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Doing Sport Psychology: Personal-Disclosure Mutual-Sharing in Professional Soccer

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This study evaluated the effects of a personal-disclosure mutual-sharing (PDMS) intervention on team cohesion and communication among 21 male professional soccer players from a top division club within the United Kingdom (UK) before an important match in the latter stages of a domestic cup competition. Data from the Group Environment Questionnaire (GEQ) and the British Scale for Effective Communication in Team Sports (BRSECTS) showed no statistically significant changes in cohesion or positive and negative communication from pre to postintervention (i.e., pretest to posttest); yet the team performed above their expectations in the important match only to lose in a penalty shoot-out. Social validation data further revealed that most players felt the intervention was worthwhile and benefitted the team by enhancing closeness, understanding of teammates, and communication. We discuss strategies and guidance for sport psychologists considering a PDMS intervention in the context of professional sport teams. Future research directions considering the effects of PDMS with other professional and youth UK sports, collective efficacy, and social identity is outlined.

Cohesion is considered an important facet of the performance and success of sports teams (Carron, Bray, & Eys, 2002a, Carron, Colman, Wheeler, & Stevens, 2002b; Eys, Burke, Carron, & Dennis, 2010; Loughead & Hardy, 2006). Measures of team success (i.e., win-loss percentage) display a moderate to large relationship with task cohesion (i.e., uniting to reach a common goal) and social cohesion (i.e., relationships within the group) factors of the Group Environment Questionnaire (GEQ; Carron et al., 2002b; Carron, Widmeyer, & Brawley, 1985). Successful teams typically report a higher perception of task cohesion and therefore remain united in their pursuit of common performance-related goals (Carron et al., 2002b). Because of the important association between cohesion and team performance,

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sport psychologists and team managers seek team-building techniques that effectively and consistently produce changes in cohesion (e.g., Crace & Hardy, 1997). Suggested team-building interventions include developing shared goals, accepting individual differences, learning personal information, establishing a similar attitude across team members, and promoting communication (Carron, 1980; Eys et al., 2010; Martin, Carron, & Burke, 2009; Prapavessis & Carron, 1997; Ryska, Yin, Cooley, & Ginn, 1999; Turman, 2003). Moreover, team-building techniques are perceived by many managers and coaches to be an integral part of a team's development (Bloom, Stevens, & Wickwire, 2003). Despite the importance placed on team-building strategies, there remains a lack of specific evidence-based practice supporting effective team interventions within the sport psychology literature (see Pain & Harwood, 2009). Techniques documented in the literature often fail to extend beyond education, social activities, and events (Eys et al., 2010; Martin et al., 2009). To illustrate, observational studies have documented changes in cohesion due to role clarity education (i.e., ensuring the individual's role within the group is accepted and understood) and team goal-setting exercises (Holt & Sparkes, 2001; Senecal, Loughhead, & Bloom, 2008). Communication exercises (Dunn & Holt, 2003), coaching efficacy programs (Harwood, 2008), motivational speeches (Gilbourne & Richardson, 2006; Turman, 2003), and outdoor pursuits (Martin & Davids, 1995; Rainey & Schweickert, 1988) have also been associated with positive changes in team cohesion.

Recent research into effective team-building interventions has explored the effects of athletes publicly disclosing personal stories and information previously unknown to the team members (e.g., Dunn & Holt, 2004; Holt & Dunn, 2006; Pain & Harwood, 2009; Yukelson, 1997, 2010). This line of research has provided applied sport psychologists with information on alternative team-building strategies and has contributed to the current evidence-base regarding team interventions. The personal disclosure mutual-sharing (PDMS) approach fosters a greater appreciation of team members' values, beliefs, attitudes, and personal motives (Hirsch, 1992), which in turn facilitates shared perceptions, meanings, constructs and understanding (Ostroff, Kinicki, & Tamkins, 2003). Indeed, such facilitation in communication is suggested to produce positive changes in team functioning (Mohammed & Dumville, 2001) because communication between group members contributes to athlete satisfaction (Sullivan & Gee, 2007), improved motivation, and collective efficacy in sport teams (Holt & Dunn, 2006). Communication has also been identified as a key determinant of cohesion (e.g., Williams & Widmeyer, 1991). For example, a negative style of handling disagreements (e.g., using personal criticism) has been inversely related to task cohesion, with a positive style (e.g., open discussion) related to perceptions of high team social cohesion. Therefore, teams with high perceptions of social cohesion are more likely to be constructive when handling disagreements (Sullivan & Feltz, 2001). Self-disclosure and mutual sharing have been found to be effective in developing empathy, facilitating intragroup communication, and aiding social cohesion in the context of self-help groups (e.g., alcoholics anonymous and bereavement groups; Ribner, 1974; Rime, 2007).

Research examining the efficacy and effectiveness of PDMS in sport teams is scant; however, data from two studies support PDMS as a team-building inter-

vention before a major tournament with North American male intercollegiate ice hockey players (Dunn & Holt, 2004), and Canadian female soccer players (Holt & Dunn, 2006). Qualitative analysis of data from these studies illustrated that players experienced apprehension before and emotional intensity during the PDMS session. However, players' perceived benefits included; trust in teammates, understanding of oneself, understanding of teammates, experiencing enhanced closeness to teammembers (social cohesion) and aspiring to "play for each other". To maximize the potential of PDMS with sports teams, Holt and Dunn (2006) presented a number of recommendations for sport psychologists. First, PDMS should be used with and therefore most effective for a high-performance adult team who, due to their level of investment in the team, are more likely to engage with the process. Second, preparatory work should be undertaken with the team to understand the sport, establish rapport with players and become familiar with team culture. Finally, PDMS should be used before "high stake" game situations such as major competitions because the importance of the game to the participants (and their heightened emotions) will enhance their willingness to disclose and because personal disclosure in these situations may facilitate cohesion before the major event (see Dunn & Holt, 2004; Holt & Dunn, 2006).

Despite evidence supporting PDMS in North American male ice-hockey and female soccer teams, less is known about the effectiveness of the technique in a UK professional sport context or whether PDMS offers any long-term maintenance effects for sports teams (Gardner & Moore, 2006; Martin, Vause, & Schwartzman, 2005). Furthermore, issues underlying the social and cultural norms of each sport might bear the greatest effect on PDMS and are therefore worthy of exploration (Holt & Dunn, 2006). To illustrate, researchers have recommended using PDMS across different sports, ability levels, and cultures, to establish the generalizability of PDMS as an effective team intervention (Dunn & Holt, 2004). In a recent attempt to address some of these issues, Pain and Harwood (2009) used a mutual-sharing intervention with 18 British university soccer team players. The intervention comprised four consecutive weekly team meetings, focusing on the open discussion of task-based themes relating to team functioning. Focus group data suggested the intervention had led to improvements in perceptions of team functioning (i.e., cohesion, communication, trust, and confidence in teammates), training quality, self-understanding, player ownership, and team performance. In addition, players associated the meetings with honesty, open team discussion, sharing of information, and improved communication. Despite the perceived effectiveness of the intervention, it was suggested that future research should consider how professional UK soccer players might react to personal disclosure and mutual-sharing.

Therefore, in response to the recent calls from PDMS researchers (e.g., Dunn & Holt, 2004; Holt & Dunn, 2006; Pain & Harwood, 2009), the current study adds to the extant literature by exploring the effectiveness and maintenance of PDMS before a major competition (i.e., match) in the context of a professional soccer team performing in a top division within the UK. In-line with past PDMS research, this study also identifies the related applied issues of using PDMS in a professional soccer setting, and contributes to the professional practice knowledge base of PDMS in sport.

Method

Design

A pretest-posttest follow-up design using a PDMS intervention was carried out with 21 male full-time professional soccer players of mean age 23.3 years (*SD* = 3.5, range 18–33 years), forming the whole of the first-team playing squad of a UK top division professional soccer club. Ethical approval for the study was obtained from the university's research ethics board. In addition, informed consent was obtained from the players within which they agreed to the dissemination of some of the information collected from the study via a possible journal article, on the premise that anonymity and confidentiality of their responses would be maintained. Fifteen players (71%) were from the British Isles and six (29%) were non-UK/Irish nationals for whom English was not their first language (i.e., five were from within the European Union and one from Africa). The sample comprised two goalkeepers, seven defenders, seven midfielders and five forwards (strikers). The mean time the players had been at the club was 22.2 months (*SD* = 16.8), with a range of 5–59 months (median 20 months). Overall, most players (67%) had been at the club for between 7 and 24 months.

Program Context and Delivery

Because the team had reached the latter stages of a high-level domestic cup competition, it was considered that this might be an ideal time for a PDMS intervention to aid cohesion and foster team spirit (Dunn & Holt, 2004; Holt & Dunn, 2006). In addition, because the foreign players in the team tended to socialize together outside of the club due to language and cultural differences this (according to the manager, coaches, and senior players) created both cohesion and communication issues for the team as a whole. Further, other players were known to have concerns about team selection and playing time, with the potential for conflict between long-serving team members and new additions to the playing squad signed by the current manager. Thus, the rationale for the intervention was to allow players to understand the motives and backgrounds of their teammates through the mutual-sharing of personal information.

The trainee sport psychologist who facilitated the PDMS intervention was a qualified medical practitioner and therefore also worked as the team physician. The individual had been involved as a team physician at various professional soccer clubs in the UK with a total of 16-years experience. The term sport psychologist (SP) has been used in the text, although this is used to aid readability and is not meant to mislead readers. In sum, the lead researcher's role at the club was that of team physician and a sport psychology Masters student. The current study formed part of a supervised experience application for British Association of Sport and Exercise Sciences (BASES) accreditation in sport psychology. To this end, a fully accredited and chartered individual was formally supervising the SP throughout the study. The soccer club was also aware of the status of the trainee before the on-set of the study. The SP, in their role as team physician, held clinics at the club twice a week to see injured players, attended all home and away matches, sat with the coaching staff for prematch meals, was in the dressing room before and after

matches and at half-time, sat on the bench during the match, and wore the team uniform on match days. Also in their role as SP, an introduction to mental skills presentation had been delivered to the first team squad earlier in the season, and a presentation on cohesion and communication had been delivered to the coaching staff. The experience of being a team physician for 16-years helped the SP to prepare, and to cope with the culture of senior professional soccer (Pain & Harwood, 2004), as well as providing a unique position to aid integration of sport psychology at the club and to deliver a PDMS intervention.

Measures

Cohesion. Cohesion was measured using the Group Environment Questionnaire (GEQGEQ: Carron et al., 1985). The GEQ is a widely used, validated and reliable 18-item multifactor inventory that assesses four dimension of cohesion: Group Integration-Task (GI-T), Group Integration-Social (GI-S), Individual Attraction to the Group-Task (ATG-T), and Individual Attractions to the Group-Social (ATG-S; Widmeyer, Brawley, & Carron, 1985). Responses were anchored on a 9-point Likert scale by 1 (*I strongly disagree*) to 9 (*I strongly agree*). Thus, higher scores reflected higher perception of cohesion. Research using the GEQ has revealed scores obtained on the four dimensions to be valid and reliable. To illustrate, Cronbach alpha coefficients indicate acceptable internal reliabilities for the four subscales (e.g., ATG-T = .78; GI-T = .73; GI-S = .70; ATG-S =.46; Eys, Carron, Bray, & Brawley, 2007). Upon inspection of the GEQ the club manager wanted items omitted which formed the Individual Attraction to Group-Task (ATG-T) subscale of the GEQ. Items for this subscale included: "I am not happy with the amount of playing time I get", "I do not like the style of play on this team", "I'm unhappy with my team's level of desire to win", and "This team does not give me enough opportunities to improve my personal performance". He felt that these items might create discontent among players who were not getting selected regularly for the team, particularly if they then talked to others in the same situation about the points raised. He did not want these players "knocking on his door" to query their lack of playing time. Because of the manager's objections, the ATG-T subscale was therefore omitted from the final GEQ that was administered to the players. While, the removal of this subscale possibly affected the overall psychometric validity of the GEQ (Carron et a., 1985), the subscales are suggested to be sufficiently unique and robust for a reduced subscale GEQ or individual use (Eys et al., 2007).

Communication. Communication was measured using the Scale for Effective Communication in Team Sports (SECTS; Sullivan & Feltz, 2003). The SECTS, although developed with North American sports teams has good internal consistency among British team sports athletes (including soccer players) for positive conflict (dealing with interpersonal differences in a nonemotionally charged way; Cronbach alpha coefficient .81), negative conflict (dealing with differences in a destructive manner; Cronbach alpha coefficient .81), and acceptance (Cronbach alpha coefficients .80; Sullivan & Callow, 2005). In this study, the SP was provided with an 11-item BR (British) SECTS 2-factor measure where items were altered to reflect British parlance (P. J. Sullivan, personal communication, August 8, 2008) looking at positive conflict (we "work as a

team to solve any disagreements", "get all problems out in the open", "when disagreements arise, we try to communicate directly with those we have a problem with", "compromize with each other when we disagree" and "are willing to discuss our feelings") and negative conflict (we "shout when upset", "get in each other's faces when we disagree", "communicate anger through body language", "show that we lose our temper", "personally criticize one another when we disagree" and "backstab one another when we disagree"). Participants responded to the items by rating each statement on a scale from 1 (hardly ever) to 7 (almost always). Evidence has revealed the construct of positive conflict is related to increased cohesion, and negative conflict related to lower levels of task cohesion within a group (Sullivan & Feltz, 2001).

Social Validation. Social validation is integral to intervention-based research because it informs researchers and practitioners about the delivery and effect of psychological techniques (Martin et al., 2005). In line with previous research (e.g., Barker, Jones, & Greenlees, 2010; Hanton & Jones, 1999) a qualitative social validation questionnaire exploring the players' perceptions and feelings about the intervention and its procedures, along with the perceived benefits was developed (Kazdin, 1982; Morgan & Morgan, 2009). This questionnaire was administered on two occasions following the PDMS intervention. Both questionnaires were printed onto two sides of an A4 sheet with six questions used immediately after the PDMS session and four for the 2-week follow-up questionnaire. Participants therefore had ample space in which to write their thoughts about the intervention. A copy of the questionnaire is available from the first author upon request.

Procedure

The 3-factor GEQ and 2-factor BRSECTS measures were taken during a group meeting held in a private lounge at the soccer club on two occasions, two-weeks before and two-weeks after the PDMS intervention, taking ten minutes to complete each time. Social validation questionnaires were completed in the players' own time within 48-hr of the PDMS intervention (immediate), and at the meeting two-weeks after the PDMS intervention (follow-up), taking around 15-min to complete. Data were identified by squad number but social validation questionnaires were anonymous. Social desirability instructions were included (Martens, Burton, Vealey, Bump, & Smith, 1990) and players were assured that all data would be anonymous, stored away from the club, and also coaches and manager would not be informed of any individual's responses, only of the overall group response.

Pretest: Preintervention. The process of preparing the players for the intervention began at a team meeting held two-weeks before the planned PDMS intervention and followed similar procedures to that used in previous PDMS research (e.g., Holt & Dunn, 2006). The SP was allowed a 15-min time slot, by the coaching staff, to see the players before a morning training session at the club. The players received a folder enclosing a participation information sheet, and both the GEQ and BRSECTS. In-line with past research players were told that the intervention would involve sharing a personal story with their teammates, and that they should be open, honest, and the team's gain depended on what individual players were willing to disclose in the session (Holt & Dunn, 2006). Players were asked to

keep the participant information sheet so that they could prepare their talks to the following questions:

Question 1: Tell the group why you play soccer, and what you think you bring to the team.

Question 2: Describe a personal story that will help your teammates understand you better, that you would want them to know about you, and that illustrates something that defines who you are. Your story can be related to any event that has taken place in your personal or sporting life, for example, what sacrifices you have made to follow your soccer career. Try and convince your teammates that they would want you in the team alongside them when we play in the important cup game the next day.

We followed recommendations from past research to maximize task content for the PDMS intervention (i.e., increased cohesion and communication; Holt & Dunn, 2006). To illustrate, question 2 encouraged players to speak about their personal sacrifices during the session because cohesiveness may be linked to members making personal sacrifices for the good of the team; however, other members of the team need to know about these sacrifices (Prapavessis & Carron, 1997).

There is the possibility of negative consequences of self-disclosure for individuals with low self-esteem when using PDMS (Cameron, Holmes, & Vorauer, 2009). This was prevalent in the soccer team in this current study. For example, several players said that they did not want to make a speech because they did not feel comfortable in such a situation. For these players, the SP reassured them by stating that they would not have to make a public speech if they did not feel comfortable, however if they did they would be making a vital contribution to the team. To alleviate the concerns of the players, the SP provided reassurance support and guidance on appropriate content to those players who required it while preparing their speeches in the weeks preceding the PDMS session.

Twenty-four first team players attended the preintervention (i.e., pretest) meeting and 23 players completed the baseline measures. One player declined because English was not his first language and he did not understand the task. The team did not want the manager, coaches or technical staff present at the PDMS session because they felt they would not be able to speak freely especially with the manager's role in team selection.

Intervention. The SP delivered the PDMS intervention while the team was at a hotel preparing for their important cup game. The squad comprised 21 of the 24 first team players who had attended the preintervention meeting; two players had not been selected for the squad and a third player was injured. The manager felt that the session would act as a "diversion" for the players before the game, who would otherwise be watching television, listening to music or playing video games in their hotel rooms.

The team traveled to the hotel two days before the match and arrived midafternoon. The intervention was scheduled for the following evening but the manager told the SP that he would prefer the intervention to be done that evening. The intervention was held in the team's meeting room at the hotel after dinner. The manager, coaches, and other staff left before the session began. All 21 players in the squad remained in the room for the meeting, although immediately before the session five players told the SP that they were not going to make a speech. These

five players had been reassured that they could stay and listen to the other speeches without having to make a speech themselves and by being present at the session they were after all making a contribution to the group. The chairs were arranged in a circle to encourage openness during the session, with one empty chair next to the SP where the player making their speech sat.

The SP facilitated the depth of self-disclosure by reinforcing openness and encouraging active participation of all group members (Kirshner, Dies, & Brown, 1978; Ribner, 1974). Indeed, it is likely within a sports team there will be individual differences in readiness to self-disclose to other members of the team, but there is likely to be reciprocity between how much an individual self-discloses and how much self-disclosure is elicited from others (Wright & Ingraham, 1985). Self-disclosure is typically promoted if initial speakers are more comfortable with public self-disclosure and are prepared to tell a strong emotional story. To this end, the SP started the session by asking the players not to act but to be open and honest when speaking. One player volunteered to speak first and then others followed. Once or twice certain players were invited by the SP to make a speech if no one volunteered. Some of the players (those who had been less confident about speaking) looked at the SP rather than their teammates. The SP encouraged players to speak and thanked them after their speech. Players listened attentively to each player and spontaneously applauded each speech. When all those who wanted to speak had done so, the five players who had initially not wanted to take part delivered a speech spontaneously. Arguably, the most emotional speeches (with a large amount of personal disclosure) were from these five players. After all 21 players had made a speech in front of their teammates the players asked the SP to tell her own story. Accordingly, it is likely a lack of self-efficacy prevented the five players from initially taking part in the PDMS session. However, as the session progressed important vicarious experience information may have been presented from other teammates which then enhanced their belief to successfully complete a speech at the end (Bandura, 1997).

Players spoke for 2 or 3 min and the PDMS intervention was completed in 90 min. As the team left the room, one player said that he "wanted to hug" his teammates after hearing their stories. Another said that if one player who had told a very personal story had cried the whole team would have been in tears. All players received a social validation questionnaire as they left the room. These were completed and returned to the SP by 14 of the 21 players (67%) before the team left the hotel for the important cup game.

Posttest: Postintervention (follow-up). A team meeting was held two weeks after the PDMS intervention when the SP was allowed a 30-min slot on a training day. Players were asked to fill in the two measures (GEQ and BRSECTS) and a follow-up social validation questionnaire to ascertain any maintenance effects of the PDMS intervention. Fourteen of the 21 players who had participated in the PDMS session attended this session. Seven players were not available for the meeting (i.e., three were away on international duty, one had left the club, one was on loan to another club, one was receiving treatment at the time of the meeting, and the player who had not completed the measures originally did not attend). At the end of the meeting, the SP debriefed the team about the purpose of the study and previous PDMS research in sport teams.

Data Analysis

Intervention effectiveness was determined using a combination of quantitative and qualitative analyses.

Results

Quantitative Analysis

Psychometric Data. Responses from the GEQ and BRSECTS before and after the PDMS intervention were compared using five paired samples *t* tests. Due to the exploratory nature of this study alpha was initially set at .05, however to guard against type I error, alpha was then adjusted from .05 to .01 using a Bonferroni adjustment (Vincent, 1999). Comparisons of the measures pretest and posttest are detailed in Table 1, and revealed no significant differences across the GEQ and BRSECTS subscales ($p > .01$).

Team Performance. The cup match finished with the scores level after normal time (i.e., 90-min) and 30-min of extra time. However, the team narrowly lost

Table 1 Mean Scores and Standard Deviations for Measures Used Pre- and Post-Intervention

Variable	Mean (± *SD*)	*t*	*df*
GEQ	6.51 (1.33)	1.12	1, 17
ATG-S *pre*			
ATG-S *post*	6.26 (1.30)		
GI-S *pre*	4.95 (1.59)	.33	1, 18
GI-S *pos*t	5.17 (.90)		
GI-T *pre*	6.32 (1.17)	.43	1, 18
GI-T *post*	6.18 (.98)		
BRSECT	4.63 (1.02)	.28	1, 19
Positive conflict *pre*			
Positive conflict *post*	4.63 (1.04)		
Negative conflict *pre*	4.28 (.85)	.85	1, 19
Negative conflict *post*	4.62 (.87)		

Note. $p > .01$

in the penalty shoot-out. Following this narrow defeat, the team lost an away league match and an away cup match (for another competition) two days before the posttest meeting. Results of the players' group task cohesion measure (GI-T) were aggregated to provide a team cohesion score; win-loss percentage was produced by dividing the number of points obtained by the maximum number of points possible up to the time of the measure, expressed as a percentage out of 100% (Carron et al., 2002a). In UK soccer, teams receive 3 points for a win, 1 point for a draw, and 0 points for a loss. Therefore, pretest team success across 25 competitive games was 63% and posttest across 30 competitive games it was 56%. GI-T scores fell from pretest (M = 6.32*; SD* = 1.17) to posttest (M = 6.18*; SD* = .98) mirroring a slight fall in win-loss percentage

Qualitative Analysis

Data from the social validation questionnaires was content analyzed using procedures outlined by Patton (1990) for inductive content analysis. A naïve researcher, also experienced in content analysis, independently validated the procedure at this stage. Content analysis of the postintervention social validation questionnaire (completed by 14 of 21 participants) is presented in Table 2 and the follow-up social validation questionnaire (14 of 21 participants) in Table 3. Emanating from the content analysis the following themes were identified.

Preparation and Delivery of the PDMS Speech. Five players (36%) said they had not really prepared for the speech: "Didn't really understand how to prepare", "Never really thought about it until I got in the room", "Quick and on the spot", and "Never wrote it down". Three players (21%) were apprehensive or nervous before making their speech but said that they were less nervous once they spoke. Six players (43%) enjoyed the experience: "Everybody was very pleasant with myself and they listened without joking, and with so much respect", and "I don't always take a look at my life the way I have, preparing and doing the session I felt really good and very lucky to be who I am and do what I do".

Understanding of the PDMS Session. Three of the 14 players (21%) said that they didn't fully understand what was required of them: "Now the session is completed I understand it a lot more", "Got it through watching other people talk", and "I would have if I took it more seriously to start with".

Concerns About the PDMS Session. Nine players had concerns before the PDMS intervention (64%): about the session itself: "I definitely thought it would be a waste of time, but was surprised how open and honest some of the boys were", and "I didn't think it would be good but it was"; about how the group would participate in the session; "I didn't think everyone would take it seriously but I was surprised", and "I had concerns about not everybody taking part, but I think everybody played their part in the session", and about their own participation in the session, although two of the three players who mentioned this commented: "I wish I had said more as I thought of a lot more things to say afterwards", and "Now I wish I said more!!"

Emotional Intensity of the Session. Nine players (64%) reported increased openness and motivation: "It opened my eyes to these sort of sessions", "Very

Table 2 Immediate Social Validation Questionnaire: Content Analysis

Raw Data Themes	1st order	2nd order
PERCEPTIONS OF THE INTERVENTION		Nervous (2), Very difficult (1)
		Easy (1), Laid back about it (1), Enjoyed it/really enjoyable (2)
How did you find preparing and delivering your speech?	Apprehension (3)	Felt good (2)
	Emotional Intensity (6)	
	Not really prepared (5)	
Did you understand what was expected of you with regards to the session and completing the questionnaires?	Positive comments (11)	Yes (10), 'Kind of' (1)
	Negative comments (3)	Didn't fully understand what we had to talk about (1)
		Beforehand not really (2)
Did you have any concerns before the session, and have your views changed now?	No concerns (5)	No (4), Not really (1)
	Concerns about session (2)	I definitely thought it would be a waste of time (1)
		I didn't think it would be good (1)
	Concerns about how group would participate in the session (4)	I didn't think everyone would take it seriously (1)
		I had concerns about not everybody taking part (1)
		Concern about how each player would prepare for the session (1)
		I was concerned wouldn't get listened to or anything like that (1)
	Concerns about self (3)	Nervous (1)
		Yes, my concerns were about speaking in front of the group (1)
		I didn't think I was going to speak so wasn't fully prepared (1)
How did the session make you feel?	Positive emotions (9)	Felt good/great (7), It made me feel better (1), Emotional (1)
	Negative emotions (2)	Made me feel nervous (1)
		It made me feel strange to hear the boys talk so openly (1)
	Closeness within group (3)	Made me see my teammates in a different light (1)
		On all around togetherness (1)
		Got an insight into the other boys (1)

(continued)

Table 2 Immediate Social Validation Questionnaire: Content Analysis

Raw Data Themes	1st order	2nd order
PERCEIVED BENEFITS TO THE TEAM		
How do you think this session will benefit the team?	Enhanced closeness (7)	Will bring the team closer together/improve team spirit (6)
		Make team stronger (1)
	Enhanced understanding (7)	Helped you find out more about your teammates (2)
		We know each other better (2)
		Hope it will give us a better understanding of each other off and on the pitch (2)
		The group will look at each other a little differently (1)
How has this session affected the way you view your teammates?	Enhanced understanding (9)	Understand their backgrounds, also their attitudes to football (4)
		Made me understand why certain players have acted in certain ways or done certain things (1)
		Feel as if I know them better (2)
		Look at a few of them slightly different now (2)
	Enhanced appreciation (5)	Makes me appreciate my teammates a lot more (1)
		Respect them more now (2)
		This team is very good. There are a lot of good persons and it helps playing very well (1)
		Seriously but relaxed (1)

Table 3 Follow-up (postintervention) Social Validation Questionnaire: Content Analysis

Raw Data Themes	1st Order	2nd Order
PERCEPTIONS OF THE INTERVENTION		
Was the session worthwhile?	Yes (13)	It's good that players can show his feelings and everybody listened, but it hasn't helped us win any games since
	Yes and No (1)	Helped learn more about each other
BENEFITS OF INTERVENTION		
What are your thoughts now regarding the session?	Helped me to understand some players better (1)	Making everyone close and to make the team stronger
(n = 13)	I feel that the session was a success, good session, worthwhile/beneficial (8)	Saw a few of the players in a different light and made me think about other people's backgrounds/Learnt stuff about teammates
		Opened my eyes to how easy I have had it with my background/upbringing compared with some of my teammates
		Good session for everyone to say what was on their minds
	Enjoyable (3)	Glad I took part/Felt we got something out of it
	Benefitted people who felt confident speaking in front of the team (1)	I still feel nervous but enjoyed listening to others' stories
ADDITIONAL QUESTIONS		
Would you have been comfortable participating if an "outsider" had been involved in its delivery?	Yes (6)	Why not?
		I have been comfortable
		I probably would have been comfortable
	No (7)	It would have made me even more uncomfortable
		Not as comfortable as I was
		Not as much
		It made it easier being the club doctor (1)
	Maybe (1)	At first maybe not but once started, I'm sure I would open up

(continued)

Table 3 Follow-up (postintervention) Social Validation Questionnaire: Content Analysis *(continued)*

Raw Data Themes	1st Order	2nd Order
Given your experience with the session, would you want to be involved in future sessions involving team psychology?	Yes (11)	I liked it being involved and being involved in the future I think so, is good for the team But not all the time
	Maybe (1)	
	Would not bother me (1)	
	No, definitely not (1)	

relaxed and open to the group, made me realize how far/much I would go/do for my teammates", "I would fight for any of my teammates. It made me want to look after all my teammates as well" and "It was good to hear other boys speaking about how they feel".

Perceived Benefits to the Team. All 14 players felt that the session would benefit the team by enhancing closeness (7 players), or understanding of teammates (7 players): "It's good for team spirit. We will understand each other a bit better"; "You find out things about people that you never knew. It also helps you understand people more"; and "Most players close off their personal lives when they're at the club and this doesn't allow others to see that side of their personality". Enhanced understanding or appreciation of teammates was mentioned by all players: for example players commented, "Shows the sacrifices they have made", "Makes me realize we have all made sacrifices especially the boys who have left their families at a young age", "Opened my eyes to how 'easy' my life has been compared to others having to sacrifice things and leaving their homes, families and friends", "I heard a different side to a lot of the boys, especially those who I don't always see outside club duties. It has made me understand more about why the boys are the way they are", and "From listening to their personal stories I have even more respect for every player in the team".

Two-weeks after the intervention all players still felt that the PDMS session had been beneficial with some players citing improved understanding and knowledge of teammates as a benefit (Table 3). In addition, most players (57%) indicated they would not have been as comfortable with an "outsider" being involved in the delivery of the intervention. Finally, 11 of the 14 players (79%) definitely wanted to be involved in future team psychology sessions.

Discussion

This study examined the effects and applied issues of a PDMS intervention on cohesion and communication within a UK premier division professional soccer team before an important domestic cup match. Overall, while managers and coaches want tangible gains when considering any team-building intervention, data from this study suggest that PDMS may not produce immediate performance gains; in the words of one of the players, the session was worthwhile, "but it hasn't helped us win any games since!"[1]. Andersen, McCullagh, and Wilson (2007) explained that behavioral change is only one of many factors that might affect performance in team sport, with confounding variables including match venue (home versus away), the strength of opposing team, injuries and changes in player selection for the team, and decisions by officials. Game outcome is not the only measure of performance in soccer and if the team's performance or league standing had improved, this might not be related to any perceived changes in cohesion brought about by the intervention. For sport researchers, changes in playing personnel (or manager) during the course of a season for professional sport teams adds to the challenge of trying to assess the influence of PDMS (and other team-building interventions) on important team variables (Martin et al., 2009). The constraints on time allowed for some data collection; however, a lack of congruent data for all players illustrates what has been aptly termed the "chaotic reality of many applied settings" (Gilbourne & Richardson, 2005; p.652).

Data from previous research has revealed equivocal findings in relation to the effects of PDMS on task and social cohesion (e.g., Dunn & Holt, 2004; Pain & Harwood, 2009). Moreover, data from the current study indicated the PDMS intervention had no statistically significant immediate or enduring effect on quantitative measures of task or social cohesion and communication. Indeed, the lack of statistical effect is likely given the time-frame of the study lasted only four-weeks from pretest to posttest and therefore it is debatable whether a change in scores for these constructs would be realized so quickly (Carron et al., 2002b).

The value of our PDMS intervention to the extant literature extends beyond searching for changes in pretest and posttest GEQ scores. The GEQ was used primarily because the intervention was expected to improve team spirit or cohesion, and because it has been used widely in the literature (see Leeson & Fletcher, 2005). Focusing only on the outcome of cohesion may have misdirected our understanding of other changes in the players (e.g., sacrifice, emotional disclosure, and friendship; Carron, Brawley, & Widmeyer, 1998). To illustrate, the foreign players, whom were experiencing problems integrating socially with the team before the PDMS intervention, demonstrated an increase in their perception of social integration within the group: "we all hang out together and when you go on the pitch you fight even more if the people you are playing with are close friends", and, "we are all part of a team and support each other and that team spirit helps us get results". It could be argued that the effects found are only true for our nonrandom sample of soccer players, but data do indicate the potential generalizability of the study to other populations of soccer players (Mook, 1983). Therefore, a PDMS session might be an important tool to integrate foreign players into a professional soccer team.

The posttest qualitative data also suggested that the soccer players found the PDMS intervention a positive experience. In line with previous research, the players experienced enhanced feelings of closeness and team cohesion, as well as improving their understanding of themselves and teammates (Dunn & Holt, 2004; Holt & Dunn, 2006; Pain & Harwood, 2009). These perceptual changes were enduring, with players' positive perceptions of the intervention being illustrated in follow-up social validation two-weeks after the PDMS intervention. Finally, data from this phase indicate PDMS may also be a useful "entry point" for the introduction of psychology to a professional sport team, with players stating that they would be happy to be involved in future team psychology sessions (Fifer, Henschen, Gould, & Ravizza, 2008; Pain & Harwood, 2004).

This study also revealed important applied issues about using PDMS in UK professional soccer. First, although the issue of establishing rapport between a sport psychologist and team is stressed (Holt & Dunn, 2006; Yukelson, 2010), it is equally important to establish rapport with the manager and coaching staff to allow the PDMS intervention to proceed effectively. For example, given the SP had worked as team physician for a number of years this may have contributed to the PDMS session being more readily accepted. Establishing rapport is the first step to establish trust, openness and mutual respect. Rapport may only occur once a team physician or SP has helped the athlete and is established more readily with players who may have been injured or sick and maintained by continuing to show an interest in the player after their recovery (Fifer et al., 2008). Second, practitioners should expect some resistance from sport performers because they do not take it seriously or players may worry about making a speech in from of their team-

mates. Third, the SP should support participants to prepare their speeches before the PDMS session. Fourth, when working in professional sport it is possible that managers and coaches may veto questions from psychometric inventories to protect their athletes and maintain control over thoughts about performance related issues. Fifth, confidentiality issues are paramount in professional sport because players are concerned about the manager or coaches accessing personal information from the PDMS session, which might affect team selection. Unlike Pain and Harwood's (2009) intervention, the manager and coaches in this current study were not present at the session, at the players' request.

This study offered a unique insight into the issues surrounding a practitioner adopting the dual role of a sport psychologist and medical doctor. Some practitioners combine the role of coach and sport psychologist (e.g., Barker & Jones, 2006), however a practitioner providing both psychological and medical support for an athlete or sport team has also to be aware of potential conflict of roles and responsibilities (e.g., Granito, Hogan, & Varnum, 1995). Ground rules and receiving support from supervisors are suggested as essential to enable the practitioner to cope with emotional demands and potential role conflict (Jones, Evans, & Mullen, 2007). An awareness of ethical issues is also required to make sure there is no betrayal of trust or client confidentiality (Fifer et al., 2008). For example, in professional soccer, where players expect physical injuries and their management to be discussed with the manager and reported in the media, they are unlikely to expect the same of psychological issues.

To further assist practitioners about the use of PDMS in professional soccer, a series of key guidelines taken from the current applied research study are presented in Table 4. The guidance is based on the reality of sport psychology in the context of a UK professional soccer team. It differs from Holt and Dunn's recommendation (2006) in that regular team meetings with the SP through the season to facilitate group communication and create conditions for the PDMS intervention were not possible. However, the use of PDMS as a brief contact intervention fulfils most managers' needs without intruding on their territory, and aims to facilitate team cohesion.

In conclusion, the nature of a field study acknowledges the trade-off between ecological and internal validity (Kazdin, 1982). No statistically significant changes in cohesion and communication emerged from the current study because of potential confounding variables. For example, the removal of the ATG-T subscale was an uncontrollable and unfortunate limitation relative to the collection of cohesion data; however the removal of the subscale by the manager further reflected the 'real-world' essence of doing PDMS in a professional sport context. In addition, match results and player selection issues that occur in the professional soccer environment (cannot be controlled) but may have affected the extent of the benefits of the intervention, but also reinforce the ecological validity of the study, and should strengthen the case for the generalizability of the research findings (Araujo, Davids, & Passos, 2007; Rogers, Kadar, & Costall, 2005). In contrast, qualitative data demonstrated that PDMS brought tangible benefits including: increased perception of sport psychology services, improved team bonding or closeness, enhanced respect and understanding of teammates, and a positive team attitude. Given the paucity of literature addressing PDMS interventions in professional sport, this study encourages sport psychology practitioners to perform further PDMS sessions with their

Table 4 Guidelines for Personal-Disclosure Mutual-Sharing in UK Professional Soccer

Guidelines
1) Work with the team to develop rapport with team members, manager and coaching staff.
2) Guarantee anonymity and ensure players and manager know what this means.
3) Keep the manager informed and involved.
4) Select an appropriate "important" match before which the PDMS session will be conducted, and ensure that the manager is in agreement.
5) Allow an opportunity for the players to digest information about a PDMS session, including the questions they will be asked to answer during the session.
6) Allow time and opportunity for the players to discuss their speeches one-to-one with the psychologist, and ensure that individual players who may lack confidence in public are reassured.
7) Allow the players to decide whether they want the manager, coaching staff or any other technical staff to be present.
8) Be flexible regarding the timing of the PDMS session; expect to have less time than you would wish, and be prepared to do the session at short notice.
9) Avoid the meeting being too long–both from the players and the manager's point of view.
10) Expect some players to decline to participate, and expect that some players who want to participate in the PDMS will not be able to because of injury, personnel changes, and team selection issues.
11) Deal with language and cultural issues sympathetically, as foreign players are more likely to benefit from the PDMS session in terms of enhanced group social integration.
12) Be prepared to participate, if the players ask you to do so.
13) Provide an opportunity for debriefing.

teams, particularly in the context of elite senior professional sport. Future research might also consider the effects of PDMS with other professional adult and youth sports teams in the UK, and on other important psychological group factors such as collective efficacy (Holt & Dunn, 2006), and the social identity of sport and nonsport teams (e.g., Ellermer, De Gilder, & Haslam, 2004).

Note

1. There may be evidence for an enduring effect of the PDMS intervention on the team, who won a domestic cup competition in the season following the PDMS session. Nine of the 11 players starting the cup final match, and one of the substitutes, had participated in the PDMS session. One of these players was quoted after winning the cup: "We are a close team and I think that has been crucial", "Everybody's mates with each other… we all get on so well", and "There are a lot of different nationalities but we mix brilliantly".

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