & Schack, 2019; Schippers & Van Lange, 2006) and preparation strategies (Cotterill, 2015), which Bonk and Tamminen (2021) found to be conducted in a structured '*checklist*' type format, including both individual and group-oriented strategies. Furthermore, research has found that athletes believe the rituals, strategies, and techniques they use during their pre-performance routines can benefit performance (Bartošová et al., 2017), as they perceive it allows them to reach optimal performance states and readiness (Bonk & Tamminen, 2021). Participants within the current study had all been exposed to pre-game speeches throughout their careers, and this early and consistent exposure may have played a role in the establishment of athletes' structured pre-game routines, hence the importance they placed on pre-game speeches being consistently delivered.

Players in the present study perceived that a key purpose of pre-game speeches is to facilitate the whole team being on the '*same page*', both tactically and mentally. This included overarching pre-game speech aspects such as having clear game plan, a collective focus, and promoting a supportive team environment. Additionally, participants reported that coaches employed various strategies to achieve this sense of being on the '*same page*', such as tactical game plans, scouts, focus exercises, motivational tools, and role modelling (e.g., excited and positive behaviour). However, participants felt some strategies can become repetitive across the season, and potentially less efficacious. Variation in pre-game speeches typically only occurred based on the game scenario (opponent's rank and regular/post season game) and the team's most recent performances (coming off a win/loss and positive or negative practices leading up to the game). Play-off games in particular were noted to include an increase in tactical and emotional

content, and a recent loss or poor performance was associated with a greater sense of urgency in how the coach delivered a speech.

In addition to '*what'* was being delivered during pre-game speeches, the behaviour of coaches as they delivered pre-game speeches, or the '*how'*, was also deemed important to players, with positive behaviours and emotional consistency noted as key features. Positive behaviours included mannerisms that displayed calm, confidence, and state of ease (relaxed), whereas negative behaviours included coaches acting moody, displaying too high or too low arousal levels and anxiousness. Although negative behaviours should be minimised, inconsistent behaviours (or emotions) were seen as particularly problematic as players then did not know what to expect. The behaviour of coaches had previously been noted to fluctuate game to game (Delrue et al., 2017) and these changes can negatively influence the performance of athletes (Gould et al., 1999). For example, if a coach is typically upbeat, positive, and excited, but shifts to a burst of aggression, even if it is intended to motivate athletes, it may have an adverse effect. Circumstances in the coach's personal life were offered by players as a possible explanation for behavioural changes. Coaches' experience emotional labour which can impact how they regulate their emotions, feelings, and how they deal with stressors (Lee et al., 2015; Wagstaff et al., 2012a, 2012b). Interventions aimed at helping coaches understand and develop emotional intelligence and regulation (Wagstaff et al., 2013) may be helpful in limiting negative emotional behaviours and displays during pre-game speeches.

Participants identified numerous personal and team needs that they felt pre-game speeches could meet in order to aid their preparation, but a key need was for clear and concise information. This could help individuals' preparation, confidence and performance, and feelings of being on the '*same page*' as their teammates. Indeed, clear instructions are a noted type of

competence-supportive coach feedback (Mageau & Vallerand, 2003). However, there is an optimal amount of information; it should not be '*too little*', '*too much*', or '*new*'. For example, too little information led to feelings of not being prepared, and too much information led to a loss of focus. Further, new information led to feelings of confusion and loss of confidence, as participants felt new information that contradicted previous information that had received in the lead up to a game conveyed to them that their coach may lack confidence in previously discussed game plans and tactics. Similarly, Breakey et al. (2009) found unexpected or new information was deemed a negative aspect of coaches' game-day speeches. The optimal amount of information, however, may depend on several factors.

Participants reported that their current need for information differed from earlier in their careers, particularly shifting to more specific information and in-game solutions as they reached higher competitive levels. Past research has found that athletes' preferences for informational or emotional pre-game speech content may be contingent on gender and game scenario (Vargas-Tonsing & Guan, 2007). For example, Vargas-Tonsing and Guan found that female participants reported a higher preference for informational content during pre-game speeches, which may be because female athletes gain more ability cues from information (Amorose & Weiss, 1998; Black & Weiss, 1992). The current study was the first to assess the pre-game speech needs and preferences of professional level athletes, with previous research focused on juniors (Vargas & Short, 2011) or collegiate players (Breakey et al., 2009; Vargas-Tonsing & Guan, 2007).

A novel finding of this study was the different ways that athletes engaged with and responded to pre-game speeches. Participants consciously assessed and interpreted the behaviours of their coach and teammates during pre-game speeches, which shaped their own engagement. For instance, when participants interpreted their teammates' body language as

indicative of confusion or a lack of focus, they would ask clarifying questions. If participants interpreted their coach's behaviours or language to be negative, they would attempt to provide motivation and positivity to bring the team together, boost morale confidence, and positive affect. Previous research has shown that coaches have the ability to influence their athletes through their words, actions and behaviours, and that a coach's behaviours and emotions can be used by athletes as 'reference points' (Hoigaard, et al., 2015), with even a coach's non-verbal behaviour being a source of influence on psychological factors such as confidence, motivation, and efficacy (Buning & Thompson, 2015; Hoigaard et al., 2015; Saville & Bray, 2016). Further, Green and Sedikides (1999) found that coaches' displayed emotions may express information about the importance of an upcoming game and their beliefs of whether their athletes will be successful or not. Thelwell et al. (2017) also found that athletes are able to identify when coaches are stressed, which then influences their own performance expectations, perceptions of competence, and awareness. As such, displaying and facilitating positive emotions may be an important endeavour for coaches.

Although athletes' evaluations of coaches are not new (e.g., Breakey et al., 2009; Smith et al., 1978, 1997), nor is it uncommon for team members to take information from each other (Totterdell, 2000), it was the depth of its occurrence during this particular interaction that was striking. Every participant referenced this behaviour and spoke about how they perceived emotions to spread throughout the team, whether it was a coach's emotions transferring to the players, or teammates' emotions transferring throughout the team. This is consistent with previous research that has found emotions to be transferrable between teammates (Friesen et al., 2013; Tamminen et al., 2021; Wagstaff & Tamminen, 2021). All participants perceived that pre-game speeches could influence their emotions and affective states, as well as cognitions and

behaviours. These findings are consistent with previous research (e.g., Chapter 2; Vargas-Tonsing, 2009; Vargas & Short, 2011). Participants described how their excitement to play, positive feelings, and a sense of calm could be enhanced during pre-game speeches. However, a poorly delivered pre-game speech could lead to them feeling indifferent, negative, and/or anxious. Although the words spoken by a coach were important, emotional contagion and emotions as social information may provide theoretical explanations for some of the effects found in this study. Emotions as social information theory (Van Kleef, 2009, 2016) proposes that affective, cognitive, and behavioural changes can be influenced by emotional displays of others. This influence can cause reciprocal or complementary reactions which can influence performance via cognitive processes. For example, if a coach displays confidence during a pre-game speech, the athletes might be more likely to appraise the upcoming game as a challenge and one that they can win. Van Kleef et al. (2019) found that baseball, softball, and soccer players experienced similar levels of happiness and anger that their coach displayed prior to a game.

Pre-game speeches were perceived to have the potential to positively influence cognitive states, including self- and collective belief, focus, task cohesion and motivation. Pre-game speeches provided an opportunity within players' pre-game routine to shift from being unfocused or individual-oriented to being focused and team-oriented. Past research has highlighted that pre-game speeches are a form of verbal persuasion (Vargas-Tonsing & Guan, 2007), which is one of the main sources of efficacy beliefs (Bandura, 1977; 1997). Vargas-Tonsing (2009) found that elite junior soccer players reported an increase in self-efficacy beliefs, from pre-game speeches, although the increase was small. Further, Bandura (1990) found that verbal persuasion from a coach could impact both team efficacy and performance, and Hanton et al. (2004) reported that a

participant in their study felt that being verbally persuaded by a coach enhanced confidence. Belief in one's own abilities can determine effort and persistence (Bandura, 1977; 1986) and performance (Bandura, 1997; Feltz et al., 2008), three aspects that participants in this study referenced experiencing as a result of a good pre-game speech.

Participants highlighted a range of behavioural effects from pre-game speeches, including influencing warm-ups, execution of skills and tactics, arousal and energy levels, and frequent 'positive touches' between teammates. The valence of these behaviours was dictated by the content and delivery of pre-game speeches. Although participants provided examples of how pre-game speeches positively or negatively influenced them, no definitive conclusions can be drawn on effects on performance outcomes such as to individual or team statistics or victory. Indeed, the effects of pre-game speeches on objective outcomes have not yet been examined in the literature. One potential indirect effect proposed by Vargas and Short (2011) was that a '*positive cycle'* could be initiated by a good pre-game speech, which then carries momentum throughout a game, although exact performance effects may not be visible. Participants' descriptions within this study were generally supportive of this '*positive cycle',* as most reported that pre-game speeches they perceived to be positive led to better performance at the start of a game.

Throughout all themes, the coach-athlete relationship and coach-athlete communication were highlighted as important to the experiences and perceptions of pre-game speeches. The coach-athlete relationship can be vital for success and enjoyment (Jowett & Cockerill, 2003) and negative coach-athlete relationships have been found to have a detrimental influence on performance (Gould et al., 1999; Jowett, 2005). Participants who perceived their relationship with their coach to be more positive, appeared to perceive pre-game speeches as more beneficial

and enjoyable, and that they had more open communication with their coach. Similarly, Kenow and Williams (1999) assessed the coach-athlete relationship between basketball players and their coaches and found that when compatibility was deemed to be high, fewer negative effects were reported and communication was viewed more favourably. Negative perceptions of a coach have also been found to lead to negative perceptions in one's own abilities (Bower & Pelletier, 2002), which may negatively influence performance. These findings suggest that even if a coach delivers a '*great*' pre-game speech that meets athletes' needs, if there is no positive coach-athlete relationship, psychological factors such as self-efficacy might not be influenced (Stewart & Owens, 2011).

The findings have a number of potential applied implications, including some direct recommendations from the professional basketball players who participated in the study. Pre-game speeches should be situated within a pre-game routine that is consistently delivered to reduce athlete uncertainties and allow time for individual preparation. Content, regardless of type, should be clear and concise to limit confusion or loss of focus, and specific strategies may benefit from being varied to prevent repetition. However, how a coach communicates and delivers speeches should generally be consistent, as atypical emotional displays may cause athletes to become confused or worried. Further, coaches should be aware of the influence they have on athletes, including an understanding of how body language and communication can be (mis)interpreted by athletes, and strive to develop their communication, coaching styles, emotional intelligence, and emotional regulation skills to enhance effectiveness and understanding of the messages they deliver.

A strong coach-athlete relationship should also be developed with each player, which should enhance how pre-game speeches are perceived, as well as create an open line of

communication in which athletes feel comfortable discussing their pre-game needs. Indeed, although participants felt that their coaches attempted to base pre-game speeches on what they thought their team needed, they highlighted those needs were never discussed and that a conversation between coaches and athletes prior to the start of the season could be beneficial. Past research has found that coaches' and athletes' pre-game speech preferences differ (Vargas-Tonsing & Guan, 2007) and that coaches and athletes are not always congruent with what the other is thinking or feeling (Lorimer & Jowett, 2009), presenting a potential barrier to effective pre-game speeches. Participants also recommended that athletes should be adaptable, and to take ownership for their preparation, especially when a pre-game speech does not meet their needs. Athletes should therefore explore and understand their personal needs prior to a competition, and develop mental skills that they could employ, reducing any reliance placed on the coach. Finally, participants recommended that coaches should consider a 'player-only' or 'player-led' section of their pre-game speeches, as this may boost athletes' feelings of ownership, togetherness, and support between teammates.

Although this study provided insight and understanding into professional female basketball players' experiences and perceptions of pre-game speeches, it was not without its limitations. First, qualitative research allows complex data to be collected and examined, but despite following IPA guidelines (Smith & Shinebourne, 2012) and applying methods of rigour and reflexivity, data and interpretations may be influenced by research bias. Second, interviews were conducted at the conclusion of the season and were thus retrospective in nature and perhaps prone to recall bias. Third, participants within this study represented a sample of professional female basketball players, so caution should be exerted if findings are generalised to other athletes or contexts or used to guide.

Future pre-game speech research should continue to build understanding of the experiences and perceptions of both parties involved in this interaction. Research has rarely examined '*why*' or '*how*' coaches deliver pre-game speeches, with most studies focused on athletes' perceptions of coaches' behaviour (e.g., Breakey et al., 2009; Vargas & Short, 2011) or observed coach behaviour (e.g., Savović et al., 2018). Exploring the coaches' experiences and perceptions of pre-game speeches may provide valuable insight. Participants within this study also highlighted various strategies that their coaches use within pre-game speeches, and further research into the breadth of strategies used and whether they extend beyond informational and emotional content (e.g., Berkowitz, 2003; Vargas-Tonsing & Guan, 2007) is needed. Future research may also examine the effects of pre-game speeches over time and on objective outcomes.

In conclusion, this study has contributed to the literature by exploring professional female basketball players' experiences and perceptions of pre-game speeches. Findings highlight that athletes' value pre-game speeches within their pre-game routines and these interactions can meet numerous individual and team preparation needs. However, when those needs are not met, athletes engage in behaviours to compensate and to help themselves and their teammates. Further, professional basketball players perceived that pre-game speeches can positively or negatively influence their affect, cognitions, and behaviour. Coaches may facilitate positive influence by maintaining consistency in pre-game speech delivery, being aware of their own emotions, asking players about their needs, and allowing a section of their pre-game speeches to be 'player-only' or 'player-led'.

Table 3.2

Summary of Previous Chapters and Preview of Upcoming Chapter

C.	Rationale	Aim	Main Findings
1	Orientate the reader to the structure and content of PhD, by introducing PGS and associated research.	To synthesise and critique the evidence on 'game-day' interactions, specifically pre-game speeches, and wider research and associated themes.	Demonstrated coach 'game-day' communication, in particular PGS may influence athletes.
2	Previous research has not examined PGS use in basketball and prior to conducting further research it was important to establish their use and value in the sport.	To examine the use, content, and effect of PGS in basketball.	PGS are commonly used within basketball, with various content and delivery styles used. Basketball players perceive PGS to be enjoyable, useful, and influential on their individual and team confidence and performance; with team outcomes perceived to experience greater influence than individual outcomes.
3	Past PGS research has typically used quantitative methods, and a more in-depth and detailed understanding of athletes' experiences and perceptions of PGS are needed.	To examine professional female basketball players' experiences and perceptions of PGS using a qualitative approach.	Professional female basketball players place high value on PGS within their pre-game routines. Numerous individual and team needs are present during PGS. If needs are not met by coach, players engage in behaviours to compensate. Players perceive PGS to affect cognitive, affective, and behavioural states, and ensuing performance.
4	Past PGS research has primarily focused on athletes' perceptions and preferences. Limited research has explored head coaches' experiences and perceptions of PGS.	To examine professional head basketball coaches' experiences and perceptions of PGS using a qualitative approach.	

Chapter 4:

The ‘What’, ‘How’, and ‘Why’: An Interpretative Phenomenological Analysis of Professional Basketball Coaches’ Experiences and Perceptions of Pre-Game Speeches

Abstract

Pre-game speech research has typically focused on athletes' perceptions, preferences and experiences, with very few studies focused on the individuals who deliver them: coaches. Therefore, the aim of this study was to examine professional basketball head coaches' experiences and perceptions of their pre-game speeches. Seven basketball head coaches (6 male, 1 female) from a women's professional league in Europe participated in semi-structured interviews. Interpretative Phenomenological Analysis (Smith, 1996; 2004) identified four superordinate themes: pre-game speech context, purpose, delivery, and effect. Context included coach, team, and game specific factors which shaped the purpose and delivery of the pre-game speeches. A key purpose of pre-game speeches was to ensure everyone were on the '*same page*' tactically and mentally, and to achieve this, coaches used numerous specific strategies and content. Coaches revealed it is important that any messages were clear and concise, and that well-planned and delivered speeches were perceived to enhance athletes' affect, cognition, behaviour, and ultimately performance. However, examples were also provided of speeches that had detrimental effects. Further, a feedback and reinforcement loop was identified, in which coaches engage in reflective practice that informed future pre-game speeches. The findings demonstrate the value that coaches place on pre-game speeches, but that the planning, delivery, and effect of this interaction are shaped by various factors. To further enhance their pre-game speeches, coaches may benefit from engagement with self-reflection, adaptability, and initiating conversations with their athletes to establish their individual and team needs.

Keywords: Game-day communication, coach-athlete interactions, coach development

Introduction

A key predictor of performance is mental preparation (Eklund, 1996; Gould et al., 1992; Orlick & Partington, 1988), and coaches play a crucial role supporting both athletes' preparation and performance (e.g., Bloom, 1996; Bloom et al., 1997; Durand-Bush & Salmela, 2002; Gould et al., 2002). For example, Gould et al. (1999) found that interactions between coaches and athletes immediately prior to a performance were influential on mental preparation and performance. Further, a coach's influence can be powerful (Allan et al., 2016) and can extend to the athletes' perceptions (Horn, 2008), motivation (Smith et al., 2016), team unity (De Backer et al., 2015), self-efficacy (Saville & Bray, 2016), and performance (Gallmeier, 1987; Orlick & Partington, 1989). One key interaction that can aid final preparation is the pre-game speech. However, despite emerging evidence on athletes' experiences of pre-game speeches and the potential impact they can have (e.g., Chapter 2 and 3; Vargas & Short, 2011), very little research has focused on the coaches' experiences and perceptions.

Pre-game speeches rely on effective communication, which is an important skill for coaches to possess (e.g., Haselwood et al., 2005; Moen & Kvalsund, 2013; Spink, 1991; Wang & Ramsey, 1997). The way a coach communicates information to their athletes, including '*what'*, '*why'*, and '*how'*, may play a role in athletes' ability to learn, develop and perform (Allen & Howe, 1998; Amorose & Weiss, 1998; Feltz et al., 2008). It is the coach's expertise that needs to be effectively communicated to allow for information, ideas, and feelings to be expressed and understood (Burton & Raedke, 2008). Not only can verbal communication influence athletes' experience of sport (Turman, 2003), but non-verbal communication can enhance athletes' confidence and motivation (Buning & Thompson, 2015). However, different types of communication can positively or negatively impact athletes (Jowett & Cockerill, 2002; Kassing

& Infante, 1999). For example, positive feedback has been linked to better learning (Turman & Schrodt, 2004), whereas verbal aggression has been linked to decreased motivation (Mazer et al., 2013). Further, Kim and Park (2020) recently found that effective communication between coaches and Olympic archers impacted athletes' self-awareness, self-confidence, anxiety, autonomy, and motivation.

Borggrefe and Cachay (2013) applied Systems Theory (Luhmann, 1995) to communication between coaches and athletes, and argued it should be understood from three processes: information, utterance, and understanding (Luhmann, 1995). Applied to pre-game speeches, information is '*what*' a coach wants to communicate to their players. For instance, using their expertise and knowledge they may think it is important for their athletes to focus on certain tactics. Utterance involves '*how*' the coach decides to communicate the information. This may include verbal or nonverbal factors, and a coach may decide what words to use, change their tone of voice or facial expressions to emphasise certain points, and/or display tactics kinaesthetically by modelling them. Understanding is how the players receive the '*what*' and '*how*', an aspect that is not within the coach's explicit control and is confirmed back to the coach through the players' response (or their utterance). For instance, upon delivering the tactical information, the coach may see players nodding their heads, confirming 'successful mutual comprehension' (p.13). Although this describes the broad communication process between coaches and their athletes, Borggrefe and Cachay (2013) argued that communication is fundamentally uncertain and can be influenced by different demographic factors (e.g., age, gender, race, and ethnicity). This highlights the complexity of communication during pre-game speeches, and the importance of understanding the perspectives of both parties involved during this interaction.

The majority of existing pre-game speech research has focused on athletes, with few studies focused on coaches. Chapter 2 found that pre-game speeches are widely used and perceived to be influential by basketball players. Chapter 3 expanded upon this finding and professional basketball players identified various ways in which pre-game speeches influenced their affect, cognitions, behaviours, and performance. Similarly, studies have found athletes perceive the content delivered and behaviours displayed by coaches during pre-game speeches to impact factors such as focus (Burton, 1989; Fletcher, 2006), emotions (Botterill & Brown, 2002; Gonzalez et al, 2011; Van Kleef et al, 2019; Vargas-Tonsing, 2009), motivation (Adegbesan, 2001; Botterill & Brown, 2002), behaviours and affect (Delrue et al., 2017), efficacy (self-, Vargas-Tonsing, 2009; team, Vargas-Tonsing & Bartholomew, 2006), and optimal performance (Mesquita et al., 2005; Savović et al., 2018). However, these perceptions may be influenced by the athletes' preferences for pre-game speech content. Vargas-Tonsing and Guan (2007) found that athletes' preferences varied based on game scenario, and that these preferences differed from those of coaches. Specifically, coaches reported a need for less emotion across four game scenarios in comparison to athletes. This potential lack of congruency may present a barrier to the delivery of effective pre-game speeches.

Research focused on coaches during pre-game speeches has provided some insight into content and delivery methods. Gallmeier (1987) examined professional ice hockey players' '*game-day*' emotions throughout a season and observed that the coach used different motivational stimuli (e.g., communication), prior to the start of the game that had a large role in directing the style of play. Further, through examining the pre-game speeches of three well-known collegiate basketball and football coaches prior to a championship game, Hettinger (2010) identified six common features: visual aids, sport jargon, associative language,

anticipation, ideographs, and narratives. Finally, in a recent study of transformational leadership behaviours displayed prior to a game by nine national level coaches, Macquet and Stanton (2021) found examples of individual consideration, inspirational motivation, intellectual stimulation, reference of group goals, performance expectations, and role modelling. Despite this evidence, however, a greater understanding of coaches' perspectives of this interaction is needed. Therefore, the purpose of this study was to explore professional head basketball coaches' experiences and perceptions of pre-game speeches.

Methods

Research Design

Like Chapter 3, a qualitative research design was applied. Subtle realism was adopted in an effort to recognise the unique views and experiences of individuals as equally valid, along with representing a common reality across coaches' experiences and perceptions of pre-game speeches (Hammersley, 2002a, 2002b; Pope, 2007). Phenomenology is one methodology that aligns with subtle realism, and aims to explore, explain, describe, or be emancipatory towards research questions (Merleau-Ponty, 2013; Schutz, 1967). As with Chapter 3, Interpretative Phenomenological Analysis (IPA; Smith, 1996) was applied. This enabled the exploration of the personal experiences and perceptions of head basketball coaches regarding pre-game speeches (Smith & Shinebourne, 2012), as IPA considers the research participants to be experts from whom we can learn from (Reid et al., 2005).

Participants

A purposive sample was sought from head coaches within a women's professional basketball league. Inclusion criteria included: (a) they were currently active head basketball coaches; (b) they were coaching at the professional level; (c) they were able to discuss and

reflect upon their personal experiences and perceptions of pre-game speeches. Nine coaches were contacted and seven agreed to participate (6 male, 1 female). Participants had a mean age of 45.3 years (*SD* = 9.91) and mean years of experience as a head coach was 20.7 (*SD* = 9.63). All coaches held national level coaching qualifications and had either coached (*n* = 6) or played (*n* = 3) at international level.

Procedure

A university ethics committee approved the study. Initially, pilot testing was conducted, which involved interviewing two professional basketball coaches from a different league. Participants were informed of the purpose of their interview and provided consent prior to the interviews. After the interview they were then asked to provide feedback on the questions, overall process, and comment on any aspects that were unclear. Pilot testing enabled the lead researcher to gain further experience in qualitative interviewing and an opportunity to critically reflect on the process, including the appropriateness of questions and prompts, their verbalised reactions, and interviewing technique. The reflective process included the lead researcher transcribing the interviews, listening to the interviews, and reading the transcripts with the lead supervisor, and then discussing all materials. Based on pilot interview feedback and reflexivity, questions and prompts were modified to aid clarity, participant understanding, and to ensure questions were open-ended to allow participants opportunities to describe their experiences and perceptions in-depth. Data collected from the pilot interviews were not analysed within the main study.

Individuals who met the inclusion criteria for the main study were approached in-person or via email by the lead researcher and given information about the study. Confidentiality and anonymity were assured to participants by clarifying that only the research team would have

access to the full transcribed interviews and any potential identifying information would be removed prior to any extracts being shared or published. Coaches who agreed to participate were then contacted to arrange a time and location for an individual interview to be conducted and asked to sign a written consent form. Prior to the interview, participants were sent the questions and prompts and encouraged to highlight any questions they felt required clarification. Interviews were then conducted in-person or by phone (Cachia & Millward, 2011), and at the start participants were reminded that interviews would be recorded and transcribed, and verbal consent also obtained. Upon completion of the interviews, participants were thanked and asked if they were happy to be contacted later should any questions arise when analysing their interview.

The Interviews

Semi-structured interviews were conducted by the lead researcher, who is a former professional basketball player and basketball coach. This allowed for the use of basketball and sport related terminology to be utilised throughout the interview. All participants were provided with a definition of pre-game speeches at the start of the interview (an intentional interaction between a member of the team's staff and their athletes prior to a competition for the purpose of final game preparation), and any further clarification was provided if necessary. Semi-structured interviews provided a general framework of questions focused on the main aim of the study (Longhurst, 2003), with prompts and probes used to encourage more detailed explanations (Barriball & White, 1994).

All coaches were first asked to talk about themselves, including general demographic information, a brief discussion about their current season, and their coaching/playing careers. This was done to gather information and build rapport. Personal experiences and perceptions with pre-game speeches were then explored, with encouragement to provide detailed and honest

responses to questions. Appendix E provides a copy of the interview guide. The interviews lasted an average of 68:14 minutes.

Data Analysis

Analysis was completed by the lead researcher and mirrored the process used in Chapter 3 (pages 73-74 for a description).

Rigour and Reflexivity

As in Chapter 3, Smith and McGannon's (2018) recommendations of member reflections and '*critical friends*' were applied to attain better levels of rigour. Member reflections were conducted by contacting participants and engaging in a 'practical opportunity' to further discuss their responses and interpretations of findings (Schinke et al., 2013). '*Critical friends*' involved discussing interpretations with other researchers (3) and experienced coaches (3) throughout the research process to be challenged (Smith & Sparkes, 2006) and assess different interpretations and explanations that could emerge from the data (Smith & McGannon, 2018). Reflexivity was a continuous process throughout the study and allowed the researcher to examine and explain how their own personal experiences may play a role and influence in the research process (Koch & Harrington, 1998). A reflexive journal was also used to help the lead researcher organise their thoughts, recall past personal experiences, list questions to discuss with '*critical friends*', and act as an audit trail.

Results

IPA identified four superordinate themes that encapsulated the coaches' experiences and perceptions of pre-game speeches and provided insight into the meaning placed on them. It should be noted that themes are complex and interrelated, with a cyclical loop existing between them. Table 4.1 illustrates the themes.

Table 4.1

Table of Themes

Superordinate Themes	Sub-Themes
Contextual Factors	Coach Factors
	Team Factors
	Game Factors
PGS Purpose	'Same Page' (Tactically / Mentally)
	Team Needs
PGS Delivery	Link to PGS Purpose
	Content and Strategies
	Communication Style
PGS Effect	Affect
	Cognition
	Behaviour

Contextual Factors

Context comprises different contextual factors professional head basketball coaches described as influencing their approach to the planning and delivery of their pre-game speeches. Specific sub-themes include coach, team, and game specific factors.

Coach Factors

Coaches indicated that their previous experiences, coaching styles (philosophy, leadership, and communication), and perceptions of pre-game speeches played a role in how they approached pre-game speeches. Past experiences appeared particularly influential on coaches' approach and included playing experiences, experiences as an assistant coach, previous head

coach roles, and having mentors who provided guidance. Some coaches described how they had learnt what did and did not work for them during their playing career and from previous coaching experiences, and that they applied these lessons to current pre-game speeches.

> You kind of develop, the more you coach and the higher level you're going to coach, you kind of learn and you develop as a coach and there are lots of ways to learn and develop these kinds of things (pre-game speeches). Obviously, being an assistant coach is a great learning opportunity because you learn from obviously the head coach in that sense, and just by being a player obviously you kind of get an idea. (C5)

Two important aspects that coaches expressed as part of their coaching style, and valuable in supporting their philosophy, leadership, and communication, were self-reflection and self-awareness. Coaches felt that their ability to reflect on past experiences and development of personal awareness of '*what'*, '*why'*, and '*how'* they deliver their pre-game speeches was important. Coaches also emphasised that personal awareness regarding their own preparation was imperative for delivering more effective speeches, as their own preparation allowed them to feel as though they were best able to prepare their teams; an aspect all coaches agreed was their responsibility. "The more prepared I am, the more clear the message, the more I know they've gotten the message. I tried to be as prepared as possible and the more prepared I am, as possible, the better the team does." (C1)

Many coaches noted they sometimes had experienced feelings of doubts and pressure over delivering pre-game speeches. Doubts focused on the usefulness of pre-game speeches, including questions about how much influence they had on athletes. This appeared to stem from self-doubt about their ability to deliver pre-game speeches that could 'please everyone' as

individual players on a team may have different needs. This led to some coaches expressing that they felt pressure to then try and meet every player's individual need.

Team Factors

Coaches reported that their approach to pre-game speeches was influenced by the team, including demographic and personality characteristics of players, recent game and training performances, current team needs, and culture. Many coaches felt that they needed to think about each athlete on their team and what would work best for them: "it's not necessarily what you're coaching, but it's who you're coaching…". (C2) Demographic characteristics such as age, gender, nationality, competitive level, and playing experience were mentioned by coaches as influencing the amount and detail they put into informational content and the overarching message they delivered during pre-game speeches. For instance, coaches reported using less detailed information for younger and more inexperienced players on the team, with a focus on having fun. Conversely, coaches used more detailed information for older, more experienced players, and emphasised higher performance standards and expectations. Furthermore, coaches who had previous experiences coaching male athletes typically felt that the way in which they spoke to females and explained information during pre-game speeches was different than the way they had delivered to male athletes.

> Men are more, I've always found them more black and white. They want things, 'specifically tell me…what you want me to do and how you want me to do it and just let me get on with it'. Whereas women tend to…'ok, you want me to do that, why do you want me to do that?' So, you've got to get into an explanation and a conversation. (C3)

The team's recent performances in games and training, along with the current mood and atmosphere, also influenced the coaches' approaches to pre-game speech delivery. For example, some coaches reflected on the week's practices and tailored their speech to address any positives or negatives from the week. "I think it depends on what kind of practice(s) we've had during the week. You try and gauge it (the pre-game speech) from that." (C2) Additionally, for most coaches, pre-game speeches were influenced by their perceptions of the team's current mood, emotions, and energy levels. If they perceived their team to be experiencing any negative moods, emotions or energy levels, they would alter their pre-game speeches in an attempt to 'correct' those areas. This assessment was performed against the team's recognised identity, culture, and routine norms, which were often established at the beginning of the season, with most coaches appearing confident in their ability to make correct assessments.

> I do try and plan it going into it and I make some points on my pad that I think (are) important about the game, but then depending on maybe reading the players is (as) much detail I go into. I feel I can sense mood, so if I feel that we are a little bit flat maybe I want to challenge that…that ability to dive after loose balls, those intangible, ethic, 'work-hardy' things, whereas if the warm-up looks hyped, the people, like you know, there's a lot of positive hand touching and like people are smiling and they look energetic, then I don't think I as a coach, I won't need to challenge that or mention it because we're already at that level. (C7)

Although the coaches highlighted their responsibility to prepare the team, they also emphasised expectations they had for the players to take responsibility for their pre-game preparation, with these expectations also being driven by the team's established culture. This included factors such as the team's 'non-negotiables', individual player responsibilities, player

buy-in, professionalism, and accountability. For example, most coaches expected that players should be self-motivated, and motivation was not a requirement for coaches to deliver during the pre-game speech.

> It shouldn't be (my responsibility). A natural energy that you should have based on your desire to prove you're as good as or better than the people that you're playing with and against. It should be my job to calm you down, not motivate you. (C3)

Game Factors

Several game-related factors influenced how coaches approached pre-game speeches, including the type of game (regular vs. post-season), previous results against the opponent, and the team's league position relative to the opponent. Most coaches revealed that for speeches prior to championship games (or play-off games) they would still maintain common aspects of previous pre-game speeches but include more emotional and informational content. "My team talk will go through a similar routine, but my team talk will really try and play on their emotions in that game…for a championship game…" (C7). There was one coach, however, who felt that due to a championship game already evoking higher levels of emotion and excitement, their pre-game speech before a cup final was calmer. "The cup final, people were up and excited, so in that on I kept it very calm and very much informational based." (C4)

Further game factors that some coaches felt were potentially influential to their pre-game speech approach dealt with the venue of the game and availability of time. For example, one coach stated that if they had nicer locker room facilities or more time, then they would perceive their pre-game speeches to be 'more important' and would be more inclined to attempt to 'improve' them.

Pre-Game Speech Purpose

The majority of coaches perceived main purposes of their pre-game speeches to include getting their team to be on the '*same page*' tactically and mentally and attempting to meet their team's needs. Coaches reasoned that accomplishing those purposes would put their teams in the best position to optimally perform because they would be mentally prepared, ready, and supported.

'Same Page'

Cultivating a strong sense of togetherness was important for all coaches, and players being on the '*same page*' tactically and mentally emerged as a main purpose of their pre-game speeches. The purpose of tactically being on the '*same page*' stemmed from coaches wanting all players on the team to understand key aspects of their game plan. "A lot of the time you're recapping the same thing that you spoke about all week, so it's more confirmation." (C3) The purpose of mentally being on the '*same page*' revolved around coaches wanting to use the pre-game speech as a time where their players' focus could transition from individual to team preparation. "The most important aspect is probably just knowing that everyone is on the same page ultimately. On the same page in terms of how we're going to play, on the same page in terms of understanding our principles and our standards." (C6)

Although they felt being on the '*same page*' tactically and mentally provided a sense of togetherness and support between players, they also had an additional aim to convey their support for their team.

> I think ultimately the players want to know that the coach cares about them as an individual and I think that's important and I think that if they know the coach

> cares then I think they're going to be more bought into the way in which, you know, the team plays and team philosophy and all that sort of stuff. (C6)

Team Needs

A fundamental purpose of pre-game speeches was to prepare players by meeting the teams' needs. As noted within contextual team factors, coaches felt team needs could be identified by assessing the team prior to the pre-game speech and comparing them to established norms. However, when asked to discuss teams' needs further, coaches appeared to contradict themselves and acknowledged a degree of uncertainty over what their teams needed or wanted to hear during pre-game speeches. "It's a great question. 'What do you want from our pre-games?' I might actually throw that at them because I'm not too sure." (C3)

Coaches indicated that they had never initiated a direct conversation with players about potential needs from pre-game speeches. Some coaches expressed concern that having a discussion could be problematic if individuals expressed different preferences from their own, with many feeling that they could make educated guesses without consulting players, particularly when they had established strong relationships. For example, Coach 4 stated, "people respond differently to different ways of speaking. So again, it's about the coach-athlete relationship of knowing what words work with the individuals."

Beyond specific content, however, coaches suggested that it was essential that their teams needed to receive the underlying message that they care about the team. "If players genuinely think I care, whether they always agree - which is never going to happen all the time - as long as they know that I care for them then I think that's like 50%." (C7)

Pre-Game Speech Delivery

As coaches discussed pre-game speeches, they described both '*what*' was delivered and '*how*' it was communicated. Coaches provided many examples of specific messages, behaviours, and strategies of '*what'* was delivered and '*how'*, with both aspects heavily influenced by the context and purpose, such as the game scenario, recent practices, and past performances. For example, most coaches typically used more informational content rather than emotional content, but this was reversed for important games or when they perceived the team to be emotionally flat.

> I would say most of the time it would be 60-40 for instruction and motivation. But a couple of games, where the trainings not particularly gone (well) or we had, didn't have a good performance, or we won but didn't have a good performance the week before, if we felt we were quite flat, I actually switch that around… (C4)

Content and Strategies

Informational content comprised messages and strategies that provided advice, guidance, and information. All coaches discussed clarifying individual and team roles and responsibilities, the opposition's tendencies, game plans, and tactics. Coaches referenced scouting reports and made use of game film and visual aids (e.g., whiteboard and posters). Central to the delivery of information was that most coaches did not always link the content to winning. Instead, they would prioritise the process over the outcome. "We never talk about winning, because you can't control winning. All you can control is your effort and your attitude and, you know, you're sticking with it." (C1) Further, there appeared to be an optimal amount and detail, with many coaches keen to avoid 'information overload'. For one coach, they felt it was challenging to strike the right balance.

> If you go too informative, they switch off. If you don't give enough information then maybe they don't understand what it is you're looking for them to do. If you're not clear with what you're trying to communicate. So, you really have to get the balance right and you have to get the timing right with it. (C6)

Emotional content comprised messages and strategies used to influence their players' cognitive and affective states, typically motivation levels, but also confidence, energy, and positivity. Commonly used messages included referencing team values, past positive performances, discussing the '*meaning of the game'*, and expressing belief in their team. Further, coaches used storytelling, motivational quotes, music, regret messages, humour, team huddles, gifting emotional memorabilia, and mental skills such as imagery and mindfulness. The consensus was that a variety of strategies enabled them to reduce repetitiveness, which could impair engagement and focus, "it can't just be the same all the time because it just becomes mundane and then people don't listen." (C4)

Coaches emphasised a focus on positive messages, but some contradictions did emerge. The clearest example coming from Coach 2 who stated, "there's no negative stuff", but went on to describe the use of regret messages. That is, highlighting potential negative consequences in terms of guilt or regret that might follow a poor performance, with the intention of motivating their team to not allow those negative consequences to happen.

> I explain to them what the negative things will be if we don't do what we need to do. If we don't get some offensive rebounds, they're (the opponents) going to run us off the floor because they're transitioning this way. I want them to come off the floor and basically not say 'ah, I could of played harder' or 'I could have done this, I could have done that'. I think that's the motivational aspect of it.

Despite the variety of messages and strategies, coaches typically labelled them as either informational or under a 'motivational umbrella'. For example, Coach 1 stated, "the rest of it (pre-game speech) is all about motivation, but it can take different tones." When asked to further explain the 'tones', they replied "it's a general motivational type thing that hopefully they feed off of…"

Communication Style

Regardless of what content coaches delivered, all coaches wanted their pre-game speeches to be delivered in a clear and concise manner, which they perceived to facilitate athletes' focus and understanding. This was heavily influenced by the coaches' preparation of '*what*' they would say and '*how*' they would say it. "It's important for me that I'm preparing myself for the pre-game to make sure that I'm clear with what I'm saying in terms of communication." (C6) However, as previously stated, most coaches admitted the uncertainty regarding their teams' needs, which could make preparation more difficult.

Pre-Game Speech Effects

Pre-game speech effect comprises the coaches' perceptions of the influence their speeches have on individual players and the team. All coaches perceived that pre-game speeches could impact players, both physically and psychologically, and that these influences could be either positive or negative. Coaches could not necessarily quantify the magnitude of effects, but many recalled past experiences as both players and coaches that informed their perceptions.

> From my own experience, from what I've seen is that actually what we say and how we act in the pre-game…it absolutely does have an impact on performance and it can impact in a positive way or it can impact it in a negative way, it just comes down to how you deliver. (C6)

Cognitive and Affective Effects

Coaches perceived pre-game speeches to have the potential to influence multiple psychological factors, including focus, efficacy beliefs, perceptions of support, and other cognitive and affective states. Many coaches felt that these aspects were linked, and by influencing one, others would also be affected. For example, building a sense of support could enhance confidence and in turn performance. Additionally, emotional and informational support was highlighted by coaches as important, as it showed that they care about the players by offering reassurance and positive feedback of their abilities and provided advice and tactical guidance.

Another aspect of this effect on athletes was that the pre-game speech served as a stimulus for some psychological factors, which could continue to evolve and be present throughout the rest of the warm-up and game.

> I think that hopefully influences them into getting on court, focusing in the warm-up, really thinking things through, getting them in a mindset, because ultimately it is about that focus, that mind, and understanding where we are. (C4)

Coaches perceived that their own emotional state had an effect on their players. Coaches described how their energy and emotion could be '*caught*' by the players, which could then influence performance. This transfer of emotions could be positive, as coaches felt that if they were able to portray a sense of calmness, confidence, or positive emotions, these could be '*contagious*', especially if the team was lacking confidence. However, this transfer of emotions could also be negative, as Coach 2 discussed a past coaching experience, "early on in my career I'd be too hyped. I'd be too coiled if you like. And that transcended into them and their

performances on the floor were tight." Although this example of '*over-arousal*' could have a negative influence on players, the same was true for '*under-arousal*'.

> I felt flat and low on energy in myself and I couldn't help but feel that the talk was flat. And I remember the players leaving the locker room and I was like 'I didn't really nail it the way I wanted to nail it'…it was one of those games where we did come out flat, so then I am thinking 'do I have a bigger impact in those moments than I actually think I do'? (C6)

Behavioural Effects

All coaches perceived that pre-game speeches influenced players' behaviour and performance during both the remaining warm-up time and the game, including efficiency, effort, and execution, with any impact potentially mediated by the influenced psychological variables. For example, coaches felt that if focus and energy were increased during the pre-game speech, players then had more efficient warm-ups, increased effort in the game, and performed better. Coaches also discussed how the delivery of tactical game plans or specific technical elements influenced tactical and skill execution on court, "you can see from…translated from implementing from the team talk in the changing room, into the game, you can see the moment when the players stick to the game plan. It works." (C5)

Negative behaviour and performance effects were highlighted by coaches in situations where pre-game speeches were not delivered, too much information was provided, or it was poorly delivered. One coach recalled an instance in which they did not stick to their established pre-game routine, missing the pre-game speech, and associated that with poor performance.

> I missed a pre-game speech. I didn't do it in that game and then as soon as we started missing lay-up after lay-up in the first five minutes I thought 'you

> ****head, you should have just…', even though we'd spoken about it…I should have went just to re-focus them a little bit. That would have been one of the ones (pre-game speech) where I could have impacted their preparation ahead of the game. (C3)

Although coaches provided examples of how pre-game speeches were perceived to have an effect on cognitive, affective, and behavioural states and performance, the amount of influence was questioned. Indeed, there was a common perception that pre-game speeches would not definitively determine outcomes of games. As one coach stated, that even if a coach delivered a bad pre-game speech, "if you put them with UCONN…they'd probably win anyway." (C7)

Feedback and Reinforcement Loop

Throughout the data analysis, the intricacy and interplay between themes emerged. Particularly prevalent was the notion of a feedback and reinforcement loop, in which the reflections of some coaches about pre-game speeches impacted future ones. Positive outcomes typically left coaches feeling confident in the pre-game speeches they delivered, resulting in minimal changes to their overall approach, purpose, and content. Negative outcomes challenged coaches to reflect on what possibly went wrong, including whether alterations should be made to their pre-game speeches. This loop then continually shaped coaches overall use and experiences of pre-game speeches.

> We played in two finals. We were a little bit up tight and I think if I could go back, or in the next final, a lot of my focus will be on constructing a pre-game speech that gets them to relax…I thought in both games, I thought they were a bit

> tense. We just need to play our game. So, my process is I need to help us get to that. To have fun, to celebrate what we have done all season, in each other. (C1)

The process of discussing issues related to this feedback and reinforcement loop appeared to trigger deeper reflection by some coaches. Some questioned whether they and other coaches sufficiently engaged in reflective practice. “I think other coaches don’t self-reflect much. They don’t think what they could do to be better.” (C7) Another coach specifically questioned their own lack of self-reflection regarding pre-game speeches. “I probably should have done that years ago because I try and reflect on everything I do and I’ve never actually reflected on that part of it (pre-game speeches).” (C6) A potential reason for not reflecting on pre-game speeches potentially stems from limited education on this ‘*game-day*’ interaction, as C4 stated “These questions, nobody really gives you these instructions do they? It’s never part of the coaching course(s), even though as basketball coaches it’s part of a routine that we’ve always done.”

Discussion

The aim of this study was to explore in-depth professional head basketball coaches’ experiences and perceptions of pre-game speeches. Interpretative phenomenological analysis identified four superordinate themes, as well as the emergence of a feedback and reinforcement loop. The themes were contextual factors, pre-game speech purpose, delivery, and effect. Contextual factors and purpose provided insight into ‘*why*’ coaches use pre-game speeches, ‘*how*’ they develop them and ‘*what*’ they intend to accomplish. Delivery provided insight into ‘*what*’ is included in pre-game speeches and ‘*how*’ they are delivered. Effects provided insight into coaches’ perceptions of the influence their speeches have on cognitive, affective, and behavioural outcomes. The four themes were interconnected, and created a feedback and

reinforcement loop, which highlighted a reflective process that coaches both consciously and sub-consciously engaged in that informs future pre-game speech development and execution.

The current findings reveal that coaches consider several contextual factors prior to delivering pre-game speeches, and these relate to the coach, team, and game scenario factors. A key coach-related factor was prior experiences of pre-game speeches, both personal and vicarious. These experiences provided a wealth of information about what could work (or not), and coaches applied past lessons to current situations. Similarly, previous research has demonstrated that experience is an essential element of coach education and development (Cushion et al., 2003, 2006; Gilbert & Trudel, 2000), and that a coach's personal practice is influenced by their philosophy and past experiences (Gilbert, et al., 2001; Nelson, et al., 2006; Salmela, 1996). In addition to the importance of previous experiences, coaches in the present study referenced a lack of pre-game speech resources for them to utilise. Coach learning has been described as formal, non-formal, and informal (Nelson et al., 2006). Walker et al. (2018) conducted a systematic review of coach learning literature and found that while coaches learn from other coaches, they like to learn independently through informal sources (e.g., internet, books, coaching videos). A preference for informal learning over formal learning may stem from coaches' feeling that formal learning (e.g., coach professional development courses) can have reduced applicability to their own personal situation. The current findings offer insight that could allow coaches to balance tacit-knowledge with empirical evidence to strengthen planning and delivery of pre-game speeches. This may be particularly important for neophyte coaches, as Turman (2003) found that antisocial instructional strategies were more frequently used by novice coaches than their experienced counterparts.

Important team factors included demographic variables and recent performances. A consensus across the coaches was that it was not only '*what*' they were trying to deliver, but who they were delivering to. For example, coaches generally favoured more information for older more experienced teams and more motivation for younger less experienced teams, and that they had to provide female athletes with greater justifications for game plan than male athletes. Many coaches cited that adaptability was a key trait that allowed them to tailor speeches to different types of players and teams. Further research is needed to verify the coaches' assumptions of how different athlete demographics may respond to pre-game speech content, but studies have found that genders can differ in their preference of coaching behaviours (Beam et al., 2004), including the amounts of informational content during pre-game speeches (Vargas-Tonsing & Guan, 2007), and that athletes on losing teams had a preference for receiving less instruction as the season progressed (Turman, 2001).

Coaches in the current study felt a sense of responsibility to prepare their teams prior to the start of the game. To facilitate this, key purposes of pre-game speeches were to facilitate a shift from individual to team preparation, ensuring everyone is on the '*same pag*e' and meeting their teams' tactical and mental needs; a key purpose of pre-game speeches also highlighted by players in Chapter 3. Tactically, coaches delivered information related to their game plan. Mentally, coaches described wanting to promote a sense of unity and togetherness via pre-game speeches. Pre-game speeches may provide an opportunity for team members to take part in a shared experience (Broch, 2015), and allow coaches to utilise different strategies to bolster team cohesion. More generally, Weiss et al. (2021) examined team cohesion among female athletes and found that both the coach and teammates are sources of task and social cohesion and that

specific strategies can be used to promote cohesion (e.g., promote growth mindset, praise effort, remove negative language, define athletes' roles, provide autonomy).

Despite the importance placed on meeting their teams' needs, coaches were not certain of the specific needs of their team and had not explicitly asked their players. Coaches believed that their experience and strong coach-athlete relationships enabled them to understand and meet their teams' needs. However, some coaches questioned why they had not asked their players directly and indicated that they would discuss this with players in the future. Although some coaches may understand their teams' needs, Vargas-Tonsing and Guan (2007) found that perceptions about preferred pre-game speech content differed between coaches and athletes. Similarly, other research has found that congruence between coaches and athletes is often low (e.g., Kenow & Williams, 1999; Lorimer & Jowett, 2009; Vargas-Tonsing et al., 2004), and that athletes have identified negative aspects of their coaches' '*game-day*' speeches (Breakey et al., 2009). Past research has found that coaches seek to manipulate their teams' emotions and moods prior to a game (Friesen et al., 2013; Gallmeier, 1987; Zaki & Williams, 2013), but it is important that coaches first identify their athletes' individual zone of optimal functioning (Hanin, 1997) and differences within their teams to prepare pre-game speeches that elicit beneficial emotions (Cerin, 2003).

Coaches provided insight into '*what*' is delivered during pre-game speeches and '*how*' it is communicated. The coaches' descriptions of '*what*' and '*how*' were similar to two coach-athlete communication aspects highlighted by Borggrefe and Cachay (2013) in their application of a Systems Theory lens: information and utterance. Regarding the third aspect in Systems Theory, understanding, coaches did not mention explicitly assessing player understanding within the pre-game speech, but players' understanding was inferred through the execution of tactical

and mental aspects during the game. Cherubini (2019) argued that coaches' communication may be enhanced by better developing an understanding of '*what*', '*why*', '*how*', and to whom they are communicating with.

Coaches described using various informational content, including reinforcing roles and responsibilities, the opposition's strengths and weaknesses, and game plans. Recent research reported that descriptive feedback tended to be most often used during pre-game meetings (Jackson, 2020), which was typically true of coaches within this current study. Coaches, however, cautioned that the delivery of too much information could be detrimental, so they attempted to be focused and concise with informational content. Previous research has also highlighted the potential for information overload by coaches (Bloom et al., 1997), with negative effects of selective attention and limited retention of information occurring (Williams & Hodges, 2005). To aid informational retention, researchers have recommended the use of repeated words (Mesquita et al., 2008) and combining verbal and visual information (Mousavi et al, 1995).

Emotional content described by coaches strongly focused on motivation. However, some contradictions emerged. For example, many of the coaches expected professional players to be self-motivated and reported that it was not a coach's responsibility to motivate them, yet all coaches described a variety of '*motivating*' strategies they employed in pre-game speeches. Further, one coach spoke about using regret messages to warn their players of the consequences of poor performance to motivate them, but also stated that they were never negative during pre-game speeches. Regardless, key motivational strategies highlighted in the current study included referencing past positive performances, team huddles, and motivational quotes. Savović et al. (2018) examined a championship game '*motivational speech*' and found that content attempted to reduce pressure, encourage players, increase enjoyment, support confidence, define goals and

rewards for achieving those goals, bring players together, and offer support. Similar to informational content, further research is needed though to understand the strategies used by coaches during pre-game speeches and if athletes find them beneficial or not.

Coaches perceived that their own emotions, body language, and tone of voice were important aspects of delivery. Coaches described purposively considering their own emotional expressions, behaviours, and supporting strategies to influence their athletes' emotional states. Conversely, they described instances in which their own emotions and moods were less than optimal, and this adversely influenced their athletes' emotions and moods. Previous research has also found that coaches' emotional displays can convey information to athletes about the situation they are facing and how to respond (Green & Sedikides, 1999; Hoigaard et al., 2015). Further, similar to previous research (Horn, 2008; Van Kleef, 2009), Chapter 3 found that basketball players assessed and interpreted their coaches' emotions. The current findings may provide important insight into the mechanisms through which pre-game speeches influence players, particularly via emotional contagion (Barsade, 2002; Cheshin et al., 2011; Elfenbein, 2014; Hatfeild et al., 1994) and emotions as social information (EASI; Van Kleef, 2009; 2016). EASI theory has proposed that emotional expressions can influence the behaviour of the observer, who may then engage interpersonal behaviour regulation or inferential processes such as reverse appraisal. As emotions are indicative of how an individual may appraise a situation (Frijda, 1986), it is important for coaches to be aware of their emotional displays during pre-game speeches.

All coaches thought that their pre-game speeches influenced their teams, both positively and negatively. Evidence for effects were typically based on examples from their past experiences and observations, which were subjective in nature. Coaches within this study

indicated that informational content could enhance the application of tactical strategies in the game, skill execution, and focus. Information has been found to be beneficial to performance and athletes' self- and team efficacy beliefs (Allen & Howe, 1998), and a lack of information can hinder performance (McCarty, 1986). Coaches also perceived that the delivery of emotional content could influence players' efficacy, mood, and arousal levels. Similarly, Vargas-Tonsing (2009) and Vargas-Tonsing & Bartholomew (2006) found that pre-game speeches can impact self- and collective efficacy beliefs. Pre-game speeches have been considered a form of verbal persuasion (Vargas-Tonsing, 2009), which has been found to influence team efficacy and performance (Allen & Howe, 1998; Bandura, 1990; Vargas-Tonsing et al., 2004), especially if coaches are deemed 'credible' by their athletes (Feltz et al., 2008). However, Rubio et al. (2018) found pre-game speeches did not influence self-efficacy when accounting for age, and that any differences were due to game scenario.

Alongside the four superordinate themes, a feedback and reinforcement loop was identified. Following games, some coaches engaged in reflective practice regarding their pre-game speeches to identify aspects to replicate and modify in the future. For some coaches this reflection was purposeful, and for other coaches learning appeared to occur more sub-consciously. This is similar to another coaching loop identified by Gilbert and Trudel (2001), who described experiences as learning opportunities for coaches to generate, experiment, and evaluate coaching strategies. Moon (2004) also discussed how coaches learn from experiences, and that learning is not meaningful until reflection occurs which was described as 'a process of re-organising knowledge and emotional orientations in order to achieve further insights' (p. 82). Coaching literature has emphasised the importance of coaches being open to development (Cassidy et al., 2004), understanding their personal philosophy, continuously analysing their

beliefs and attitudes (e.g., Nelson & Cushion, 2006; Savović et al., 2018), and becoming familiar with different communication styles they can utilise at various points in a season (McGowan & Henschen, 1988). The pre-game speech feedback and reinforcement loop provides evidence of these principles being applied by some coaches and could provide others with a starting point to initiate the continuous evaluation, reflection, and development of their use of pre-game speeches.

Following the above, the current findings have several potential applied implications. Coaches should engage in reflective practice and consider contextual factors that influence their current use and the effectiveness of pre-game speeches. Framing reflections by '*what*' (information), '*how*' (utterance), and understanding may allow coaches to gain insight into different aspects of their own communication styles. It may be important that they are adaptable in the content and delivery of pre-game speeches to suit team needs and different game scenarios. They should build positive coach-athlete relationships to understand individual and collective pre-game speech needs; initiating conversations with players may also help to establish game preparation needs. Typically, though, pre-game speeches should be short, concise, clear, and positive. Further, developing and adhering to a team pre-game routine, in which the pre-game speech is situated, may provide consistency for both players and themselves. Finally, coaches in the current study perceived a lack of education and training around pre-game speech delivery, so governing bodies and training providers might consider embedding guidance of this specific communicative interaction within formal coach education programmes.

The study has provided important insight into head basketball coaches' experiences and perceptions of pre-game speeches, but some limitations should be noted. First, despite following recommended steps of IPA (Smith & Shinebourne, 2012) and applying methods to enhance rigour, such as member reflections, '*critical friends*' and keeping a reflexive diary, interpretation

of data could be influenced by researcher bias. Second, the sample comprised coaches from women's professional basketball, with six male coaches and one female coach, potentially limiting the generalisability of the findings. Future research should explore pre-game speeches across various sports, genders, competitive levels, and nationalities to contribute to overall understanding of pre-game speeches. Third, the interviews were conducted at the end of a season, so were retrospective in nature and potentially subject to recall bias. Future researchers should examine coaches throughout a season, which might yield unique insight into the feedback and reinforcement loop.

Building on past pre-game speech research, which has tended to focus on athletes' perceptions, this study has advanced understanding of the experiences and perceptions of the individuals delivering pre-game speeches: coaches. The findings highlight how contextual factors such as the team, coach and game influence the purpose and delivery of pre-game speeches. A key purpose of pre-game speeches was to ensure everyone were on the '*same page*' tactically and mentally. Delivery provided insight into '*what*' is included in pre-game speeches and '*how*' they are delivered. Emotional and informational content was important and should be delivered in a clear and concise manner. Speeches could have both positive and negative effects on affective, cognitive, and behavioural outcomes, highlighting the importance of well-planned and delivered speeches. Coaches also appeared to engage in reflexive practice to inform the development of future pre-game speeches. Overall, the findings demonstrate the value that coaches place on pre-game speeches, but that the planning, delivery, and effect of communication is shaped by various factors. To inform coaching practice, further research is needed on the range of strategies coaches use in pre-game speeches, how these vary over time, and the impact they have on psychological and performance outcomes.

Table 4.2

Summary of Previous Chapters and Preview of Upcoming Chapter

C.	Rationale	Aim	Main Findings
1	Orientate the reader to the structure and content of PhD, by introducing PGS and associated research.	To synthesise and critique the evidence on 'game-day' interactions, specifically pre-game speeches, and wider research and associated theories.	Demonstrated coach 'game-day' communication, in particular PGS may influence athletes.
2	Previous research has not examined PGS use in basketball and prior to conducting further research it was important to establish their use and value in the sport.	To examine the use, content, and effect of PGS in basketball.	PGS are commonly used within basketball, with various content and delivery styles used. Basketball players perceive PGS to be enjoyable, useful, and influential on their individual and team confidence and performance; with team outcomes perceived to experience greater influence than individual outcomes.
3	Past PGS research has typically used quantitative methods, and a more in-depth and detailed understanding of athletes' experiences and perceptions of PGS are needed.	To examine professional female basketball players' experiences and perceptions of PGS using a qualitative approach.	Professional female basketball players place high value on PGS within their pre-game routines. Numerous individual and team needs are present during PGS. If needs are not met by coach, players engage in behaviours to compensate. Players perceive PGS to affect cognitive, affective, and behavioural states, and ensuing performance.
4	Past PGS research has primarily focused on athletes' perceptions and preferences. Limited research has explored head coaches' experiences and perceptions of PGS.	To examine professional head basketball coaches' experiences and perceptions of PGS using a qualitative approach.	Coaches highlighted numerous contextual factors that influenced the purpose and delivery of pre-game speeches. Coaches considered what and how speeches were delivered, and perceived that they affect cognitive, affective, and behavioural variables, and ultimately performance. After games, coaches engaged in a reflective process that influences subsequent speeches.
5	Previous research has focused on informational and emotional dimensions of PGS, without exploring specific strategies within these and whether other dimensions exist.	To identify and classify the specific PGS strategies used in basketball and their perceived effect on collective-efficacy and team performance.	

Chapter 5:

Evaluation of Pre-Game Speech Strategies in Basketball: A Concept Mapping Approach

Abstract

Past research has typically identified and examined two types of pre-game speech content: informational and emotional (e.g., Berkowitz, 2003; Vargas-Tonsing & Guan, 2007). However, Chapters 3 and 4 highlighted the need to examine if other types of content exist and their importance for performance outcomes. Therefore, the primary aim of this study was to identify the current strategies used within pre-game speeches by basketball coaches and how these strategies converge into differing types of content. A secondary aim was to assess basketball coaches' and players' perceptions of the impact that the strategies have on collective efficacy and performance. A concept mapping approach was used (Kane & Trochim, 2007), and initially 271 head basketball coaches generated 65 unique pre-game speech strategies. A subset of 66 head basketball coaches then sorted those strategies into groups and rated their use and perceived effect on collective efficacy and performance. A sample of 122 basketball players also rated the strategies in terms of perceived effect on collective efficacy and performance. Multidimensional scaling and hierarchical cluster analysis identified six pre-game speech content clusters (stress value = .24): 'strategic information', 'collective team support', 'pre-game speech preparation', 'emotional appeal', 'concentration/focus', and negative/critical'. The cluster 'strategic information' received the highest mean rating for use (M = 3.93, SD = .29) and for perceived effect on collective efficacy (coaches: M = 3.67, SD = .62; athletes: M = 3.73, SD = .55) and performance (coaches: M = 3.72, SD = .58; athletes: M = 3.73, SD = .58) by both coaches and athletes. The findings may have important implications for researchers and coaches, including the demonstration of the utility of concept mapping, identifying six content clusters that may provide a framework for future pre-game speech research, and identifying 65 unique strategies for coaches to develop varied and impactful pre-game speeches.

Keywords: Coach communication, coaching strategies, game-day communication

Introduction

Existing pre-game speech research has typically conceptualised content as falling into two categories: informational and emotional (e.g., Berkowitz, 2003; Vargas-Tonsing & Guan, 2007; Vargas & Short, 2011). Previous chapters within this thesis support that both informational and emotional content are common types of pre-game speech content within basketball, but the findings also highlighted that numerous strategies are utilised, which may not always fit into the commonly applied dichotomy. Similarly, other studies have indicated a range of content and delivery approaches used by coaches during pre-game speeches, including the use of regret messages (Turman, 2005; 2007), need-supportive and need thwarting behaviours (Delrue et al., 2017), team values (Breakey et al., 2009), shared values and goals (McCarthy, 2007), and movie clips (Broch, 2015). As such, it is important to further explore the breadth of strategies and how these share underlying properties.

Four previous studies have been conducted which provided insight into pre-game speech content, each using different approaches and theoretical frameworks. First, Hettinger (2010) examined the rhetoric used during three championship pre-game speeches delivered by high-level basketball and football collegiate coaches. Rhetoric was defined using Foss's (2004) definition "the human use of symbols to communicate". Six common features were observed: visual aids, sport-specific jargon, associative language, anticipation, ideographs, and narratives. Second, Macquet and Stanton (2021) interviewed nine national team sport coaches to explore transformational leadership behaviours in pre-game speeches. Leadership behaviours included: individual consideration, inspirational motivation, intellectual stimulation, fostering acceptance of group goals, high-performance expectations, and appropriate role modelling.

Third, Savović et al. (2018) examined the pre-game speech delivered by a national soccer coach before a junior World Cup final. Twelve meaningful units emerged: encouraging enjoyment of the game without pressure, referring to opposition without ‘exaggeration or depreciation’, referencing the use of players’ instincts, raising the players’ self-confidence, enhancing self-confidence by referring to the future, defining the main goal, defining the reward, relativization to reduce pressure, highlight players’ maturity, bring individuals together as a team, respect individuals’ needs, and giving support. Fourth, Mesquita et al. (2008) categorised the instruction given by coaches prior to a competition as prescriptive, descriptive, positive evaluation and negative evaluation, displayed verbally, visually, kinaesthetically, or through a combination of behaviours. Prescriptive information included highlighting mistakes to avoid and offers a solution, and descriptive information explained ways in which the athlete could accomplish an action. Positive evaluation included items of praise and encouragement, and negative evaluation included disapproval. Additional research has reported that descriptive information is used more often than prescriptive information during pre-game speeches (Jackson, 2020).

Despite this important insight into behaviours, content, and delivery, further insight into specific strategies used within pre-game speeches and how they converge around similar categories or concepts is required to advance theory and the measurement and observation of pre-game speeches. For example, the terms ‘informational’ and ‘emotional’ may not encompass all content. Definitions of emotion can vary (Vallerand & Blanchard, 2000) and a range of terms have been used to describe different affective states, including emotions, mood, and affect. Hanin (1997, 2000) also described seven components of an athlete’s performance, and in this emotion and motivation were separated: cognitive, emotional (affective), motivational, bodily,

behavioural, operational, and communicative. Further, conceptual differences have also been discussed regarding motivation and inspiration (Roberts, 2001; Thrash & Elliot, 2003; 2004), with inspiration being an 'evoked sense', and motivation being the reason behind an individual's behaviour. Gonzalez et al. (2011) examined if 'pep talks' influenced athlete inspiration, motivation, and emotion. Results found that participants exposed to a pep talk reported more inspiration to perform and greater emotional dominance, with no significant effect reported for situational autonomous motivation.

Beyond understanding the specific strategies used and how they might be categorised, it is important to examine the effects they have on outcomes. Previous chapters have found that athletes and coaches perceive pre-game speeches as influential on cognitive, affective, and behavioural factors, with Chapter 2 finding that athletes reported stronger effects on team confidence and performance than self-confidence and performance. Pre-game speeches are a form of verbal persuasion, which is an important source of self- and collective efficacy (Bandura, 1977; 1990). Coaches have the ability to boost collective efficacy beliefs by promoting a motivational climate, which can be achieved through motivational quotes, setting goals for the team, and referring to team values (e.g., Feltz & Chase, 1998; Olympiou et al., 2008). Furthermore, Vargas-Tonsing and Bartholomew (2006) found that an emotionally persuasive pre-game speech influenced team efficacy. An athlete may have individual (e.g., perceived control; Feltz et al., 2008) and team sources (e.g., past performances; Chase et al., 2003) of collective efficacy, and collective efficacy may also be influenced by the team's perception of how they compare to their opponent (Fransen et al., 2014). Collective efficacy in turn has been linked with various favourable outcomes, such as teamwork, motivation, and cohesion (Chow &

Feltz, 2008), and a meta-analysis of 96 studies found a positive relationship between collective efficacy and performance (Stajkovic et al., 2009).

Given the emerging evidence regarding the myriad of different pre-game speech strategies used by coaches, the present study adopted a concept mapping approach to further understand the scope and effect of content commonly used in pre-game speeches. The specific aims of the study were to identify the current strategies used within pre-game speeches by basketball coaches, how these converge on similar categories, and the perceived effect on collective efficacy and performance. Given the exploratory nature of concept mapping (see next section), hypotheses were tentative and broad in nature. It was hypothesised that a large number of specific types of strategies would be identified, that they encompass more types of categories than informational and emotional content, and that both coaches and athletes would perceive pre-game speech content to be influential on collective efficacy and performance.

Methods

Research Design

Concept mapping is a structured methodology that allows research questions to be answered by gathering input from groups to develop conceptual frameworks, action plans, and need assessments and evaluations (Trochim, 1989; Trochim & Kane, 2005). Concept mapping has good internal representational validity and sorting reliability (Rosas & Kane, 2012). Some examples of its use include developing understanding of injury prevention training (Ageberg et al., 2019), health-promoting in sports clubs (Johnson et al., 2020), the menstrual cycle in women's team sports (Clarke et al., 2021), effective leadership in healthcare (Hargett et al., 2017), and perceived effects of yoga on children (Cook et al., 2018). The main objective of concept mapping is to generate a list of statements through a '*brainstorming*' process (Trochim,

1989), and consists of six stages: preparing, generating, structuring, representing, interpreting, and utilising maps (Trochim, 1989; Kane & Trochim, 2007).

Preparing Stage

Preparing involves researchers developing the specific focus and research goal that participants will '*brainstorm*', identifying a target sample, and devising an overall plan for conducting research including questions and rating scales (Burke et al., 2005; Trochim, 1989). It is important to recruit a range of participants with relevant knowledge or experience (Kane & Trochim, 2007; Trochim, 1989). Therefore, in the present study, current head basketball coaches were recruited as the primary sample, with basketball players recruited for later stages.

Generating Stage

The generating stage, also known as '*brainstorming*', focuses on data collection, which can be done numerous ways including focus groups, interviews, and online surveys. We used an online survey, which enabled participants (coaches) from across geographical locations to share their strategies anonymously and without fear of being judged (Michinov & Primois, 2005; Souza & Ebbeck, 2018). Within the generating stage, idea synthesis also occurs to acquire a list of unique strategies. Kane and Trochim (2007) suggested that if the '*brainstorming*' produces over 100 statements (strategies), researchers should first conduct a preliminary 'sort/synthesis' to make sure each strategy only represents one strategy, that each strategy is relevant to the research project focus, and to edit strategies accordingly (e.g., eliminate repetitive strategies or unclear strategies).

Structuring Stage

The structuring stage involves sorting and rating the final list of generated strategies. Sorting involves participants (coaches) placing the strategies into groups or '*piles*' that represent

similar meanings. Within concept mapping, not all participants in the generating stage need to sort the data (Trochim, 1989), and reliable maps can be generated with as few as 20 sorters (Kane & Trochim, 2007; Rosas & Kane, 2012). In the current study, participants (coaches and athletes) rated the strategies on three variables: current use of the strategies (coaches only), perceived effect on team performance and collective efficacy.

Representing Stage

The representing stage is conducted utilising three analyses: similarity matrix generation, multidimensional scaling analysis, and hierarchical cluster analysis. Similarity matrix generation gives a representation of the similarities and distance between objects (or strategies in this current study). Multidimensional scaling is applied to the sorted '*piles*' from the structuring stage and hierarchical cluster analysis (Everitt, 1980; Yim & Ramdeen, 2015) is conducted on the participants' ratings to identify clusters "that reflect comparable concepts" (Trochim, 1989, p. 7). These three analyses then generate point and cluster map information, which is then used by researchers and participants in the interpretation stage. Point maps plot each strategy separately on a map based on the participants sorting of strategies, with distance between each strategy signifying the likelihood that the strategies were sorted together (closer points). Cluster maps are also based on how participants sorted strategies and the resulting point map, with strategies on the point map grouped together into clusters that denote similar themes. Preliminary titles were given to each cluster based on participants' titles given to their individual grouped piles.

Interpreting Stage

The interpreting stage involves using all the collected strategies and generated maps, as well as participant input, to finalise the clusters and name them. This included: the full brainstormed strategies list, the list of strategies within each cluster, the point map, the cluster

map, and the mean value ratings of each cluster and individual strategy. Furthermore, discussions were held as each source of interpretive material was considered and examined. To conclude, the final named cluster map provides a conceptual framework and is the primary output from concept mapping (Trochim, 1989).

Utilising Stage

The final utilising stage involves revisiting the original purpose of the study to further examine the interpretation of maps and data so that they can inform theory and applied practice.

Participants (Coaches)

Current head basketball coaches, aged 18 years or over, were recruited to participate. The generating stage involved 271 participants (223 males, 44 females, and 2 'prefer not to say'). The predominance of male participants (82%) is consistent with head basketball coaches in collegiate basketball (76%; U.S. Department of Education, Office of Postsecondary Education, Equity in Athletics Disclosure Act). A subset of 66 coaches participated in the sorting stage. Table 5.1 contains all demographic information from both samples of coaches.

Participants (Athletes)

Current competitive basketball players, aged 18 years or over, were recruited to participate in the rating stage. There were 115 players (42 males, 73 females). The predominance of females is consistent with the trend of females being more likely to complete surveys than males (e.g., Curtin et al., 2000; Moor & Tarnai, 2002; Smith, 2008). Table 5.1 contains all demographic information of the players.

Procedure (Coaches)

A university ethics committee approved the study prior to data collection. Prior to the main study, pilot testing was conducted, in which two basketball coaches and two basketball

players were asked to complete the surveys and provide feedback on any areas they felt needed clarification or adaptations that could be made to support ease of use. This led to minor changes on the online survey to address a technical issue that was identified. Head basketball coaches were recruited through personal contacts, social media, and word of mouth. Advertising materials included a weblink for those interested in participating. The weblink directed participants to online survey platform (Qualtrics, Provo, UT) which started with a participant information sheet and consent form. Individuals who agreed to participate first provided demographic information. They then read a passage that prompted them to brainstorm and list as many pre-game speech strategies as possible that they had used in an attempt to increase team performance and/or collective efficacy beliefs (see Appendix F for text). Definitions were provided for pre-game speeches and collective efficacy. Multiple boxes were provided so that participants could describe as many strategies as they wished. Upon completing the '*brainstorming*', participants were thanked and asked to provide an email address if they were interested in completing the subsequent stage of the study.

The lead author examined the list of strategies to remove duplicates and any that were unclear (Souza & Ebbeck, 2018). Due to the large list of generated strategies, similar strategies were grouped under simplified themes (Kane & Trochim, 2007; Souza & Ebbeck, 2018). To do this, each of the 424 strategies were printed on their own card, examined individually, split if the full statement contained more than one strategy, and then the cards were moved into piles that represented equivalent strategies. The lead researcher conducted this process, but the research team and two head basketball coaches acted as '*critical friends*' to limit any bias and support

Table 5.1

Participant Demographic Information

	Coaches				Athletes		
	Generating Stage		Sorting Stage			Sorting Stage	
	N	%	N	%		N	%
Total	271		66		Total	115	
Age					Age		
Under 20	10	3.7%	1	1.5%	Under 20	30	26.1%
21-29	52	19.2%	11	16.7%	21-29	72	62.6%
30-39	73	26.9%	15	22.7%	30-39	10	8.7%
40-49	80	29.5%	16	24.2%	Did Not Respond	3	2.6%
50-59	33	12.2%	15	22.7%			
60 or older	23	8.5%	8	12.1%			
Gender					Gender		
Male	223	82.3%	56	84.5%	Male	42	36.5%
Female	44	16.2%	8	12.1%	Female	73	63.5%
Prefer Not To Say	2	0.7%	2	3.0%			
Genders Coached					Position		
Male	61	22.5%	17	25.8%	Point Guard	32	24.8%
Female	42	15.5%	12	18.2%	Shooting Guard	34	26.4%
Both Male/Female	167	61.6%	36	54.5%	Wing/Combo	27	20.9%
Highest level of coaching experience					Small Forward	24	18.6%
Community/County	28	10.3%	2	3.0%	Center	11	8.5%
HS/AAU/Regional	92	33.9%	16	24.2%			
Collegiate/University	72	26.6%	20	30.3%	Current Competitive Level of Basketball		
National League/Professional	47	17.3%	13	19.7%	Community/County	2	1.7%
International	32	11.8%	15	22.7%	Collegiate/University	35	30.9%
Years of Coaching Experience					National League/Professional	64	56.6%
Less than 1 year	3	1.1%	0	0.0%	International	12	10.6%
1-5 years	61	22.5%	7	10.6%	Did Not Respond	2	1.7%
6-10 years	69	25.5%	14	21.2%			
11 or more years	138	50.9%	45	68.2%			

final decision making. This process is similar to summative content analysis (Berg & Lune, 2012) and resulted in a list of 65 pre-game speech strategies for the following structuring stage.

Participants who had provided an email address in the generating stage were sent further information and a weblink. The weblink directed participants to online survey platform (Qualtrics, Provo, UT), which started with a participant information sheet and consent form. Individuals who agreed to participate provided demographic information, before moving on to sorting and rating tasks. The order of tasks were randomised to account for any potential survey/task fatigue. For the sorting task, participants were asked to sort the strategies into groups (or '*piles*') that they felt represented similar themes/meanings. Once sorted, participants were presented with a page showing the piles they had created and were asked to name each pile in 'whatever way makes sense to you'. Additional guidelines were that each strategy was not to be placed in more than one group, no groups were to have only one strategy, and not all strategies were to be placed in one group. For the rating activity, participants were asked to rate each pre-game speech strategy on its perceived effect on 1) a team's performance, and 2) a team's collective efficacy. Coaches were also asked to rate how often they used each strategy in their own pre-game speeches. The order of strategies within each of the three rating variables were randomised, as well as the order in which participants were given the three variables (Kane & Trochim, 2007; Souza & Ebbeck, 2018). Participants responded to each strategy on a 5-point scale: 0 (Not at all/Never), 1 (Slightly/Rarely), 2 (Moderately/Sometimes), 3 (Very/Very Often), 4 (Extremely/Always).

Procedure (Athletes)

Basketball players were recruited in-person, through personal contacts, word of mouth, and online social media posts which included a weblink to the survey. All participants (in-person

and online) were initially presented with a participant information sheet and consent form. Participants then provided demographic information before completing the same rating activity as the coaches, except that players did not rate use of pre-game speech strategies, only their perceived effect on 1) a team's performance, and 2) a team's collective efficacy.

Data Analysis

In the representing stage, sorted and rated strategies were analysed using similarity matrix generation, multidimensional scaling, and hierarchical cluster analysis. Multidimensional scaling identifies which strategies had similarities between them (Davidson, 1983; Kruskal & Wish, 1978; Souza & Ebbeck, 2018) and is a technique that shows the distance between items in a similarity or dissimilarity matrix (Kruskal & Wish, 1978). A dissimilarity matrix was obtained by first creating binary square similarity matrices. A grid was produced for each participant who took part in the sorting stage. For example, if a participant sorted strategy A and strategy B together, a 1 was recorded into the AB/BA cells, a 0 was recorded if strategies were not grouped. Once a matrix was produced for each participant, all matrices were added together to create a total square similarity matrix. A higher number in a cell indicated that those two strategies were grouped together more often by participants. SPSS Version 25 was then utilised to turn the total square similarity matrix into a dissimilarity matrix (Cox & Cox, 2001; Kruskal & Wish, 1978; Souza & Ebbeck, 2018), allowing a list of x-y coordinates to be produced, which located each strategy in relation to other strategies in a "point map" (Kane & Trochim, 2007). This initial process was consistent with previous concept mapping research that employed a two-dimensional non-metric approach, utilising the similarity and dissimilarity matrices, due to ease of visual interpretation when reproducing the sorting data (Kane & Trochim, 2007; Rosas & Kane, 2012; Souza & Ebbeck, 2018). Strategies that are closer together on the map were grouped

together more often than strategies with larger distances between them. Kane and Trochim (2007) reported that stress values, which indicate how well multidimensional scaling represented the similarity matrix, within concept mapping usually fall between a 95% confidence interval of .21 and .37, with lower stress values signifying better representation. Rosas and Kane (2012) found that the average stress value of 69 concept mapping studies being .28.

A hierarchical cluster analysis (Anderberg, 1973; Everitt, 1980; Kane & Trochim, 2007) was then applied to the x-y coordinates generated from the multidimensional scaling using Ward's algorithm. This allowed strategies to be clustered and analysed for any potential overlap, with clusters representing similarly themed strategies (Kane & Trochim, 2007). Hierarchical cluster analysis is divided into two types: agglomerative and divisive. For this study, the agglomerative process was utilised, as it allowed for each strategy to begin as its own cluster, which were then gradually merged until they were all grouped in a single cluster. This created a tree structure, or dendrogram, which was used to determine the number of generated clusters in non-overlapping groups. No specific guidelines exist to delineate how many clusters should result from this process, with researcher and participant interpretation providing the cluster outcome (Kane & Trochim, 2007; Trochim, 1989).

Supplementary Analyses

Based on previous research that utilised concept mapping, two additional interpretive analyses were performance for this study: pattern matching and the creation of a "go-zone map" (Kane & Trochim, 2007; Souza & Ebbeck, 2018). Pattern matching explores the relationship between the cluster ratings of different variables or demographics (Kane & Trochim, 2007). In the current study, a series of Pearson's correlation coefficients were calculated: (1) between the mean cluster ratings for perceived effect on team performance and collective efficacy; (2) within

coaches, between the mean cluster ratings of male and female coaches, and then more and less experienced coaches, for each outcome; and (3) within athletes, between the mean cluster ratings of males and females, and then higher and lower competitive levels, for each outcome. "Go-zone" displays are an additional graph used to analyse and compare ratings of the strategies. It is a bivariate graph, which is divided into quadrants based on the mean ratings values of each variable (Kane & Trochim, 2007). The top right quadrant is referred to as the "go-zone", as any strategies that are in this quadrant would have been rated above average on perceived effect on team collective efficacy and on team performance.

Results

Multidimensional scaling produced a point-cluster map, which visually represents the similarity between pre-game speech strategies (See Figure 5.1). The stress value was .24, which is within the range of .21 to .37 suggested by Kane and Trochim (2007) and indicates satisfactory representation. Clusters were further established through hierarchical cluster analysis and the use of participant and researcher interpretation. Through these analyses, the 65 unique strategies converged on six clusters: (1) preparation of pre-game speech (3 strategies), (2) strategic information (15 strategies), (3) collective team support (25 strategies, (4) emotional appeal (8 strategies), (5) concentration/focus (7 strategies), (6) negative/critical (7 strategies). See Figure 5.2 for cluster outlines and titles.

Preparation of pre-game speech comprised broad strategies that represented aspects of a coaches' pre-game speech development and preparation, such as the development and delivery of different (or consistent) pre-game speeches. Strategic information comprised strategies aimed at providing technical and tactical information, such as use of game plan, offensive and defensive tactics, and references to scouting reports. Collective team support comprised strategies that

Figure 5.1

Point Map with Cluster Outlines

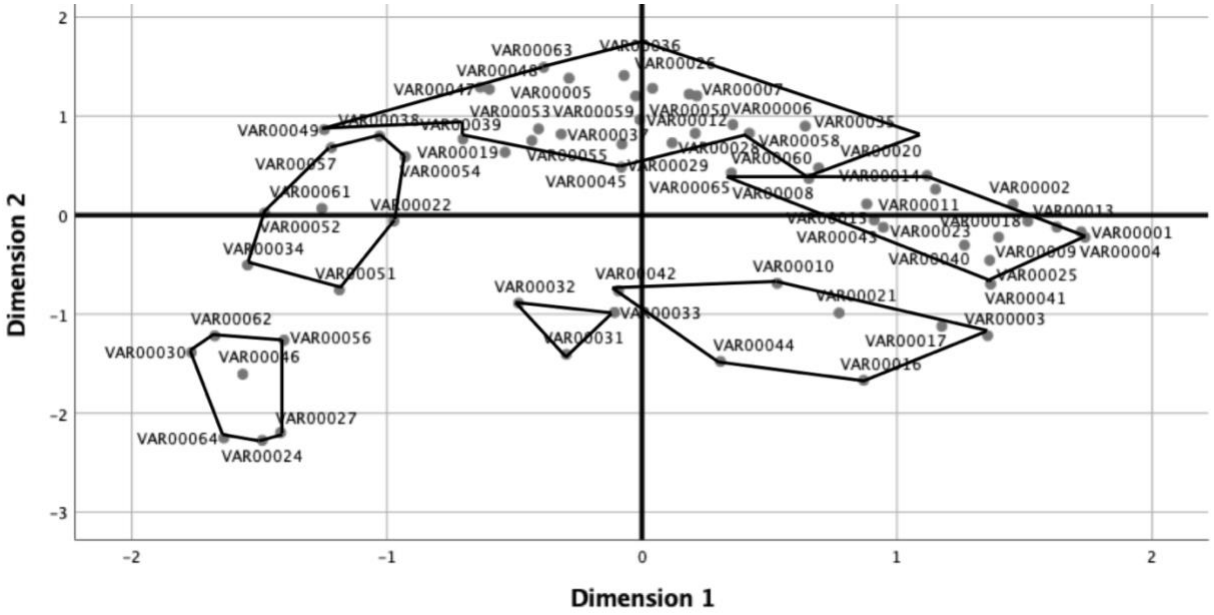
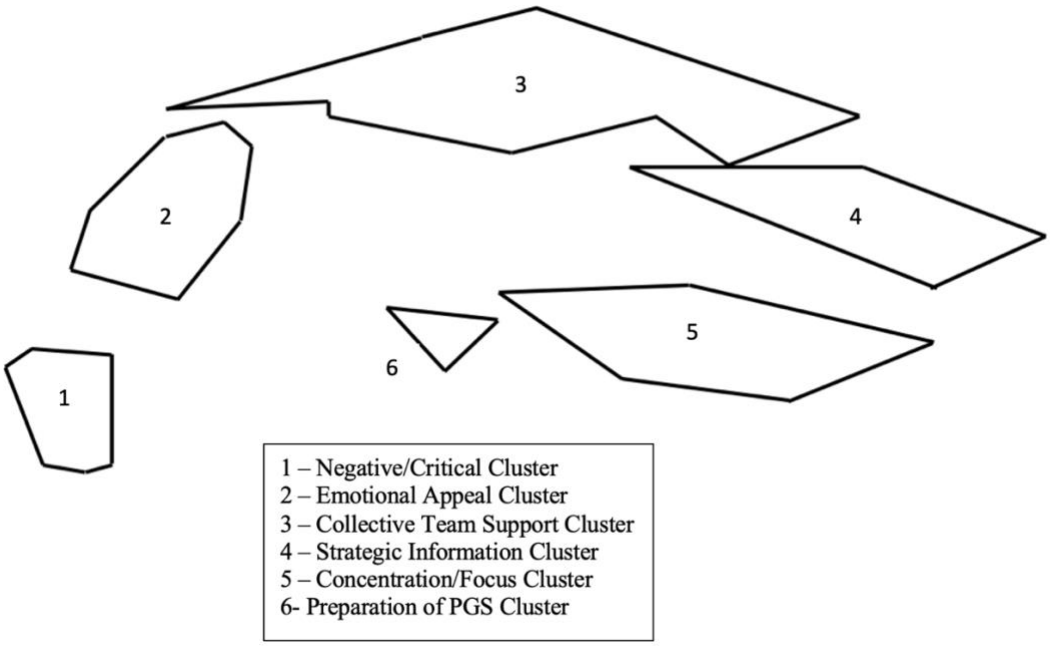


Figure 5.2

Cluster Map Outlines with Titles



aimed to enhance cohesion and build aspects of support and collective efficacy within the team, including use of positive language, encouragement of support, and coaches' stating belief in their team's ability to win. Emotional appeal comprised strategies that aimed to help athletes achieve optimal emotional, arousal, and motivational levels, including attempting to influence emotional states of players, use of quotes to motivate, use of music, and making each game a special situation. Concentration/focus comprised strategies that facilitated the concentration and focus of athletes, such as using film, listing team's non-negotiables, and providing stats on opponents. Negative/critical comprised strategies focused on negativity and critical language, both in delivered content and tone, such as discussing the consequences of poor performance and using 'bad' language.

For coaches, strategic information had the highest mean value for collective efficacy (*M* = 3.67, *SD* = .62), performance (*M* = 3.72, *SD* = .58), and use *(M* = 3.93, *SD* = .29). Negative/critical received the lowest mean for collective efficacy *(M* = 1.58, *SD* = .42), performance (*M* = 1.64, *SD* = .56), and use *(M* = 1.67, *SD* = .37). These perceptions were mirrored by athletes, as strategic information also had the highest mean value for collective efficacy (*M* = 3.73, *SD* = .55) and performance (*M* = 3.73, *SD* = .58), with negative/critical also receiving the lowest mean for collective efficacy (*M* = 1.95, *SD* = .64) and performance (*M* = 2.09, *SD* = .74).

For coaches, the strategy "use positive language" had the highest mean value for collective efficacy (*M* = 4.49, *SD* = .62), performance (*M* = 4.16, *SD* = .79), and use (*M* = 4.66, *SD* = .51). "Creating excuses for team/blame others" had the lowest mean value for collective efficacy (*M* = 1.18, *SD* = .43), performance (*M* = 1.23, *SD* = .88), and use (*M* = 1.13. *SD* = .34). For athletes, the strategy "focus on 'keys' to winning game" had the highest mean value for

collective efficacy (*M* = 4.17, *SD* = .69), and "discuss game plan/game strategy" had the highest mean value for performance (*M* = 4.14, *SD* = .91). Like coaches, "creating excuses for team/blame others" had the lowest mean value for collective efficacy (*M* = 1.62, *SD* = 1.04) and performance (*M* = 1.84, *SD* = 1.16). See Table 5.2 and 5.3 for coaches' and athletes highest and lowest rated strategies.

Pattern Matching

Pattern matching revealed that the mean value of clusters based on perceived effect on collective efficacy and team performance were highly correlated for both coaches and players (*rs* = .97 - .99). Strategic information was highest, followed by collective team support, and concentration/focus. (See Table 5.4)

Table 5.4

Pattern Matching - Mean Ratings for Clusters by Role

	Coaches		Athletes	
	Performance	CE	Performance	CE
Prep of PGS	2.67(4)	2.67(4)	2.61(4)	2.65(4)
Strategic Information	3.72(1)	3.67(1)	3.73(1)	3.73(1)
Collective Team Support	3.38(2)	3.57(2)	3.28(2)	3.37(2)
Emotional Appeal	2.60(5)	2.64(5)	2.61(4)	2.64(5)
Concentration/Focus	3.08(3)	2.98(3)	3.16(3)	3.17(3)
Negative/Critical	1.64(6)	1.58(6)	2.09(6)	1.95(6)

Within coaches, correlations between the mean cluster values of males and females were high for performance (*r* = .90), collective efficacy (*r* = .81), and use (*r* = .99). Similarly, the correlations were high between the mean cluster ratings of coaches with different levels of coaching experience: performance (*r* = .93), collective efficacy (*r* = .93), and use (*r* = .99). Within athletes, correlations between the mean cluster ratings of males and females were high for performance (*r* = .96) and collective efficacy (*r* = .97). Similarly, the correlations between the

Table 5.2

Coaches' and Athletes' Highest Rated Strategies for Collective Efficacy, Performance, and Use

	Collective Efficacy		Performance		Use	
	Strategy	M	Strategy	M	Strategy	M
Coaches	Use Positive Language	4.49	Use Positive Language	4.16	Use Positive Language	4.66
	Reinforce Support for Players/Team	4.25	Discuss Game Plan/Strategy	4.11	Keep Length of PGS 'Short'	4.61
	Encourage Support Within Team	4.23	Focus on 'Keys' to Winning	4.10	Lang. - Use of 'We' not 'I'	4.60
Athletes	Focus on 'Keys' to Winning	4.17	Discuss Game Plan/Strategy	4.14		
	Discuss Game Plan/Strategy	4.15	Offensive / Defensive Tactics	4.11		
	Use of Motivation	4.05	Discuss 'Keys' to Winning	4.10		

Table 5.3

Coaches' and Athletes' Lowest Rated Strategies for Collective Efficacy, Performance, and Use

	Collective Efficacy		Performance		Use	
	Strategy	M	Strategy	M	Strategy	M
Coaches	Create Excuses/Blame Others	1.18	Create Excuses/Blame Others	1.23	Create Excuses/Blame Others	1.13
	Discuss Consequences of Poor Perf.	1.25	Discuss Consequences of Poor Perf.	1.45	Discuss Consequences of Poor Perf.	1.39
	Keep Length of PGS 'Long'	1.50	Use 'Bad' Language	1.50	Keep Length of PGS 'Long'	1.56
Athletes	Create Excuses/Blame Others	1.62	Create Excuses/Blame Others	1.84		
	Use a Pre-Written Speech	1.71	Use a Pre-Written Speech	1.88		
	Use 'Bad' Language	1.73	Include Prayer	1.88		

mean cluster ratings of athletes at different competitive levels were also high for performance (r = .93) and collective efficacy (r = .98).

Go-Zones

Out of all 65 strategies, 36 strategies were located in the upper right quadrant of the "go-zone", which indicates that coaches perceived these to have above average impact on both collective efficacy (M = 3.16) and performance (M = 3.10). (See Figure 5.3) Out of those 36 strategies, they represented: strategic information (n = 15), collective team support (n = 17), emotional appeal (n = 1), and concentration/focus (n = 3). The highest rated strategy in the go-zone was "use positive language", which suggests that coaches perceive it to be the most important strategy for impacting collective efficacy and performance during pre-game speeches.

For athletes, 35 out of the 65 strategies were located in the upper right quadrant of the go-zone, above the mean score for both collective efficacy (M = 3.16) and performance (M = 3.13). (See Figure 5.4) They represented strategic information (n = 15), collective team support (n = 15), concentration/focus (n = 4), and emotional appeal (n = 1). The highest rated strategy in the go-zone for performance was "discussing the game plan/strategy" and for collective efficacy was "focus on 'keys' to winning game", both of which were found in the strategic information cluster. For a list of all strategies located within the "go-zone" please see Appendix G.

Discussion

The specific aims of this study were to identify the current strategies used within pre-game speeches by basketball coaches, how these converge into similar categories, and the effect they may have on collective efficacy and performance. A total of 65 unique strategies were collated, and these converged into six pre-game speech content clusters: preparation of pre-game speech, strategic information, collective team support, emotional appeal, concentration/focus

Figure 5.3

Coaches' Go-Zone Map

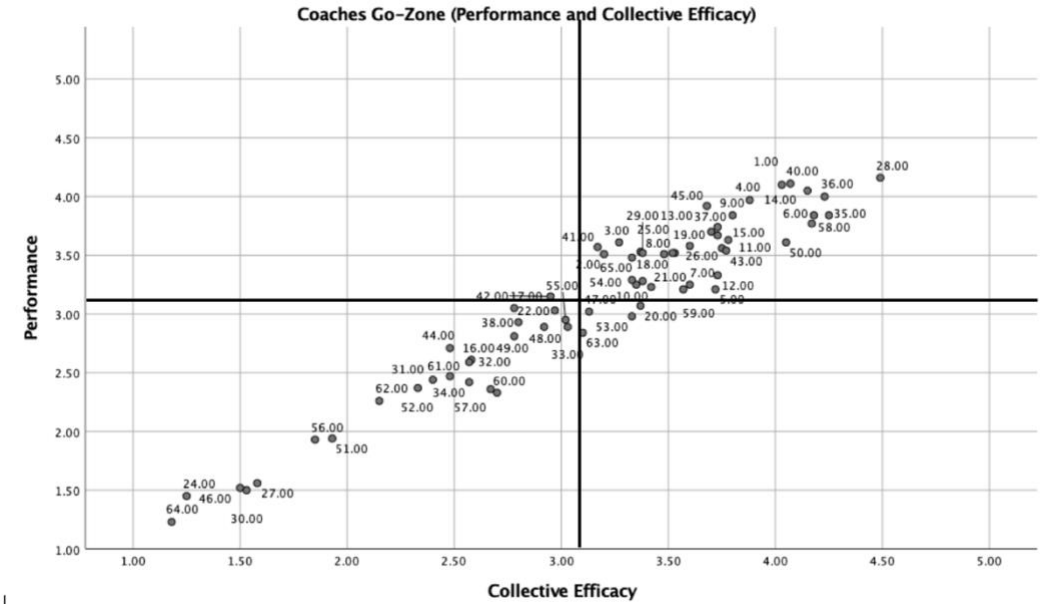
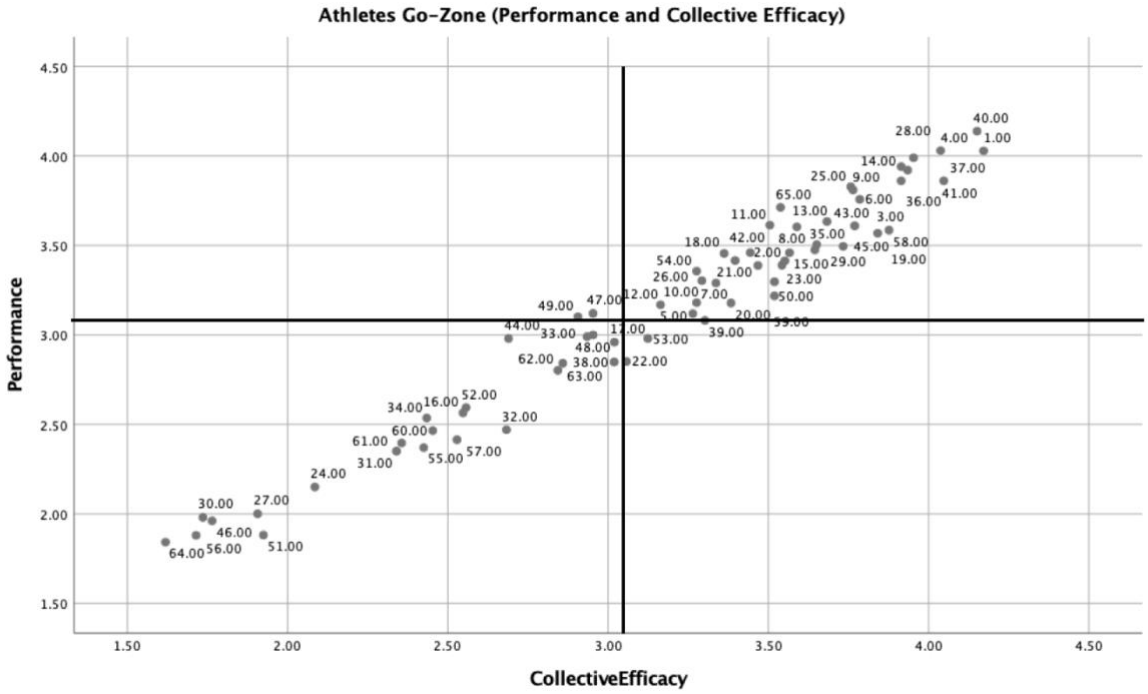


Figure 5.4

Athletes' Go-Zone Map



and negative/critical. The number of strategies within each cluster differed and included broad strategies that dealt with intended purpose (e.g., influence emotional state of players) through to specific strategies that dealt with how that intended purpose be achieved (e.g., 'play up' special situation for each game). Strategic information was the most commonly used cluster and perceived by coaches and athletes as having the largest effect on collective efficacy and team performance. More generally, the ratings of clusters, for both coaches and athletes, and sub-groups within them were highly correlated.

The main finding of this study was the emergence of six pre-game speech content clusters. Previous pre-game speech literature has often examined two types of content: informational and emotional (e.g., Berkowitz, 2003; Vargas-Tonsing & Guan, 2007), with acknowledgement that further investigation should examine if additional types of content are used by coaches. Although informational (strategic information) and emotional (emotional appeal) clusters emerged, the coaches who participated within this study generated, grouped, and named four additional clusters, which would suggest that coaches perceive differences between the types of content they deliver. For example, the content cluster of preparation of pre-game speech differs from informational and emotional content in that it contains approaches to the development and delivery of their speeches, such as consistent or different pre-game speeches and routines. This particular cluster may represent strategies that are not readily apparent to athletes but may still influence them in some way. Chapter 4 found that coaches reflect upon pre-game speeches, which informs the development and delivery of subsequent speeches via a feedback and reinforcement loop.

Strategic information was perceived to be the most used and influential cluster for collective efficacy and performance by both coaches and athletes. It comprised of content and

strategies that focused on providing technical and tactical information to athletes, such as emphasising the game plan/strategy, keys to winning, and importance of communication. Previous literature has suggested that coaches' pre-game speeches are more informational than emotional (e.g., Bloom et al., 1997; Vargas & Short, 2011), although Vargas and colleagues (Vargas & Short, 2011; Vargas-Tonsing & Guan, 2007) found that athletes may prefer more emotional content. Potential explanation for participants' ratings could be linked to previous research that has found strategic information may enhance athletes' focus on task behaviour (Burton, 1989), be a source of ability, effort and success expectations (Amorose & Weiss, 1998), and increase perceived self-competence and team competence (Allen & Howe, 1998; Amorose & Weiss, 1998; Meyer, 1982). Furthermore, strategic information may help coaches accomplish 'team coordination', which is the arrangement of players' actions to correctly execute tactics through the achievement of shared knowledge state ('*same page*') (Eccles, 2010). However, Vargas-Tonsing and Bartholomew (2006) found that a strategic information pre-game speech did not influence efficacy.

Chapters 3 and 4 highlighted that too much, too little, or new information can have negative influence on cognitive, affective, and behavioural states, so there may be an optimal amount of information, and delivery should be clear and concise. This could aid retention of information (Mesquita, 2008) and avoid information overload (Bloom et al., 1997). Eccles and Tan (2012) also recommended strategies to enhance communication (e.g., use multiple sensory modes, use redundancy, explain why) and strategies for increasing the likelihood that athletes receive the communication (e.g., enhance athletes' listing skills, encourage questions, use check backs).

Emotional, motivational, and inspirational pre-game speeches have been identified and examined in previous research (e.g., Savović et al., 2018; Smith et al., 2018; Vargas-Tonsing & Short, 2011). In the current study, emotional appeal was rated fifth out of the six clusters regarding use and perceived effect on collective efficacy and performance. It comprised of strategies that aim to optimise emotions, arousal, and motivation in the team, with strategies such as playing up a situation for each game, using quotes to motivate, and comparing the game to life. The emergence of this cluster may suggest that coaches believe that they can alter their players' emotional states, but do not always seek to do so. Emotion is difficult to define, and researchers should clearly distinguish between 'emotion, non-emotion, and borderline modalities of state' (Lazarus, 2000). Furthermore, emotional content can include categories such as positive-negative, functionally optimal-dysfunctional, and facilitating-debilitating. Coaches attempting to introduce emotion into their pre-game speeches should first consider what their athletes may want and need as perceptions of the amount of emotion needed in pre-game speeches can differ between players and coaches (Vargas-Tonsing & Guan, 2007), with players indicating they would like more emotion (Vargas & Short, 2011). However, individual athletes on teams may have different zones of optimal functioning regarding emotions (Hanin, 2000; 2003; 2007; Ruiz et al., 2017), and so it is important to consider optimal emotional content for individuals as well as the collective team.

Collective team support comprised the most individual strategies and was perceived to be the second most used and second most effectful cluster by coaches and athletes on collective efficacy and performance. It comprised strategies focused on promoting collective efficacy, cohesion, and perceptions of support. Key strategies included reinforcing support for the team, encouraging support within the team, using positive language, and referring to 'we' not 'I'. For

coaches, positive language was the individual strategy that received the highest mean value for impact on collective efficacy and performance. The use of positive language can enhance athletes' perception that their coaches are trustworthy and respectful (Jowett & Felton, 2013), two important aspects of closeness (Jowett & Cockerill, 2002; Jowett & Ntoumanis, 2004). Furthermore, positive feedback is a coach-autonomy support behaviour (Mageau & Vallerand, 2003), which can foster autonomy, competence, and relatedness (Adie et al., 2012); three basic psychological needs that underpin intrinsic motivation (Deci & Ryan, 2000). Fulfilment of these needs may enhance persistence (Pelletier et al., 2001) and performance (Gillet et al., 2010; Haerens et al., 2018). Coffee et al. (2017) also found that team referent social support (team member's individual perception of the supportive resources available to their team) predicted both group cohesion and collective efficacy. Pre-game speeches may provide coaches with opportunities to facilitate a sense of support for, and within, the team.

In contrast to the positive tone of the five other clusters, the sixth cluster to emerge was negative/critical. It comprised of content and strategies that involved negatively toned and critical language and strategies, including highlighting detrimental consequences of poor performance, putting down the opposition, and 'bad' language. This cluster had the lowest mean rating for use and perceived effect on collective efficacy and performance from both coaches and athletes but was still reported as having some use for effecting collective efficacy and performance. However, it is not clear whether these strategies could have unintended, detrimental consequences on athletes, or whether coaches use negative and critical pre-game speeches intentionally. For example, do coaches use regret messages about consequences of poor performance as a motivational tool (cf. one coach in Chapter 4)? Alternatively, are negative and critical pre-game speeches due to a loss of emotional control? Coaches face various stressors

(Thelwell et al., 2008), which can lead to them experiencing various emotions (Frey, 2007). Dixon et al. (2017) found a small relationship between how coaches appraised stressors (challenge or threat) and the valence of their behaviour (social support). A loss of emotional control may lead to verbal aggression, such as threats, swearing, and teasing (Bekiari & Digelidis, 2015; Infante & Wigley, 1986), and this has been linked to reduced intrinsic motivation in athletes (Alexandra et al., 2015). Coaches may benefit from understanding how they react to stressful situations to limit potential loss of emotional control or use of negative language during pre-game speeches.

The current findings may have important implications for both researchers and coaches. The study demonstrates the utility of concept mapping, and this approach could be applied to provide a more detailed and nuanced approach to other topics within the pre-game speech literature, as well as coaching and sport psychology more generally. Further, identification of six clusters provides a framework through which to explore pre-game speeches. For coaches, the identification of the six clusters and 65 unique strategies provides a valuable resource to help them develop varied and impactful pre-game speeches. The perceived usefulness of strategic information and collective team support for increasing collective efficacy and performance suggest that these might be particularly important. Strategies in the "go-zone" could also help guide practice. Coaches rated using positive language as the overall highest strategy and athletes rated game plan/strategy and 'keys' to winning most favourably.

As with all research, there are limitations that should be acknowledged. First, although the use of concept mapping is a novel approach to pre-game speech research and it allows for participants to '*brainstorm*', the collation of a large list of strategies to sort and rate may have created some 'questionnaire fatigue' in participants. The order of variables and strategies within

them, however, were randomised to minimise the impact of this issue on the sorting and rating process. Second, the study focused on basketball coaches, so the list of strategies may not generalise to other sports, as other sports may create different game day informational and emotional needs (Cerin et al., 2000). Third, there were varying numbers of males and females in both the coach and athlete samples, although this may reflect that there are more male than female coaches across all competitive levels (U.S. Department of Education, Office of Postsecondary Education, Equity in Athletics Disclosure Act).

In conclusion, this study identified a range of different strategies used by basketball coaches during pre-game speeches and how these converged around six common pre-game speech content clusters. This extends previous research that has either focused on two types of pre-game speech content (information and emotional) or observed a limited number of coaches deliver one-off pre-game speeches. The clusters and specific strategies within them were perceived by both coaches and players to affect collective efficacy and performance. However, it is important future research explores their use across games and their effect on different performance factors.

Table 5.5

Summary of Previous Chapters and Preview of Upcoming Chapter

C.	Rationale	Aim	Main Findings
1	Orientate the reader to the structure and content of PhD, by introducing PGS and associated research.	To synthesise and critique the evidence on 'game-day' interactions, specifically pre-game speeches, and wider research and associated theories.	Demonstrated coach 'game-day' communication, in particular PGS may influence athletes.
2	Previous research has not examined PGS use in basketball and prior to conducting further research it was important to establish their use and value in the sport.	To examine the use, content, and effect of PGS in basketball.	PGS are commonly used within basketball, with various content and delivery styles used. Basketball players perceive PGS to be enjoyable, useful, and influential on their individual and team confidence and performance; with team outcomes perceived to experience greater influence than individual outcomes.
3	Past PGS research has typically used quantitative methods, and a more in-depth and detailed understanding of athletes' experiences and perceptions of PGS are needed.	To examine professional female basketball players' experiences and perceptions of PGS using a qualitative approach.	Professional female basketball players place high value on PGS within their pre-game routines. Numerous individual and team needs are present during PGS. If needs are not met by coach, players engage in behaviours to compensate. Players perceive PGS to affect cognitive, affective, and behavioural states, and ensuing performance.
4	Past PGS research has primarily focused on athletes' perceptions and preferences. Limited research has explored head coaches' experiences and perceptions of PGS.	To examine professional head basketball coaches' experiences and perceptions of PGS using a qualitative approach.	Coaches highlighted numerous contextual factors that influenced the purpose and delivery of pre-game speeches. Coaches considered what and how speeches were delivered, and perceived that they affect cognitive, affective, and behavioural variables, and ultimately performance. After games, coaches engaged in a reflective process that influences subsequent speeches.
5	Previous research has focused on informational and emotional dimensions of PGS, without exploring specific strategies within these and whether other dimensions exist.	To identify and classify the specific PGS strategies used in basketball and their perceived effect on collective-efficacy and team performance.	Six PGS content clusters emerged: strategic/information, collective team support, emotional appeal, concentration/focus, negative/critical, preparation of PGS. Strategic/information cluster was perceived to have the greatest effect on collective-efficacy and team performance by both coaches and athletes. 65 strategies were generated, with 36 (35 for athletes) strategies rated within the 'go-zone'.
6	The previous chapter identified a variety of PGS strategies and dimensions that have not been examined before. Further, limited research has examined PGS across multiple games or their influence on objective performance outcomes	To explore the use and effect of PGS strategies in professional basketball across a season.	

Chapter 6:

Inside the Locker Room: A Season Long Case Study on the Use and Effect of Pre-Game Speeches

Abstract

Coaches use a variety of strategies when delivering pre-game speeches, but research examining effects and preferences have tended to focus on one time point or game within a sporting season, or hypothetical scenarios. Therefore, a mixed-methods case study approach was used to examine the content, effect, and perceptions of pre-game speeches throughout a season in a women's professional basketball team. Twenty pre-game speeches across a season were recorded, along with performance outcomes. At the conclusion of the season, seven players and the head coach were interviewed. Deductive content analysis found content most commonly reflected strategic information and collective team support, but other clusters were also used: emotional appeal, concentration/focus, negative/critical, and preparation. Although the frequency of pre-game speech content was not a statistically significant predictor of points difference after two minutes, nor at the end of the game, the effect sizes were large. Interpretative thematic analysis found players perceived that pre-game speeches could influence focus, efficacy, energy, and support. The specific content, the tone of delivery and emotional contagion were important factors that appeared to determine whether the pre-game speech was perceived to be beneficial or detrimental.

Keywords: Game-day communication, performance outcomes, coach communication

Introduction

Pre-game speeches are commonly used in basketball (e.g., Chapter 2; Fletcher, 2006) and other team sports (e.g., Bloom et al., 1997; Macquet & Stanton, 2021; Van Kleef et al., 2019; Vargas & Short, 2011). Coaches utilise these speeches for various purposes, employing numerous types of content, with the ultimate aim of preparing their athletes mentally and physically for competition (e.g., Chapter 4; Fletcher, 2006; Macquet & Stanton, 2021; Mesquita et al., 2005). Previous chapters and pre-game speech literature, however, have found that coaches and athletes have different pre-game speech preferences and needs based on contextual factors, such as game scenario. Vargas-Tonsing & Guan (2007) found differences between the amount of emotional content that athletes and coaches preferred across a number of scenarios (e.g., unknown opponent, previously played w/l, underdog, championship game). Athletes also preferred more informational content when competing against an unknown opponent and opponents they had previously lost to by a narrow margin. Further, Chapter 4 revealed that coaches consider other contextual factors during the planning of their pre-game speeches, including coach and team factors. These factors and preferences can influence '*what*' and '*how*' a coach delivers pre-game speeches, yet existing pre-game speech research has typically examined a specific time point, one game, or imagined situations when assessing effects on various outcomes.

For instance, Savović et al. (2018) and Hettinger (2010) both examined the pre-game speech delivered before a championship game. Other studies have presented participants with imagined or hypothetical scenarios (team efficacy; Vargas-Tonsing & Bartholomew, 2006; motivation, inspiration, and emotion; Gonzalez et al., 2011). Only one study has focused on multiple games. Breakey et al., (2009) assessed twenty female collegiate ice hockey players'

perceptions of game-day speeches over two home stands. Findings provided valuable insight in perceived positive features (e.g., genuine emotion displayed by coach, short and meaningful speeches, reference to team's values) and negative features (e.g., long or mistimed speeches, disagreements with coach, unexpected approaches or omission of expected information). However, perceived influence on performance was not examined. Further, consistent with Chapters 3 and 4, Breakey and colleagues also found that coaches sought to assess and meet their players' needs. However, coaches' behaviour can vary across games (Delrue et al., 2017), and Bloom et al. (1997) found that pre-game speeches are typically calm and informationally focused throughout a season, with emotionally driven content used for play-off and championship games.

Pre-game speech research that has examined effects on performance is limited. Previous chapters and Vargas and Short (2011) found that both athletes and coaches *perceive* pre-game speeches to be influential (psychologically and physiologically), but they did not assess effects on *objective* performance outcomes. Outside of pre-game speech research, the effects of pre-task interventions have been examined. For instance, Damali (2014) examined participants' muscular endurance during a plank exercise after being shown a motivational or non-motivational video. Participants who viewed the motivational video had significant improvement in performance compared to those who watched the non-motivational video. Cook and Crewther (2012) also examined the effects of different pre-game motivational interventions delivered in team meetings, on free hormonal states and performance of rugby union players: 15-minute video of themselves executing past positive performances with the coach delivering scripted positive comments (e.g., "you performed that well"), 15-minute video of their opponent executing past positive performances with the coach delivering scripted comments (e.g., "watch out for him doing that"), and no video or coach in the meeting but participants were invited to meditate or

listen to music. The video meetings had the biggest response on the athletes' free hormonal states and also future player performance based on their individual key performance indicators and overall performance indicators. Further, Moll et al. (2017) examined types of support delivered prior to a golf putting task, with results indicating that performance was better for participants who received visible esteem support compared to participants in other conditions.

Despite the potentially beneficial impact of 'motivational' videos and supportive coach feedback, coaches in Chapter 5 identified six types of content that may be used by coaches during pre-game speeches: strategic information, collective team support, emotional appeal, concentration/focus, negative/critical, and preparation of pre-game speech. This extended previous pre-game speech research that has often assessed speeches in terms of informational or emotional content (e.g., Vargas-Tonsing & Guan, 2007). It is therefore important to examine whether these six distinct clusters predict performance outcomes.

The current study adopted a mixed-methods case study approach to examine the content, impact, and perceptions of pre-game speeches throughout a season in a professional female basketball team. Qualitative methods provided in-depth insight into the use of different content in pre-game speeches, variations across games, and perceptions of the players and coaches. Quantitative methods examined whether the frequency of different content predicted performance (points difference) after 2-minutes and the entire game. It was hypothesised that pre-game speech content would fluctuate throughout the season, greater use would be associated with better performance outcomes, and that players would perceive pre-game speeches to benefit psychological and performance outcomes.

Methods

Research Design

This study adopted a season-long case study design. Case studies can be helpful in examining understudied processes or phenomenon in a 'real-life' context (Hartley, 1994; Yin, 1993), and have been used within sport psychology and coaching literature (Halperin, 2018; Rodrigue & Trudel, 2018) as well as game day communication (Breakey et al., 2009; Macquet & Stanton, 2021; Savović et al., 2018). Within this case study, a mixed-methods approach was used to allow for in-depth understanding (Burke et al., 2007). Both qualitative and quantitative methods allowed for enhancement and elaboration of the results that emerged, and a triangulation design was applied due to the complementary nature of the different data collected (Creswell & Plano Clark, 2007).

Participants

Participants were the head coach and twelve players from a women's professional basketball team, who compete in the top division of a European Basketball League. At the conclusion of the season, the coach and seven players took part in individual semi-structured interviews. The seven players ranged from 21-28 years old (M = 25.0, SD = 2.09), had played competitive basketball for 9-21 years (M = 14.2, SD = 3.84), and had been professionals for 1-5 years (M = 2.6, SD = 1.18). Five of the seven were in their first season with the team and two were in their second season. The players played various positions, including a point guard, shooting guard, wing (n = 2), forward (n = 2), and center. Collectively, the seven players played 92% of the team's competitive minutes across the season. The head coach was a 37-year-old male, who had played competitive basketball for over 20 years, coached for eight years (3 at the professional level), and had qualifications in coaching, strategic management, and leadership from accredited universities and national governing bodies.

Procedure

A university ethics committee approved the study. In the pre-season all players, coaches, and support staff from the team attended a session which described the purpose and requirements of the study and provided an opportunity for questions. All individuals provided consent for the lead researcher to attend games, be present in the locker room, record audio of pre-game speeches, and collect game statistics (International Basketball Federation [FIBA], n.d.). No other interactions were recorded. The researcher had prior involvement with the team, so was familiar with players, coaches, and the team's pre-game routine, resulting in no known impediments to a natural pre-game speech environment. Across the season, the team played 22 games, 20 of which were recorded and analysed. Due to the COVID-19 pandemic, a further five games were cancelled and there were no play-offs.

Each recorded pre-game speech was transcribed verbatim and team and individual statistics were collected. Data from pre-game speeches and game statistics were used to aid the development of interview questions in the next phase of the study. Upon the conclusion of the season, the head coach and seven players who had competed the majority of the minutes throughout the season were invited to participate in individual semi-structured interviews on Zoom. Semi-structured interviews provided a general framework to explore the main aims of the study (Longhurst, 2003), but also emergent topics raised by participants (Barriball & White, 1994). Participants were encouraged to provide detailed responses but were free to decline questions or terminate the interview at any point without having to provide a reason and with no penalty or repercussions.

In the player interviews, initial questions focused on overall thoughts on the pre-game speeches across the season, perceived variations in content and delivery, and any particularly memorable pre-game speeches. Questions then asked participants about their thoughts and

feelings before, during and after the pre-game speeches, and any potential affect they had on individual and team performance. (See Appendix H for interview guide) To aid recollection, the full audio recordings of three pre-game speeches were also then played, as well as ten clips of the more commonly used strategies during the speeches. Participants were asked to discuss their general thoughts and perceptions of these audio clips. To conclude the interview, participants were asked for reflections on any ways pre-game speeches could have been more beneficial to them individually and to the team. The player interviews lasted an average of 86.5 minutes.

The head coach was asked about his overall thoughts on pre-game speeches across the season, how he developed and delivered the speeches, and his perceptions of the effects on individuals or the team. To further explore the decision making, planning and delivery style, the same recording clips from the player interviews were played for the coach who discussed his general thoughts and reflections on them. To conclude the interview, the coach was asked to reflect on any ways his pre-game speeches could have been more beneficial. The coach interview lasted 110 minutes. At the end of all interviews, participants were thanked for their time, and asked if they were happy to be contacted if any questions emerged during analysis. All interviews were then transcribed verbatim.

Data Analysis

Analysis was conducted on three sources of data: recorded pre-game speeches, game statistics, and individual interviews. For the pre-game speeches, the lead researcher initially listened to the recordings and read the transcripts multiple times to immerse and familiarise themselves with the data. Deductive content analysis was then applied to identify the frequency of strategies used during the pre-game speeches across the season (Krippendorff, 2004). Content analysis is a systematic research method that can quantify data on a particular phenomenon

(Krippendorff, 1980), be deductive or inductive (Elo & Kyngäs, 2007), and is not located within specific ontological or epistemological positions (Janssen, et al., 2017). Within deductive content analysis, three phases are applied: preparation, organisation, and reporting. The preparation phase identified and selected specific words or themes as units of analysis (Guthrie et al., 2004), based on the six distinct types of pre-game speech content from Chapter Five. In the organisation phase, each line of the transcripts were coded in line with the identified units of analysis and a categorisation matrix developed (Table 6.1). In instances where a specific strategy was observed more than once during a pre-game speech, each instance was coded. The reporting phase consisted of presenting the data the strategies used throughout the season (see results), and this also helped develop the player and coach interview guides.

For game statistics, hierarchical multiple regression analysis was utilised. The points difference within the first two-minutes of the game and at the conclusion of the game were outcome variables. Opponents' league rank, venue (home or away), and previous result against the opponent (win or loss) were entered at Step 1 as control variables. At Step 2 all six pre-game speech types of content were entered. Furthermore, results of this analysis provided guidance in the design of the interview guides.

Individual interviews were inductively analysed using interpretive thematic analysis (Braun & Clarke, 2006). First, audio recordings were listened to multiple times and then transcribed, allowing for familiarisation and full immersion in the data. During this process, extensive reflective notes were kept (Smith, 2004). Second, initial codes were generated. Third, codes were sorted into preliminary themes, during which visual maps were used to help recognise potential relationships between codes, sub-themes, and themes. Fourth, the themes were reviewed, such as identifying any misplaced codes and assessing if any themes could be combined or split.

Table 6.1

Categorisation Matrix of Units of Analysis

Code	Description	Example Strategies (Strategies generated in Chapter 5)
Strategic Information	Strategies aimed at providing technical and tactical information	e.g., game plan, offensive and defensive tactics, reference to scouting report
Collective Team Support	Strategies that aimed to enhance cohesion and build aspects of support and collective efficacy within the team	e.g., using positive language, encouragement of support, coach's belief in team's ability to win
Emotional Appeal	Strategies aimed to help athletes achieve optimal emotional, arousal, and motivational levels	e.g., making the game a special situation, 'visual environment', use music
Negative /Critical	Strategies focused on negativity and critical language	e.g., discussing consequences of poor performance, use of 'bad' language
Concentration /Focus	Strategies that facilitated the concentration and focus of athletes	e.g., using film, listing team's non-negotiables, providing stats on opponents
Preparation of PGS	Broad strategies that represent aspects of a coaches' pre-game speech development and preparation	e.g., delivery of consistent or different pre-game speeches across each game, reference warm-up

Discussions within the research team and with a '*critical friend*', reflected upon the maps and similarities and differences across themes. Fifth, the themes were named and defined, and a thematic map produced (Appendix I). Sixth, the analysis was written up, including extracts related to each theme.

Throughout the analysis, methodological rigour was considered. For example, Braun and Clarke's (2006) thematic analysis steps were carefully applied and described. Reflexivity was also integral throughout the process, including the use of a diary by the lead researcher and regular interactions within the research team and with a '*critical friend*' (Dowling, 2013).

Results

Results will be presented for each of the three data collection and analysis aspects, including both quantitative and qualitative descriptions.

Pre-Game Speech Use

Deductive content analysis found that the majority of pre-game speeches contained multiple types of content. Table 6.2 provides an overview of the clusters used with each pre-game speech. Pre-game speeches lasted on average 4 minutes 20 seconds (range: 2:06 to 5:40). Results found that the mean number of strategies used per pre-game speech was 74 (*SD* = 21.7), with collective team support and strategic information clusters used most often. To enhance the understanding of how each cluster was used, brief discussions of each cluster, including quotes from the pre-game speeches, will be presented.

Strategic Information

The coach used numerous messages and behaviours within the strategic information content cluster including listing 'keys' to winning the game, describing offensive/defensive tactics, discussing performance expectations, describing players' roles/responsibilities, and discussing game plan/strategy.

> Defend for forty minutes, get that mindset. Prepare yourselves for that. Make sure we're steering sideline/baseline. Make sure that we're fronting in the post below the foul line, make sure we're an arm and a half above it. Any ball screen involving X, on the wing, automatic ice. Fours hedge, allow the guard to fight over. If it breaks down just make sure someone rotates, someone's guarding the ball, and everyone else is in a position to help. (HC)

Table 6.2

Overview of Clusters Used During Each Pre-Game Speech Across the Season

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Strategic Information	20	24	16	32	25	28	33	32	10	24	25	28	39	32	27	31	16	10	27	26
Collective Team Support	33	33	41	52	44	47	61	70	28	31	43	38	42	35	26	45	23	26	56	50
Emotional Appeal	2	2	2	3	4	3	7	7	3	3	1	2	1	4	2	3	1	3	8	5
Concentration / Focus	1	0	0	2	3	0	1	2	1	3	0	4	1	2	0	1	0	3	0	3
Negative / Critical	1	1	0	5	5	0	3	11	2	7	0	2	2	4	0	1	0	0	0	11
Prep of PGS	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0
Total	57	60	60	94	81	78	105	123	44	68	69	74	85	77	55	81	41	41	92	95

Game Description

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Game Type (League / Tournament)	T	T	T	T	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Previous Result (Win / Loss / Not Played)	NP	NP	NP	NP	L	NP	NP	NP	L	NP	NP	NP	NP	NP	L	W	L	L	L	L
Venue (Home / Away)	A	A	H	H	H	A	H	H	A	A	A	H	A	H	H	H	A	A	H	A
Opponent's Rank (Higher / Lower)	H	H	H	H	H	H	H	_	H	L	L	H	L	L	H	L	H	H	H	_
Outcome (Win / Loss)	W	W	L	L	L	L	L	L	L	W	W	L	L	W	L	W	L	L	L	W
First 2 Minutes (Lead / Trail)	_	_	L	T	T	T	T	T	L	L	L	T	L	L	L	L	L	L	T	L

Collective Team Support

The most often used type of content was collective team support. The three most prominently used strategies were the coach's language of 'we' and not 'I', asking for input from the team/asking the team questions, and using positive language. "*We*'ve got a great opportunity today. Great opportunity to go out and absolutely play the way *we*'re capable of playing for forty minutes." (HC)

Emotional Appeal

The coach's pre-game speeches often included him attempting to influence the emotional state of the players through direct language and his tone of voice. For example, towards the end of one pre-game speech, after delivering strategic information in a calm manner, the coach's tone changed in intensity and volume as he said "Let's absolutely ******** get this win together today. You've put the work in this week. Now it's about going out and executing to your best. Let's go get it!" (HC). The players responded by shouting and clapping, a noted change in their emotional states.

Concentration/Focus

Concentration/focus was used less frequently. When this type of content was used, it was often to discuss what the team's focus should be in response to mistakes and for the team to concentrate on limiting the opposing team's strengths and capitalising on their weaknesses.

> But that comes from focus. If you make a mistake on the offensive end, you miss a lay-up, I don't care, those things happen. But control what you do on the next play. Be in the moment. Forget the misses, forget the mistakes, forget it if you turn the ball over. Make up for it with something on defence. Go dive on a loose ball, go take a charge, go get a rebound. (HC)

Negative/Critical

The coach rarely used negative/critical content, but when it was used it was typically 'bad' language in the form of swearing. It was never used in ways to be critical or demeaning but instead in an apparent effort to put emphasis on certain points and increase the players focus and enthusiasm. "I'm ******* jacked up for this game. Each week, in this league, we've been making steps forward in the league. We've been making steps. We're getting better each week." (HC)

Game Statistics

The team had an overall game record of seven wins and thirteen losses, and after the first two-minutes of games the team had outscored their opponent on 13 occasions and were outscored seven times. Two hierarchical multiple regression analyses were conducted with performance outcomes as the dependent variables: Points difference at (1) two-minutes; (2) end of game. Assumptions were checked and generally satisfied (e.g., independent errors: Durbin-Watson values = 1.45-1.48; multicollinearity: VIFs = 1.25-4.15). Beyond a significant effect of opponent rank, venue, and previous result (ΔR^2 = .43, p = .04), pre-game speech content did not significantly predict points difference after the first two-minutes (ΔR^2 = .24, p = .21). Beyond a non-significant effect of opponent rank, venue, and previous result (ΔR^2 = .26, p = .23), pre-game speech content did not significantly predict the points difference at the end of the game (ΔR^2 = .33, p = .37). Although the effects of pre-game speech content were not statistically significant on points difference after two-minutes nor at the end of the game, the effect sizes were large. The coefficients and squared part correlation values indicate that collective team support and concentration/focus were most strongly associated with the points difference after two-minutes (See Table 6.3). Higher frequencies of both types of content were related to poorer

performance (worse points difference). Emotional appeal was most strongly associated with points difference at the end of the game, with more emotional appeal related to superior performance (better points difference).

Table 6.3

Summary of Hierarchical Regression Analysis for Variables Predicting Points Difference (PD)

Dependent Variable	Step	Independent Variable	ΔR^2	*p(F)*	β	*t*	*p(t)*	sr^2
2 minutes	1	Opponent Rank	.43	.04	0.40	0.27	.80	.00
		Venue			2.25	1.40	.20	.08
		Previous Result			1.06	0.91	.39	.03
	2	Strategic Information	.24	.50	0.70	0.55	.60	.01
		Collective Team Support			-0.12	-1.22	.26	.06
		Emotional Appeal			0.11	0.21	.84	.00
		Concentration/Focus			-1.53	-1.96	.09	.16
		Negative/Critical			0.25	0.80	.45	.03
		Preparation of PGS			-0.06	-0.04	.97	.00
Full Game PD	1	Opponent Rank	.26	.23	25.79	2.60	.03	.35
		Venue			13.67	1.29	.23	.09
		Previous Result			2.59	0.34	.74	.01
		Strategic Information	.33	.44	0.24	0.32	.76	.01
		Collective Team Support			0.24	0.36	.73	.01
		Emotional Appeal			3.91	1.12	.30	.06
		Concentration/Focus			-0.58	-0.11	.91	.00
		Negative/Critical			0.85	0.41	.69	.01
		Preparation of PGS			-2.36	-0.21	.84	.01

Player/Coach Interviews

Thematic analysis found that participants' perceptions of the effects of pre-game speeches revolved around four main factors: focus, efficacy, energy, and support. These four factors could then in turn influence performance outcomes. Within each theme, sub-themes emerged, presented in Table 6.4.

Focus

Players felt that their focus was influenced during pre-game speeches, with all referencing the sub-themes of routine, a shift from individual to team focus, specific strategies they felt influenced focus, and how focus effected their performance.

Routine. Players often referred to pre-game speeches as an important aspect of their routine, which enabled them to focus on the upcoming game and limit external distractions. The consistent delivery of pre-game speeches during their pre-game routine was noted as a positive, as it allowed players to complete individual routines prior to the start of a pre-game speech uninterrupted. The routine delivery of pre-game speeches was intentionally utilised by the head coach to maintain consistency, "I think players are creatures of habits. I think they like that routine and I think it's important for them to have that." (HC)

Individual to Team Shift. The players also described how the pre-game speech acted as a specific point in which their focus shifted from individual preparation to team preparation. "A lot of us do have individual routines that we like to go through that maybe not everyone wants or needs to do. And then, once you come out of that talk, it's way more 'we' based, it's more team centred." (P. 7) Alongside the players' descriptions of the pre-game speeches acting as a time to focus on the team, the coach also stated that they felt it was their responsibility "to deliver the game plan and make sure that the team are focused and aware of the task at hand." (HC)

Table 6.4

Table of Themes

Theme	Sub-Theme(s)
Focus	Routine
	Individual to Team Shift
	Specific Strategies
	Performance Effect
Efficacy	Sources of Efficacy
	Specific Strategies
	Performance Effect
Energy	Sources of Energy (Contagious)
	Performance Effect
Perceived Support	Sources of Support
	Specific Strategies
	Performance Effect

Specific Strategies. A key strategy in pre-game speeches to enhance focus was the coach explicitly explaining each player's role and responsibility to the team. This ensured expectations were clear, limited confusion, promoted individual and team accountability, and created an 'inclusive' feeling within the team that all players would contribute to the game in some way.

> We're all given roles and I think coach is very good at making everyone feel like they have a role. I think if he's giving us kind of like a specific role for the game or he's asked us to do a set thing, having those kind of key things to focus on I think definitely helps our performance because you kind of go back to that. So

> just having those couple of things kind of fresh in your mind coming out of the locker(room) I think definitely helps. (P. 5)

Importantly, players highlighted that their coach only assigned roles and responsibilities that were within the players' control. For example, the coach never stated that a player had to score x number of points or get x number of rebounds, but ascribed tasks such as boxing out, hustling after loose balls, or sprinting back on defence; all of which the players could control, which also influenced their confidence.

> I think it gives me something to focus on because I mean, me personally, I don't like to be thinking about a lot of stuff…because obviously, in a game, I could go 0-10, but I can't control that. Whereas the things that we go through in pre-game you can control. So yeah, it gives me confidence to go (out) there and focus on myself or stuff that I can really control and just remind me of what I can control. (P. 2)

The use of '*controllable*' focus points or responsibilities extended beyond individual players to the team, as the coach reiterated the team's performance '*identity*' during each pre-game speech. This '*identity*' included three game aspects that the coach felt were always within the team's control and if focused upon could result in positive performance: tempo, toughness, together.

Other specific strategies that the coach used, and that players felt influenced their focus, was the frequent use and encouragement of brief visualisation and 'mindfulness' exercises. These were sometimes guided by the coach, but also occasionally self-led. When guided by the coach, usually at the beginning of the pre-game speech, players were asked to think about what they would bring to the game to help the team achieve success and to clear their minds of all

other distractions. Players reported using this time in unique ways that best suited their personal needs. For instance, some used it to eliminate game-day distractions:

> it can all be a bit overwhelming on game day. You know, you get there and there's loads of people and you're warming up and so it's just time to completely chill for a minute and just breathe and think, rather than going 100 miles an hour. (P.5)

For others, it was a chance to visualise their game,

> for me personally, I try to visualise what I have to do before the game. So then, when I get on the court, having like that picture in my mind kinda helps me execute…so having that 30 seconds or whatever, just kind of like think things through it, is helpful for me. (P. 4)

The coach often posed questions during the pre-game speech, which players felt enhanced their engagement and focus. For example, the coach would ask questions to ensure players understood tactics or reiterate the 'keys' to the game. "I think it keeps us engaged better because it makes you think more and give feedback, rather than just being talked at." (P. 6) The coach also thought that the use of questions elicited a more assertive mental state and facilitated focus and performance. "I think it can leave them in a more assertive state mentally…if they feel like they're engaged, they're going to be more focused. If they're more focused, they're more likely to perform better." (HC)

Performance Effect. As some of the sub-themes have already highlighted, participants perceived focus to then effect their performance in various ways. Increased focus was often related to increased performance via the execution of specific tactics and the increased ability to self-monitor and correct issues in-game. Examples of execution were given at the individual and

team level, with key points from the speeches acting as ongoing personal reminders, prompts and areas for the team to discuss during on-court huddles.

> It's then on us when it does start to drop (performance/execution of tactics), to then take that from the pre-game and use it within the team. I think it is really important for players to have that because obviously the coach can really only coach in a time-out…. (P. 2)

Although the effect of focus on performance was often referred to positively, some players highlighted that a loss of focus during pre-game speeches had a detrimental effect at the start of the game. Information overload, a lack of clarity, and repetition throughout the season were contributing factors to a loss of focus. For example, one player referenced a game in which team performance was poor, and how the pre-game speech was different. Instead of the coach describing the game plan, he just asked the team if they knew it and, upon receiving a 'yes', concluded the speech. The player discussing this occurrence felt it caused confusion and suggested that even a quick reference to the game plan would have been beneficial, "I think it's definitely beneficial to just, even if it's super brief, just to actually say it for those people in the room that may not know 100% or be a bit confused." (P. 7)

Another player discussed the use of strategies becoming repetitive. "In the beginning of the season, yes, like of course you're listening to him every time. But after a while, but it could just be me, they get repetitive…it was like a broken record for some of us." (P. 3) One player referenced the coach's tone of voice as a factor that could limit repetitiveness. "When somebody speaks a certain way, just gets you engaged differently, or puts more emphasis on going out there and doing what he's saying…if you're listening to somebody monotone, you're either going to lose focus or just not be fully engaged in what they're saying." (P. 6)

Efficacy

Players revealed that their self- and collective efficacy were influenced during pre-game speeches, with sub-themes of sources of efficacy (coach and teammates), specific strategies that influenced efficacy, and how it had an effect on performance.

Coach and teammates. Players often spoke of self- and collective efficacy being influenced during pre-game speeches from two sources: the head coach and other teammates. Players reported that the head coach's pre-game speeches did impact their efficacy beliefs, and the coach revealed that this was an aspect they often attempted to influence. The coach felt that it was the coach-athlete relationship that allowed him insight into what the players may need to boost their confidence. He would then tailor the pre-game speeches to meet those needs. "It might be that I need to highlight that player and give them some confidence or it might just mean I don't mention them if I know that they're going through something. But it's important to be aware and know kind of where your players are at." (HC).

Players reported that the behaviours and words of their teammates during the pre-game speech could influence their own efficacy expectations. Often, a more engaged, energetic, and positive teammate was associated with an increase in efficacy, whereas a disengaged, flat, and negative teammate was associated with a decrease in efficacy. The pre-game speech acted as a point of reference for players to assess their teammates in this regard.

Specific Strategies. When players discussed specific strategies, two key sources of efficacy emerged: verbal persuasion and past positive performances. For example, when the coach ascribed roles and responsibilities, it was beneficial for the players' efficacy if the coach also cited past positive performances of the role. This extended to collective efficacy, as players heard the coach express his beliefs about other individual players and the collective team.

Further, the coach would highlight how the team had overcome challenges, worked hard in recent practices, and detailed specific instances of positive performance. Many players described feeling reassured and confident that they were capable of replicating these past positive performances and this influenced their upcoming performance.

> Our pre-game speeches…. often he'll relate to a time that we've performed well or performed a big win, or maybe we didn't win but we competed the whole game. So it's that little reminder, I think, does improve our efficacy as a team as we go out because it's like 'oh yea, we know we can do that, we've done it before, so there's no reason we can't do it now'. (P. 7)

Performance Effect. The increases in self- and collective efficacy experienced from the pre-game speeches were perceived to effect performance via various pathways, spanning cognitive, affective, and behaviour states. For example, self-efficacy that was influenced by feelings of reassurance and belief from the coach helped one athlete deal with anxiety. "I think there's always going to be nerves, but knowing that you've got a coach that believes in you one hundred percent is always helpful coming out of the locker room as a team and individually." (P. 5) Likewise, efficacy led to better skills execution, increased effort, and a sense of freedom. "If I'm going into a game feeling really confident, I'm feeling like there's nothing I can't do, it just really pushes you to do those things because you know you can do them. You feel free to do them and it just leaves a nice openness to the game and you're not restricted." (P. 7)

Energy

Players reported that pre-game speeches influenced their energy levels primarily through two sources: the coach's tone of voice and teammates' body language, both of which were

deemed to be '*contagious*'. A further sub-theme to emerge was players' perceptions of how energy effected their performance.

Sources of Energy. Energy was perceived as transferable and contagious, and something that players '*fed off each other*'. Engagement in a team huddle and shout at the end of the pre-game speech provided a key marker of body language and emotional states that players felt could influence them. "If you see them (teammates) picking up the energy and stuff it kind of gets everyone else going." (P. 2) In contrast, when energy was flat, negative effects could occur. "It's a team sport, so I think if one person isn't ready to go it kind of does then like affect everyone else like a domino kind of." (P. 1) Although players acknowledged it was their responsibility to control their own energy, they highlighted the coach's tone of voice during pre-game speeches as influential on their energy levels. The coach's tone of voice could convey different messages, such as game importance and the need for players to be mentally ready, which could then also be beneficial or detrimental.

> I think the intensity when he talks like that. And I think it's more, I don't know, motivating. It gets everyone going. It's not up to him to bring the intensity for us, but it definitely kind of helps like foster that feeling. I think when he says it (PGS) with intensity, it's more urgent, it's more like you have to do it, and if he said it with more of a neutral tone it wouldn't be taken in that way. It wouldn't be taken as seriously. (P. 1)

Fluctuations to the coach's tone of voice appeared intentional. The coach described how he would interpret the team's energy levels upon entering the locker room and would increase the passion and emotion in his delivery if he felt players lacked alertness or engagement.

> It can be a little bit planned if I feel like the energy is a little bit low and they're coming in and I'm noticing the body language is a bit down and there's like a weird funk in the atmosphere. I'll kind of be like 'right, we're just going to try and fire them up a little bit' and other times if we look like we're focused and we're keyed in and we're locked, then it's about just giving that technical tactical information and just telling them what they need. But again, I just think it comes down to being able to read the room a little bit and read kind of the atmosphere. (HC)

Performance Effect. '*Contagious*' energy could be considered beneficial or detrimental. For instance, the transfer of energy was beneficial when a feeling of excitement permeated the team, and detrimental when the members of the team were '*flat*'.

> If it's a feeling of excitement and things like that, yep, definitely feed off it. Like I'm jumping to the court like ready to go. But when it is flat, I feed off that as well. Then I start getting in my head and it's a bit concerning because it's like we play so bad when we're flat, so it kind of just fosters…it starts those kind of negative feelings try(ing) to seep in. (P. 7)

Players noted that changes to energy influenced the remaining warm-up and first few minutes of the start of the game by generating momentum. This momentum led to better warm-ups, which in turn led to better performances. However, players did reveal that performance effect was probably limited to the first few minutes of the game. "I think we come out starting with a lot of energy. I don't know about the whole game…because we sometimes don't know how to do it for forty minutes."

Support

Players felt that pre-game speeches were interactions that increased feelings of support from both the head coach and teammates. Sub-themes of sources of support, specific strategies, and performance effect emerged.

Sources of Support. Being physically together in the locker room with no outside distractions cultivated a sense of togetherness and perceptions of support within the team. Players perceived support from their coach and from their teammates during pre-game speeches, with aspects of esteem support, informational support, and emotional support noted during the speeches.

> It just like builds a sense of like family, like team. I guess just like going on the court having the sense of everyone's in it together, everyone's on the same page. Obviously kind of builds trust within me that everyone's ready to play and when the ball is in their hands they're going to make the right decision. To kind of have that reassurance that everyone's ready to go through this and ready to execute their part is important. I think it just kind of makes everyone feel like they're in it together…like they have the team behind them. (P. 1)

Specific Strategies. Support from the coach, within the pre-game speech, was well received by players, potentially a consequence of the coach attempting to meet their needs. Most players felt it was the coach's responsibility to create and promote a supportive environment and that '*what*' and '*how*' the coach's messages were communicated were important. For example, clarifying team roles and expressing belief in players' ability to fulfil these was beneficial, along with conveying these messages in a reassuring and encouraging manger. Additionally, sometimes the coach would directly state that support was needed amongst the team, "most importantly we do it together…support each other and talk to each other. No negativity, nothing

but positivity today." (HC) From the players' perspective, the team huddle and shout at the end of the game were cited as important strategies that reinforced togetherness and support.

> I think the shout at the end is pretty important just because it wraps up the speech. It brings us as a team together, like physically together. It's just probably more like a symbol that emphasises the togetherness and unity of the team. It impacts me because knowing that my teammates, that I can truly trust my teammates and that my teammates has completely my back, helps me on the court as well. (P. 4)

Performance Effect. Most players felt coach support positively influenced their performance. Feeling supported lifted some of the burden of responsibility felt by players and enabled them to better execute skills and the game plan, "as a shooter it helps a lot having a coach behind you. Like if you know you have the green light, then you're not going to second guess, when you catch the ball, whether you should shoot it or not." (P. 6) Coach and team support was also perceived to affect performance via mental and physical mechanisms, including increased confidence, trust, effort, and reduced hesitation. "It comes back to hesitating again. I think just having that trust and belief from your team will give you the confidence to just do what your role is. And same with the team. I think it gives belief in individuals and then just overall team philosophy." (P. 2)

Discussion

The aim of this study was to examine the content, effect, and perceptions of pre-game speeches throughout a season in a women's professional basketball team. Collective team support and strategic information were the most frequently used clusters, and there did not appear to be noticeable variation in content based on venue, opponent rank, and previous results against the opposition. Although the frequency of pre-game speech content was not a statistically

significant predictor of points difference after two-minutes nor at the end of the game, the effect sizes were large. There was a trend for higher frequencies of collective team support and concentration/focus to be associated with worse points difference after two-minutes, whereas there was a trend for emotional appeal to be positively associated with points difference at the end of the game. Players perceived that pre-game speeches could positively or negatively influence focus, efficacy, energy, and support, and thereby performance throughout the remaining warm-up and during the game. The specific content, the tone of delivery and emotional contagion were important in determining whether influence was beneficial or detrimental.

There were no major variations in pre-game speech content used throughout the season based on game-related factors such as venue, opponent rank, and previous results against the opposition. For example, the coach did not appear to deliver significantly more strategic information or collective team support content when home versus away, or when playing higher versus lower ranked opposition. This finding contradicts Delrue et al. (2017) who found coaches' behaviours changed game-to-game, although that study did focus on more than one coach/team. The coach's use of consistent pre-game speeches within the current study, with little variation in the type of content, may have stemmed from their personal belief that their players needed consistency and were '*creatures of habit*'. However, Vargas-Tonsing and Guan (2007) found that athletes preferred more informational or emotional content based on game scenario. Although female athletes within their study reported a preference for more information than male athletes, collectively there was a preference for more emotional content when competing in a championship game and when playing an opponent ranked higher.

Although the frequencies of pre-game content did not significantly predict performance outcomes, which was contrary to the hypothesis, the magnitude of effect sizes were large. The lack of statistical significance may be due to a relatively small sample size of only 20 games. There was a trend for higher frequencies of collective team support and concentration/focus content to be associated with poorer performance (worse points difference) after two-minutes, whereas emotional appeal was most strongly associated to better performance (positive points difference) at the end of the game. These results could indicate that while some type of support and concentration/focus elements were being delivered by the coach, an overabundance, or 'overprovision' (Dehle et al., 2001) of these types of content strategies may have resulted in negative effects (Brock & Lawrence, 2009). Conversely, higher frequencies of emotional appeal strategies were associated with better performance at the end of the game. Previous research has found that athletes may want and need more emotion during pre-game speeches (Vargas & Short, 2011), therefore an increase in emotional appeal strategies may have met the players' needs and positively improved performance.

Consistent with the hypothesis and previous research, players perceived that pre-game speeches influenced a range of psychological factors: focus, efficacy, energy, and support. Players felt that pre-game speeches allowed them to focus on the game by maintaining a pre-game routine and shift their focus from individual areas of preparation to team-oriented aspects. Players also reported that they felt their self- and collective efficacy were influenced by both the head coach and their teammates during pre-game speeches, which led to better execution, reduced nerves, and a sense of freedom during games. Similarly, previous research has found that athletes perceive that pre-game speeches can influence efficacy expectations (Vargas-Tonsing, 2009; Vargas-Tonsing & Bartholomew, 2006) and physiological factors including

arousal and effort (Vargas & Short, 2011). Further, the players reported that both their coaches and teammates could influence their energy and perceptions of support during pre-game speeches.

Beyond identifying psychological factors perceived to have been influenced, however, the current results shed light on specific factors that enhanced these outcomes and influenced the effectiveness of pre-game speeches, including content, delivery, and emotional contagion. Findings identified a range of content that players perceived to benefit psychological and performance outcomes. Informational content was important, particularly clear details on individual roles and responsibilities. This helped the players to focus on what they had to do individually, but it also promoted a sense of inclusivity and shared responsibility. In discussing roles, the coach often provided instruction, rationale, and encouragement, all factors related to need- and autonomy-supportive behaviours (Mageau & Vallerand, 2003; Reeve, 2009; Reeve & Cheon, 2016), and a positive motivational climate (Weiss et al., 2021). The coach also sometimes encouraged input from players by asking questions, such as to detail their involvement in tactical elements, define certain factors of the team's identity, or to provide additional insight. These behaviours contrast with the findings of Delrue et al. (2017) that need-thwarting coaching behaviours were often present during pre-game speeches with male adult soccer players. Need-supportive behaviours foster autonomy, competence, and relatedness, which can influence athletes' cognitive, affective, and behaviour states (Ntoumanis et al., 2017). Additionally, emphasis was placed on the controllability of all roles and responsibilities. 'Controlling the controllables' is a cognitive-behavioural approach that can reframe situations and limit the chances of choking (Shapiro & Bartlett, 2019) and increase self-efficacy (Karageorghis & Terry, 2011).

Additional beneficial content included referencing positive past performances, using visualisation and mindfulness techniques, and ending with a team huddle. Past performances are a source of efficacy (Samson, 2014, Bandura, 1997) and reminded players what they are capable of. When discussing past positive performance, the coach often provided encouragement that the performance could be replicated, instruction on how the performance could be replicated through task-oriented statements and delivered with positive belief statements. This delivery includes many of the coaching behaviours identified as sources of relation-inferred self-efficacy beliefs (McMullen et al., 2020). Similarly, players were encouraged to visualise themselves performing well and to clear their minds of any distractions, which they felt increased focus and efficacy. Previous research has also found that visualisation, or mental imagery, can increase focus, confidence, and preparation, and reduce nerves when facing a stressful experience (Predoiu et al, 2020; Rogers, 2006). Further, at the conclusion of every pre-game speech there was a team huddle in which all players touched hands and shouted a meaningful word. Players' responses throughout this study suggested that this '*small*' and common moment may have '*big*' influence on feelings of support and energy. The act of physically coming together appeared to boost players' feelings of togetherness and that they were entering the game with the support of their teammates. Drawing on social identity theory, it may be that these actions make players feel they belong to a group in which there is emotional value and significance (Turner & Tajfel, 1979). Furthermore, the huddle and shout may act as a source of perceived support, which has been linked to self-confidence (Freeman & Rees, 2010; Rees & Freeman, 2007), motivation (DeFreese & Smith, 2013), flow states (Bakker et al., 2011), and performance outcomes (e.g., Freeman & Rees, 2008; Rees et al., 2007). When analysing the types of perceived support from teammates, Freeman and Rees (2009) found esteem and emotional support to occur most

frequently. Typically, the shout during the huddle included the words '*family*' and '*together*', perhaps influencing and indicating the emotions felt while performing this action.

The majority of players emphasised the effect of the coach's tone of voice, which could increase focus (intense tone), confidence (passionate tone), energy (urgent tone), and feelings of support (authentic tone). Athletes often give meaning to tone of voice, such as identifying if the coach is stressed (Manley et al., 2008; Thelwell et al., 2017) and as a way of gathering useful information (Pop, 2014). Smith et al. (2018) also found that tone of voice is a key feature of inspiring communication. In the current study, tone of voice was purposively modulated by the head coach, based on his perception of the team's needs. These needs were assessed following speaking with individual players before the game and assessing body language. However, the foundation of his '*understanding*' of the players' and team's needs was perceived to be the coach-athlete relationship. Lorimer and Jowett (2009) questioned the ability of athletes to correctly interpret their coach's messages and reported that mutual understanding may be less than 40%. However, a strong coach-athlete relationship may help messages to be accurately received, which can reduce conflict (Mellalieu et al., 2013), and increase athletes' positive perceptions of their coach's communication (Kenow & Williams, 1999).

During pre-game speeches, participants spoke of '*feeding off*' each other and the coach. Players referenced feeling focused and energised when the coach displayed behaviour that was intense, urgent, confident, and supported when their teammates' body language was positive and energetic. These effects may be akin to emotional contagion (Hatfield et al., 1994) and emotions as social information (EASI theory; Van Kleef, 2009, 2016). EASI posits that when an emotion is observed it can spread through the process of emotional contagion, altering cognitive, affective, and behavioural responses (Keltner & Haidt, 1999). Van Kleef et al. (2019) found that

a coaches' expressions of anger and happiness before a game were linked to their players' feelings of anger and happiness during a game, with happiness then positive associated with team performance predictions. Coaches who can portray urgency, confidence, intensity, and trust during pre-game speeches may foster similar constructs in their players, especially if a positive coach-athlete relationship is present (Moll & Davies, 2021). Athletes may then become further sources of contagion for each other. The influence of athletes' emotions on teammates has been associated with collaborative behaviour (Tamminen et al., 2016) and performance (Moll et al., 2010). In the current study, participants identified both positive and negative examples of how they '*feed off*' their coach and teammates. Totterdell (2000) found that the transfer of mood may depend on how a player perceives the motive behind their teammate(s) (or possibly coach's) mood; a mood may be supportive if aimed towards achieving a shared goal but threatening if aimed towards achieving a personal goal.

The findings of this study provide a number of applied implications. Coaches' pre-game speeches may benefit from being delivered consistently within the pre-game routine and including emotional appeal strategies. Coaches' may also benefit from delivering pre-game speeches that include special attention to promoting positive focus, efficacy, energy, and support. The current study identified some specific strategies that may help, including clear information on players' roles and responsibilities, referencing positive past performances, inclusion of mental skills (e.g., visualisation and mindfulness), providing esteem, emotional and informational support, and concluding with a team huddle and shout. Further, coaches should be aware of their tone of voice throughout their pre-game speeches, as players actively engage in assessment of their tone of voice and use it as a point of reference.

Despite the important contribution of this study in advancing understanding of the use, effect and perceptions of pre-game speeches, some limitations should be discussed. First, interviews were conducted at the end of the season, rather than after each game, so recall bias may be an issue. To reduce this limitation, audio clips from pre-game speeches were utilised to stimulate recall of the participants' experiences of pre-game speeches. Second, due to COVID-19 the final five games of the regular season and the play-offs were cancelled. Future research may benefit from conducting case studies, that extend throughout the regular and post-season, to assess if a coach's pre-game speech delivery changes and if athletes' needs, preferences, and reported performance effect vary during games that might have increased pressure associated with them. Third, although the case study approach was a strength of this study, it may limit the generalisability of the findings beyond the specific team or immediate context of female professional basketball. Research should be conducted to examine any potential differences that may arise due to gender, competitive level, and type of sport.

The current study adopted a case study approach to examine the content, impact, and perceptions of pre-game speeches throughout a season in a women's professional basketball team. Collective team support and strategic information were the most frequently used clusters, and although the frequency of pre-game speech content was not a statistically significant predictor of performance, the magnitude of effects on points difference after both two-minutes and the end of the game were large. Players also perceived that pre-game speeches could positively or negatively impact their focus, efficacy beliefs, energy, and feelings of support. The specific content, the tone of delivery and emotional contagion were important to determine the beneficial influence of the pre-game speech.

Table 6.5

Summary of All Chapters

C.	Rationale	Aim	Main Findings
1	Orientate the reader to the structure and content of PhD, by introducing PGS and associated research.	To synthesise and critique the evidence on 'game-day' interactions, specifically pre-game speeches, and wider research and associated theories.	Demonstrated coach 'game-day' communication, in particular PGS may influence athletes.
2	Previous research has not examined PGS use in basketball and prior to conducting further research it was important to establish their use and value in the sport.	To examine the use, content, and effect of PGS in basketball.	PGS are commonly used within basketball, with various content and delivery styles used. Basketball players perceive PGS to be enjoyable, useful, and influential on their individual and team confidence and performance; with team outcomes perceived to experience greater influence than individual outcomes.
3	Past PGS research has typically used quantitative methods, and a more in-depth and detailed understanding of athletes' experiences and perceptions of PGS are needed.	To examine professional female basketball players' experiences and perceptions of PGS using a qualitative approach.	Professional female basketball players place high value on PGS within their pre-game routines. Numerous individual and team needs are present during PGS. If needs are not met by coach, players engage in behaviours to compensate. Players perceive PGS to affect cognitive, affective, and behavioural states, and ensuing performance.
4	Past PGS research has primarily focused on athletes' perceptions and preferences. Limited research has explored head coaches' experiences and perceptions of PGS.	To examine professional head basketball coaches' experiences and perceptions of PGS using a qualitative approach.	Coaches highlighted numerous contextual factors that influenced the purpose and delivery of pre-game speeches. Coaches considered what and how speeches were delivered, and perceived that they affect cognitive, affective, and behavioural variables, and ultimately performance. After games, coaches engaged in a reflective process that influences subsequent speeches.
5	Previous research has focused on informational and emotional dimensions of PGS, without exploring specific strategies within these and whether other dimensions exist.	To identify and classify the specific PGS strategies used in basketball and their perceived effect on collective-efficacy and team performance.	Six PGS content clusters emerged: strategic/information, collective team support, emotional appeal, concentration/focus, negative/critical, preparation of PGS. Strategic/information cluster was perceived to have the greatest effect on collective-efficacy and team performance by both coaches and athletes. 65 strategies were generated, with 36 (35 for athletes) strategies rated within the 'go-zone'.
6	The previous chapter identified a variety of PGS strategies and dimensions that have not been examined before. Further, limited research has examined PGS across multiple games or their influence on objective performance outcomes	To explore the use and effect of PGS strategies in professional basketball across a season.	Coach used numerous strategies during PGS across a season, with collective team support and strategic/information cluster strategies most common. Although the Influence was not statistically significant, the effect sizes were large. Players' also perceived PGS could affect focus, efficacy, energy, and support. Content, tone, and emotional contagion were important factors that appeared to determine whether effect was beneficial or detrimental.

Chapter 7:

‘Remember What Got You Here’:

General Discussion

Main Findings

This thesis aimed to examine pre-game speeches and their influence on psychological and performance outcomes in basketball by: a) reviewing current pre-game speech literature and associated theories; b) assessing current use, content, and perceived influence; c) gaining insight and understanding into the experiences and perceptions of professional basketball players and coaches; d) identifying specific strategies used during pre-game speeches and their potential performance effects; e) examining the use and influence of pre-game speeches throughout a basketball season. Table 7.1 graphically summarises the research that was conducted to address these aims.

A narrative review presented an important synthesise of explicit pre-game speech research and associated theories. This was the first review of the literature and found that although research was emerging, explicit examination of pre-game speeches was limited. Associated literature, therefore, provided insight and understanding into this '*game-day*' phenomenon. First, the review demonstrated that communication between coaches and their athletes occurs at various points before, during, and after a competition. Second, it identified that pre-game speech literature has focused on three main aspects: delivery and content, athlete and coach perceptions and preferences, and potential psychological and performance outcome effects. Third, gaps in the literature were identified that provided direction for this thesis to complement and extend pre-game speech literature. For example, no previous studies had examined pre-game speeches at the professional level, nor attempted to examine effects on objective measures of performance. A variety of research methodologies were employed to investigate the gaps identified in the review.

Chapter 2 utilised a cross-sectional survey, and found that pre-game speeches were

Table 7.1

Summary of Research

	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6
Method	Narrative Review	Cross-Sectional Survey	Qualitative	Qualitative	Concept Mapping	Mixed-Methods Case
Aims	To synthesise and critique the evidence on 'game-day' interactions, specifically pre-game speeches, and wider research and associated theories.	To examine the use, content, and effect of pre-game speeches in basketball.	To examine professional female basketball players' experiences and perceptions of pre-game speeches using a qualitative approach.	To examine professional head basketball coaches' experiences and perceptions of pre-game speeches using a qualitative approach.	To identify and classify the specific pre-game speech strategies used in basketball and their perceived effect on collective efficacy and team performance.	To explore the use and effect of pre-game speech strategies in professional basketball across a season.
Contribution of Findings	First review of pre-game speech research and associated theories. Demonstrated coach 'game-day' communication occurs at various points. More research is needed on the use, content, and impact of pre-game speeches.	Pre-game speeches are commonly used within basketball. Various content and delivery styles are used. Basketball players perceive pre-game speeches to be enjoyable, useful, and influential on individual and team confidence and performance.	Professional female basketball place high value on pre-game speeches within their pre-game routines. Numerous individual and team pre-game speech needs are present during pre-game speeches. When needs are not met, players engage in behaviours to compensate. Players perceive pre-game speeches to affect cognitive, affective, and behavioural states, and performance.	Professional head basketball coaches use a variety of strategies to attain their pre-game speech purpose. Coaches perceive pre-game speeches to affect cognitive, affective, and behavioural states, and performance. Coaches may engage in a reflective feedback and reinforcement loop that considers contextual factors that determine pre-game speech use and main purposes. Coaches noted a lack of coaching literature regarding pre-game speeches for them to use.	Six pre-game speech content clusters emerged: strategic information, collective team support, emotional appeal, concentration/focus, negative/critical, and preparation of pre-game speeches. Strategic information was perceived to have the greatest effect on collective efficacy and team performance by both basketball coaches and players. 65 strategies were generated, of which 36 (35 for athletes) were rated within the 'go-zone'.	Coach used numerous strategies during pre-game speeches across a season, with collective team support and strategic information most common. Pre-game speech influence on performance was not statistically significant, but effect sizes were large. Players perceived pre-game speeches could affect focus, efficacy, energy, and support. Content, tone, and emotional contagion were important factors that appeared to determine whether effect was beneficial or detrimental.

highly prevalent within basketball across competitive levels and genders. Informational, inspirational, and motivational content is currently used by basketball coaches during their pre-game speeches and the content is delivered in supportive, calm, and sometimes aggressive ways. Basketball players generally perceive pre-game speeches to be enjoyable, useful, and impactful on individual, and particularly team confidence and performance.

Most previous research had been conducted through surveys and questionnaires, so Chapter 3 used a qualitative approach to explore professional basketball players' experiences and perceptions of pre-game speeches. Players perceived that pre-game speeches are a valuable part of their game-day routine, that they can meet numerous individual and team needs, that individuals engage in behaviours to compensate when those needs are not met, and that pre-game speeches' influence affect, cognitions, behaviour, and performance. However, pre-game speeches include two parties: athletes and coaches. Therefore, Chapter 4 examined professional basketball head coaches' experiences and perceptions of pre-game speeches. Results provided insight into the '*what*', '*how*', and '*why*' of pre-game speeches. For instance, coaches consider contextual factors (i.e., coach, team, game factors) and the purpose of their pre-game speeches (their '*why*') that inform '*what*' and '*how*' they will deliver the speech (e.g., specific strategies, behaviours). After games, many coaches engaged in a self-reflective feedback and reinforcement loop that informed subsequent speeches.

Chapters 1-4 identified numerous pre-game speech strategies, content, and delivery styles, but previous literature has typically focused on informational and emotional content. Therefore, Chapter 5 utilised a concept mapping approach to examine strategies used by basketball coaches during pre-game speeches. This found 65 unique strategies that converged on six pre-game speech content clusters: strategic information, collective team support, emotional

appeal, concentration/focus, negative/critical, preparation of pre-game speech. The six clusters were further examined in Chapter 6, which used a mixed-methods case study approach with a professional basketball team throughout their season. Although pre-game speech content did not significantly predict objective performance outcomes, the effect sizes were large. Further, the players and head coach perceived that pre-game speeches influenced focus, efficacy, energy, and support, and thereby performance.

Significance and Implications

The findings of this thesis advanced pre-game speech research in three key areas: content and delivery, perceptions and preferences, and effect. These will be discussed below along with methodological, theoretical, and applied/practical implications for researchers, athletes, coaches, sport psychology professionals, and organisations.

Content and Delivery

Previous pre-game speech research that has examined content, delivery styles, and behaviours has typically used hypothetical scenarios (Vargas-Tonsing & Guan, 2007) or one game, such as a championship match (Hettinger, 2010; Savović et al., 2018). Although these studies provided important insight, wider coaching literature that interviewed or observed coaches found that they used different content and behaviours throughout a season and potentially game-to-game (e.g., Bloom et al., 1997; Delrue et al., 2017; Gallmeier, 1987). Furthermore, informational and emotional content have been the predominant types of content examined with pre-game speech literature (e.g., Berkowitz, 2003; Bloom et al., 1997; Vargas-Tonsing & Bartholomew, 2006; Vargas-Tonsing & Guan, 2007). The studies in this thesis addressed these gaps and expanded the knowledge of types of content used by basketball coaches during pre-game speeches.

Chapter 2 found that informational, motivational, and inspirational content, delivered in supportive, calm, and sometimes aggressive styles were present in pre-game speeches delivered by basketball coaches. Indeed, the presence of these types of content and delivery styles within basketball pre-game speeches highlighted the need to assess why different content is used, its impact and whether additional types of content and delivery styles exist. Thus, Chapter 3 and 4 provided further insight into the pre-game speech content and delivery in professional basketball, as players and coaches referenced main delivery aims and the ways in which specific strategies or delivery styles are used to achieve those aims. Getting everyone on the '*same page*', both tactically and mentally, was the primary aim. Content delivered to accomplish a shared tactical understanding included referencing game plans, scouting reports, offensive and defensive tactics and establishing players' roles and responsibilities. Content delivered to accomplish mental coordination varied from specific focus and motivational strategies (e.g., mindfulness, visualisation, quotes) to the coach role modelling different emotions and expressing their belief in the team's ability to perform well.

Players reported that the delivery of these strategies could become repetitive. However, they perceived some variation in content occurred based on game scenario, opponent rank, and how the team had recently been performing. For example, play-off/championship games were reported to have increases in tactical and emotional content and games after a loss or recent poor performances were reported to be delivered with a greater sense of urgency. The coaches confirmed the players' perceptions of variation in content and explained that numerous factors influenced their overall pre-game speech approach, purpose, and content. These factors included personal coach factors (e.g., philosophy, leadership, communication, expectations), team factors (e.g., mood, recent performances), and game factors (e.g., game scenario, opponent). Coaches'

analysis of these factors then influenced '*what*' they delivered and '*how*' it was delivered; an aspect of pre-game speech and '*game-day*' communication that had not previously been explored in detail. For instance, coaches typically deliver less detailed information to younger players, and are more likely to provide explanations for coaching decisions to female players. Further, coaches assess their team's mood in the lead up to their pre-game speech and attempt to alter their mood if it is perceived to be negative, which sometimes includes increased energy and positivity during delivery.

Chapter 5 identified six pre-game speech content clusters: strategic information, collective team support, emotional appeal, concentration/focus, negative/critical, and preparation of pre-game speech. These content clusters were made up of 65 specific strategies, with coaches rating positive language, short length, and 'we' not 'I' language as the top three strategies they used. Strategic information and collective team support were the clusters that contained the most strategies. Although these content clusters emerged through coach input and statistical analysis, there is possibly conceptual overlap between the clusters, so future research is needed. However, Chapter 6 examined the use of the six pre-game speech content clusters across a professional basketball season, and strategic information and collective team support strategies were used most often. Further, a combination of all content clusters were present during most pre-game speeches. The identification of 65 specific strategies, six clusters, and their use across a 20-game season in professional basketball extended pre-game speech literature.

Perceptions and Preferences

Previous literature has found that athletes and coaches have perceptions and preferences regarding pre-game speeches. For instance, Vargas-Tonsing and Guan (2007) examined athletes' and coaches' preferences for informational or emotional content based on game scenario and

found that championship games and games against higher ranked opponents evoked a greater need for emotional content, whereas facing unknown opponents or those they had previously narrowly defeated evoked a greater need for informational content. Further, Breakey et al. (2009) reported female collegiate ice hockey players' perceptions of positive and negative factors of their coaches' '*game-day*' communication during pre-game speeches and intermission talks. Positive factors included genuine emotion, short and meaningful communication, and references to team values. Negative factors included long and poorly timed speeches, content that caused disagreements with the coach, and information that was unexpected or expected information that was omitted. Additionally, Vargas and Short (2011) and Savović et al. (2018) both found that junior elite soccer players perceived the pre-game speech to have influenced their performance. Despite these findings, perceptions and preferences had yet to be established within basketball, at a professional level, or through detailed qualitative methods.

Research conducted across all chapters of this thesis provided insight into basketball players' and coaches' pre-game speech preferences and perceptions. Chapters 2 and 5 found that both parties perceive pre-game speeches to be impactful on individual and team confidence/ efficacy and performance, and further insight into their perceptions was provided in Chapters 3, 4, and 6. Chapter 3 found that professional female basketball players perceived the pre-game speech to be a valuable and beneficial part of their pre-game routine, even though they also perceived it to be an interaction in which they have little control or input. They also revealed that there are several individual and team needs that basketball players have in the lead up to a game, and the pre-game speech can be used to meet those needs. These needs often took the form of preferences, such as a preference for clear and concise information that was not new and was consistent with Breakey et al. (2009). When their needs were met, basketball players perceived

positive effects on cognitive, affective, and behavioural states and overall performance. However, when their needs were not met, perceptions shifted to detrimental effects on all outcomes. For example, if a player had a need for informational content that was not met, they reported effects such as confusion, loss of confidence, and hesitation during the game. Further, Chapter 6 found that professional basketball players perceived that pre-game speeches influenced efficacy, energy, focus, and support, all factors that could affect performance.

Coaches' perceptions and preferences were a focus in Chapter 4. Results indicated that coaches had personal preferences when delivering pre-game speeches, based on several different perceptions they held of this interaction. For instance, some coaches cited that they delivered pre-game speeches that they themselves would have enjoyed as a former player, often preferring positive pre-game speeches over negative or aggressive pre-game speeches. Additionally, like the players, coaches perceived pre-game speeches to influence cognitive, affective, and behavioural states, and ensuing performance. Coaches described evidence of these effects as perceived shifts in players' focus and mood, and their application of game plan and strategy information during games. Although many coaches perceived the effects of pre-game speeches to be positive, they felt that there was a lack of coaching literature and resources for them to use to develop a more efficient pre-game speech. The evidence provided in this thesis, which draws on the perspectives of players and coaches, should help address this concern and inform coaching practice in future.

Effect

Coaching literature has reported numerous ways in which a coaches' behaviours, actions, or words can influence an athlete (Gonzàlez-García et al., 2021; Jowett & Cockerill, 2002; Van Kleef et al., 2019; Weinberg & Gould, 2019). Pre-game speech literature specifically has

identified potentially beneficial effects on psychological outcomes, including self-efficacy (Vargas-Tonsing, 2009), team efficacy (Vargas-Tonsing & Bartholomew, 2006), emotion (Gonzalez et al., 2011), and inspiration (Gonzalez et al., 2011; Smith et al., 2018), and that athletes feel their performance is influenced in some way (Savović et al., 2018; Vargas & Short, 2011). Past research, however, has primarily utilised quantitative approaches focused on perceived effects in hypothetical scenarios or single pre-game speeches. A detailed understanding of effects and potential mechanisms was therefore needed

Throughout the thesis cognitive, affective, behavioural, and performance outcomes were found to be affected by pre-game speeches. Chapters 3 and 6 found that affect was influenced by two sources: the specific content and strategies used by the coach and the emotions or moods of others. Participants also made numerous references to emotional contagion processes within pre-game speeches as coaches and teammates' emotions and moods were assessed and mirrored. This supports the findings of Van Kleef et al. (2019) who found that coaches' displays of happiness or anger predicted athletes' displays of happiness and anger.

Pre-game speeches affected cognitive states through the delivery of information and psychological skills (e.g., visualisation, mindfulness). Chapters 3 and 6 indicate that there is typically an ideal amount and type of information (e.g., not too long, not too short, not new), and when this is met it provides athletes with individual and shared knowledge regarding what and how they need to perform to achieve a positive result. Parallels exist with social support in sport literature, in which the support adequacy model (Dehle et al., 2001) and optimal matching model (Cutrona & Russell, 1990) propose that the amount and type of support should match what a recipient wants and needs of the situation respectively. Furthermore, and consistent with efficacy theory (Bandura, 1997), reminders of previous mastery experiences and the coach expressing

belief in players' abilities increased self- and collective efficacy beliefs, which were further supported by verbal, non-verbal, and emotional cues from their coaches and teammates. For instance, when a coach delivers a game plan in a confident manner, and teammates appear to be focused, efficacy beliefs increased.

Behavioural effects typically focused on the effort players exerted in the remaining warm-up and at the start of the game, and the players' response during pre-game speeches that did not meet their individual and team needs. When needs were not met, players in Chapter 3 reported initiating behaviours to compensate and achieve those needs themselves. These behaviours included asking clarifying questions and utilising psychological skills such as positive self-talk and goal-setting.

Chapter 6 was the first study to the researcher's knowledge that has examined the effects of pre-game speeches on objective performance outcomes. Although the type and amount of pre-game speech content did not significantly predict points difference after two-minutes nor at the end of the game, the effect sizes were large. Case studies comprising 20 games across a season in a professional sports team are rare, but this sample size of games may be low from a statistical perspective and may have increased the probability of Type 2 errors. The magnitude of effects, however, provide tentative evidence that pre-game speeches may influence performance to some extent. Collective team support and concentration/focus content clusters were most strongly associated with points difference after two-minutes, however, higher frequencies of those types of content were related to poorer performance. This finding could suggest that although the coach was delivering some type of support, it may not have matched the amount (or possibly type) that the players wanted. An overabundance, or 'overprovision' (as termed in the support adequacy model, Dehle et al., 2001), of collective team support and concentration/focus

strategies may lead to negative effects (Brock & Lawrence, 2009). In contrast, emotional appeal was most strongly associated with points difference at the end of the game, with higher frequencies related to better performance. Research has found that athletes may want and need more emotion from their coaches during pre-game speeches (Vargas & Short, 2011), and therefore when the coach increased their use of emotional appeal strategies athletes' needs were met and performance improved. Chapter 6 investigated this effect on performance further by interviewing seven professional female basketball players. Participants reported that efficacy, focus, energy, and support were four key psychological variables influenced by pre-game speeches and that these might be mechanisms which led to subsequent effects on performance. For example, increased focus led to better tactical awareness and execution, increased efficacy led to reduced hesitation, energy helped increase effort, and support led to more positive interactions with teammates during a game.

Implications

Methodological

This thesis provides some important methodological implications. The use of various methodologies (e.g., qualitative, concept mapping, mixed-methods case study) allowed for different aspects pertaining to pre-game speeches to be explored and examined and should be continued to be used by pre-game speech research and more widely across sport psychology. Chapters 2, 3, and 6 used qualitative methods, which provided in-depth knowledge of professional basketball players' and coaches' perceptions and experiences of pre-game speeches. Understanding the experiences of both players and coaches provided important insight into shared and unique perceptions and preferences. Future research into dyadic and group processes should explore interactions from all individuals involved rather than from a single perspective.

Chapter 5 utilised concept mapping, a novel approach to pre-game speech research. It allowed for a large number of coaches from different backgrounds to participate in the generation of knowledge. Concept mapping has high utility for examining different topics in sport psychology. Recent research has applied this approach to enhance understanding of injury prevention (Ageberg et al., 2019), health promotion in sports clubs (Johnson et al., 2020), perceived effects of yoga (Cook et al., 2018), and the menstrual cycle in women's team sports (Clarke et al., 2021). Further, Chapter 6 was a mixed-methods season-long case study, which had not previously been conducted within pre-game speech literature. Although research may continue to benefit from the assessment of one-off or hypothetical pre-game speeches, a case study approach allows for variations in content and delivery to be explored, including understanding contextual factors which may emerge throughout a season to influence the delivery and impact of pre-game speeches. Additionally, a mixed-methods approach provided in-depth qualitative insight that helped to understand the emerging quantitative trends in the data.

Theoretical

A number of theoretical implications emerged throughout this thesis that build on the three main areas of pre-game speech research. When thinking about their pre-game speech delivery, coaches consider contextual aspects, including coach, team, and game factors. These factors form their '*why*'. This consideration then leads coaches to decide upon the type of content and delivery style they want to utilise: their '*what*' and '*how*'. During the delivery of pre-game speeches, athletes assess the content and delivery in comparison to their individual and team needs and their personal pre-game speech preferences, perceiving if they have been met or not. Based on those perceptions and preferences, positive or negative effect occurs on various cognitive, affective, social, and behavioural outcomes. Based on previous literature and findings

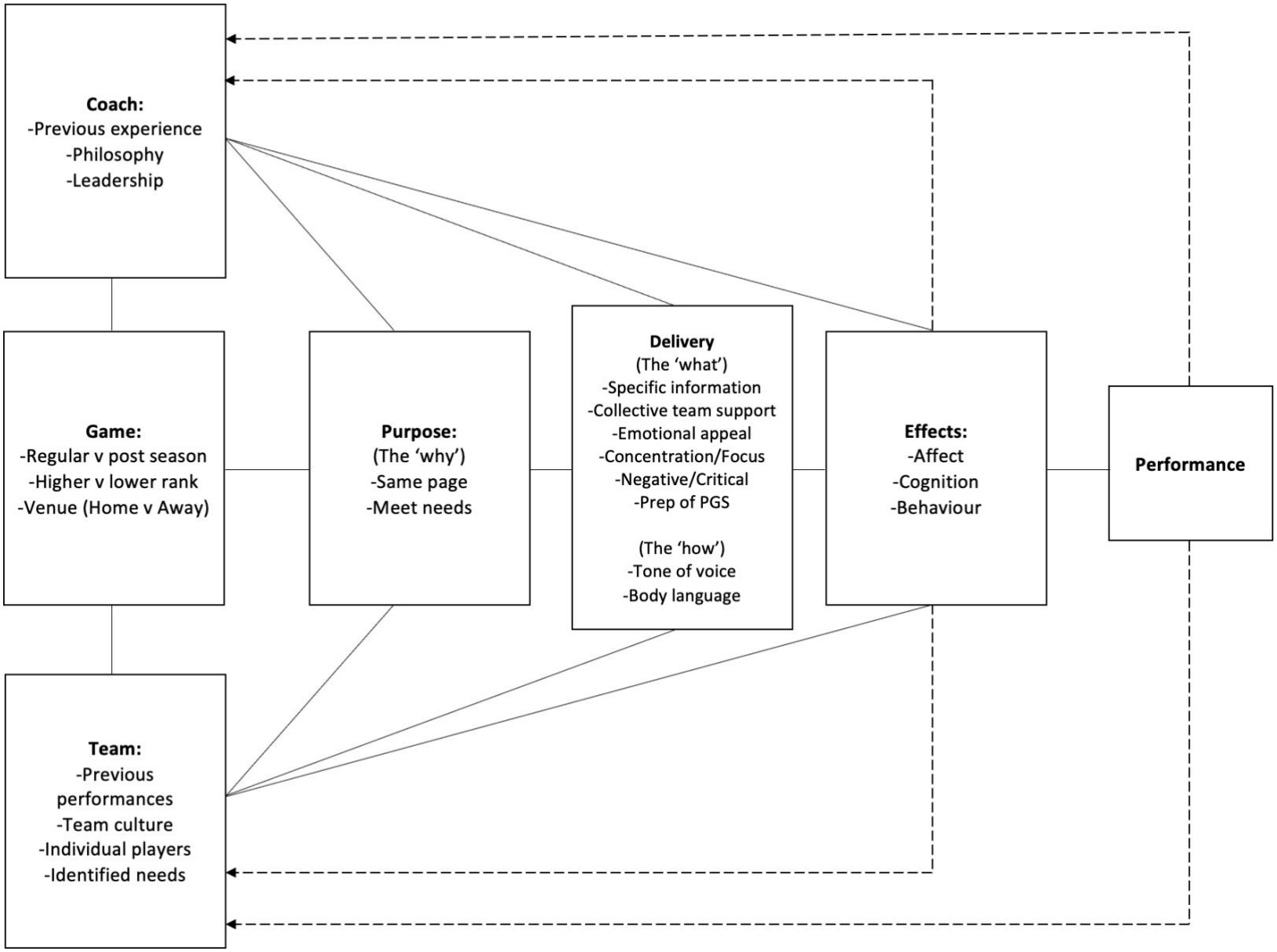
from this thesis, those outcomes then affect performance. Performance outcomes then add to the coaches' past experiences and inform subsequent pre-game speeches. Figure 7.1 depicts these relationships. This figure should be subject to further testing and developed as more insight into the '*what*', '*how*', and '*why*' of pre-game speeches is gathered.

Applied

Findings of this thesis have several applied implications for coaches, athletes, sport psychologists, and organisations. Given that basketball players perceived pre-game speeches to be an important part of their '*game-day*' routine and potentially beneficial for cognitive, affective, behavioural and performance outcomes, coaches should consistently deliver pre-game speeches and position them within a broader pre-game routine. Coaches should not only consider '*what*' to deliver during pre-game speeches, but also '*how*' and '*why*'. In terms of '*why*', players and coaches in the current thesis highlighted that a key purpose of the pre-game speech was to ensure everyone was on the '*same page*' tactically and mentally. To meet individual and team needs, coaches should consider discussing players' needs in a supportive and open manner at the start of the season. This conversation was noted to be lacking within current coaching practice by basketball players and coaches. A conversation may provide a valuable reference for coaches when contemplating their pre-game speeches. Indeed, this may help coaches develop the '*what*'. Throughout this thesis, findings indicated that pre-game speeches can positively influence team-based outcomes such as collective efficacy, team cohesion, and social support. To promote these aspects, coaches should emphasise team values, promote a sense of togetherness (e.g., 'we', 'us'), highlight team roles, responsibilities, and capabilities to perform, and use a positive team huddle and shout. It might also be beneficial to allow a 'players-only' or 'player-led' portion of

Figure 7.1

Theoretical Model of the Pre-Game Speech Process



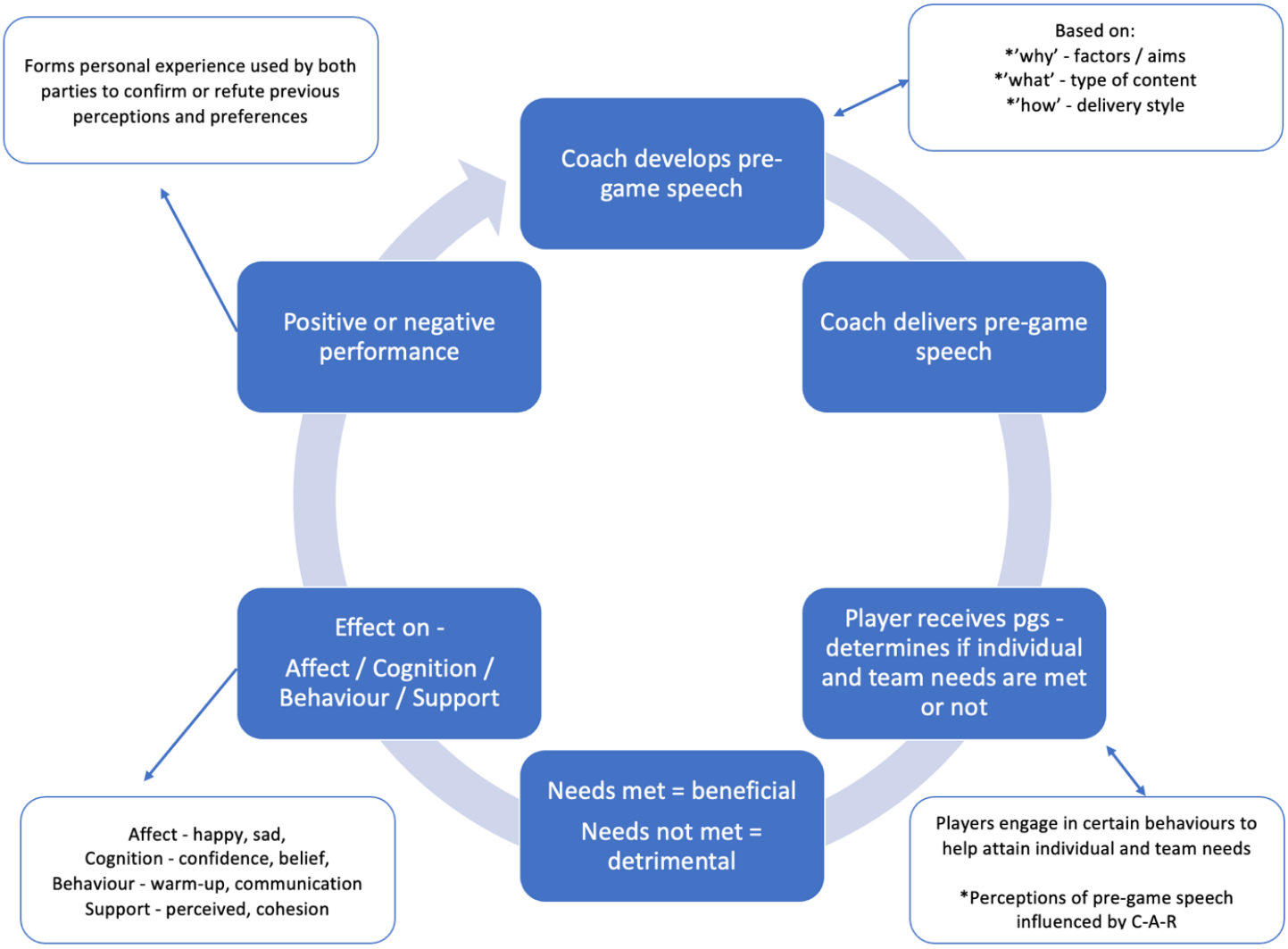
the pre-game speech to provide players with an opportunity for autonomy and sense of ownership.

In terms of '*how*', pre-game speeches should be positive, short and concise, with no new information, and consistent emotional displays. Taking time to plan pre-game speeches may help coaches feel more comfortable and confident in their delivery, narrow information to key points to aid retention and focus, and reduce the potential loss of emotional control, which could help promote the transfer of positive emotions throughout the team. Beyond, the '*what*', '*how*' and '*why*', coaches should also engage in reflective thinking to analyse their current pre-game speech use and delivery after games. This process can be aided by the pre-game speech feedback and reinforcement loop to help identify what was and was not successful in pre-game speeches and use this information to inform subsequent speeches. Figure 7.2 provides a simple applied model for coaches to help frame their pre-game speech process.

Athletes are encouraged to engage in conversations with their coaches to discuss their individual and team needs during pre-game speeches. It is important for athletes to understand, however, that individuals may have different preferences and not all needs may be met during pre-game speeches. As such, they may need to be adaptable. Practising and implementing psychological skills into their '*game-day*' and pre-game speech routine, may offer a greater sense of control over fulfilling their needs and attaining a positive pre-performance state. Further, athletes may benefit from understanding that emotional contagion can occur throughout teams and learning that their own emotional displays and behaviours could influence their teammates. Team discussions may enable athletes to highlight what emotions they may find beneficial or detrimental. These discussions could allow team leaders to evaluate their team needs and implement positive strategies in 'player-led' portions of pre-game speeches.

Figure 7.2

Applied Model of the Pre-Game Speech Process for Coaches



Coaches throughout this thesis referenced a lack of coach education resources regarding pre-game speeches. Sport psychology professionals and organisations, such as national governing bodies or athletic departments, could therefore have a crucial role in supporting coaches to deliver effective pre-game speeches. Organisations could embed information and training on pre-game speeches into formal coach education programmes. The findings of this

thesis could help inform the content. This could be particularly useful for novice coaches, who lack experiential knowledge, and may therefore benefit from understanding the myriad of pre-game speech strategies they may use, and which ones athletes may prefer. Indeed, having insight into what professional level basketball coaches do during their pre-game speeches could provide a valuable resource that may help coach development. Sport psychologists could provide communication training to coaches, model effective behaviour, and help develop understanding of factors that could influence the effectiveness of pre-game speeches. For example, helping to develop positive coach-athlete relationships and coach-athlete communication may facilitate positive '*game-day*' interactions such as pre-game speeches.

Limitations

As with all research, this thesis has some limitations that should be considered when interpreting the findings. First, studies throughout this thesis focused on specific demographics that may limit the generalisability of the findings. For instance, basketball was the only sport explored throughout this thesis. Further, three of the five studies focused on professional level basketball, with female basketball players featured heavily throughout this thesis. Therefore, while the significance and implications of the results were presented, caution should be utilised when determining generalisability to other sports, competitive levels, and genders.

Second, despite the diverse range of methods utilised, which have collectively given insight into pre-game speeches, no experimental methods were utilised. As such, causality cannot be inferred from the findings. An experimental study was in development, but it was unfortunately abandoned due to the COVID-19 pandemic.

Directions for Future Research

To build upon the findings of the current thesis, numerous future research directions exist. First, pre-game speech research would benefit from the application of experimental methods to assess effects on different psychological and performance outcomes. For example, one could compare the effectiveness of different pre-game speech content to groups before they perform an experimental task. Experiments could be performed within different sports and participant demographics. Second, researchers could apply concept mapping to understand pre-game speech content and strategies used in different sports. Third, attention should continue to be paid to effects on objective performance outcomes. Research could use a range of methodologies, such as correlating coach and/or athletes' self-reported surveys of pre-game speech content with match results, using observation to code content, or possibly assessing performance in a controlled experimental setting as to better understand effects. Fourth, the current thesis highlighted the potential importance of team outcomes, so researchers should utilise team-level constructs and theories to investigate pre-game speeches. Fifth, researchers should further examine types of social support during pre-game speeches and whether under- or overprovision of support influences athletes' performance.

Conclusion

This thesis complemented and extended existing literature by examining the use, content, and effects of pre-game speeches within basketball. Previous research has suggested that pre-game speeches can influence athletes psychologically and physically but had not examined these influences through in-depth or on objective performance outcomes. Further, previous research has tended to focus on informational and emotional content. Studies within this thesis highlight that basketball coaches' pre-game speeches may include six types of pre-game speech content

and various styles of delivery. Content and delivery are influenced by a number of factors, including the coach's personal experiences, team characteristics and recent performances, and game scenario. Basketball players value pre-game speeches within their pre-game routine, but they also have several individual and team needs and preferences that can be met during this specific '*game-day*' interaction, and they engage in specific compensatory behaviours when those needs are not met. Although chapter 6 found the effects of pre-game speech content on objective performance was not statistically significant, the effect sizes were large. The thesis also provided more extensive insight into the psychological effects of pre-game speeches, which might in turn influence performance: focus, efficacy, effort, and support. Collectively, the studies have advanced pre-game speech literature by expanding the current knowledge of content and delivery, perceptions and preferences, and effect of pre-game speeches within basketball. Coaches should use pre-game speeches consistently within their pre-game routines but should consider contextual aspects when developing their pre-game speeches to optimise positive effects on individual players and teams, engaging in reflective thinking to analyse their pre-game speech use. This process may be aided by the pre-game speech feedback and reinforcement loop. Further, pre-game speeches should be positive, short and concise, contain no new information, and be delivered with consistent emotional displays. Coaches and athletes should discuss pre-game needs, during the pre-season, to enhance effectiveness and support. Athletes should be adaptable and develop psychological skills that they can employ in their pre-game routine. Sport psychologists and national governing bodies can use the findings of this thesis to offer support and resources to coaches and athletes during educational programmes that inform and help develop communication skills and address factors that may influence pre-game speech effectiveness.

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Appendix A

Narrative Review Literature Search Keywords

Preliminary Keywords	Secondary Keywords	Tertiary Keywords
Pre-Game Speech(es)	Briefings	Verbal Messages
Pre-Game Talk(s)	Communication	Non-Verbal Messages
Pep Talks	Time-Outs	Verbal Persuasion
Pre-Game Meeting(s)	Half-Time Talks	Feedback
Game-Day Communication	Debriefings	RISE
Game-Day Interaction(s)	Self-Efficacy	BPN
Pre-Competitive Communication	Collective Efficacy	3+1Cs Model
Pre-Competitive Interaction(s)	Team Cohesion	COMPASS Model
Game-Day Preparation	Coach-Athlete Relationship	Transformational Leadership
Competition Preparation	Leadership (Coach)	CMRT
Coach-Athlete Communication	Emotion	TCTSA
Coach Behaviours (Competition)	Motivation	Emotional Contagion
Pre-Performance Routine(s)	Social Support	EASI
Pre-Performance Interactions	Intermission Talks	SDT
Pre-Performance Communication		Emotional Support
		Esteem Support
		Informational Support
		Tangible Support
		Received Support
		Perceived Support

Appendix B

Pre-Game Speech Cross Sectional Survey Questions

Section	Question	Response Options
Demographics	Age	Text Entry
	Gender	Text Entry
	Position	Multiple Choice
	Current competitive level	Multiple Choice
	Nationality	Text Entry
	Country you currently play basketball in	Text Entry
PGS Use	Within your current team, how often have pgs been conducted?	Sliding Scale
	During pgs, please rate to what extent each of the following individuals have contributed to the pgs.	Sliding Scale
	Typically, how long prior to the start of your games have the pgs occurred?	Multiple Choice
	How long have the pgs usually lasted?	Multiple Choice
	Please indicate how often the pgs have been delivered to individual athletes, small groups within the team, and the whole team.	Sliding Scale
PGS Content	Thinking about your current season, how often have the pgs been supportive?	Sliding Scale
	Thinking about your current season, how often have the pgs been calm?	Sliding Scale
	Thinking about your current season, how often have the pgs been aggressive?	Sliding Scale
	Thinking about your current season, how often have the pgs been motivational?	Sliding Scale
	Thinking about your current season, how often have the pgs been inspirational?	Sliding Scale
	Thinking about your current season, how often have the pgs been informational?	Sliding Scale
PGS Perceptions	Athletes have different needs when preparing for a competition/game. These needs may include: psychological, emotional, or physical preparation. To what extent, do you feel that the pgs have met the needs of you as an individual and the team as a whole?	Sliding Scale
	To what extent have you enjoyed pgs?	Multiple Choice
	To what extent have you felt that pgs were useful?	Multiple Choice
	To what extent have you felt that pgs impacted your confidence prior to the game?	Multiple Choice
	To what extent have you felt that pgs impacted your team's confidence prior to the game?	Multiple Choice
	To what extent have you felt that pgs influenced your performance?	Multiple Choice
	To what extent have you felt that pgs influenced your team's performance?	Multiple Choice

Appendix C

Chapter 3 Player Interview Guide

*Thank you for agreeing to take part, can you just confirm that you are happy to take part in this interview and that you understand that it is being recorded.

*The focus of the questions will be on pre-game speeches, by this we mean – an intentional interaction between a member of the team's staff and their athletes prior to a competition for the purpose of final game preparation. Before we start, can you please tell me about your playing career? How is your current season going?

1.) When thinking about pre-game speeches, how does your current coach use them?
    a. Prompts:
        i. How long prior to the start does your coach deliver the speech? How long does it usually last? Who typically talks during the pre-game speech?
        ii. What does the environment usually look like when delivering the pre-game speech?
2.) Please describe the types of content that are used by your coach during the pre-game speech.
    a. Prompts:
        i. Technical/tactical information, motivational aspects, etc?
        ii. Information you've previously discussed, new information, etc.?
        iii. What are some of the non-verbal tendencies of your coach?
        iv. What type of language is used (swearing, etc.) and what is the tone of your coach's voice?
        v. Does the content vary each game depending on the game situation? If so, how?
3.) What do you think the main aims and goals of your coach are when they deliver the pre-game speech?
4.) What do you believe you need and want to hear during a pre-game speech?
5.) What do you believe your team needs and wants to hear during a pre-game speech?
6.) Please discuss what you think your coach wants you (as an individual) and your team (as a collective) to hear and gain from the pre-game speech?
7.) Please describe how you think the pre-game speech influences you and your team?
    a. Prompts:
        i. Individually? Team as a whole?
8.) When thinking about previous pre-game speeches, can you recall any that you felt didn't meet you or your team's needs?
    a. Prompts:
        i. If so, how did this influence you and your team? (Performance, physical, mental)
        ii. Why do you think it didn't meet you or your team's needs?
9.) What do you think is the most important aspect of the pre-game speech?
    a. Prompts:
        i. For you as a player? For your team?
10.) Please discuss any other thought or beliefs about pre-game speeches you wish to share.

*Would you be happy to potentially take part in a follow up conversation if I have any questions that may arise during the analysis of this research project?

Appendix D

IPA Data Analysis Process: Example 1

Transcribed Interview (Participant) - Highlighted from written notes	Preliminary stage - broad commentary	Emerging Themes	Critical Friend Comments
(PGS influence?) I don't really know if it's having any impact. I don't necessarily think it has a positive impact and I don't think it changes our performance possibly. I think if anything, people leave the room a bit confused. They're not really sure what they're supposed to have taken from that. In terms of how they're supposed to apply that on the floor and then for me individually, what I said, it's about… I like specifics and when I don't have that, I become a bit 'oh what are we doing' and you just kind of end up going through the motions instead of having deliverable actions and things that you're doing and I think you just end up playing freelance and when it goes good, it goes good, and when it goes bad, it goes bad.	*PGS performance influence = no positive impact, no change in performance *PGS performance influence = confusion (decrease in execution?) *Individual player needs – game specifics *PGS performance influence – no specifics = going through the motions ('playing freelance'), sometimes good sometimes bad	*PGS performance influence *PGS needs (individual)	*Impact uncertain / unclear *Lack of clarity from PGS *Individual preferences
(explored confusion more) If we had a more focused scout and the practice ran that through and then in the changing room it would just be a case of recapping this, this, and this, is a focus for this game. Even make it more interactive, where you're asking like…my coaches before all asked 'if this happens, what are we doing', what we discussed in the practice the other day and then it's more like players are coming back and showing that they were paying attention on what's going on. So yeah, I think it could make a difference in terms of just how we start and the tone we start with and just being on the same page from the tactical point of view was a main one for us.	*Potential beneficial changes to PGS – more focused scout / previous practices address scout = PGS a 'recap' – more direct focus *Potential beneficial changes to PGS – interactive = increase in focus/attention *Potential performance influence (of those changes) = leads to stronger start and playing on the 'same page'	*Potential beneficial PGS changes *PGS performance influence	*Informational content *Re-cap content from practice *Strategy - question players *Impact on start *Congruence between team
(What is the outcome of the coach stating game expectations during PGS?) I think so. (influence performance) We maybe sometimes played worse when there was more pressure and it was a game that we thought we should win because we just, like we still didn't have much direction, but everyone kind of froze and didn't play free because they're like 'oh, we should be doing this'. We should be winning basically and it became so focused on the results, rather than focusing on how are we going to get to that result. Whereas we played a team that were higher up, we may not have necessarily, it's not focused, we've not been given that much direction, but equally not focused on results. It's just like we have absolutely nothing to lose, like go play and just run what we ran this year, let's improve that a bit and I think everyone's a little bit more relaxed. So I think when it's been changed, in tone, in terms of 'okay, now you're expected to win and get results', I don't think we coped very well. I don't think there's belief there.	*Potential performance influence (expectation to win against lower seeded teams) = increased pressure = decreased performance *Lack of information (direction) *Outcome > Process focus = pressure / froze vs relaxed *Potential performance influence (not expected to win) = less pressure (relaxed) = improved performance *Coach's tone – inconsistent (based on opponent) = noticed by players = identified as lack of belief by coach = potential negative influence	*PGS performance influence *Information * PGS Content: Outcome > Process *Coach Communication *Coach influence	*Increase expectations *Detrimental impact on performance *Lack of information

Note. Handwritten margin notes were collated into a word document table.

Appendix D

IPA Data Analysis Process: Example 2

Note. Emerging themes were written on pieces of paper with connections collated. Process done for each interview. Patterns were then assessed across cases.

Appendix D

IPA Data Analysis Process: Example 3

Player Qualitative Table (Version 2):

- PGS Influence
  - Positive Psychological Influence
  - Negative Psychological Influence
  - Positive Physical Influence
  - Negative Physical Influence
  - 'Other' Negative Influence
  - 'Other' Positive Influence
  - Unsure
  - No
  - External PGS Influencers
    - Coach-Athlete Relationship
    - Coach-Athlete Communication
- PGS ~~Use~~ Delivery
  - PGS Logistics
  - PGS Aims
  - PGS Content
  - Coach Behaviours
- PGS Behaviour
  - Player Behaviours
  - Expectation of Themselves During PGS
- PGS Needs
  - Individual Needs
  - Team Needs
  - Change in Needs Throughout Career
  - Individual Differences that Impact PGS Needs
  - Whose Responsibility to Meet Those Needs?
  - PGS Recommendations
    - Type of Content
    - Delivery of PGS
    - Discussion of Needs
  - Player's Expectations
    - Expectation of Coach During PGS
    - Expectation 'Other'

*Addressed action points of previous iteration
*Condensed some main themes into other main themes
-External PGS Influencers was moved to PGS Influence. Why? Participants described these external aspects, external implying not during the pgs, as aspects that influenced how much positive/negative influence the pgs had on them
-PGS Recommendations was moved to PGS Needs. Why? Participants offered recommendations that they felt would best support their own and their teams' needs during the PGS
-Player's Expectations was moved to PGS Needs. Why? Participants discussed expectations they had of their coach and their teammates during the pgs in a way that either fit their 'needs' or didn't fit their 'needs'
*PGS Behaviour sub-theme of coach behaviour was moved to PGS Use (renamed Delivery). Player behaviour and participants Expectations of Themselves during PGS were moved together under the theme of PGS Behaviour.
*PGS Use is now renamed PGS Delivery
*Removal of Misc. main theme as not relevant to main purpose of study
*Discussion with critical friend revolved around the movement of themes / sub-themes and the flow of main themes was identified as something to address
*Action points – continue to visit the placement of themes / sub-themes and alternative titles for main themes and begin to put themes in coherent order

Note. Once themes began to emerge, a word document was created, discussed, and interpreted with supervisor and critical friends.

Appendix D

IPA Data Analysis Process: Example 4

Player Qualitative Table (Version 5)

- PGS Delivery
  - PGS Logistics
  - PGS Aims
  - PGS Content
  - Observable Coach Behaviours
  - Contextual Factors
    - Interpretation of coach's behaviours based on C-A-R/C-A communication
- PGS Needs
  - Individual Needs
    - Psychological Needs
    - Emotional Needs
    - Physical Needs
    - Individual Differences that Impact PGS Needs (Personality, Position, Experience, etc.)
  - Team Needs
    - Psychological Needs
    - Emotional Needs
    - Physical Needs
  - PGS Recommendations – Based on athlete's previous experiences
    - Preferred PGS Content
    - Preferred PGS Delivery
    - Whose Responsibility to Meet Those Needs?
      - Both – Have a discussion of needs
  - Contextual Factors
    - Change in Needs Throughout Career – Based on athlete's previous experiences
    - Expectation of Coach During PGS – Based on athlete's previous experiences
    - Expectation of 'Others' During PGS – Based on athlete's previous experiences
- PGS Athlete ~~Behaviour~~ Engagement
  - Athlete's Behaviour During PGS
    - 'Reading' Coach/Teammates
    - Attentive / Inattentive
    - Expectations of themselves
  - Contextual Factors
    - Interpretation of others based on C-A-R / previous experiences
    - Expectations of themselves based on previous experiences
- PGS Effect
  - Psychological Influence (Affect / Cognition)
    - Positive
    - Negative
  - Physical Influence (Behaviour)
    - Positive
    - Negative
  - No
  - Contextual Factors
    - Direction and strength of influence based on…
      - C-A-R
      - C-A Communication
- Contextual Factors
  - Coach-Athlete Relationship
  - Coach-Athlete Communication

'Discussed how contextual factors were observable throughout all super-ordinate themes (Highlighted now in Version 5)
'PGS Athlete Behaviour now renamed PGS Athlete Engagement

Note. Example of progression of emerging themes table, with feedback and changes discussed with supervisor and critical friends.

Appendix E

Chapter 4 Coach Interview Guide

*Thank you for agreeing to take part, can you just confirm that you are happy to take part in this interview and that you understand that it is being recorded.

*The focus of the questions will be on pre-game speeches, by this we mean - an intentional interaction between a member of the team's staff and their athletes prior to a competition for the purpose of final game preparation. Before we start, can you please tell me about your coaching experience and current position? How is your season going so far?

1.) When thinking about pre-game speeches how do you use them with your current team?
    a. Prompts:
        i. How long prior to the start do you deliver the speech? How long does it usually last? Does anyone else talk during the pre-game speech?
        ii. What does the environment usually look like when delivering the pre-game speech?
2.) Please describe the types of content of pre-game speeches that you have delivered to your team.
    a. Prompts:
        i. technical/tactical information, motivational aspects, etc?
        ii. Any non-verbal cues?
        iii. What type of language is used (Swearing, etc.) and what is the tone of your voice?
        iv. Does this content vary each game depending on the game situation? If so, how?
3.) When delivering pre-game speeches, what are your main aims and goals?
4.) What do you believe your team needs to hear during a pre-game speech?
5.) Please describe how you think your pre-game speeches influence your athletes?
    a. Prompts:
        i. Individuals / team as a whole?
6.) When thinking about previous pre-game speeches that you have delivered, can you describe any that you felt didn't meet your team's needs?
    a. Prompts:
        i. If so, how did this influence your team? (performance, physical, mental)
        ii. Have you ever felt that your athletes misunderstood your intended message? If so, how?
7.) What do you think is the most important aspect of the pre-game speech?
    a. Prompts:
        i. For you as the coach? For your team?
8.) Please discuss any other thoughts or beliefs about pre-game speeches you wish to share.

Appendix F

Chapter 5 Concept Mapping 'Brainstorming' Text

Coaches communicate and interact with their teams constantly throughout a season. Game-days are no exception and include a variety of interaction. For example, pre-game speeches, in-game directions, half-time speeches, and post-game debriefs.

Our study is particularly interested in the pre-game speech - an intentional interaction between a member of the team's staff and their athletes prior to a competition for the purpose of final game preparation. We are requesting your help in creating a list of strategies that can be used during the pre-game speech. Strategies discussed within this study should be ones that you have used in the past, you have heard other coaches use, or ones that you are developing to use in the future.

Below you will see the question prompt. There are no right or wrong answers, and we are interested in all responses/ideas. As such, please identify as many strategies you can think of. They can be specific or broad, but please include as much detail as possible. All responses recorded are anonymous.

What strategies have you used, during a pre-game speech, with the intention of enhancing your team's collective efficacy beliefs and/or team performance? (multiple boxes are provided if you have more than one strategy you wish to share)

Appendix G

Go-Zone Pre-Game Speech Strategies

Content Cluster	Strategy
Strategic Information	Focus on 'keys' to winning the game
	Speak to individual players about game focus points
	Describe offensive / defensive game tactics
	Set challenges for team to accomplish in game
	Discuss expectations
	Describe players' roles / responsibilities
	State importance of communication
	Discus 'controllables'
	Reinforce player / team fundamental technical and tactical ability
	Describe start of game tactics
	Discuss the game plan / game strategy
	Reference / use scouting report
	Use whiteboard as visual aid
	Mention team's goals
	Focused delivery
	Keep length of pre-game speech 'short'
Collective Team Support	Reference team's 'culture' **(Coaches only)**
	State your belief in team's ability to win
	Remind team to 'have fun'
	Remind team to play with 'energy and effort'
	Reference team's 'values' **(Coaches only)**
	Ask for input from team / ask team questions
	Reinforce your support for players and team
	Encourage support to come from within the team (teammates supporting teammates)
	Use of motivation
	Use humour **(Coaches only)**
	Have a team huddle / physical contact

	Use ‘we’ and not ‘I’
	Reference team as a family
	Reference past positive performances **(Players only)**
	Read team to aid pre-game speech meeting team’s needs
	Use positive language
	Alter tone of voice to match message
Concentration / Focus	Discuss opponents’ strengths and weaknesses
	List team’s ‘non-negotiables’
	Describe how team will respond to mistakes in game
	Use film **(Players only)**
Emotional Appeal	Use pre-game speech to influence the emotional state of your players

Appendix H

Chapter 6 Interview Guide

-Thank you for agreeing to take part in this interview, please can you confirm that you are happy to take part, have signed the written consent form and that you understand that this interview is being recorded.

-As you are aware, the pre-game speeches that were delivered prior to all games throughout your season were recorded. The focus of the questions will be on those pre-game speeches and subsequent team and individual game performance. There are no right or wrong answers and it is up to you how much you wish to discuss. Before we start with those questions, can you please tell me about your (coaching/playing) experience and how the season went for (you/your team)?

1.) Please tell me about your general thoughts about the pre-game speeches that were delivered across the whole season.

    -Please describe any variations in the pre-game speeches across the season.
    -Please discuss any memorable pre-game speeches or parts from the pre-game speeches that you recall.

2.) Please describe how you felt before, during and after the pre-game speeches?

3.) I'm going to play you two pre-game speeches from this past season in their entirety.

    -Please tell me your overall general thoughts about this pre-game speech.

4.) Throughout the season, your coach used a number of different strategies during the pre-game speeches. I would like you to discuss your thoughts and, in your opinion, please describe how they may have influenced you and your team. Including any examples, you may recall.

5.) Please describe any aspects of the pre-game speech that you felt your coach could have done differently or additionally included into the speeches that you feel would have been beneficial.

6.) We have discussed several different aspects of the pre-game speeches that were delivered this past season. Are there any additional things you would like to say about those pre-game speeches that we haven't covered?

7.) Are there any questions I haven't asked that I should have done to get a better understanding about your experiences and perceptions of the pre-game speeches and their potential influence?

Appendix I

Chapter 6 Thematic Map