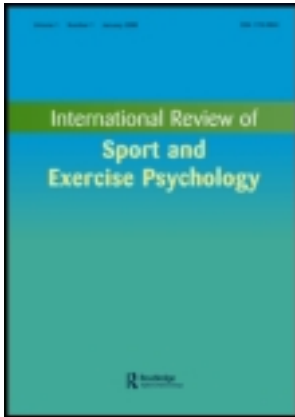


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The social environment in sport: selected topics

Luc Martin^a, Mark Bruner^b, Mark Eys^c & Kevin Spink^d

^a Kinesiology and Physical Education, University of Lethbridge, Lethbridge, Canada

^b Schulich School of Education, Nippising University, North Bay, Canada

^c Kinesiology and Physical Education, Wilfrid Laurier University, Waterloo, Canada

^d College of Kinesiology, University of Saskatchewan, Saskatchewan, Canada

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The social environment in sport: selected topics

Luc Martin^{a*}, Mark Bruner^b, Mark Eys^c and Kevin Spink^d

^aKinesiology and Physical Education, University of Lethbridge, Lethbridge, Canada; ^bSchulich School of Education, Nipissing University, North Bay, Canada; ^cKinesiology and Physical Education, Wilfrid Laurier University, Waterloo, Canada; ^dCollege of Kinesiology, University of Saskatchewan, Saskatchewan, Canada

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The purpose of the present article is to provide a summary of recent developments for select constructs that reflect the social environment of groups and have the potential to add to our knowledge relating to group processes in sport – cohesion, groupness, social identity, roles, conflict, and cliques. For each construct, we provide (1) a general overview of the current state of knowledge, (2) a summary of recent research developments, and (3) suggestions for future endeavors. It is our hope that this review will afford researchers suggestions for future work that will result in the advancement of group-related research in sport.

Keywords: cohesion; conflict; roles; groupness; social identity; cliques

The importance of group processes and group behavior with regard to performance outcomes and individual well-being in sport is well documented (e.g. Beauchamp & Eys, 2007; Carron & Eys, 2012). Group dynamics is the general term used to define the field of inquiry dedicated to understanding these processes and behaviors or, more specifically, to ‘advancing knowledge about the nature of groups, the laws of their development, and their interrelations with individuals, other groups, and larger institutions’ (Cartwright & Zander, 1968, p. 19).

The strength of this definition – and, by extension, the reason for its continued use – is the manner in which it identifies the different aspects of group research. This information, however, is only beneficial to those who have a complete understanding of what constitutes a ‘group’. Based on previous theorizing, Carron and Eys (2012) summarized five factors that, when present, allow for a collection of individuals to be classified as a group. The first is that group members must share a *common fate*; what influences one member must also influence other members. The second is that members must *benefit mutually* from the group’s existence; that is, membership in the group is individually rewarding. The third is that some form of *social structure* must be present; in order for a group to exist, members must have developed an understanding of group roles or norms that would be immaterial to a random collection of individuals. The fourth requirement is the presence of *quality interactions* (i.e. group processes). For example, interactions should occur directly among group members (not through others), be present over a span of time (more than once), and influence the individuals involved in the

*Corresponding author. Email: luc.martin@uleth.ca

interaction. Finally, the fifth requirement is that members must *self-categorize* as a group. Specifically, each member must believe his/her collective to be a group.

As noted by Shaw (1981), groups are embedded in a complex environmental context that exerts a powerful influence on almost every aspect of group process. Owing to this complexity, he noted that this context should be viewed as several environments rather than one – physical, personal, task, and social. The physical environment represents material aspects that are tangible and overt. The spatial arrangement of locker rooms represents one example of the physical environment. The personal environment is a reflection of the unique characteristics (e.g. age, sex, intelligence, interpersonal orientation) each individual brings to the group, and the degree to which these characteristics affect the individual's behaviors and those of other group members. The group's goals, as well as the specific actions necessary to meet those objectives, constitute the task environment. Our intent in the present review is to focus on the fourth aspect: the social environment. Shaw (1981) described this environment as the interpersonal relationships that come to be established once members have assembled and begin to interact. In terms of this interaction process, this review considers representative constructs that reflect the social environment of groups as well as have the potential to add to our knowledge relating to group processes – cohesion, groupness, social identity, roles, conflict, and cliques. For each construct, we provide (1) a general overview of the current state of knowledge, (2) a summary of recent research developments, and (3) suggestions for future endeavors.

As a final point, we wish to reiterate that there are numerous exciting advancements in the field of group dynamics, both from established constructs as well as emerging topics. The topics selected for the present discussion, although representative of only a subset of social variables, are intended to highlight and encourage work relevant to the social environment that both builds from established constructs as well as moves the field into new areas. Each of the topics selected has received recent research attention and been highlighted for continued investigation. On a larger scale, our purpose has direct relevance to group dynamics and addresses a concern advanced in a recent sport psychology review: 'Despite this general importance and presence of *group* and *team* topics in sport psychology, these topics are underrepresented or in decline in congresses and handbooks compared with other sport psychology topics' (Kleinert et al., 2012, p. 413).

Cohesion

General overview

When considering the initial interactions between group members, it is difficult to overlook what causes them to 'hang together'. This process is captured by the construct of cohesion. Not surprisingly then, cohesion is one of the most extensively researched topics in group dynamics (e.g. Dion, 2000). While it is generally viewed as the degree to which members are motivated to remain with the group, cohesion is more formally defined as 'a dynamic process that is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs' (Carron, Brawley, & Widmeyer, 1998, p. 213). Conceptualized by Carron and colleagues, cohesion is multidimensional in nature, consisting of task and social orientations as well as individual perceptions based on the group's integration and individual attractions to the group. The result is a four-dimensional model of cohesion (Carron, Widmeyer, & Brawley, 1985) encompassing

group integration-task (GI-T; group unity regarding instrumental objectives), *group integration-social* (GI-S; group unity regarding social relationships and activities within the group), *attractions to the group-task* (ATG-T; individual attractions toward the group's instrumental objectives), and *attractions to the group-social* (ATG-S; individual attractions toward social relationships and activities within the group).

In addition to the definition and conceptualization, Carron et al. (1985) developed a measure in order to assess individual perceptions of group cohesiveness – the Group Environment Questionnaire (GEQ). The GEQ was designed to assess the four dimensions of cohesion (i.e. GI-T, GI-S, ATG-T, and ATG-S) in adult sport populations, and an examination of participant responses to the questionnaire provides evidence of validity and reliability across numerous studies (Carron, Eys, & Martin, 2012). For a more detailed overview of the cohesion literature in the physical activity setting, interested readers could refer to chapters by Spink (2011) and Carron et al. (2012).

Recent advances

An important development in the cohesion literature has been the addition of population-specific inventories. This need was emphasized when the validity of the GEQ was discussed after the instrument was employed with populations that differed from those for which it was developed (e.g. Sullivan, Short, & Cramer, 2002). In fact, the authors of the GEQ cautioned about its use in different populations (Carron, Brawley, & Widmeyer, 2002). Subsequently, the past decade has seen the development of four new cohesion measurement tools created for older adult exercise groups (Physical Activity Group Environment Questionnaire; PAGEQ; Estabrooks & Carron, 2000), French sport teams (Questionnaire sur l'Ambiance du Groupe; QAG; Heuzé & Fontayne, 2002), youth environments (ages 13–17; Youth Sport Environment Questionnaire; YSEQ; Eys, Loughhead, Bray, & Carron, 2009), and children's groups (ages 9–12; Child Sport Cohesion Questionnaire; CSCQ; Martin, Carron, Eys, & Loughhead, 2012).

While the development of these questionnaires provides researchers with the ability to assess cohesion in a wide range of populations, a particularly significant development was highlighted through work with the YSEQ and the CSCQ. Specifically, the responses provided by children and youth on these questionnaires did not distinguish between perceptions of a group's integration and their attractions to the group. As such, rather than the four-dimensional model outlined previously, these questionnaires assess cohesion as a two-dimensional construct – task and social cohesion (Eys et al., 2009; Martin et al., 2012).

A second development that warrants discussion relates to the temporal nature of cohesion. The construct is commonly believed to be dynamic (e.g. Burke, Carron, & Shapcott, 2008), meaning that the degree to which members perceive their groups as cohesive is not stable over time. In fact, in a recent book chapter, Carron et al. (2012) stated that 'while cohesion certainly does not change moment to moment – as mood does, for example – it does change over time' (p. 413). Dunlop, Falk, and Beauchamp (2012) recently argued that the dynamism of cohesion remains largely untested, and subsequently set out to assess the 'dynamic' nature of cohesion in adult exercise groups. Their results indicated that while social cohesion appeared to be dynamic (it changed significantly over time), task cohesion did not. Although this study was conducted with exercise groups, its relevance to the sport context is apparent. For example, Carron and Brawley (2008) suggested that in sport – because of its performance-based orientation – task cohesion

develops first, and due to the requirement for interpersonal interaction between members, social cohesion will follow. Therefore, based on the supposition by Carron and Brawley (2008), it could be argued that similar results to those found by Dunlop et al. (2012) may arise in the context of sport. The possibility that social cohesion may fluctuate to a greater degree than does task cohesion throughout the season is directly relevant for those attempting to build and promote cohesion within their teams. However, it needs to be clear that this is largely speculative, and research in sport should attempt to empirically determine the dynamism of both task and social cohesion.

A third development in the cohesion literature is an extension from the established cohesion–performance relationship (e.g. Carron, Colman, Wheeler, & Stevens, 2002). Specifically, in a meta-analysis conducted by Carron et al. (2002), the authors found a moderate to large relationship ($ES = .66$) between cohesion and performance. Results also indicated that type of sport (interactive vs. coactive), competition level (intramural to professional), and type of cohesion (task vs. social) did not moderate the cohesion–performance relationship. However, one variable that did moderate the relationship was gender ($ES = .95$, females and $ES = .56$, males). An inherent shortcoming to empirical reviews is the lack of explanation for the results; thus, the authors cautioned that explanations regarding this relationship were necessary.

As such, Eys et al. (2014) undertook a qualitative investigation to better understand the differences between males and females with regard to the cohesion–performance relationship. To accomplish this task, Canadian and German coaches with extensive experience coaching both males and females were recruited to take part in semi-structured interviews. Their findings were in agreement with those of Carron et al. (2002) with regard to (1) the relevance of the cohesion–performance relationship for both genders, but also (2) the greater importance of the relationship for females as compared to males. In addition, the results suggested the possibility of two other gender differences in terms of the *type* and *direction* of the relationship. Specifically, coaches highlighted that social cohesion (vs. task cohesion) may be more relevant to performance for females. Furthermore, as it pertains to the direction of the relationship, coaches suggested that the strength of the performance–cohesion relationship was likely greater for males (i.e., performance leads to cohesion) but stronger in the opposite direction for females (i.e., cohesion leads to performance). These results highlight the importance of considering gender differences, and should inform future work with regard to cohesion research in sport.

Future directions

Although cohesion has been extensively researched, several avenues warrant further investigation. One of these relates to the recent advancements in younger populations. Specifically, Bruner and Spink (2010, 2011) implemented a team-building intervention with youth (ages 13–17) exercise groups. Their results indicated that the intervention increased perceptions of task cohesion as well as attendance and group task satisfaction. In older populations, team building has also resulted in increased cohesion (Carron & Spink, 1993), as well as participation and adherence (Spink & Carron, 1993; Watson, Martin Ginis, & Spink, 2004). Therefore, with the addition of the YSEQ and the CSCQ, researchers should attempt to assess the levels of cohesion in these younger populations in response to team-building protocols with an overall goal of increasing participation, adherence, and overall enrichment of the sporting experience.

Groupness

General overview

While member relationships within a group can result in the development of forces that bond the group together (i.e. cohesion), what about the effect on group process from the interpersonal relationships that result from simply being in the group? There are many definitions of what a 'group' is, but one enduring characteristic of all definitions is the requirement that group members perceive the collection of individuals to be a group. Embedded in this observation is the acknowledgment that being with others is not synonymous with perceiving the collection as a group. This differentiation between a collection and a group is not new. As one example, three decades ago Zander (1982) pointed out that a collection of individuals who happen to be at the same place at the same time is conceptually and practically different from a group. To assist in this differentiation, Campbell (1958) introduced the term 'entitativity' to capture the degree to which a group has a real existence. He argued that groups are as much about perceived social reality as physical reality and there are certain collections of individuals that are perceived to meet the criteria of being an entity (a real group) and other collections that do not.

Extending Campbell's (1958) conceptualization, Hamilton (2007) suggested that the term entitativity refers to either the actual properties of the group itself or the perception of the group as an entity rather than as a mere collection of individuals. When viewed as a group property, entitativity can be comparable to the concept of group cohesion, such that it is the glue that holds a group together. As outlined elsewhere (Spink, 2011), it is clear that the properties of a group such as cohesion play an important role in a number of key individual behaviors. However, properties aside, one might wonder whether that other aspect of entitativity – that is, the mere perception that a collection of individuals is a group (Hamilton, 2007) – also relates to individual behavior.

Recent advances

While the relationship between perceptions of groupness and individual behaviors such as the aggressive responses of individuals (Gaertner, Iuzzini, & O'Mara, 2008) and cooperation (Abele & Ehrhart, 2005) have been reported, research in the activity setting is in its infancy. Before reporting the results that have emerged, a note on how groupness has been assessed in the activity setting would be instructive. Groupness has been defined and conceptualized in many ways over the years. After perusing the extant literature, Meneses, Ortega, Navarro, and de Quijano (2008) described groupness as a multi-dimensional construct comprising different characteristics that can be perceived by group members to constitute a group.

In understanding that the characteristics of groupness are more a matter of degree than mere presence/absence (e.g. McGrath, 1984; Meneses et al., 2008), it was necessary to identify situation-specific characteristics that, when present, would make one collection of individuals groupier than another because it better captured the defining characteristics. The specific variables that have been used typically to define perceptions of groupness in the activity setting are the five identified by Carron and Eys (2012) as characteristic of exercise and sport groups. As noted previously, these five variables include common fate, mutual benefit, social structure, group processes, and self-categorization.

While studies examining groupness are starting to emerge in the activity setting, it is worth noting that the focus to date has been with exercise groups. In the first study to examine groupness in this setting, it was reported that perceiving groupness when exercising with others was associated with an individual's reported pattern of adherence within that situation (Spink, Wilson, & Priebe, 2010). Specifically, those members who reported greater perceptions of groupness in their self-identified collection of individual exercisers also reported better adherence in this structured exercise setting.

Recent work examining groupness and adherence has extended the reach to include other group constructs. Given the documented relationship between the group property of cohesion and exercise adherence (Carron, Hausenblas, & Mack, 1996), as well as the finding that cohesion and groupness are positively related in both activity (Ulvick, Crozier, Spink, Wilson, & Priebe, 2012) and non-activity settings (Ip, Chiu, & Wan, 2006), one recent study examined the unique and combined effects of these two group variables on the prediction of adherence in a structured exercise setting (Crozier, Spink, Wilson, Ulvick, & Priebe, 2012).

Two noteworthy findings emerged from this study. First, it was found that groupness added unique variance to exercise adherence over and above cohesion, suggesting that researchers may wish to include it in future research examining the relationship between group constructs and adherence. Second, the impact of cohesion perceptions on adherence was diminished when groupness was added to the model, suggesting that the relationship between these two variables may not simply be additive. Future research may wish to examine this suggestion by testing models that capture different relationships (e.g. interactive) between these two predictors.

In another exercise study, researchers examined whether perceptions of groupness would contribute any unique variance beyond cohesion to explaining another important outcome that has been related to group constructs – member satisfaction (Priebe, Spink, & DeRoo, 2011). Examining adults in structured exercise settings, it was found that both perceptions of cohesion and groupness were significant correlates of satisfaction. Two further conclusions can be drawn from this study. First, emergence of the groupness–satisfaction relationship extended past research reporting an association between groupness and adherence (Spink et al., 2010). Second, given the unique contributions of each to satisfaction, initial support was provided for the suggestion that the cohesion and groupness measures appeared to be assessing different constructs.

Future directions

As noted above, the degree to which a collection of individuals was perceived to be a 'group' was positively associated with both affect and individual adherence outcomes in the exercise setting. In sport, teams tend to vary in the characteristics that reflect groupness, like the tightness of bonds and degree of interaction among members. As such, one wonders whether perceiving a sport team as 'groupier', even within the physical reality of being a 'team', would positively relate to how individuals act and feel, in a manner similar to that found in other structured activity settings. Given the possible motivational implications of perceiving one's sport team as more like a group versus a collection, this deserves future research attention.

The examination of the groupness measure also warrants attention. In research to date, five variables identified by Carron and Eys (2012) as defining activity-type groups were used to reflect a latent factor of groupness. Given the newness of the research, it also

is possible that these variables may not be the only indicators of groupness. Variables that have been used to assess groupness in other settings such as shared knowledge and common goals (Denson, Lickel, Curtis, Stenstrom, & Ames, 2006) and similarity (Spencer-Rodgers, Hamilton, & Sherman, 2007) may also be important. In the future, researchers may wish to consider examining different combinations of variables to capture not only the presence of varying levels of groupness in the sport setting, but also the impact that those levels may have on both individual and team-level outcomes.

Social identity

General overview

When individuals come together as a group, the interactions that occur have the power to influence feelings of individual identity in relation to that group (and vice versa; Hogg, 2006). Social identity has been defined as ‘that part of an individual’s self-concept which derives from his[her] knowledge of his[her] membership of a social group (or groups) together with the value and emotional significance attached to that membership’ (Tajfel, 1981, p. 255). Early research and theory on the topic draws heavily from Tajfel and Turner’s (1979) Social Identity Theory (SIT), which proposes that people define and evaluate themselves in terms of the groups to which they belong. SIT has been described as a pre-eminent theoretical perspective in social psychology and, as such, has been investigated extensively (Brown, 2000). Across numerous contexts, a greater perception of group identification has been shown to improve group member self-esteem and self-concept (e.g. Rubin & Hewstone, 1998), adherence to group norms and group membership (e.g. Spears, Doosje, & Ellemers, 1999), and performance (e.g. Lembke & Wilson, 1998).

Identifying with a particular group is of direct relevance to the sport context. In fact, a considerable amount of research has investigated the identification of spectators with sport teams (e.g. Cialdini et al., 1976). For example, identification with a particular sport team has been associated with social psychological benefits (Wann, 2006), a greater tendency to wear that team’s apparel after a victory (Cialdini et al., 1976), and a willingness to engage in illegal behavior in order to assist that team (Wann, Hunter, Ryan, & Wright, 2001). While the identification with sport teams by spectators relates to the context of sport, of greater relevance to the current discussion is the influence of social identity on athletes’ cognitions and behaviors. This area of research has received far less attention. Murrell and Gaertner (1992) are credited as being among the first to investigate the concept of social identity (sometimes referred to as group or team identity/identification) on athletes in sport. The authors examined perceptions of identity and performance in a sample of high school football (American football) players and found that those on winning teams (as determined by season win-loss records) held greater perceptions of social identity than players on teams with losing records.

Taking a different approach to assessing social identity in sport, Zucchermaglio (2005) conducted a qualitative, ethnographic investigation of professional soccer players. Specifically, conversations between team members were audio recorded after a victory, after a defeat, and in a pre-game situation. These conversations were subsequently coded while paying particular attention to the pronouns used within the conversations (e.g. I, you, we). Results revealed that the outcome of the match influenced how members referenced team membership and specific subgroups on the team. For example, after a victory, the team was discussed as a whole. In contrast, after a loss, the athletes were

more likely to distance themselves from the team and identify subgroups of the team to account for the loss (e.g. poor play of the defenders; Zuccheromaglio, 2005).

Recent advances

While the previously discussed studies demonstrate the applicability of social identity to the sport context, the sparseness of these research endeavors is surprising. Nonetheless, the following three studies emphasize a trend toward the investigation of social identity in our field. First, De Backer et al. (2011) assessed the importance of coach behaviors (e.g. perceived justice and need support) on volleyball and handball players' perceptions of team identification and cohesion. Their findings showed that both perceived justice and need support behaviors exhibited by coaches positively predicted team identification. In addition, athletes who identified with their teams to a greater extent were found to have greater perceptions of both task and social cohesion.

Second, Tauber and Sassenberg (2012) assessed the impact of team identification on the adherence to team goals in a football (soccer) team throughout the duration of a season. While adherence to team goals is generally viewed as a positive outcome in sport, the authors were interested in determining whether greater team identification in athletes would render them more likely to deviate from (i.e. avoid) harmful (defined by the authors as unambitious) team goals. Their results demonstrated that strongly identified athletes were in fact less likely to adhere to these harmful team goals in comparison to weakly identified players.

A final development worth noting is a study conducted by Bruner, Boardley, and Côté (2014) in a youth sport setting. In addition to assessing how social identity in sport shapes social development, the authors were interested in testing the applicability of a multidimensional conceptualization of social identity. Despite the multiple components of social identity highlighted in the above definition by Tajfel (1981), social identity has been assessed typically as a unidimensional construct (Dimmock, Grove, & Eklund, 2005). Drawing on previous theoretical work, Cameron (2004) developed and psychometrically tested a three-factor social identity questionnaire. The three dimensions of social identity include: (1) ingroup ties – perceptions of similarity, bonding, and belongingness with other group members; (2) cognitive centrality – the importance of being a group member; and (3) ingroup affect – the positive feelings associated with group membership. Using an adapted version of Cameron's (2004) social identity measure for sport, Bruner et al. (2014) sampled a wide array of high school teams and athletes. Findings revealed stronger perceptions of ingroup affect to be a significant predictor of prosocial behavior toward teammates.

Future directions

Several avenues of future research warrant investigation. First, while many methods and measures for the assessment of social identity in various contexts have been advanced (e.g. Brown, 2000; Hogg, 2001), the lone use of Cameron's (2004) measure – and its multidimensional properties – to evaluate athletes' perceptions of social identity in the sport setting (Bruner et al., 2014) suggests that future work should attempt to support the utility of this survey for sport teams. The second future avenue is closely related to the first. In addition to testing the utility of the questionnaire, qualitative and observational forms of research are required to better understand each of the three dimensions of social

identity. Another outcome of interest would be the influence of social identity on sport involvement. Previous research revealed stronger perceptions of social identity to be associated with exercise adherence in school-based physical activity clubs (Bruner & Spink, 2009). Would similar findings emerge in sport? This awaits future research.

Roles

General overview

Through group member interactions, patterns of relationships emerge that differentiate parts of a group. This differentiation is known as group structure and contributes to group process in meaningful ways. One of the key elements in a group's structure relates to individual roles. An individual's role represents the set of responsibilities he or she holds, which is a function of the position occupied within the group and is interdependent with other members (Carron & Eys, 2012). There is variety with respect to the types of roles present in any one group; however, two general classification schemes separate roles based on function and formality (Carron & Eys, 2012). First, related to function, roles can be differentiated as task or social in orientation. *Task roles* serve instrumental group purposes and examples could span leadership (e.g. captains) and positional occupancies (e.g. goalie). *Social roles*, in contrast, have responsibilities toward maintaining a positive group environment. Individuals who focus on increasing harmony within the group or organizing team gatherings may be viewed as occupying a social-oriented role.

A second way to classify roles within groups is based on their degree of formality (Mabry & Barnes, 1980). Roles that are directly prescribed to individuals within the group are classified as *formal roles*. Using the examples above, individuals who are explicitly instructed to organize social gatherings or act in the capacity of group leader obtained these responsibilities through formal channels. The *informal role* process, on the other hand, differs in that expectations for behaviors are not specifically prescribed; rather, they arise more naturally through group member interactions (e.g. team comedian).

Within sport research (e.g. Eys, Carron, Beauchamp, & Bray, 2005; Mellalieu & Juniper, 2006), a model of the role episode (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964) has been used to highlight the events that occur in the transmission of formal role responsibilities. These events, in order, include (1) the derivation of expectations by the role sender (i.e. the individual who is prescribing role responsibilities), (2) the exertion of pressure to fulfill role expectations, (3) the experience of role pressure by the focal person (i.e. the individual who is expected to carry out the role responsibilities), and (4) the actual responses to these expectations by the focal person.

Sport research has typically focused on the responses to formal role processes including behavioral manifestations (i.e. role performance; Beauchamp, Bray, Eys, & Carron, 2002) and cognitions including role ambiguity (Eys & Carron, 2001) and role efficacy (Bray, Brawley, & Carron, 2002). With respect to role ambiguity, important relationships were found with cohesion (Bosselut, McLaren, Eys, & Heuzé, 2012), coaching competency (Bosselut, Heuzé, Eys, Fontayne, & Sarrazin, 2012), cognitive state anxiety (Beauchamp, Bray, Eys, & Carron, 2003), and athlete satisfaction (Eys, Carron, Bray, & Beauchamp, 2003). However, recent research has investigated other role perceptions held by athletes (i.e. role acceptance) in addition to the informal role process. These advances are described in the next section.

Recent advances

Two recent lines of research have provided novel advances in understanding the role construct. First, Benson and colleagues conducted a qualitative study to gain a greater understanding of role *acceptance*, defined generally as the willingness of the athlete to fulfill his/her role responsibilities (Benson, Eys, Surya, Dawson, & Schneider, 2013). Carron and Eys (2012) proposed that the degree to which athletes accept their roles (or, conversely, reject their role responsibilities) within sport teams is important to team processes and performance. The interviews conducted by Benson et al. (2013) provided support for this sentiment. As a brief summary, athletes discussed a series of consequences related to the rejection of role responsibilities including increased interpersonal conflict among group members, decrements in perceptions of the team's climate and cohesion, and ultimately negative effects on team performance. Furthermore, the athletes highlighted personal consequences including effects on the emotional state of the athlete and greater member attrition.

In addition to garnering information regarding the potential consequences of failing to accept one's role, Benson et al. (2013) also noted numerous possible antecedents of role acceptance. For example, athletes suggested that convincing group members of the significance of their roles (e.g. through acknowledgment of the role contributions by coaches and teammates) facilitates greater willingness to remain in the group and execute the expected responsibilities. Furthermore, perceptions of the coach (e.g. degree of competency), the team's cohesion, other role perceptions (e.g. role satisfaction), and effective intra-team communication were also cited as important precursors to role acceptance.

A second significant advancement pertains to a greater understanding of *informal* roles within sport teams. As noted previously, informal roles are those that emerge naturally within groups and are not specifically prescribed to individuals. Cope, Eys, Beauchamp, Schinke, and Bosselut (2011) identified a series of these roles within sport including, among others, informal team leaders, mentors, comedians, social organizers, and cancers/bad apples. Consistent with previous research in organizational psychology, these roles address task and social aspects of group involvement and, in contrast to formal roles, can have positive or negative influences on the group (e.g. Farrell, Schmitt, & Heinemann, 2001; Reid, Stewart, & Thorne, 2004; Wagstaff, Fletcher, & Hanton, 2012). With respect to the possible presence of negative informal roles, Cope and colleagues (Cope, Eys, Schinke, & Bosselut, 2010) conducted an in-depth analysis of coaches' perceptions of the cancer/bad apple within teams and highlighted responses pertaining to the characteristics, emergence, consequences, and responses to individuals who decide to take on this detrimental group role.

Future directions

There are several avenues of future research for role involvement in sport across multiple levels of the scientific process. First, there are a number of role perceptions that have yet to receive attention within sport. As a result, a greater understanding of the *theoretical underpinnings* (as drawn from other areas of research such as organizational psychology), and potential application to sport, of perceptions related to role overload and role conflict would be beneficial. Similarly, a better understanding of the perceptions of role responsibilities within the different levels of a sport organization (e.g. managers, coaches, medical staff, physiotherapists, equipment managers) would be beneficial (cf. Fletcher &

Wagstaff, 2009). Second, with the exception of ambiguity and efficacy, the opportunities to *measure* role perceptions are somewhat limited. Clearly those constructs noted above that have not received any critical examination do not have associated measures. However, some topics are in the beginning stages of measurement development (e.g. role satisfaction; Surya, 2012), while more focused efforts on assessment are required for others (e.g. role acceptance; Benson et al., 2013). Overall, a strong need remains for the development and testing of psychometrically sound assessment tools in this area of study. Finally, opportunities exist to create and assess *interventions* designed to facilitate more effective communication and reception of role responsibilities; in essence, creative solutions to develop role clarity.

Conflict

General overview

It should come as no surprise that not all interactions within groups are considered to be harmonious. Conflict is a topic that is largely relevant to the sport domain but interestingly has received less exposure in the literature (Martin & Beauchamp, 2014). Generally, conflict can manifest itself between opposing groups (i.e. intergroup conflict) or between members within a group (i.e. intragroup conflict). At its most basic level, sport is largely based on competition between individuals or teams and, therefore, intergroup conflict is perhaps more evident than intragroup conflict. However, from a group dynamics perspective, and particularly with regard to the social environment wherein researchers are interested in group member relationships and behaviors, intragroup conflict is potentially very impactful. In organizational and industrial psychology, this potential has been identified and translated into more than 70 years of extensive research (e.g. Barki & Hartwick, 2004).

A large portion of this research is attributed to the work of Karen Jehn, who advanced a definition and conceptual framework for intragroup conflict. Jehn (1995) described conflict as discrepant views or interpersonal incompatibilities possessed by group members. Furthermore, Jehn (1997) postulated that intragroup conflict was a multi-dimensional construct, resulting from incompatibilities or disagreements relating to the tasks (e.g. instrumental objectives), relationships (e.g. interpersonal interactions or relationships), and processes (e.g., how instrumental objectives will be attained) within the group. More recently, Bendersky et al. (2010) revised the conceptual framework to describe intragroup conflict as two-dimensional: task and relationship conflict. This two-dimensional revision is in agreement with traditional group dynamics theoreticians in the social sciences (e.g. Carron et al., 1985; Cartwright & Zander, 1968) and, as we will discuss, has generated preliminary support in sport.

Recent advances

In 2001, Sullivan and Feltz were interested in determining the relationship between intragroup conflict and team cohesion. Specifically, they highlighted that although previous research indicated a contradictory relationship between the constructs, the multidimensional nature of both would make it difficult for a perfect negative relationship to be present. Therefore, they assessed the impact of both constructive (e.g. integrative strategies) and destructive (e.g. confrontational or avoidance strategies) styles of intragroup conflict resolution on team cohesion. Their results indicated that destructive

styles of intragroup conflict were negatively related to task and social cohesion, whereas constructive styles were positively related to social cohesion. These results provided preliminary support for the tenet that the implementation of constructive resolution strategies could improve the levels of social cohesion within a group even though intragroup conflict is largely perceived as a negative process in sport.

Beauchamp, Lothian, and Timson (2008) conducted another study where intragroup conflict was a secondary interest. They implemented an intervention that was grounded in the Jungian preference framework (Jung, 1921/1971) that emphasized the understanding of one's self as well as one's teammates to promote optimal interaction. Specifically, by informing individuals of their as well as their teammates' respective personality preferences, which Jung postulates to be a combination of personal attitudes (e.g. introversion or extraversion) and mental processes (e.g. sensing, feeling, thinking, and intuition), members are better suited to understand intragroup interactions. Among other important variables such as increased trust, group cohesion, and overall performance, the authors found that the intervention resulted in the reduction of intragroup conflict. Taken together, Sullivan and Feltz (2001) provided information with regard to the resolution of conflict and Beauchamp et al. (2008) highlighted the importance of precautionary measures and preventative strategies.

While the previous studies contributed to the intragroup conflict literature, more recent efforts attempted to *describe* the nature of intragroup conflict in the sport context. Holt, Knight, and Zukiwski (2012) conducted semi-structured interviews with female varsity athletes in order to understand their perceptions of teammate conflict. Several findings warrant discussion. First, they identified the presence of both performance and relationship conflict, which is in accordance with both the organizational literature (Bendersky et al., 2010) and the general consensus of group orientations (e.g. Carron et al., 1985). In addition, the presence of both task (i.e. performance) and social (i.e. relationship) forms of intragroup conflict in sport has recently been supported (Paradis, Carron, & Martin, 2014). Second, the athletes indicated that conflict was prominent within their teams and advanced specific strategies for minimizing the potential negative outcomes of conflict. These included the use of (1) team building, (2) early resolution in order to prevent festering or escalation, (3) mediators in the resolution process, and (4) frequent structured team meetings.

Finally, Mellalieu, Shearer, and Shearer (2013) assessed experiences of interpersonal conflict in athletes, management personnel, and support staff workers representing the United Kingdom in international games and championships. Their findings indicated that those most closely involved in competition (i.e. athletes, coaches, and team managers) were more likely to experience interpersonal conflict, which frequently revolved around breakdowns in communication and power struggles. In addition, the frequency of such experiences was high in that a large proportion of respondents (i.e. 70%) had been involved in some form of conflict.

Future directions

Previous studies have highlighted the presence of intragroup conflict in the sport context, which is inevitable in any group. What remains a challenge for future research is the development of a structurally valid sport-specific questionnaire. The ability to *measure* the presence and magnitude of conflict within groups will enable researchers to draw informed conclusions as to certain outcomes relating to conflict such as performance,

satisfaction, and drop-out. In addition, this information would help inform *intervention* work geared to the prevention or resolution of intragroup conflict.

Cliques

General overview

Another concept that is important to consider when individuals begin to interact with one another, and which has implications for group processes, is the 'clique'. This has been referred to as a tightly knit subgroup that involves reciprocating relationships (e.g. Henrich, Kuperminc, Sack, Blatt, & Leadbeater, 2000). In the sport literature, the assessment of cliques within groups has received little to no attention. This is somewhat surprising considering that four decades ago, Stanley Eitzen (1973) demonstrated that the presence of cliques within high school basketball teams appeared to reduce the probability of success. Subsequent to that early study, Carron (1982) emphasized the importance of understanding subdivisions such as cliques and coalitions in small groups (i.e. sport teams).

While rarely examined in the sport literature, the relevance of clique formation has been investigated in different disciplines such as sociology as well as educational and social psychology. For example, from a sociological perspective, Adler and Adler (1995) advocated the investigation of cliques in pre-adolescent children (grades 4 to 6) and noted that '[s]tudying popular cliques offers vital sociological insight because these groups mobilize powerful forces that produce important effects on individuals' (p. 145). These powerful forces are of direct relevance to the sport setting as these effects on individuals could lead to decreased performance, perceptions of belonging, and participation, to name a few. Interestingly, Henrich et al. (2000) found isolation from cliques in adolescent female groups to be positively related to maladaptive outcomes. In addition, the presence of cliques is not solely tied to children and youth populations. In an observational study with older adults, Salari, Brown, and Eaton (2006) identified the importance of social cliques with regard to the inclusion and exclusion of groups in senior center dining halls. While the previous examples are not sport based, the implications related to the presence of cliques are evident. For sport – where the importance of group processes is undeniable – an understanding of the potential impact of cliques is paramount.

Recent advances

Indeed, recent attempts to directly assess the impact of clique formation in sport are lacking. Several studies, however, have indirectly identified the presence of cliques as being an antecedent or consequence of negative individual and group-level outcomes. With regard to elite athletes, the development of within-team cliques has been found to increase stress levels (Fletcher & Hanton, 2003). Specifically, the existence of cliques within a team was identified as a negative aspect of a team's atmosphere that would lead to stressful situations for athletes, and subsequently detract from individual performance.

From a group perspective, US and Australian coaches were interviewed to determine strategies used to facilitate team cohesion (Ryska, Yin, Cooley, & Ginn, 1999). All coaches described athlete integration as imperative to developing cohesion, and identified 'breaking up of cliques' as one method through which to do so. In addition, Australian coaches emphasized the importance of promoting a general sense of acceptance (as compared to isolation and clique formation) for all team members as a means of

increasing retention, motivation, and performance. The finding of clique formation being potentially detrimental to team cohesion was also supported in a qualitative investigation with Canadian and German coaches (Eys et al., 2014).

Finally, a recent intervention protocol aimed to develop emotion regulation strategies and abilities in sport organization employees fulfilling a range of roles (Wagstaff, Hanton, & Fletcher, 2013). Among its many benefits, this intervention resulted in enhanced relationship quality and closeness, and was associated with a reduction in the number of perceived cliques within the organization.

Future directions

Although the literature with regard to cliques in sport is limited, research in other areas and the preliminary associations discovered in sport (from the perspective of both coaches and athletes) provide support for the need to further assess this within-group construct. In discussing the importance of team member similarity with regard to team success, Carron (1982) stated that '[t]he critical factor may not be the homogeneity or heterogeneity per se, but whether the team fractionates into cliques or produces social isolates' (p. 249). The use of qualitative investigations with coaches and athletes would provide researchers with insight into both individual and team consequences resulting from the presence of cliques. It would also be interesting to determine the cognitions and behaviors present in individuals considered as clique members compared to those classified as social isolates. For example, integration within team cliques (a subgroup of the team) could provide those involved with greater perceptions of social support, belongingness, or social identity compared to perceptions generated from involvement with the larger group (the team). If in fact this were the case, perhaps some effort could be expended to consider the development of strategic and useful subgroups that do not detract from group performance and are not perceived as exclusive to certain group members. Alternatively, if the negative consequences experienced from non-clique members (e.g. isolation, decreased status, etc.) are present and outweigh the benefits experienced by the clique members, strategies advanced for the breaking up of cliques should be identified and utilized. Future research will aid in the understanding of this important group construct.

Conclusion

Understanding the social environment of groups is undeniably important. When individuals assemble, begin to interact, and subsequently become a 'group', many processes develop and impact the group. Our review of the relevant literatures in the areas of cohesion, groupness, social identity, roles, conflict, and cliques revealed that all have the potential to add to our knowledge relating to group processes. As part of our coverage, our intent was also to encourage work that both builds on these constructs and moves our field into new areas.

References

- Abele, S., & Ehrhart, K.-M. (2005). The timing of effect in public good games. *Journal of Experimental Social Psychology*, *41*, 470–481. doi:10.1016/j.jesp.2004.09.004
- Adler, P. A., & Adler, P. (1995). Dynamics of inclusion and exclusion in preadolescent cliques. *Social Psychology Quarterly*, *58*, 145–162. doi:10.2307/2787039

- Barki, H., & Hartwick, J. (2004). Conceptualizing the construct of interpersonal conflict. *International Journal of Conflict Management*, 15, 216–244. doi:10.1108/eb022913
- Beauchamp, M. R., Bray, S. R., Eys, M. A., & Carron, A. V. (2002). Role ambiguity, role efficacy, and role performance: Multidimensional and mediational relationships within interdependent sport teams. *Group Dynamics: Theory, Research, and Practice*, 6, 229–242. doi:10.1037/1089-2699.6.3.229
- Beauchamp, M. R., Bray, S. R., Eys, M. A., & Carron, A. V. (2003). The effect of role ambiguity on competitive state anxiety. *Journal of Sport and Exercise Psychology*, 25, 77–92.
- Beauchamp, M. R., & Eys, M. A. (2007). *Group dynamics in exercise and sport psychology: Contemporary themes*. New York, NY: Routledge.
- Beauchamp, M. R., Lothian, J. M. & Timson, S. E. (2008). Understanding self and others: A personality preference-based intervention with an elite co-acting sport team. *Sport & Exercise Psychology Review*, 4, 4–20.
- Bendersky, C., Behfar, K., Weingart, L., Todorova, G., Bear, J., & Jehn, K. (2010, June). *Revisiting the dimensions of intragroup conflict: Theoretical and psychometric construct refinement*. Paper presented at the 23rd Annual International Association of Conflict Management Conference, Boston, Massachusetts, USA.
- Benson, A., Eys, M. A., Surya, M., Dawson, K., & Schneider, M. (2013). Athletes' perceptions of role acceptance in interdependent sport teams. *The Sport Psychologist*, 27, 269–281.
- Bosselut, G., Heuzé, J., Eys, M. A., Fontayne, P., & Sarrazin, P. (2012). Athletes' perceptions of role ambiguity and coaching competency: A multilevel analysis. *Journal of Sport & Exercise Psychology*, 34, 345–364.
- Bosselut, G., McLaren, C. D., Eys, M. A., & Heuzé, J.-P. (2012). Reciprocity of the relationship between role ambiguity and group cohesion in youth interdependent sport. *Psychology of Sport and Exercise*, 13, 341–348. doi:10.1016/j.psychsport.2011.09.002
- Bray, S. R., Brawley, L. R., & Carron, A. V. (2002). Efficacy for interdependent role functions: Evidence from the sport domain. *Small Group Research*, 33, 644–666. doi:10.1177/1046496402238619
- Brown, R. (2000). Social identity theory: Past achievements, current problems, and future challenges. *European Journal of Social Psychology*, 30, 745–778. doi:10.1002/1099-0992(200011/12)30:6<745::AID-EJSP24>3.0.CO;2-O
- Bruner, M. W., Boardley, I. D., & Côté, J. (2014). Social identity and prosocial and antisocial behavior in youth sport. *Psychology of Sport and Exercise*, 15(1), 56–64. doi:10.1016/j.psychsport.2013.09.003
- Bruner, M. W., & Spink, K. S. (2009, June). *Investigating the relationship between social identity and exercise adherence in adolescents*. Marrakech: International Society of Sport Psychology (ISSP) World Congress of Sport Psychology.
- Bruner, M. W., & Spink, K. S. (2010). Evaluating a team building intervention in a youth exercise setting. *Group Dynamics: Theory, Research, and Practice*, 14, 304–317. doi:10.1037/a0018296
- Bruner, M. W., & Spink, K. S. (2011). Effects of team building on exercise adherence and group task satisfaction in a youth activity setting. *Group Dynamics: Theory, Research, and Practice*, 15, 161–172. doi:10.1037/a0021257
- Burke, S. M., Carron, A. V., & Shapcott, K. M. (2008). Cohesion in exercise groups: An overview. *International Review of Sport and Exercise Psychology*, 1(2), 107–123. doi:10.1080/17509840802227065
- Cameron, J. E. (2004). A three-factor model of social identity. *Self and Identity*, 3, 239–262. doi:10.1080/1357650044000047
- Campbell, D. T. (1958). Common fate, similarity, and other indices of the status of aggregates as social entities. *Behavioral Science*, 3(1), 14–25. doi:10.1002/bs.3830030103
- Carron, A. V. (1982). Processes of group interaction in sport teams. *Quest*, 33, 245–270. doi:10.1080/00336297.1981.10483757
- Carron, A. V., & Brawley, L. R. (2008). Group dynamics in sport and physical activity. In T. S. Horn (Ed.), *Advances in sport psychology* (pp. 213–237). Champaign, IL: Human Kinetics.
- Carron, A. V., Brawley, L. R., & Widmeyer, W. N. (1998). The measurement of cohesiveness in sport groups. In J. L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 213–226). Morgantown, WV: Fitness Information Technology.

- Carron, A. V., Brawley, L. R., & Widmeyer, W. N. (2002). *The Group Environment Questionnaire: Test manual*. Morgantown, WV: Fitness Information Technology.
- Carron, A. V., Colman, M. M., Wheeler, J., & Stevens, D. (2002). Cohesion and performance in sport: A meta-analysis. *Journal of Sport & Exercise Psychology*, *24*, 168–188.
- Carron, A. V., & Eys, M. A. (2012). *Group dynamics in sport* (4th ed.). Morgantown, WV: Fitness Information Technology.
- Carron, A. V., Eys, M. A., & Martin, L. J. (2012). Cohesion: Its nature and measurement. In G. Tenenbaum, R. Eklund, & A. Kamata (Eds.), *Handbook of measurement in sport and exercise psychology* (pp. 411–421). Champaign, IL: Human Kinetics.
- Carron, A. V., Hausenblas, H. A., & Mack, D. A. (1996). Social influence and exercise: A meta-analysis. *Journal of Sport and Exercise Psychology*, *18*, 1–16.
- Carron, A. V., & Spink, K. S. (1993). Team building in an exercise setting. *The Sport Psychologist*, *7*, 8–18.
- Carron, A. V., Widmeyer, W. N., & Brawley, L. R. (1985). The development of an instrument to assess cohesion in sport teams: The Group Environment Questionnaire. *Journal of Sport Psychology*, *7*, 244–266.
- Cartwright, D., & Zander, A. (1968). *Group dynamics: Research and theory*. New York, NY: Harper & Row.
- Cialdini, R. B., Borden, R. J., Thore, A., Walker, M. R., Freeman, S., & Sloan, L. R. (1976). Basking in reflected glory: Three (football) field studies. *Journal of Personality and Social Psychology*, *34*, 366–375. doi:10.1037/0022-3514.34.3.366
- Cope, C. J., Eys, M. A., Beauchamp, M. R., Schinke, R. J., & Bosselut, G. (2011). Informal roles on sport teams. *International Journal of Sport and Exercise Psychology*, *9*(1), 19–30. doi:10.1080/1612197X.2011.563124
- Cope, C. J., Eys, M. A., Schinke, R. J., & Bosselut, G. (2010). Coaches' perspectives of a negative informal role: The 'Cancer' within sport teams. *Journal of Applied Sport Psychology*, *22*, 420–436. doi:10.1080/10413200.2010.495327
- Crozier, A. J., Spink, K. S., Wilson, K. S., Ulvick, J. D., & Priebe, C. S. (2012). 'All for one': Examining the effect of cohesion and groupness on adherence in structured exercise settings. *Journal of Sport & Exercise Psychology*, *34*, S219.
- De Backer, M., Boen, F., Ceux, T., De Cuyper, B., Høigaard, R., Callens, F., ... Vande Broek, G. (2011). Do perceived justice and need support of the coach predict team identification and cohesion? Testing their relative importance among top volleyball and handball players in Belgium and Norway. *Psychology of Sport and Exercise*, *12*, 192–201. doi:10.1016/j.psychsport.2010.09.009
- Denson, T. F., Lickel, B., Curtis, M., Stenstrom, D. M., & Ames, D. R. (2006). The roles of entitativity and essentiality in judgments of collective responsibility. *Group Processes & Intergroup Relations*, *9*(1), 45–61.
- Dimmock, J. A., Grove, J. R., & Eklund, R. C. (2005). Reconceptualizing team identification: new dimensions and their relationship to intergroup bias. *Group Dynamics: Theory, Research, & Practice*, *9*(2), 75–86. doi:10.1037/1089-2699.9.2.75
- Dion, K. L. (2000). Group cohesion: From 'field of forces' to multidimensional construct. *Group Dynamics: Theory, Research and Practice*, *4*, 7–20. doi:10.1037/1089-2699.4.1.7
- Dunlop, W. L., Falk, C. F., & Beauchamp, M. R. (2012, October 29). How dynamic are exercise group dynamics? Examining changes in cohesion within class-based exercise programs. *Health Psychology*. Advance online publication. doi:10.1037/a0030412
- Eitzen, D. S. (1973). The effect of group structure on the success of athletic teams. *International Review for the Sociology of Sport*, *8*(1), 7–17. doi:10.1177/101269027300800102
- Estabrooks, P. A., & Carron, A. V. (2000). The Physical Activity Group Environment Questionnaire: An instrument for the assessment of cohesion in exercise classes. *Group Dynamics: Theory, Research and Practice*, *4*, 230–243. doi:10.1037/1089-2699.4.3.230
- Eys, M. A., & Carron, A. V. (2001). Role ambiguity, task cohesion, and task self-efficacy. *Small Group Research*, *32*, 356–372. doi:10.1177/104649640103200305
- Eys, M. A., Carron, A. V., Beauchamp, M. R., & Bray, S. R. (2005). Athletes' perceptions of the sources of role ambiguity. *Small Group Research*, *36*, 383–403. doi:10.1177/1046496404268533
- Eys, M., Carron, A., Bray, S., & Beauchamp, M. (2003). Role ambiguity and athlete satisfaction. *Journal of Sports Sciences*, *21*, 391–401. doi:10.1080/0264041031000071137

- Eys, M. A., Loughhead, T. M., Bray, S. R., & Carron, A. V. (2009). Development of a cohesion questionnaire for youth: The Youth Sport Environment Questionnaire. *Journal of Sport & Exercise Psychology, 31*, 390–408.
- Eys, M. A., Ohlert, J., Evans, B., Wolf, S., Martin, L. J., & VanBussel, M. (2014). *Cohesion in female and male sport teams*. Manuscript submitted for publication.
- Farrell, M. P., Schmitt, M. H., & Heinemann, G. D. (2001). Informal roles and the stages of interdisciplinary team development. *Journal of Interprofessional Care, 15*, 281–295. doi:10.1080/13561820120068980
- Fletcher, D., & Hanton, S. (2003). Sources of organizational stress in elite sports performers. *The Sport Psychologist, 17*, 175–195.
- Fletcher, D., & Wagstaff, C. (2009). Organizational psychology in elite sport: Its emergence, application, and future. *Psychology of Sport and Exercise, 10*, 427–434. doi:10.1016/j.psychsport.2009.03.009
- Gaertner, L., Iuzzini, J., & O'Mara, E. M. (2008). When rejection by one fosters aggression against many: Multiple-victim aggression as a consequence of social rejection and perceived groupness. *Journal of Experimental Social Psychology, 44*, 958–970. doi:10.1016/j.jesp.2008.02.004
- Hamilton, D. L. (2007). Understanding the complexities of group perception: Broadening the domain. *European Journal of Social Psychology, 37*, 1077–1101. doi:10.1002/ejsp.436
- Henrich, C. C., Kuperminc, G. P., Sack, A., Blatt, S. J., & Leadbeater, B. J. (2000). Characteristics and homogeneity of early adolescent friendship groups: A comparison of male and female clique and nonclique members. *Applied Developmental Science, 4*, 15–26. doi:10.1207/S1532480XADS0401_2
- Heuzé, J., & Fontayne, P. (2002). Questionnaire sur l'Ambiance du Groupe: A French-language instrument for measuring group cohesion. *Journal of Sport & Exercise Psychology, 24*, 42–67.
- Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review, 5*, 184–200. doi:10.1207/S15327957PSPR0503_1
- Hogg, M. A. (2006). Social identity theory. In P. J. Burke (Ed.), *Contemporary Social Psychological Theories* (pp. 111–136). Stanford, CA: Stanford University Press.
- Holt, N. L., Knight, C. J., & Zukiwski, P. (2012). Female athletes' perceptions of teammate conflict in sport: Implications for sport psychology consultants. *The Sport Psychologist, 26*, 135–154.
- Ip, G. W., Chiu, C., & Wan, C. (2006). Birds of a feather and birds flocking together: Physical versus behavioral cues may lead to trait- versus goal-based group perception. *Journal of Personality and Social Psychology, 90*, 368–381. doi:10.1037/0022-3514.90.3.368
- Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly, 40*, 256–282. doi:10.2307/2393638
- Jehn, K. A. (1997). A qualitative analysis of conflict types and dimensions in organizational groups. *Administrative Science Quarterly, 42*, 530–557. doi:10.2307/2393737
- Jung, C. G. (1921/1971). Psychological types (H. G. Baynes, Trans., R. F. C. Hull, Trans.). In *The collected works of C.G. Jung* (Vol. 6, pp. 1–495). Princeton, NJ: Princeton University Press. (Original work published 1921).
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Occupational stress: Studies in role conflict and role ambiguity*. New York, NY: Wiley.
- Kleinert, J., Ohlert, J., Carron, A., Eys, M., Feltz, D., Linz, L., ... Sulprizio, M. (2012). Group dynamics in sports: An overview and recommendations on diagnostic and intervention. *The Sport Psychologist, 26*, 412–434.
- Lembke, S., & Wilson, G. M. (1998). Putting the 'team' into teamwork: Alternative theoretical contributions for contemporary management practice. *Human Relations, 51*, 927–944.
- Mabry, E. A., & Barnes, R. E. (1980). *The dynamics of small group communication*. Englewood Cliffs, NJ: Prentice Hall.
- Martin, L. J., & Beauchamp, M. R. (2014). Conflict in sport. In R. C. Ecklund & G. Tenenbaum (Eds.), *Encyclopedia of sport and exercise psychology*. Thousand Oaks, CA: Sage.
- Martin, L. J., Carron, A. V., Eys, M. A., & Loughhead, T. M. (2012). Development of a cohesion inventory for children's sport teams. *Group Dynamics: Theory, Research, and Practice, 16*, 68–79. doi:10.1037/a0024691
- McGrath, J. E. (1984). *Groups: Interaction and performance*. Englewood Cliffs, N.J.: Prentice-Hall.
- Mellalieu, S. D., & Juniper, S. W. (2006). A qualitative investigation into experiences of the role episode in soccer. *The Sport Psychologist, 20*, 399–418.

- Mellalieu, S. D., Sheare, D. A., & Shearer, C. (2013). A preliminary survey of interpersonal conflict at major games and championships. *The Sport Psychologist*, *27*, 120–129.
- Meneses, R., Ortega, R., Navarro, J., & de Quijano, S. D. (2008). Criteria for assessing the level of group development (LGD) of work groups: Groupness, entitativity, and groupality as theoretical perspectives. *Small Group Research*, *39*, 492–514. doi:[10.1177/1046496408319787](https://doi.org/10.1177/1046496408319787)
- Murrell, A. J., & Gaertner, S. L. (1992). Cohesion and sport team effectiveness: The benefit of a common group identity. *Journal of Sport & Social Issues*, *16*(1), 1–14. doi:[10.1177/019372359201600101](https://doi.org/10.1177/019372359201600101)
- Paradis, K. F., Carron, A. V., & Martin, L. J. (2014). *Athlete perceptions of intragroup conflict in sport*. Manuscript submitted for publication.
- Priebe, C. S., Spink, K. S., & DeRoo, T. (2011). An exploratory study examining groupness, cohesion and satisfaction in an exercise setting. *Journal of Sport & Exercise Psychology*, *33*, S179–180.
- Reid, C., Stewart, E., & Thorne, G. (2004). Multidisciplinary sport science teams in elite sport: Comprehensive servicing or conflict and confusion? *The Sport Psychologist*, *18*, 204–217.
- Rubin, M., & Hewstone, M. (1998). Social Identity Theory's self-esteem hypothesis: A review and some suggestions for clarification. *Personality and Social Psychology Review*, *2*(1), 40–62. doi:[10.1207/s15327957pspr0201_3](https://doi.org/10.1207/s15327957pspr0201_3)
- Ryska, T. A., Yin, Z., Cooley, D., & Ginn, R. (1999). Developing team cohesion: A comparison of cognitive behavioral strategies of U.S. and Australian sport coaches. *The Journal of Psychology*, *133*, 523–539. doi:[10.1080/00223989909599760](https://doi.org/10.1080/00223989909599760)
- Salari, S., Brown, B. B., & Eaton, J. (2006). Conflicts, friendship cliques and territorial displays in senior center environments. *Journal of Aging Studies*, *20*, 237–252. doi:[10.1016/j.jaging.2005.09.004](https://doi.org/10.1016/j.jaging.2005.09.004)
- Shaw, M. E. (1981). *Group dynamics: The psychology of small group behavior* (3rd ed.). New York, NY: McGraw-Hill.
- Spears, R., Doosje, B., & Ellemers, N. (1999). Commitment and the context of social perception. In N. Ellemers, R. Spears, & B. Boosje (Eds.), *Social identity: Context, commitment, content* (pp. 59–83). Oxford: Blackwell.
- Spencer-Rodgers, J., Hamilton, D. L., & Sherman, S. J. (2007). The central role of entitativity in stereotypes of social categories and task groups. *Journal of Personality and Social Psychology*, *92*, 369–388. doi:[10.1037/0022-3514.92.3.369](https://doi.org/10.1037/0022-3514.92.3.369)
- Spink, K. S. (2011). Group cohesion in sport and exercise. In P. Crocker (Ed.), *Sport and Exercise Psychology* (pp. 166–195). Toronto, ON: Pearson Canada.
- Spink, K. S., & Carron, A. V. (1993). The effects of team building on the adherence patterns of female exercise participants. *Journal of Sport & Exercise Psychology*, *15*, 39–49.
- Spink, K. S., Wilson, K. S., Priebe, C. S. (2010). Groupness and adherence in structured exercise settings. *Group Dynamics: Theory, Research, and Practice*, *14*, 163–173. doi:[10.1037/a0017596](https://doi.org/10.1037/a0017596)
- Sullivan, P. J., & Feltz, D. L. (2001). The relationship between intra-team conflict and cohesion in hockey teams. *Small Group Research*, *32*, 342–355. doi:[10.1177/104649640103200304](https://doi.org/10.1177/104649640103200304)
- Sullivan, P. J., Short, S. E., & Cramer, K. M. (2002). Confirmatory factor analysis of the group environment questionnaire with co-acting sports. *Perceptual and Motor Skills*, *94*, 341–347. doi:[10.2466/pms.2002.94.1.341](https://doi.org/10.2466/pms.2002.94.1.341)
- Surya, M. W. (2012). *Athletes' perceptions of role satisfaction* (Unpublished master's thesis). Wilfrid Laurier University, Waterloo, Ontario, Canada.
- Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology*. Cambridge: Cambridge University Press.
- Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W. G. W. Austin (Ed.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks-Cole.
- Tauber, S., & Sassenberg, K. (2012). The impact of identification on adherence to group norms in team sports: Who is going the extra mile? *Group Dynamics: Theory, Research, and Practice*, *16*, 231–240. doi:[10.1037/a0028377](https://doi.org/10.1037/a0028377)
- Ulvick, J. D., Crozier, A. J., Spink, K. S., Wilson, K. S., & Priebe, C. S. (2012). Understanding groupness: Exploring the effects of perceived cohesion and similarity. *Journal of Sport & Exercise Psychology*, *34*, S295.
- Wagstaff, C., Fletcher, D., & Hanton, S. (2012). Positive organizational psychology in sport: An ethnography of organizational functioning in a national sport organization. *Journal of Applied Sport Psychology*, *24*, 26–47. doi:[10.1080/10413200.2011.589423](https://doi.org/10.1080/10413200.2011.589423)

- Wagstaff, C. R. D., Hanton, S., & Fletcher, D. (2013). Developing emotion abilities and regulation strategies in a sport organization: An action research intervention. *Psychology of Sport and Exercise, 14*, 476–487. doi:[10.1016/j.psychsport.2013.01.006](https://doi.org/10.1016/j.psychsport.2013.01.006)
- Wann, D. L. (2006). Understanding the positive social psychological benefits of sport team identification: The team identification-Social Psychological Health Model. *Group Dynamics Theory, Research and Practice, 10*, 272–296. doi:[10.1037/1089-2699.10.4.272](https://doi.org/10.1037/1089-2699.10.4.272)
- Wann, D. L., Hunter, J. L., Ryan, J. A., & Wright, L. A. (2001). The relationship between team identification and willingness of sport fans to consider illegally assisting their team. *Social, Behavior and Personality, 29*, 531–536. doi:[10.2224/sbp.2001.29.6.531](https://doi.org/10.2224/sbp.2001.29.6.531)
- Watson, J. D., Martin Ginis, K. A., & Spink, K. S. (2004). Team building in an exercise class for the elderly. *Activities, Adaptation & Aging, 28*(3), 35–47. doi:[10.1300/J016v28n03_03](https://doi.org/10.1300/J016v28n03_03)
- Zander, A. (1982). *Making groups effective*. San Francisco, CA: Jossey-Bass.
- Zucchermaglio, C. (2005). Who wins and who loses: The rhetorical manipulation of social identities in a soccer team. *Group Dynamics: Theory, Research, and Practice, 9*, 219–238. doi:[10.1037/1089-2699.9.4.219](https://doi.org/10.1037/1089-2699.9.4.219)