# Encouraging togetherness during a national lockdown

Warburton, Harry K.; Slater, Matthew J.

*Published in:*
The Sport Psychologist

*DOI:*
10.1123/tsp.2022-0014

E-pub ahead of print: 27/01/2023

*Document Version*
Peer reviewed version

Warburton, H. K., & Slater, M. J. (2023). Encouraging togetherness during a national lockdown: the influence of relationship-oriented personal-disclosure mutual-sharing on team functioning in academy soccer coaches. *The Sport Psychologist*. https://doi.org/10.1123/tsp.2022-0014

# Encouraging togetherness during a national lockdown: The influence of Relationship-Orientated Personal-Disclosure Mutual-Sharing on team functioning in academy soccer coaches

**Abstract:**

The present study examined the influence of an online Relationship-Orientated Personal-Disclosure Mutual-Sharing (ROPDMS) intervention upon diverse measures of group functioning during a national lockdown. Twelve soccer coaches and one senior member of staff from a professional female soccer academy participated by openly disclosing and sharing unknown personal stories amongst one another. Social identity dimensions (ingroup ties, cognitive centrality and ingroup affect), friendship identity content (FIC), social support, self-esteem, and a non-equivalent dependent variable (NEDV) were measured across four time-points, while social validation was obtained immediately and 4-weeks after ROPDMS. Quantitative data revealed significant increases for ingroup ties, cognitive centrality, and FIC after ROPDMS, while the NEDV did not significantly change. Qualitative data revealed coaching staff felt the session was worthwhile and enhanced aspects of team functioning. Online ROPDMS therefore appears to be a viable team-building method for practitioners seeking to strengthen social identity dimensions and FIC during a national lockdown.

**Keywords:** PDMS, online team building, social identity, sports coaching, soccer, social validation

## Introduction

The global pandemic of an acute respiratory syndrome (COVID-19) has impacted society in an unprecedented manner. Specifically in sport, COVID-19 implications have been severe for sport team staff with the postponement and in most cases the cancellation of training and competition due to the threat of increased transmission of the virus. Despite the physically isolating implications of national lockdowns and the novel severity of COVID-19 leading to everyone being a potential source of infection, the need to feel socially connected with others has perhaps never been so evident (Jetten, et al., 2020). One way in which sport teams have attempted to remain connected during this adversity, has been to support and learn from each other through online team building. Team building is a widely advocated method for enhancing group functioning (Beauchamp et al., 2017; LePine et al., 2008) and is considered by McEwan and Beauchamp (2014) to be a collaborative team process whereby members pursue common goals through the successful integration of relevant independent and interdependent behaviours. Being able to capitalise on team building methods within group environments can encourage meaningful interactions between members, which evidence has suggested have profound positive influence on outcomes including identity (Barker et al., 2014), cohesion (Carron et al., 2007), and team performance (Evans et al., 2013). The appeal of solution focused team building interventions (Yukelson, 2010) led by either sport psychologists or coaches (Martin et al., 2009) therefore have the potential to accelerate the unified and desirable actions of sport teams.

Personal-Disclosure Mutual-Sharing (PDMS; Dunn & Holt, 2004) is a communication-based intervention that originated from counselling settings and is used to enhance participant self-awareness, empathy, and socioemotional bonds through the disclosure of unknown meaningful stories (Crace & Hardy, 1997; Dunn & Holt, 2004). PDMS facilitates mutual-understanding and

peer appreciation through an emotionally evocative process (Rimé, 2007) of personal-disclosure (Dryden, 2011) and reflective listening (Yukelson, 2010), similar to that found in self-help groups (e.g., alcoholics anonymous). Accordingly, PDMS relies on the interpersonal dialogue of values, beliefs, and attitudes towards a particular theme with the intention of improving group and/or individual psychological outcomes. More specifically, PDMS is thought to facilitate the therapeutic resolution of individual or team needs through mechanisms that underpin Rogers' (1951) person-centred counselling therapy. However, in comparison to counselling settings where client and practitioner work together to gain resolution, teammates during PDMS work together to resolve conflict through the personal-disclosure and mutual-sharing of stories and information. In doing so, teammates can gain a deeper sense of awareness and empathy for their peers' thoughts, feelings, and experiences which can endorse perceptions of group unity (Windsor et al., 2011). Moreover, socioemotional bonds can improve as PDMS promotes closeness among peers due to the sharing of personal experiences (Dunn & Holt, 2004). However, preparing for PDMS delivery is commonly associated with apprehension (Evans et al., 2019), as athletes can feel threatened by the prospect of openly disclosing personal information (Dunn & Holt, 2004), and/or feeling obligated to share meaningful stories (Holt & Dunn, 2006). Despite such initial concerns, athletes are considered to support one another through a PDMS delivery by demonstrating respect throughout what is perceived to be a challenging experience (Evans et al., 2013). In addition, it is believed the emotional intensity of PDMS delivery can make athletes more collectively receptive to addressing problems and pursuing shared goals, especially within high-performance team settings (Holt & Dunn, 2006). Consequently, these feelings can mobilise task investment that helps to maximise the cathartic benefits attainable via PDMS, therefore making the initial process worthwhile for teammates on both a personal and social level (Turner & Davies, 2019).

Furthermore, as online psychological support has been advocated as a method for promoting feelings of safety and anonymity (Price et al., 2020), it was believed delivering online PDMS may help to promote willing disclosures that could further foster the emotional intensity associated with traditional PDMS delivery.

PDMS research in sport highlights that there are currently four forms of PDMS that can be used by practitioners to manipulate target variables. Firstly, Relationship-Orientated PDMS (ROPDMS), aims to increase understanding and relationships among athletes via the sharing of personal stories (Dunn & Holt, 2004). Secondly, Mastery-Orientated PDMS (MOPDMS) aims to increase confidence amongst athletes via the sharing of personal stories pertaining to best sporting performance (Barker et al., 2014). Thirdly, Rational-Emotive PDMS (REPDMS) aims to endorse rational beliefs through reflectively sharing experiencing of applying Rational Emotive Behaviour Therapy (REBT) principles (Vertopoulos & Turner, 2017). Finally, Coping-Oriented PDMS (COPDMS) aims to increase athlete self-awareness via the communication of demand and resource appraisals (Lazarus, 1999) required to function effectively when faced with career-related challenges such as gaining a professional contract or being released from a team (Evans et al., 2019). ROPDMS appears particularly relevant to fostering social identity (i.e., an individual's sense of belonging to a group that holds emotional significance; Tajfel, 1972), and friendship identity content (FIC; i.e., identifying on the basis of friendships within a team; Barker et al., 2014). Therefore, in the context of a national lockdown, ROPDMS would likely be the most appropriate to deliver among team members who are physically and socially disconnected from one another. For example, early qualitative research with male intercollegiate ice hockey players and female soccer players (Dunn & Holt, 2004; Holt & Dunn, 2006) indicated ROPDMS enhanced trust, confidence, understanding of oneself and others as well as feelings of closeness among

teammates. In addition, member checking conducted by researchers with no prior connection to the team within Dunn and Holt's (2004) seminal study, revealed participants still harboured positive feelings about their PDMS experience three years after the intervention. Further ROPDMS research has supported such positive trends via social validation results that have indicated PDMS to be a poignant and worthwhile experience that athletes would recommend (Windsor et al., 2011). Additionally, psychometric data (Evans et al., 2013; Barker et al., 2014) has implied PDMS can improve and sustain team unity via the sharing of personal or task-specific knowledge (Pain & Harwood, 2009). For example, a dual-phase delivery over an 11 day pre-season cricket tour with elite academy cricketers (n=15) discovered that from baseline, an initial ROPDMS session led to significant and large increases in social identity, and FIC (Barker et al., 2014). Furthermore, initial significant and medium-to-large increases for collective efficacy (i.e., the confidence in a team's skillset to accomplish processes associated with success; Bandura, 1997), and results identity content (RIC; i.e., identifying on the basis of results achieved within a team) were noted across the first phase (Barker et al., 2014). The subsequent MOPDMS session, which involved the personal disclosure of a successful performance achievement, contributed to a further significant and large increase in collective efficacy, and a significant and medium-to-large increase in RIC. Despite the potential benefits, Windsor et al (2011) reported no improvement to either cohesion or communication following ROPDMS, however a lack of change in both variables could be because psychometric data was not immediately gathered after the intervention.

Regardless, the shared respect and trust potentially gained from PDMS indicates that members increase affiliation and connectedness to their teammates, and that this may strengthen a shared social identity which is believed to have implications for member cognition, behaviour, and affect (Tajfel & Turner, 1979). Nevertheless, PDMS research has predominantly measured social

identity as a global construct and is yet to conceptualise how PDMS influences the three social identity dimensions within sport teams (Bruner & Benson, 2018). Accordingly, PDMS may be attributable to enhanced team functioning via members perceptual development of: (a) group bonds (ingroup ties); (b) the importance of group membership (cognitive centrality); or (c) positive feelings associated with group membership (ingroup affect). Researching the effects of PDMS upon the three social identity dimensions would appear pertinent to help indicate the extent to which ROPDMS strengths each dimension. In other words, are there consistent effects across the three dimensions or is an improvement driven by one dimension? For example, if a problem lies with ingroup ties specifically, then ROPDMS may be appropriate to use to strengthen this form of SI. In addition, social identity content (SIC) measures have been embedded within PDMS literature (Barker et al., 2014; Evans et al., 2013) in the form of FIC and RIC to help explain why members identify with their team. Most specifically, ROPDMS is considered to enhance the development of friendships as individuals will likely identify with the friendships within their team (FIC), given that socioemotional bonds are ubiquitous within such collaborative sporting environments and offer a source of social support (Evans et al., 2013). Since individuals' sense of self is determined in large part by the groups that they belong, being separated from those groups can negatively impact one's self-concept (Jetten et al., 2020). Consequently, as COVID-19 restricted interaction among sport coaches from the same organisation it was believed PDMS may help to retain group identity. Therefore, as self-esteem (i.e., one's sense of personal value) is a component of the self (Rogers, 1959), and is considered a salient outcome of group identification (Turner, 1982), we propose that PDMS may increase self-esteem via enhanced affiliation and self-understanding (Holt & Dunn, 2006).

Self-categorization theory (SCT; Turner, 1982) indicates that when group identification becomes internalised as "we" rather than "I", members become motivated to both offer and receive support, as group members seek to protect and advance those that share their collective identity. As a result, such groups have been found to feel more supported and therefore better equipped to cope during periods of distress compared to those with lower levels of group identification (Haslam et al., 2005). As shared identities are believed to promote social support that can buffer group members from stress during COVID-19 (Jetten et al., 2020), it was believed creating an online space for sharing personal information would provide a meaningful opportunity to re-establish and improve working relations among academy staff. Hence, we assessed if PDMS would subsequently enhance group perceptions of received support during a period of social isolation (i.e., a national lockdown).

To date, PDMS has been utilised within athlete populations prior to important club related events (Evans et al., 2019; Windsor et al., 2011). However, there is currently no research regarding the influence of PDMS among sport coaches, nor PDMS delivered online, nor during an enforced national lockdown due to the spread of COVID-19. Since academy soccer was postponed in an effort to slow the spread of COVID-19, the physical distancing measures in place may have inadvertently exacerbated many of the adverse effects of stress commonly experienced in elite sport coaching such as negative affect, withdrawal and reduced motivation (Olusoga et al., 2010). Consequently, as developing and maintaining social identities are considered fundamental for social connection (Jetten et al., 2020), it was believed that volunteer coaches who rely on the use of facilities to operate (i.e., training grounds) may have felt particularly isolated during this time. Hence, as sharing personal information can foster social identification (Evans et al., 2013) through increased mutual understanding and rapport, it was believed PDMS would act as a unifying

experience for academy coaches during this period. Given this context, and as online environments are considered safe alternative methods for supporting social networks in response to COVID-19 (Price et al, 2020), the online delivery of ROPDMS was considered the most appropriate to deliver. Moreover, we believed that online ROPDMS would provide a level of geographical accessibility that would allow participation to take place in a setting of one's choosing, benefiting the working alliance between the coaches. If successful, this study could also pave the way for the utility of online PDMS, which until now, has been restricted to face-to-face delivery. Accordingly, the primary purpose of this intervention was to investigate the influence of a single online ROPDMS session upon measures of group functioning and self-esteem among a female soccer academy's coaching team during a national lockdown. In doing so, this study aims to extend existing PDMS knowledge by not only exploring the influence of online ROPDMS but by also examining how ROPDMS influences specific dimensions and potential outcomes of social identity among an adult coaching team during a national lockdown. Additionally, guidelines for delivering PDMS online are reported. Thus, informed by the social identity approach, and previous PDMS research, the following hypotheses were tested:

1) ROPDMS will strengthen the participants ingroup ties, cognitive centrality and ingroup affect to their academy coaching team.

2) ROPDMS will strengthen FIC within the academy coaching team.

3) ROPDMS will increase the academy coaching team's self-esteem

4) ROPDMS will increase the perception of received social support among the academy coaching team.

5) ROPDMS will not change the non-equivalent dependant variable (NEDV) among the academy coaching team

## Method

### *Participants and Intervention Design*

A repeated-measures design was adopted with 12 coaches (male = 9, female = 3) and the male Head of the Academy (HoA) from a professional female soccer academy ($M_{age}$ = 31, $SD_{age}$ = 10.39). Besides the HoA and a goalkeeping coach, participants supported specific academy teams; under-9's (2), under-11's (1), under-13's (1) under 15's (4), under-17's (1) and the under-19's (2). Participants were of White British origin and had been working at the academy for an average of 2 years (SD = 1.57). Collectively, staff had 80 years of soccer coaching experience and held accredited qualifications ranging from one coach having a sports leadership award to three staff members having a UEFA B coaching license. Despite one-group studies having internal validity concerns, the design of the study reflected the social limitations facing sport teams at the time and previous PDMS research. Two baseline measures were taken prior to the intervention in attempt to enhance internal validity regarding the interventions effect (Barker et al., 2011), while social validation data were gathered to help determine treatment effectiveness (Barker et al., 2014). Additionally, a NEDV based on the low frustration tolerance sub-scale from the irrational performance beliefs inventory was used (Turner et al., 2018). A NEDV is a ". . . dependent variable that is predicted not to change because of the treatment but is expected to respond to some or all of the contextually important internal validity threats in the same way as the target outcome" (Shadish et al., 2002, p. 509). LFT was selected because it is a relatively stable belief that is unlikely to be influenced by the immediate sharing of Relationship-Orientated information akin to ROPDMS. Also, ROPDMS does not attempt to challenge participants' core irrational beliefs

through processes associated with Rational Emotive Behaviour Therapy and REPDMS (Vertopoulos & Turner, 2017). Thus, if the intervention enhanced the targeted variables and not the NEDV (H5), then there would be evidence to support the intervention effects.

### *Context and Needs Analysis*

Owing to a national lockdown that forced academy soccer to be postponed, the participants were prohibited from coaching players in person. Prior to the intervention, a one-hour Zoom meeting was conducted with the HoA, who indicated that coaches' welfare had been neglected during previous COVID-19 lockdowns and was willing to discuss possible support. The meeting revealed that the coaches did not normally socialise outside of their academy team. As a result, it was believed that such unfamiliarity across the staff rota could be limiting both the coaches and the athlete's experiences within the academy. Since forming positive relationships is considered essential in developing group functioning (Gandhi & Schneider, 2020) and interpersonal coping strategies such as perceived social support (Olusoga et al., 2010), the following action points were generated from the needs analysis: (a) integrate all coaches from the academy; (b) improve relationships and understanding among fellow peers; and (c) develop the identity of the academy coaching team. To address these points, an ROPDMS session was conducted via Zoom by the lead author who was experienced in delivering PDMS, had no prior connection to the academy, and under the supervision of a Charted Psychologist with significant experience of PDMS.

### *Measures*

All measures were gathered using Qualtrics software at four independent time-points (i.e., baseline one, baseline two, post-ROPDMS and 4-week follow-up). The online questionnaire assessed five constructs and was initially piloted among two sports coaching academics, who found the instructions and items comprehensible. Participants completed the questionnaire, via their smartphone, indicating the extent to which they agreed with each statement and were

prompted to answer all questions based on their coaching team. Social validation data were simultaneously gathered within the post intervention questionnaires.

*Social Identity and Social Identity Content*

The Social Identity Questionnaire for Sport (SIQS; Bruner & Benson, 2018) captured each three-item dimension of Social Identity: *ingroup ties* (e.g., "I feel strong ties to other members of this team"); *cognitive centrality* (e.g., "The fact I am a team member often enters my mind); and *ingroup affect* (e.g., "I feel good about being a member of this team"). Coaches rated the extent to which they agreed with each item on the Likert-type scale, ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*). Cronbach alpha coefficients were considered reliable at each time point for ingroup ties (.92 to .90 to .93 to .93), ingroup affect (.81 to .79 to .95 to .95) and cognitive centrality (.63 to .80 to .92 to .88). SIC was captured using a PDMS inspired (Barker et al., 2014) single-item measure of *friendship identity content* (FIC: "the most important thing to you are the friendships within your academy coaching team"). Coaches responded to the items via a Likert-type scale from 1 (*Do not agree at all*) to 7 (*Agree completely*).

*Self-esteem*

A single-item measure of *self-esteem* ("I have high self-esteem") was considered an appropriate, validated, measure to use among adult populations within the context of the current study (Robins et al., 2001). The measure has been correlated with multiple-item measures of self-esteem (Robins et al., 2001) and is advocated as an appropriate resource for social identity researchers (Haslam et al., 2018). The adopted Likert-type scale was anchored from 1 (*Not very true of me*) to 7 (*Very true of me*).

*Social Support*

Four adapted items assessed received social support (House, 1981): (1) *emotional support*: "Do you get the emotional support you need from your academy coaching team?"; (2) *companionship*: "Do you get the help you need from your academy coaching team?"; (3) *instrumental support*: "Do you get the resources you need from your academy coaching team"; and (4) *informational support*: "Do you get the advice you need from your academy coaching team?". Responses were indicated on a scale from 1 (*Not at all*) to 7 (*Definitely*). Consistent with previous research using populations facing adversity (Haslam et al., 2005), Cronbach alphas demonstrated suitable internal reliability values of .86 to .94 to .96 to .91 across each time-point. Additionally, this measure has been evidenced as a reputable measure of social support within existing social identity literature (Haslam et al., 2018).

*Non-equivalent Dependent Variable*

Low frustration tolerance (Turner et al., 2018), was included as an indicator of internal validity to help mitigate the absence of a control group (Shadish et al., 2002). For each of the seven items (e.g., "I can't stand not reaching my goals") responses were provided on a Likert-type scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Cronbach alphas of .76 to .85 to .88 to .96 indicated internal reliability at each time-point.

*Social Validation*

Social validation is a vital element of applied research that helps to assess participants lived experiences of interventions (Page & Thelwell, 2013), and was included to explore participants satisfaction regarding the intervention design and its perceived effectiveness. Five social validation questions were adopted from Barker and colleagues (2014) PDMS research (i.e., "How did you find preparing for and delivering your speech? How did the session make you feel? How do you think the session will influence the academy coaching team? How has the activity affected the way

you view your coaching teammates at the academy? What have you learnt about yourself and your coaching teammates from the session?"). This procedure captured both acute views immediately post-ROPDMS and sustained views after the cessation of the intervention (4-week follow-up). Participants had unlimited space to record their answers.

### ***Procedure***

Institutional ethical approval from Staffordshire University and informed consent from the academy and respective volunteers was attained in advance of the ROPDMS session. The coaching staff were introduced to the lead researcher on a Zoom call before the start of an unrelated workshop prearranged by the academy. During this 10-minute period, all academy coaches were invited and informed of both the intervention procedure, and that the HoA would be participating. These actions were included to help convey the level of importance of the session to the coaches in attempt to encourage adherence. Moreover, following a similar procedure to Evans et al. (2013), as the researcher had limited time to build rapport with members it was believed the senior staff presence helped create a safe and comfortable environment. Baseline one data was available to complete up until the day of the intervention. Baseline two data was gathered shortly before the 90-minute ROPDMS session. Quantitative and qualitative measures (post-ROPDMS) were immediately completed at the end of the PDMS session. Finally, participants were contacted 4-weeks later and completed the follow-up measures.

#### *Introduction of ROPDMS*

Participants were given two weeks to prepare a five-minute speech which conformed to previous PDMS practice (Evans et al., 2013; Windsor et al., 2011). Participants were advised to prepare their speech in response to two specific instructions:

Instruction 1: *Tell the group why you coach football and what you think you bring to the coaching team?*

Instruction 2: *Describe a personal story/situation that will help your academy coaching team understand you more. Your story can be related to any event that took place in your sporting or personal life and should be something you are happy to share. Make it clear as to why you are a great person to have in the academy which will make your fellow coaches want to work alongside you.*

The adapted instructions were used in attempt to further develop team rapport, especially among the more reserved and newer members of the team. Instruction 1 focused on enhancing coach integration within the group. Instruction 2 enabled coaching staff to strengthen relationships and understanding by sharing a meaningful life event in attempt to improve their collective social dynamics, identities, and beliefs.

As recommended by Evans and colleagues (2019), each participant had their speech screened before the evening of the ROPDMS session for information that was inappropriate to share. None of the speeches were deemed inappropriate during these 10-minute Zoom meetings. To avoid influencing intervention effects, participants were not provided feedback on the content of speeches (Barker et al., 2014). However, each participant was encouraged to articulate why their speech demonstrated they are a great person to work alongside in the academy. This procedure was also considered beneficial for providing emotional support to staff who were nervous about publicly disclosing their story in front of their peers whilst also being used to create a preliminary running order for the session.

*Delivery of ROPDMS*

The ROPDMS session was conducted on Zoom at a similar time to previous online workshops arranged by the academy, with participants advised to wear academy attire to endorse academy affiliation. Thirteen out of the twenty-four academy coaching staff attended, despite all

being encouraged to attend to prevent exclusion from the potential shared benefits of the session (Windsor et al., 2011). Two coaches that had previously agreed to participate, failed to attend. Reasons for non-attendance included work commitments and illness, however, such decisions may have also been influenced by the session being held on a) an evening and b) online. On arrival, PowerPoint slides were used to encourage the completion of the baseline two questionnaires. A PDMS contract (Holt & Dunn, 2006) was then presented to reinforce the importance of respect, listening and upholding confidentiality and anonymity. As the coaches were not being assessed we urged them to act authentically to promote an open and trusting environment. During this period, all participants were advised to keep their camera on. Speech instructions were displayed as a visual reminder of the session's focus before screen sharing stopped to allow for the delivery of speeches.

The HoA began the session. In this instance as they already had a working relationship with the academy coaches it was believed their involvement would be welcomed more than the researcher's. Therefore, in line with social identity theory (Tajfel, 1972), the researcher was more likely to be classified by the coaches as an outgroup member and may have been seen to have less valuable vicarious experiences for the coaches to gain confidence from, prior to publicly sharing their story (Bandura, 1997). The types of topics discussed included reasons for being a soccer coach, overcoming challenging life experiences and being a parent coach. A round of applause from the attendees followed each speech whilst the first author who chaired the session commended the coaches on their contributions between speeches. The HoA concluded the session by leading a reflective discussion on how the knowledge gained from the speeches could benefit the academy coaching team. All staff participated with the average length of speeches being 300

seconds. A written summary of the collective quantitative and qualitative findings was later presented to the academy.

***Data Analysis***

After performing parametric checks, we used a one-way repeated measure multivariate analysis of variance (MANOVA) to examine whether ROPDMS improved ingroup ties, cognitive centrality and ingroup affect over time (H1). In addition, four one-way repeated measures analyses of variances (ANOVA) were conducted to explore sequential changes in FIC (H2), self-esteem (H3), social support (H4), and the NEDV (H5). Follow up pairwise comparison tests were conducted for each dependent variable using an initial alpha-value of .05, with Bonferroni correction ($p<.0125$) applied to prevent type 1 errors due to conducting multiple comparisons. Effect sizes in the form of eta-squared ($\eta 2$) were calculated to show the magnitude of change over the testing period, while Cohens (1988) *d* interpretations were used to demonstrate the magnitude between each time-point. Descriptive statistics from all dependent variables alongside effect sizes between each time-point are presented in Table 1 with graphical representations shown in Figure 1.

Inductive thematic analysis was conducted across all social validation data. Initially, the lead author familiarised themselves with the data by repeatedly reading the provided data whilst underlining words and highlighting phrases considered salient. Initial codes were then generated by attaching meaningful labels to sections of the datasets. A list of all codes was subsequently created before being organised into potential themes. At this time, a table was used to check that the raw data represented the provided codes and formed into relevant themes. As a result, amendments were made to ensure the themes were formed by the clustering of codes into meaningful patterns before being reviewed through repeating the previous stages. Themes were

then named and defined before the narration of the analysis occurred. The second author acted as a critical friend (Sparkes & Smith, 2014) by reviewing and challenging the interpretations of codes and themes throughout this process to ensure the analysis and writing of the results clearly derived from the raw data. In doing so, Braun and Clarke's (2006) recursive six-phase process was followed to ensure codes and subsequent salient themes were constructed and refined from the immersive reading of the data. A thematic map is presented in Figure 2.

## Results

### *Data Screening*

There were no missing data. Assumptions for the repeated measures analyses were assessed by inspecting the normality of the distribution of the scores for each dependent variable across all time-points via inferential and descriptive statistics (i.e., Shapiro-Wilk tests, kurtosis, skewness, histograms, Q-Q plots, box-plots, and *z*-scores).

### *Social Identity and Social Identity Content*

A repeated-measures MANOVA revealed no significant changes over time in ingroup ties, cognitive centrality, and ingroup affect, Wilks $\Lambda = .635$, $F\ (9, 83) = 1.89$, $p = .065$, $\eta^2 = .14$. Given this result was non-significant but closely above the accepted convention of $p<.05$, bonferroni-adjusted pairwise comparisons were cautiously explored. Ingroup ties demonstrated a significant and medium-to-large increase immediately after ROPDMS (TP2 M = 4.97, SD = 1.01, to TP3 M = 5.67, SD = 0.91; p = .023, d = .76), with a similar effect evident when compared to the initial baseline (TP1 M = 5.00, SD = 1.00, to TP3 M = 5.67, SD = 0.91; p = .063, d = .73). No significant change was revealed between the baselines (TP1 $M = 5.00$, $SD = 1.00$, to TP2 $M = 4.97$, $SD = 1.01$; $p = 1.000$, $d = -.03$). Moreover, ingroup ties remained elevated (TP1 $M = 5.00$, $SD = 1.00$, to TP4 $M = 5.56$, $SD = 0.86$; $p = .342$, $d = .62$) indicating ROPDMS strengthened and then maintained

IGT among the academy staff. Additionally, cognitive centrality demonstrated a significant and small-to-medium increase post-ROPDMS (TP2 $M$ = 5.26, $SD$ = 1.01, to TP3 $M$ = 5.51, $SD$ = 1.41; $p$ = .013, $d$ = .41). All other pairwise comparisons were non-significant.

A repeated-measures ANOVA revealed the importance of FIC significantly changed across time, $F$ (3, 36) = 4.38, $p$ = .010, $\eta^2$ = .27. Initially, a significant and medium-to-large decrease occurred across the baselines (TP1 $M$ = 5.00, $SD$ = 1.22 to TP2 $M$ = 4.23, $SD$ = 1.01; $p$ = .014, $d$ = -.72). A significant medium increase occurred post-ROPDMS (TP2 $M$ = 4.23, $SD$ = 1.01 to TP3 $M$ = 4.92, $SD$ = 1.44; $p$ = .036, $d$ = .58) and was sustained at TP4 ($M$ = 4.92, $SD$ = 1.50) indicating ROPDMS strengthened and then maintained FIC.

***Self-esteem***

Analyses with a Greenhouse-Geisser correction for violation of sphericity ($x^2_{(5)}$ = 16.59, $p$ = .006) indicated that self-esteem did not significantly change over time, $F$ (1.81, 21.74) = 0.93, $p$ = .401, $\eta^2$ = .07. A small-to-medium decrease was reported across the baselines (TP1 $M$ = 5.15, $SD$ = 0.90 to TP2 $M$ = 4.77, $SD$ = 1.17; $p$ = 1.000, $d$ = -.38). Incremental increases were reported post-ROPDMS (TP2 $M$ = 4.77, $SD$ = 1.17 to TP3 $M$ = 4.92, $SD$ = 1.04; $p$ = .992, $d$ = .14) and were maintained (TP3 $M$ = 4.92, $SD$ = 1.04 to TP4 $M$ = 5.08, $SD$ = 1.19; $p$ = 1.000, $d$ = .15).

***Social Support***

Analyses revealed group perceptions of social support did not significantly alter over time, $F$ (3, 36) = 1.38, $p$ = .263, $\eta^2$ = .10. A small and non-significant decrease occurred between the baselines (TP1 $M$ = 5.19, $SD$ = 1.05 to TP2 $M$ = 4.94, SD = 1.11; $p$ = 1.000, $d$ = -.24). Small and non-significant immediate and sustained increases were reported post-ROPDMS (TP2 $M$ = 4.94, $SD$ = 1.11 to TP3 $M$ = 5.21, $SD$ = 1.13; $p$ = .167, $d$ = .25 and from TP3 $M$ = 5.21, $SD$ = 1.13 to TP4 $M$ = 5.31, $SD$ = 0.95; $p$ = 1.000, $d$ = .10).

***Non-equivalent Dependent Variable***

Analyses with a Greenhouse-Geisser correction for violation of sphericity ($x^2_{(5)} = 8.53$, $p = .131$), revealed group perceptions of low frustration tolerance did not significantly change across time ($F$ (3, 36) = 0.69, $p = .564$, $\eta^2 = .05$). Small and non-significant increases were reported post-ROPDMS (TP1 $M$ = 3.78, $SD$ = 0.47, to TP3 $M$ = 3.92, $SD$ = 0.50; $p$ = 1.000, $d$ = .30 and TP2 $M$ = 3.77, $SD$ = 0.49 , to TP3 $M$ = 3.92, $SD$ = 0.50; $p$ = .194, $d$ = .32). Scores later regressed (TP3 $M$ = 3.92, $SD$ = 0.50, to TP4 $M$ = 3.78, $SD$ = 0.70; $p$ = 1.000, $d$ = -.24). **[Table 1, Figure 1 and 2 near here]**.

***Social Validation***

The social validation data captured immediately post-RODPMS were collated into three higher order themes: emotional and cognitive reactions (represented by 12 of the 13 participants), improved togetherness (11 of the 13 participants), and enhanced understanding (12 of the 13 participants). Analysis of the 4-week follow-up data re-affirmed the initial three higher order themes: emotional and cognitive reactions (12 of the 13 participants), improved togetherness (12 of the 13 participants), and enhanced understanding (9 of the 13 participants), whilst intervention feedback (12 of the 13 participants) was also constructed.

***Theme 1: Emotional and cognitive reactions***

Reactions varied with some suggesting they felt "confident and relaxed" prior to ROPDMS delivery. Such reactions were considered in part due to the existing public speaking skills among the coaches, whilst another found the screening procedure a worthy support mechanism: "the one to one helped me massively in making sure I was on the right track". Equally, many found the prospect of public speaking "daunting" with participants reporting concern and apprehension due to wanting to express themselves meaningfully. In contrast, these initial reactions were replaced

with various positive thoughts and emotions post-delivery: “I was so proud to be a part of this session. There were stories that struck me emotionally and moved me to tears which I did not expect – however I am so proud of those who shared their stories and believe it will bring the coaches together more”.

***Theme 2: Improved togetherness***

There were increased perceptions of connection among newer and established academy coaches: “[It] made me feel more connected to the rest of the academy staff. We see each other every week but don’t know too much about one and other, was good to get some different perspective and learn more about my colleagues”. Moreover, ROPDMS was considered a catalyst for improving team functioning with coaches believing the experience had made them more willing to communicate and support each other, and that subsequently this would benefit their coaching practice.

***Theme 3: Enhanced understanding***

ROPDMS was believed to have influenced self-understanding as the intervention encouraged coaches to recognise why they coach: “Learned a bit about why I coach, and how I would like to influence others and help them progress onto reach their full ability in football, and as people”. Further views indicated improved self-confidence and social skills, although two coaches expressed little personal benefit. Understanding others was a further interpreted effect of ROPDMS as participation led to increased respect, empathy and reduced pre-conceptions among staff. For some, increased peer knowledge facilitated a sense of approachability among the coaching staff: “I feel I know them all better, feel I am able to talk to them, even if it is just a “hi” when walking past at training”. However, another indicated the online modality was ineffective in altering peer perceptions: “[It has] not really changed it from just [a] Zoom call”.

### *Theme 4: Intervention feedback*

The group were satisfied with the intervention with members expressing they enjoyed it and would encourage others to participate. In contrast, the applied impact of the intervention divided opinion. Some viewed the lockdown as a limiting factor that restricted the group's ability to assess the impact of the session whilst others believed team members were now more engaged in club matters, with one coach stating ROPDMS "probably raised morale for all the coaches during a difficult period".

## Discussion

The current study assessed the influence of an online ROPDMS intervention upon variables including social identity (SI), friendship identity content, social support, and self-esteem among coaching staff from a female professional soccer academy. The data indicated mixed support for our hypotheses. In partial support of H1, despite all overall non-significant changes and no differences in ingroup affect, follow-up pairwise comparisons suggested that compared to baseline, ingroup ties and cognitive centrality increased post-ROPDMS. We additionally found no significant differences between the baselines which strengthens the evidence that ingroup ties and cognitive centrality increased because of ROPDMS. However, we do urge that the reader interpret our cognitive centrality results with some caution given the moderate Cronbach alpha score reported at baseline 1. In support of H2, FIC significantly increased after ROPDMS. H3 and H4 were not supported as ROPDMS failed to significantly increase self-esteem or social support. However, H5 was supported as ROPDMS did not significantly change the NEDV. Overall, our study contributes to knowledge by demonstrating that ROPDMS delivered online with an academy coaching team led to increases in ingroup ties, cognitive centrality, and FIC during a national lockdown. In addition, effect size calculations indicated meaningful treatments effects between at

least one, or in some cases both baselines when compared to post-ROPDMS results. These effects were evident across all the targeted variables which highlights the practical significance of the online ROPDMS session for mobilising measures of group functioning among academy coaches. What is also promising, is that there appeared to be a maintained effect for some variables at the 4-week follow-up (e.g., ingroup ties), which goes some way to evidence the potential lasting effects of PDMS. Given the context of delivering online PDMS during a national lockdown these maintained effects could be explained by the heightened value assigned to social interactions during a period of physical restrictions (Jetten et al., 2020). Furthermore, as the coaches were still in lockdown at the 4-week follow-up, the ROPDMS session may have acted as a catalyst for the collective staff to socially prepare and or anticipate a return to face-to-face operations. Consequently, this could have created further opportunities for the coaches to develop the emotional significance they assign to their academy coaching team and could explain the subsequent effect upon our group functioning variables.

The positive effects in the current study provide evidence to support the application of online ROPDMS. The ingroup ties findings from this study reinforce previous PDMS research (Evans et al., 2013), that suggest SI improvements are likely explained by increased perceptions of commonality elicited through the sharing of valued speeches as participants begin to internalise their team as an important representation of who they are as individuals. This suggestion is plausible as not only were medium-to-large effect sizes reported after the session when compared to either baseline, but social validation data also indicated ROPDMS made staff feel more connected to their peers. What is more, as the disclosures revealed many of the coaches were parents of players in the academy, it is understandable that improved bonds among staff would be reported as parent coaches were able to relate positively to many of the shared disclosures (e.g.,

time spent together as parent and daughter). A potential explanation for the immediate significant and small-to-medium rise in cognitive centrality could be that some personal disclosures referred to an academy mantra that was symbolic of how the coaches aimed to develop academy players as both athletes and people. This form of positive distinctiveness (Tajfel & Turner, 1979) could arguably have made perceptions of the coaching team more poignant as according to SI theory, individuals are motivated to view their groups as bespoke and better than other (out)groups (i.e., rival academies). In addition, this is the first PDMS study to examine the three-dimension nuance of SI vs previous research that has focussed on SI globally (e.g., Evans et al, 2013). Consequently, our findings suggest online ROPDMS may influence aspects of SI in different ways in coaches. This is likely more a function of ROPDMS rather than coaches being sampled for the first time as ROPDMS helps to develop meaningful relationships via the mutual sharing of personal disclosures (Windsor et al., 2011). However, it was somewhat surprising that the online ROPDMS session failed to effect ingroup affect in a similar manner to ingroup ties and cognitive centrality across the testing period. Despite this, ingroup affect remained elevated across all time points implying that the participants generally felt positive about being a member of the coaching team. Moreover, the social validation data appeared to show that online ROPDMS can instigate emotional reactions that are synonymous with traditional face-to-face PDMS (Windsor et al., 2011) as participation led to sustained feelings of openness and pride among the staff.

The significant increase in FIC did support previous PDMS effects (Barker et al., 2014; Evans et al., 2013), as a significant medium increase was reported immediately post-ROPDMS after an initial significant medium-to-large decrease across the baselines. These results reflect both the session's intentions and the instructions used, demonstrating that ROPDMS increased and maintained perceptions of friendships among coaching staff at a period when many undoubtedly

felt isolated from respected sources of friendship. As self-disclosure is believed to be conducive with enhanced relationship quality (Cameron et al., 2009), it was unsurprising to see ROPDMS improve socioemotional bonds which are symbolic of FIC (Evans et al., 2013), as staff became more aware of the similar reasons and experiences they share in coaching soccer. Moreover, as socioemotional bonds are considered beneficial for both staff and athletes operating in performance driven organisations (Gandhi & Schneider, 2020), qualitative responses after ROPDMS implied staff felt more comfortable, respectful, and willing to communicate having learned more about their peers, indicating staff valued socioemotional bonds. Therefore, empathy and rapport may have been facilitated in a similar manner to counselling settings (Dryden, 2011), leading to the development of FIC through improved team harmony. However, FIC was not stable across the baseline period and ROPDMS did not increase FIC to the level of the first baseline which somewhat limits these findings. The FIC effects may have been impaired by the impact of the national lockdown as coaches would have struggled to sustain socioemotional bonds (especially before ROPDMS) due to being unable to operate together in their traditional physical sport settings.

Self-esteem and social support followed similar patterns to the SI facets between each baseline with small decreases reported. One possible explanation could be that during this collective period of distress associated with being in a national lockdown, coaching staff may have mobilised their immediate attention to more proximal social identities that fundamentally mattered (i.e., family; Jetten et al., 2020). Consequently, this could explain why other academy coaches did not participate and potentially highlights social mobility (Tajfel & Turner, 1979); a theoretical consequence of reduced SI, may have initiated somewhat of a cognitive disbandment of coaching identities among participants due to implications caused by the lockdown. However, self-esteem

did remain elevated post-ROPDMS, with social validation data indicating this could have been a result of enhanced self-understanding and group affiliation. One possible explanation for why self-esteem did not improve further after ROPDMS is that self-esteem is thought to be shaped by the group's status, and since the team were unable to coach, this status was likely handicapped (Haslam et al., 2020).

The non-significant and small effect size findings for social support were somewhat surprising given the theoretical consequences of self-categorization theory (Turner, 1982). However, the limited change to received social support may have been a result of the restricted operational duties of the coaches at the time of the lockdown, and therefore their ability to recognise or require social support as coaching staff may have been impaired. To maximise such effects, COPDMS may be best applied to enhance participants appraisals and acknowledgments of support during novel stressors (Evans et al., 2019), particularly because supportive team networks have been valued by coaches during stressful experiences (Olusoga et al, 2010), and can contribute to improved wellbeing during COVID-19 (Graupensperger et al., 2020).

***Applied Implications***

To the best of the researcher's knowledge, this study is the first to have used ROPDMS with sport coaches. Based on this online delivery and given that coaches encounter various performance and organisational demands (e.g., managing athletes, staff, and parents during and outside of competitive environments), alongside managing their own wellbeing (Norris eta al, 2017), several applied recommendations can be proposed. Despite coaches appearing to benefit from existing public speaking skills, coaches can still feel apprehensive about the prospect of ROPDMS. It is therefore important to clearly explain the purpose of ROPDMS and provide clear instructions via real-time and recorded forms of communication to endorse participant

understanding. Furthermore, encouraging coaches to embrace ROPDMS as a ubiquitous sport related stressor could promote task investment, allowing the subsequent benefits of ROPDMS to be experienced. This would appear pertinent given that coaches can reappraise stressors as a source of motivation (Frey, 2007). To further support participants prior to PDMS, one-to-one online meetings can prove mutually beneficial in building rapport with practitioners. Also, as ROPDMS involves public speaking, reviewing speeches helps to support participants who are naturally apprehensive about disclosing private information among peers (Cameron et al., 2009). As a result, to build rapport, provide support and to safeguard participants, practitioners should operate flexibly to ensure all personal disclosures are screened prior to PDMS delivery. Furthermore, our findings are useful for coaches as the delivery of an online ROPDMS session served the purpose of enhancing ingroup ties, cognitive centrality, and FIC. Therefore, as coaches are required to navigate complex interpersonal dynamics for the benefit of their athletes, peers, and organisation (Norris et al, 2017), online ROPDMS can provide the platform for enhanced communication and understanding even when members cannot be in the same physical environment. To assist future researchers, a series of guidelines for conducting online ROPDMS are presented in Table 2.

***Design Considerations***

The present research provides the first insight into the influence of PDMS as an online team building method. The findings demonstrate creditability, as typical confounding factors associated with applied research, such as participants building rapport outside intervention environments, were reduced due to the lockdown restrictions imposed upon the participants during the study. We understand Dunn and Holt (2004) highlight such practice as essential for the building of teams and we do not oppose this however these results simply indicate that online-ROPDMS can be beneficial when delivered at time when social restrictions challenge the natural

development of groups. In addition, treatment effects were supported by initially conducting a needs analysis that matched the requirements of the team and the limitations they faced. The subsequent design of the study included two baselines and a follow-up period that allowed the effects of one online ROPDMS session to be sufficiently examined over time. Adopting the SIQS (Bruner & Benson, 2018) also provided the first example of how PDMS influenced sport specific measures of social identity. Further procedures included the use of a NEDV to mitigate the absence of a control group (Shadish et al., 2002), and no significant changes over time were found, which provides support to suggest the targeted variables significantly altered because of ROPDMS. Yet, it is worth noting the NEDV did demonstrate a small increase post-ROPDMS. On reflection, this increase is understandable as staff who felt more connected to their coaching team post-ROPDMS perhaps became less likely to tolerate the frustration of not being able to physically coach due to the restrictions at the time. Also, we recognise NEDV's are not a panacea for internal validity concerns associated with single-group design research (Shadish et al., 2002), but as appropriate control groups were unavailable, we believe the collective design features adopted in this study provide incremental evidence that reduces internal validity concerns commonly associated with PDMS research.

There are some limitations that should be considered when interpreting the findings from this study. First, the results are not representative of all the coaches from the academy but do reflect the ecological challenges of working with sport teams during a global pandemic. Relatedly, it could be argued those who did not participate were perhaps feeling the most estranged from their academy coaching peers due to the implications of the national lockdown. As a result, these non-participating members may have benefited the most from ROPDMS, as it may have helped to reinforce the importance they assign to their academy membership by improving their

relationships with their peers. Third, given that previous PDMS researchers (Windsor et al., 2011) have demonstrated athletes can feel uncomfortable speaking freely in front of senior staff, some coaches may have decided against participating due to fear of judgment from the HoA. Therefore, consulting participants regarding such participation is warranted.

Considering the findings and limitations of this study, future research should attempt to use social (Barker et al., 2014) and task (Pain & Harwood, 2009) PDMS approaches to support the group functioning of teams as they re-enter competitive environments post-lockdown. Moreover, utilising a cross-over design would reduce internal validity concerns by alternating control and PDMS exposure amongst multiple teams to ensure participants are not withheld from the possible benefits of PDMS.

In conclusion, the present study indicates ROPDMS to be a viable online team building method for increasing elements of social identity and friendship identity content among academy coaching staff during a national lockdown. Future online delivery would allow practitioners to remotely support relevant teams whilst alleviating logistical concerns associated with elite sport settings. **[Table 2 near here].**

**References:**

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Barker, J. B., Evans, A. L., Coffee, P., Slater, M. J., & McCarthy, P. J. (2014). Consulting on tour: A dual-phase personal-disclosure mutual-sharing intervention and group functioning in elite youth cricket. *The Sport Psychologist, 28*(2), 186-197. doi:10.1123/tsp.2013-0042

Barker, J. B., McCarthy, P. J., Jones, M. V., & Moran, A. (2011). *Single-case research methods in sport and exercise psychology*. London: Routledge Ltd.

Beauchamp, M. R., McEwan, D., & Waldhauser, K. J. (2017). Team building: Conceptual, methodological, and applied considerations. *Current Opinion in Psychology, 16*, 114-117. doi:10.1016/j.copsyc.2017.02.031

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. doi:10.1191/1478088706qp063oa

Bruner, M. W., & Benson, A. J. (2018). Evaluating the psychometric properties of the Social Identity Questionnaire for Sport (SIQS). *Psychology of Sport and Exercise, 35*(1), 181-188.

Cameron, J. J., Holmes, J. G., & Vorauer, J. D. (2009). When self-disclosure goes awry: Negative consequences of revealing personal failures for lower self-esteem individuals. *Journal of Experimental Social Psychology, 45*(1), 217-222. doi:10.1016/j.jesp.2008.09.009

Carron, A. V., Shapcott, K. M., & Burke, S. M. (2007). Group cohesion in sport and exercise: past, present future. In M. R. Beauchamp & M. A. Eys (Eds.). *Group dynamics in exercise and sport psychology: Contemporary themes* (pp. 177-139). New York: Routledge.

Cohen, J. (1988). *Statistical power and analysis for the behavioural sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Crace, R. K., & Hardy, C. J. (1997). Individual values and the team building process. *Journal of Applied Sport Psychology, 9*(1), 41-60. doi:10.1080/10413209708415383

Dryden, W. (2011). *Counselling in a nutshell* (2nd Ed.). London: Sage.

Dunn, J. G. H., & Holt, N. L. (2004). A qualitative investigation of a personal-disclosure mutual-sharing team building activity. *The Sport Psychologist, 18*(4), 363-380. doi:10.1123/tsp.18.4.363

Evans, A., Morris, R., Barker, J., Johnson, T., Brenan, Z., & Warner, B. (2019). Athlete and practitioner insights regarding a novel coping-oriented personal-disclosure mutual-sharing intervention in youth soccer. *The Sport Psychologist, 33*(1), 64-74. doi:10.1123/tsp.2017-0125

Evans, A. L., Slater, M. J., Turner, M. J., & Barker, J. B. (2013). Using personal-disclosure mutual-sharing to enhance group functioning in a professional soccer academy. *The Sport Psychologist, 27*(3), 233-243. doi:10.1123/tsp.27.3.233

Frey, M. (2007). College Coaches' Experiences with Stress—"Problem Solvers" Have Problems, Too. *The Sport Psychologist, 21*(1), 38-57.

Gandhi, J., & Schneider, P. (2020). Understanding the role of environment and culture when delivering sport psychology services in elite women's international soccer. In J. G. Dixon, J. B. Barker, R. C. Thelwell & I. Mitchell (Eds.), *The psychology of soccer* (pp.220-233). New York: Routledge.

Graupensperger, S., Benson, A. J., Kilmer, J. R., & Evans, M. B. (2020). Social (un)distancing: Teammate interactions, athletic identity, and mental health of student-athletes during the COVID-19 pandemic. *Journal of Adolescent Health, 67*(5), 662-670. doi:10.1016/j.jadohealth.2020.08.001

Haslam, C., Jetten, J., Cruwys, T., Dingle, G., & Haslam, A. (2018). *The new psychology of health: Unlocking the social cure*. Routledge.

Haslam, S. A., O'Brien, A., Jetten, J., Vormedal, K., & Penna, S. (2005). Taking the strain: Social identity, social support, and the experience of stress. *British Journal of Social Psychology, 44*(3), 355-370. doi:10.1348/014466605X37468

690 Haslam, S. A., Reicher, S., & Platow, M. J. (2020). *The new psychology of leadership* (2nd Ed.).
691 Hove, East Sussex: Psychology Press.
692 Holt, N. L., & Dunn, J. G. H. (2006). Guidelines for delivering personal-disclosure mutual-sharing
693 team building interventions. *The Sport Psychologist, 20*(3), 348-367.
694 doi:10.1123/tsp.20.3.348
695 House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley
696 Jetten, J., Reicher, S. D., Haslam, S. A., & Cruwys, T. (2020). *Together apart*. London: SAGE.
697 Lazarus, R. S. (1999). *Stress and emotion*. New York, NY: Springer
698 LePine, J. A., Piccolo, R. F., Jackson, C. L., Mathieu, J. E., & Saul, J. R. (2008). A meta-analysis
699 of teamwork processes: Tests of a multidimensional model and relationships with team
700 effectiveness criteria. *Personnel Psychology, 61*(2), 273-307. doi:10.1111/j.1744-
701 6570.2008.00114.x
702 Martin, L. J., Carron, A.V., & Burke, S. M. (2009). Teambuilding interventions in sport: A meta-
703 analysis. Sport and exercise review, 5, 3-18
704 McEwan, D., & Beauchamp, M. R. (2014). Teamwork in sport: A theoretical and integrative
705 review. *International Review of Sport and Exercise Psychology, 7*(1), 229-250.
706 doi:10.1080/1750984X.2014.932423
707 Norris, L. A., Didymus, F. F., & Kaiseler, M. (2017). Stressors, coping, and well-being among
708 sports coaches: A systematic review. *Psychology of Sport and Exercise, 33*, 93-112.
709 10.1016/j.psychsport.2017.08.005
710 Olusoga, P., Butt, J., Maynard, I., & Hays, K. (2010). Stress and coping: A study of world class
711 coaches. *Journal of Applied Sport Psychology, 22*(3), 274-293.
712 doi:10.1080/10413201003760968

Page, J., & Thelwell, R. (2013). The value of social validation in single-case methods in sport and exercise psychology. *Journal of Applied Sport Psychology, 25*(1), 61-71. doi:10.1080/10413200.2012.663859

Pain, M., & Harwood, C. (2009). Team building through mutual sharing and open discussion of team functioning. *The Sport Psychologist, 23*(4), 523-542. doi:10.1123/tsp.23.4.523

Piasecki, P. A., Loughead, T. M., Paradis, K. F., & Munroe-Chandler, K. J. (2021). Using a personal-disclosure mutual-sharing approach to deliver a team-based mindfulness meditation program to enhance cohesion. *The Sport Psychologist, 35(1), 22-29. doi:10.1123/tsp.2019-0116*

Price, D., Wagstaff, C. R. D., & Thelwell, R. C. (2020). Opportunities and considerations of new media and technology in sport psychology service delivery. *Journal of Sport Psychology in Action, ahead-of-print*(ahead-of-print), 1-12. doi:10.1080/21520704.2020.1846648

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the rosenberg self-esteem scale. *Personality & Social Psychology Bulletin, 27*(2), 151-161. doi:10.1177/0146167201272002

Rogers, C. R. (1951). *Client-centred therapy: It's current practice, implications and theory*. Constable

Rogers, C. R. (1959). A theory of therapy, personality and interpersonal relationships as developed in the client-centered framework. In (ed.) S. Koch, *Psychology: A study of a science. Vol. 3: Formulations of the person and the social context*. New York: McGraw Hill.

Sparkes, A. C., & Smith, B. (2014). *Qualitative Research Methods in Sport, Exercise and Health*. Routledge. 10.4324/9780203852187

Rimé, B. (2007). The social sharing of emotion as an interface between individual and collective processes in the construction of emotional climates. *Journal of Social Issues, 63*(2), 307-322. doi:10.1111/j.1540-4560.2007.00510.x

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin.

Tajfel, H. (1972) Social Categorization. English Manuscript of "La catégorisation sociale". In: Moscovici, S., (Eds.). *Introduction a la Psychologie Sociale,* Vol. 1, Larousse, Paris, 272-302.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The social psychology of intergroup relations?*, 33, 47

Turner, J. C., (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Eds.). *Social Identity and Intergroup Relations*. Cambridge: Cambridge University Press.

Turner, M. J., Allen, M. S., Slater, M. J., Barker, J. B., Woodcock, C., Harwood, C. G., & McFayden, K. (2018). The development and initial validation of the irrational performance beliefs inventory (iPBI). *European Journal of Psychological Assessment, 34*(3), 174-180. doi:10.1027/1015-5759/a000314

Turner, M. J., & Davis, H. S. (2019). Exploring the effects of rational emotive behavior therapy on the irrational beliefs and self-determined motivation of triathletes. *Journal of Applied Sport Psychology, 31*(3), 253-272. doi:10.1080/10413200.2018.1446472

Vertopoulos, E., & Turner, M. J. (2017). Examining the effectiveness of a rational emotive personal-disclosure mutual-sharing (REPDMS) intervention on the irrational beliefs and rational beliefs of Greek adolescent athletes. *The Sport Psychologist, 31*(3), 264-274. doi:10.1123/tsp.2016-0071

759 Windsor, P. M., Barker, J., & McCarthy, P. (2011). Doing sport psychology: Personal-disclosure
760 mutual-sharing in professional soccer. *The Sport Psychologist, 25*(1), 94-114.
761 doi:10.1123/tsp.25.1.94
762 Yukelson, D. P. (2010). Communicating effectively. In J. M. Williams (6th Ed.). *Applied sport*
763 *psychology: Personal growth to peak performance* (pp. 305-335). Boston: McGraw Hill