

Chapter 26

Group Dynamics in Sport

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Chapter Overview

Small groups like teams, training groups, and physical education classes are nearly inseparable from sport, so they have the potential to determine how young people and adults experience sport. This chapter will introduce you to some of the fundamental concepts related to group dynamics in sport. The chapter will first discuss definitional characteristics of groups and the universality of groups, and then will explore how individual members can influence their groups, as well as how individuals are impacted by group-related factors (e.g., group cohesion, role structures). The chapter will also describe team development intervention strategies that can promote group success and enhance members' experiences. In each section, we will discuss selected research findings involving groups in sport as well as in other settings while also addressing how these findings might inform the efforts of coaches, programs, and athletes in terms of enhancing their groups. Through this chapter, you will develop an appreciation of the complexity of groups and learn about the various factors that can positively and negatively influence how groups function.

Group Dynamics in Sport

Groups are widespread throughout life and group memberships strongly influence individuals (Forsyth, 2018). Humans are innately social beings and seek out group memberships for various reasons, including fulfilling an embedded human need to belong, accessing social networks, or even enjoying activities like sport (Baumeister & Leary, 1995). Groups are so important that we experience psychological benefits when we belong to groups. Simply the act of identifying with a group (i.e., belonging to one or more social groups that are important for one's sense of self) delivers a sense of meaning and purpose to people (Haslam et al., 2009).

The pervasiveness and importance of groups translate to sport settings, to the extent that groups often characterize the experience of sport. Next time you attend or watch a sport event, observe the many types of groups that are evident. At a competitive youth soccer (football) game, for instance, athletes form separate teams that compete against one another, parents cluster together to the side of the pitch, and officials work collectively as a small group. We reinforce these groups by creating barriers to become a member (e.g., fee to be involved, tryouts), and then we bind members through special colors and team names, as well as by constructing norms that lay out what is expected from members. In many of these cases, individuals with different personalities and characteristics come together to form a group, develop a collective identity, and collate their efforts to achieve shared goals.

Sport is an especially rich environment to study group dynamics because teams and clubs possess many of the characteristics required for defining a collective as a group. Forsyth (2018) defined groups as collections of “two or more individuals who are connected by and within social relationships” (p. 3) and discussed several characteristics that underlie groups. According to Forsyth, group members:

1. Share instrumental goals (e.g., winning a competition).
2. Constantly interact with one another. In sport, athletes often stay together as a team and interact with one another throughout a season or across years.
3. Depend on one another for task achievements. In sport, members often rely on one another to perform.
4. Are embedded within a social structure that consists of norms and roles.
5. Collectively identify as a distinct entity from other groups.

Because these characteristics are apparent in many of the groups that emerge in sport, it is evident that: (a) considering group-related aspects is important for understanding and enhancing individuals' sport experiences, and (b) sport can be a powerful setting to learn about groups in ways that translate to other settings like workplace, classrooms, and health promotion interventions. The following sections explore some fundamental concepts and how they have helped advance our understanding of sport groups. Then, some of the key considerations pertaining to developing effective groups will be provided, including practical suggestions that can help enhance groups.

Inputs and Interactions that Comprise Group Dynamics

Various group components interact with one another to influence the success and maintenance of groups. Broadly, these components can be divided into group *inputs* and member *interactions* (Carron & Eys, 2012). Inputs include members' attributes and groups' structural designs that collectively “make up” and organize groups. These inputs then shape within-group processes and members' feelings and thoughts about their groups that emerge over time. It is anticipated that these processes and emergent states represent how members interact and ultimately determine what groups achieve and what the members gain from their membership. It is important to note that these components influence one another. For example, while it is natural to think about how inputs shape member interactions, the interactions can also induce changes in group member compositions or structures. In this section, some

of the key concepts related to each group component will be discussed in detail.

Group Member Attributes

If you recall the sport teams you may have belonged to, you will quickly recognize that every team is composed of members with diverse individual characteristics. Such characteristics can include things like members' age, gender, ethnicity, personality, and attitudes, and can be broadly referred to as their *attributes*, which represent a type of a group input. Effectively integrating the collection of individuals who possess diverse attributes is the essence of group success. When researchers or consultants try to measure the composition of members' attributes in a group, they can use many different methods. The simplest is to identify the overall group mean as a way to reveal whether the group members are "high" or "low" on given attributes as a whole. However, alternative approaches exist, including efforts to identify the dispersion of attributes (i.e., how different or similar are members on given attributes?) or the minimum/maximum score (i.e., what is the lowest or highest score on given attributes?).

Whereas sport researchers have conducted few studies that focused on group composition and member attributes, much of our understanding comes from researchers studying student project groups and workplace groups (Hardy et al., 2020). In these settings, one of the most researched member attributes is member personality. This body of research used the five-factor model proposed by McCrae and Costa (1987) as the conceptual basis, which asserts that there are five global personality dimensions. These dimensions include *openness to experience* (i.e., how much one prefers or seeks new experiences/perspectives), *conscientiousness* (i.e., how diligent and reliable one is), *extraversion* (i.e., how outgoing and sociable one is), *agreeableness* (i.e., how sympathetic and cooperative one is), and *neuroticism* (i.e., how emotionally unstable one is; often used interchangeably with *emotional instability*). Several interesting findings can be drawn from the studies examining member personality composition. In more successful groups, members tend to be more agreeable and conscientious on average (i.e., higher group mean), and most members share these traits (i.e., lower dispersion; Peeters et al., 2006; Prewett et al., 2009). There is also some evidence that groups may benefit from having members who are more extraverted and emotionally stable on average (Prewett et al., 2009). The findings regarding extraversion were nevertheless more mixed in contrast to the other traits, but some researchers found that greater variability in extraversion could be beneficial within teams (Prewett et al., 2018). This suggests that a balanced mix of extraverts and introverts may be beneficial for teams, perhaps because these traits are complementary. It is intuitive that teams might face drawbacks when members are highly introverted or extraverted. For example, teams with predominantly extraverted members may experience conflicts because every member wishes to speak up and take on leadership roles, whereas more introverted teams may suffer because members engage in less communication and interactions that are pillars of effective teamwork.

As an additional finding regarding personality from other group settings, minimum scores on traits such as agreeableness and conscientiousness can relate to team success (Prewett et al., 2009). In other words, having even a single member with noticeably low agreeableness and/or conscientiousness scores may negatively impact the team. This is comparable to the idea of "one bad apple spoiling the whole bunch". Though there is currently limited research examining personality composition of sport teams, these studies hint at the possibility that athlete personality traits can significantly impact the team.

In addition to personality, members' cultural backgrounds are an important consideration. In today's societies, culturally diverse sport teams are very common. As one illustrative example, Tottenham Hotspur Football Club's Men's First Team squad in the English Premier League during the 2019-2020 season included various players whose skin colors were visibly different. The complexity of the cultural diversity within this team can be further appreciated considering that the players'

nationalities included France, Belgium, Colombia, South Korea, England, Argentina, Netherlands, Ivory Coast, Brazil, Wales, and Portugal (ESPN, n.d.).



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There are two major schools of thought on how cultural diversity may impact group functioning. On the one hand, *social identity theory* posits that individuals are naturally attracted towards others who are perceived to be similar (Tajfel, 1982). This identification school of thought suggests that culturally diverse groups may be more prone to conflicts and social division within the group and thus perform less effectively than culturally homogenous groups. On the other hand, researchers adopting an *information processing perspective* believe that more culturally diverse groups have more variety of resources and information available, and thus perform better than culturally homogenous groups (Mannix & Neale, 2005).

Advancing from these theoretical foundations, researchers provided evidence of both negative (e.g., Haas & Nüesch, 2012) and positive (e.g., Kearney & Gebert, 2009) effects of cultural diversity. Offering some explanation for such mixed findings, Stahl et al. (2010) demonstrated that the impact of cultural diversity on group outcomes depended on various contextual factors such as task complexity, group size, and team tenure (i.e., amount of time spent together as a team). For instance, it is possible that diverse cultural backgrounds will have unique effects on how members interact when a group is first assembled, compared to the effects of diversity on how groups emerge across months or years.

Given the salience of diverse cultures, there is some emerging research that has examined related topics in sport. For example, Schinke et al. (2013) suggested that social support from teammates and coaches is critical for helping immigrant athletes during their transition into a new community. However, sport researchers have yet to examine how cultural diversity can specifically influence sport teams. Godfrey and colleagues (2020) asserted that cultural diversity within sport teams can influence factors such as team cohesion, athlete satisfaction, member conflicts, as well as the overall team performance in a variety of positive or negative ways. For example, Godfrey and colleagues suggested that leaders of culturally diverse groups could promote more unity among members if they can find ways to recognize members' unique characteristics and celebrate diversity as something that defines

the group. Though the specific mechanisms by which cultural diversity influences sport teams are still unknown, it is clearly an important factor to consider in sport team contexts.

Group Structure

Once a group has been formed, it is necessary to create and maintain a group structure that can maximize members' abilities and strengths. In particular, successful team performance requires *chunking* the group's mission into individual tasks and assigning these tasks to each member according to their strengths and interests. A concept that helps with this process is *roles*, which can be referred to as the sets of behavioral expectations held for each member (Biddle & Thomas, 1966). Benson and colleagues (2014) classified four major types of roles that emerge within sport teams, including roles related to *specialized task* (i.e., actions directly related to team performance such as scoring goals), *auxiliary task* (i.e., supplemental actions indirectly related to team success such as supporting teammates), *social* (i.e., actions for promoting harmony and relationships among teammates), and *leadership* (i.e., actions for guiding teammates in terms of both task and social aspects) functions.

Considering that roles reflect the individual tasks that must be combined to create a successful and harmonious group, sport researchers have focused on studying how athletes perceive their roles and their feelings relating to their roles. These concepts include *role clarity* (i.e., do members understand their roles?), *efficacy* (i.e., are members confident that they possess the capabilities to execute their roles?), *satisfaction* (i.e., do members feel pleased with their roles?), and *acceptance/commitment* (i.e., are members willing to execute their roles?; Eys et al., 2014). Generally, more positive individual and team outcomes result from members who report higher scores on these role perceptions.

Among the aforementioned role perceptions, researchers have demonstrated substantial interest in role clarity, along with role ambiguity (the opposite of clarity). There is evidence that athletes who have a vague understanding of their roles tend to report lower self-efficacy and satisfaction in their group, along with weaker perceptions of team cohesion (Eys et al., 2014). Eys and colleagues (2005) surveyed competitive team sport athletes to understand the various sources of role ambiguity and found that athletes experienced greater role ambiguity if they did not: (a) understand their sport well enough to recognize how their roles affected the game, (b) ask questions to clarify potential misunderstandings, or (c) practice hard enough to learn their roles. Meanwhile, coaches produced ambiguity if they provided little communication or if they did not fully explain members' role responsibilities. Conflicting communication was also highlighted as an important factor, where two or more coaches communicate inconsistent expectations to the athletes. As for situational factors, athletes were less likely to understand their roles if they did not have role models, opportunities to practice performing their roles in competitions, or if their roles were very complex (Eys et al., 2005).

Although athletes may understand their roles, acceptance and commitment can present additional challenges. Eys and colleagues (2020) made several conceptual advances on the topic of role acceptance and commitment in sport contexts based on the literature within the organizational psychology discipline (i.e., study of industry groups/organizations; e.g., Klein et al., 2012). They defined role commitment as the "dynamic and volitional psychological bond reflected in the dedication to and responsibility for one's role" (p. 91) and identified three antecedent bases of role commitment: *affective*, *normative*, and *continuance* perceptions (Eys et al., 2020). These bases can roughly be reflected as the "I want to...", "I ought to...", and "I have to..." types of perceptions, respectively. For example, athletes are likely to commit to their roles if they are assigned glamorous roles such as the team's main scorer, because they simply like the roles (i.e., affective base). However, those who are assigned less desirable roles (e.g., substitute or practice players) may still commit to them because there is a strong team norm to be a team player (i.e., normative base) or because they would like to remain as a member of their team (i.e., continuance base).

Box 26.1

Informal Roles

We often focus on *formal* roles that are essentially assigned by coaches, such as strikers in soccer, guards in basketball, bowlers in cricket, or team captains (i.e., formal athlete leaders). However, many sport teams also have *informal* roles, which develop more naturally without coaches' formal delegation of responsibilities. Cope and colleagues (2011) read and analyzed articles from the *Sports Illustrated* magazines and identified 12 informal roles that may be relevant in sport teams:

- *Comedian*: Someone who consistently uses humor to amuse others.
- *Spark plug*: Someone who fires up teammates through inspirational actions/words.
- *Enforcer*: Someone who is trusted to protect teammates by fighting back when the opponent team uses aggressive tactics.
- *Mentor*: Someone who guides other members with their knowledge and experiences.
- *Informal leader-nonverbal*: Someone who leads other members through actions without verbal commands.
- *Informal leader-verbal*: Someone who leads other members by being outspoken and by giving verbal directions.
- *Team player*: Someone who makes sacrifices for the team and places their team's and teammates' needs before their own.
- *Star player*: Someone who stands out with exceptional personality or performance.
- *Social convener*: Someone who organizes gatherings for members to socialize.
- *Cancer/bad apple*: Someone who spreads negativity throughout the team.
- *Distracter*: Someone who disturbs teammates' focus during important tasks (e.g., training, competition).
- *Malingerer*: Someone who constantly feigns and/or exaggerates injuries for benefits such as drawing sympathy or gaining access to therapies.

Increasing amount of research has documented how these roles emerge and impact the team. For example, informal leaders are known to serve important task, social, motivational, and external functions in sport teams (Cotterill & Fransen, 2016; also see Chapter 25; Cotterill & Fransen, 2021). Other roles such as team comedians, enforcers, cancers/bad apples, and distracters have been suggested to influence the team's cohesion and overall integration (Cope et al., 2011; Kim, Godfrey, & Eys, 2020; Leggat et al., 2020). In terms of how they emerge, athletes who are more extraverted may be more likely to emerge as the team comedians and athletes who are less conscientious may emerge as the team distracters (Kim, Godfrey, & Eys, 2020). In addition to personality, external factors like the team environment can lead to the emergence of certain informal roles (Kim, Coleman, et al., 2020). Because these roles can emerge rapidly and have a big impact, it may be beneficial to encourage individuals to fulfill positive informal role functions and/or to recognize someone who does (e.g., acting as a spark plug or informal leader).

What types of informal roles do (did) you see on your team? How do you think they emerge(d) and influence(d) the team?

When people think of sport teams, it is common for them to focus on team sports where successful team performance depends heavily on the coordination of all members' efforts. However, individual sports also tend to happen in groups. For example, athletes participating in sports such as track and field, swimming, wrestling, and badminton commonly belong to a school team or a sport club where they train with other members and often compete for team-level goals (i.e., conference championships). Individual sports also often include events where members have to work together in ways that resemble team sport, such as relays or doubles tennis. Evans and colleagues (2012) identified six types of sport teams, based on the varying degrees of structural interdependence. Two of the six types can be observed in team sports. In *integrated* teams, all members must coordinate their efforts simultaneously (e.g., basketball, rowing). In *segregated* teams, members compete together but their actions may not always occur at the same time (e.g., baseball). In both types, members must interact with one another (Evans et al., 2012).

The remaining four types of teams can be observed in prototypical individual sports, where there is no clear group task requiring all members to work together interdependently (Evans et al., 2012). A *collective* team involves members competing against one another but also for a team outcome (e.g., members of a golf team compete in a tournament that has both individual and team standings). A *cooperative* team involves members competing separately from teammates but contributing to an overall team goal (e.g., members of a wrestling team compete in different weight groups and contribute to an overall team score). A *concurrent* team involves members competing against one another without a team goal (e.g., members of a tennis team may train together but compete in an individual tournament that does not consider team standings). Finally, in an *independent* team, members do not compete against one another and there is no team goal, though they may identify as a group (e.g., a team of speed skaters compete in different events; Evans et al., 2012). Considering this spectrum of team types, it is evident that individual sport team members can still experience connection. Furthermore, when members do experience interdependence with one another, their group becomes more salient and teammates can influence one another in meaningful ways (Evans et al., 2013).



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As we have discussed, groups are salient across various types of sport environments, even in those sports that are often considered individual. The salience of groups can be further appreciated when one considers that there are “groups within groups”, often referred to as *subgroups*. The term *cliques* is also used to refer to subgroups that are thought to be detrimental to the group. Subgroups have three defining features: The collection of individuals (1) belongs to a bigger total group, (2) has formed reciprocating relationships among them, and (3) can be distinguished from the rest of the group (Martin, 2020). Researchers have discussed several mechanisms by which subgroups may form. Among them, *faultline theory* suggests that there are unobservable dividing lines in a group due to the various member attributes (Lau & Murnighan, 1998), and uses the analogy of geologic faultlines that are difficult to observe but that divide up the earth’s surface. For example, group members may interact more frequently with members who share similarity in age or cultural backgrounds.

Though research focusing on subgroups/cliques in sport is still in its infancy, studies have gathered important insights from interviews with coaches and athletes (Martin et al., 2015, 2016; Wagstaff et al., 2017). Supporting the faultline theory, coaches and athletes across the studies indicated that certain members naturally gravitated towards one another because they lived together or because they were in the same cohort (e.g., first-year athletes), or due to the similarity in age, personalities, interests, and skill levels. Coaches and athletes also asserted that subgroups are inevitable, and that they are not inherently detrimental to the team because they have consequences that are both positive (e.g., sense of inclusion) and negative (e.g., conflicts). Thus, effective management of subgroups first requires the coaches to engage in ongoing communications with various team members (e.g., athletes, other coaches, trainers) to closely observe member relationships, which can help differentiate positive (or neutral) subgroups from detrimental cliques. Coaches may also benefit from: (a) establishing norms and values that promote unity regardless of subgroup membership, (b) enhancing the members’ understanding of other members’ personality traits and values, and (c) organizing authentic, inclusive team gatherings as opposed to relying on casual team outings that may exclude certain members.

Group Processes

We have so far discussed concepts related to the group member attributes and structures, which pertain to the inputs that provide the foundation of group development and functioning. However, even though the leader has organized these inputs effectively, it cannot be assumed that the group will operate smoothly on an “auto-pilot” mode. Rather, leaders and members must continuously ensure that they engage in effective interactions and group processes that will ultimately determine the team’s success.

To gather a sense of the intricacy within group processes, consider that a group of only 15 members represents over a hundred pairings between teammates, which is a pile of individual relationships! It is perhaps unsurprising that researchers have identified numerous constructs for measuring how members work together. As one key example of this, researchers have attempted to comprehensively unpack the concept of *teamwork* by trying to document the components required to efficiently work together as a group. McEwan and colleagues (McEwan & Beauchamp, 2014; McEwan et al., 2018) specifically described four phases of effective team performance regulation, each of which includes several components. During the *preparation* phase, members identify the team’s overall mission, specific goals, and plans to achieve such goals. Then, during the *execution* phase, members enact their plans by coordinating their efforts as well as by cooperating and communicating with one another. During the *evaluation* phase, members monitor themselves to ensure that they are following through on their plans and identify areas for improvement. Finally, during the *adjustments* phase, members modify their plans as necessary, which can involve brainstorming innovative solutions, as well as providing feedback and social support to one another. Through iterative processes involving preparation, execution, evaluation, and adjustment, teams can maximize their chance of overall success

and positive individual member experiences.

Early research on the topic of group processes focused on understanding why groups often perform below their full potential. In his conceptual model, Ivan Steiner (1972) asserted that a group's actual productivity can be represented as the difference between the group's *potential productivity* and *process losses* due to various errors. A group's potential productivity represents the best possible scenario, where highly skilled and talented members exert maximum efforts and are able to integrate their efforts flawlessly as a group. However, the group's actual productivity is often less than the group's potential productivity due to various process errors.

One of the earliest illustrating examples of this reduced group productivity was demonstrated by Ringelmann, whose work originally focused on performance efficiency in agricultural contexts (Kravitz & Martin, 1986). Ringelmann noted that workers' individual performance on a rope-pulling task decreased as the group size increased. Specifically, if individual performance is expressed as 1 when a worker is pulling the rope alone, the overall group output should theoretically increase by 1 unit each time a new worker is added. However, the workers' collective performance was recorded at 1.86 for two members, 2.55 for three members, and down to 3.92 for eight members. This means that each member was only contributing 49% of their potential productivity in the largest group, which included eight members! This interesting phenomenon has come to be known as the *Ringelmann effect* (Kravitz & Martin, 1986). Contemporary scholars assert that this effect is comprised of coordination losses (i.e., members of larger groups experiencing greater difficulties to cooperate compared to smaller groups) and motivation losses (i.e., members reducing their effort when they know there are others contributing to pulling).

This example provides a simple illustration of process losses that can reduce overall group productivity. However, most sport situations are much more complex than rope-pulling, and thus theorists have created their own conceptual models to consider process losses in sport contexts specifically. In terms of coordination, Eccles (2010) explained that athletes must align three elements to achieve optimal teamwork: *action type*, *timing*, and *location*. For example, in basketball, if a point guard with the ball dribble-penetrates through the opponent team's defense and moves closer to the basket, this may attract multiple defenders to the basket, creating an open space outside the three-point line. The team's shooting guard then could recognize this and position themselves into this open space, which can allow the point guard to pass the ball to the shooting guard who then can take a three-point attempt without the presence of the opponent team's defenders. In this example, it is apparent that all three components of coordination are present: The point guard dribble-penetrates and subsequently passes the ball to the shooting guard (*action type*), who must move (*action type*) into the open space (*location*) as soon as the point guard attracts the opponent defenders (*timing*).

Considering the importance and the complexity of coordination in sport teams, a logical question that follows is, "how does a team achieve coordination?". A relevant psychological concept is *shared knowledge*, meaning that team members must have a common understanding of the task at hand to be able to coordinate their actions (Cannon-Bowers et al., 1993; Eccles, 2010). Eccles (2010) asserted that team members can develop shared knowledge naturally through experience (*incidentally shared knowledge*) and/or through communication (*intentionally shared knowledge*). As an example of incidentally shared knowledge, defenders in soccer may learn over the years that effective defense entails avoiding large gaps where opponent team players can break through. Athletes may also incidentally learn the tendencies of their teammates over time—allowing them to anticipate one another's movements during a game. Intentionally shared knowledge develops via verbal communication and is evident when coaches verbally explain strategies to athletes or when teammates constantly exchange task-relevant information during competitions (e.g., softball outfielder yelling, "my ball!").

Teams may still fail to achieve their potential even when all members have the capacity to coordinate effectively. Specifically, motivation losses also harm group productivity because members elect not to exert their full effort. A popular concept in social psychology that exemplifies motivation losses is *social loafing*, which refers to a phenomenon where individuals reduce their effort when they are in a group context. Karau and Williams (1993) made several suggestions for reducing social loafing, which included making individual performance identifiable, providing feedback on group performance, assigning meaningful tasks, and promoting cohesiveness in the group.

Box 26.2

Köhler Effect

Though individuals may decrease their efforts in a group setting because of social loafing, an opposite effect can also occur. Otto Köhler, a psychologist from Germany, first discovered that there are circumstances where participants persisted longer on a task when they were performing in a group setting than performing individually.

Köhler effects occur commonly on tasks where group performance is complete only after the weakest member finishes the task. For instance, sport researchers have studied relay events like 4X100m track races and swimming relays, where the slowest member can have a substantial effect on the race result. Even though runners and swimmers occasionally race faster during relays than during individual races, researchers revealed that more inferior members of a given relay team raced their fastest during relays (e.g., Osborn et al., 2012). This improved performance for the weakest links in a relay team may occur because those members feel pressure to match the performance of more superior teammates, such that they do not compromise the team's overall performance. These findings suggest some practical strategies that coaches may consider for maximizing athletes' efforts. For instance, athletes may be grouped together with teammates who are moderately more skilled, and group drills can be organized such that individual performances are identifiable.



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Group States

As group members spend time together, they develop various affective and cognitive perceptions regarding the group and fellow teammates over time. Such perceptions can be referred to as *emergent states*. Group dynamics researchers have dedicated substantial attention toward studying emergent states, perhaps because (a) emergent states that are self-reported from team members tend to be easier to measure compared to behavioral processes, (b) they are more changeable compared to member attributes, and (c) optimizing emergent states can positively contribute to groups and their members. Though numerous important emergent states have been examined in the field of sport group dynamics, we will primarily focus on the concept of *group cohesion* because it was one of the first group-related constructs studied by sport researchers, and because it is the most predominant group-related perception in sport research.

Carron and colleagues (1998) defined group cohesion as an emergent state “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” (p. 213). Carron and colleagues’ work (e.g., Carron et al., 1998, 1985) has provided the foundation for research on this topic in sport contexts. They demonstrated that athletes’ perceptions of their team’s cohesion can be subdivided based on two factors: (a) whether the perceptions pertain to task-related aspects vs. social relationships in the group, as well as (b) whether the perceptions pertain to members’ personal attractions to the group vs. the group’s integration as a whole. Carron and colleagues (1998, 1985) combined these factors to create four dimensions of perceptions of cohesion, representing the degree to which an athlete (1) feels personally satisfied with their roles and contributions to the group success (*attractions to the group-task*), (2) feels connected to their teammates (*attractions to the group-social*), (3) perceives that the group is on the same page in terms of its performance goals (*group integration-task*), and (4) believes that teammate relationships are positive and strong (*group integration-social*).

Group cohesion can be viewed as a key emergent state that is associated with numerous important antecedents and outcomes, many of which have already been mentioned in this chapter. For example, research findings have demonstrated that team mean levels of extraversion and emotional stability related to social cohesion (Barrick et al., 1998) and team minimum levels of conscientiousness and agreeableness related to task cohesion (van Vianen & De Dreu, 2001). In addition to member attributes, studies have found that greater cohesion can be observed when coaches engage in democratic and supportive leadership behaviors (Shields et al., 1997), when athletes clearly understand their roles (Leo et al., 2020), and with smaller group sizes (Widmeyer et al., 1990).

Researchers have also focused on understanding the key outcomes of group cohesion. Not surprisingly, studies have linked higher group cohesion to more beneficial outcomes. As examples, athletes who perceive greater cohesion in their group are more motivated to return to their team in the future (Spink et al., 2018), develop better social skills (Bruner et al., 2014), report stronger capacity to cope with stress (Wolf et al., 2015), and are more satisfied with their sport involvement (Paradis & Loughhead, 2012). Meta-analyses also reveal that both task and social cohesion are positively related to team performance (Carron et al., 2002). Researchers have also found that the link between cohesion and performance was stronger for some teams than others. As one example, the relationship between cohesion and team performance was stronger in female teams than male teams (Carron et al., 2002).

Though it seems self-evident that cohesion is related to team performance, a more complicated question pertains to the direction of this relationship. Is it the case that more cohesive teams perform better, or is it that teams that perform better develop stronger cohesion? Both of these scenarios appear logically possible. This “chicken or the egg” question was tackled by Benson and colleagues (2016) who studied European elite youth soccer and handball teams. Benson and colleagues found the strongest evidence for the performance-to-cohesion direction. Specifically, mid-season team performance predicted cohesion perceptions later in the season, but mid-season cohesion perceptions

did not predict team performance later in the season. Although this study emphasizes the importance of focusing on previous performance as a predictor of cohesion, this does not mean that we should stop working to enhance cohesion. This is because cohesion still impacts team performance indirectly. For example, cohesion may promote teamwork behaviors such as communication or coordination. It is also important to remember that cohesion is related to other meaningful factors pertaining to the group's functioning (e.g., reduced social loafing) and individual members' experiences (e.g., greater satisfaction).

As described in the lead-in to this section, cohesion is the most commonly-studied emergent state from sport group dynamics researchers. Researchers are nevertheless increasingly recognizing the spectrum of perceptions or evaluations that athletes make about their group that are also important considerations. As such, we will conclude this section with Table 26.1, which lists several other emergent states and their implications for members and teams.



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Table 26.1*Example Emergent States Beyond Group Cohesion*

Concept	Definition	Example measure in sport	Underpinning theory and relevance	Example finding
Collective efficacy	Perceptions of our group's ability to successfully complete a task	Collective Efficacy in Sport Questionnaire (Myers et al., 2004)	Self-efficacy theory (Bandura, 1977) Peak performance entails believing that we can do it.	With professional soccer players, Leo et al. (2015) found that teams' changes in collective efficacy during a season were predicted by team conflict and cohesion.
Perceived interdependence	Beliefs about the degree to which members of our group depend on one another for tasks, outcomes, and resources	Perceived Task and Outcome Interdependence Survey (Evans & Eys, 2015)	Social interdependence theory (Deutsch, 1949) We will cooperate when we think we are "in it" together.	University athletes from individual sports reported higher interdependence perceptions with teammates when they participated in cooperative events (e.g., relays), or when they had a team score at competitions (Evans & Eys, 2015).
Social identity strength	The degree to which athletes feel that their sport team contributes to their identity	Social Identity Questionnaire for Sport (Bruner & Benson, 2018)	Social identity theory (Tajfel & Turner, 1979) Social identities benefit wellbeing, and we try to align our behaviors to match our identities.	Young athletes reported stronger identity with their team on days they experienced more prosocial behaviors from teammates (e.g., teammates gave them positive feedback; Benson & Bruner, 2018).
Groupness	Evaluations of the extent to which a collection of individuals represents a group	Spink et al.'s (2010) measure focusing on common fate, mutual benefit, social structure, group processes, and self-categorization	Group entitativity (Campbell, 1958) True groups are likely more potent than collectives that lack features of small groups.	When groupness was higher in youth sport teams, task cohesion was a stronger predictor of intentions to return to the team the next season (Spink et al., 2018).

Table 26.1 (continued)

Motivational climate	The psychological environment aimed at motivating athletes in training/competition (mastery- vs. performance-oriented)	The Perceived Motivational Climate Questionnaire (Walling et al., 1993)	Goal perspective theory (Nicholls, 1984) Two major goal states are dominant in achievement contexts: task vs. ego.	Adolescent male soccer players who perceived a mastery climate in their team reported more “sportspersonlike” behaviors with teammates and competitors (Ommundsen et al., 2003).
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Team Development

Just as sport psychologists use psychological approaches to improve experiences within sport, application seems particularly woven into the fabric of group dynamics research that often focuses on enhancing productivity in other settings like military units and surgical teams (Paradis & Martin, 2012). As such, those who study groups often develop knowledge that has direct use for coaches and athletes. Many of you may recognize strategies that athletes or coaches intuitively use to enhance groups. Perhaps you remember gatherings such as potlucks that bring teammates together or participated in team discussions about group norms. Although it is great to see team leaders implementing activities to enhance their group, researchers have produced key insights that help team leaders to more consistently produce positive team environments. For instance, Box 26.3 lists several insights about developing optimal groups drawn from the available literature. These are only a sample of take-home messages that can be integrated into a group leader's everyday actions. Sport researchers have also developed formal interventions that can be adopted within various life settings. In the next section, we identify the main approaches used to develop groups and then provide examples of team development interventions.

Team Development Intervention Approaches

Team development interventions refer to activities delivered with members of groups to improve team effectiveness. These interventions are systematically delivered by either a team leader or by a consultant (e.g., sport psychologist), using either *direct* or *indirect* approaches (Carron & Eys, 2012). Within an indirect approach, a consultant works alongside a group leader who then introduces the intervention to the team. Because the focus is on training a leader like a coach to manage the group, the consultant may never even meet all of the team members. Meanwhile, within a direct approach, a consultant is invited to work directly with the athletes and facilitates one or more team development sessions.

Team-Building

Most team development interventions within sport fall under the category of team-building. Team-building is designed to improve team effectiveness by enhancing members' perceptions of group cohesion (Brawley & Paskevich, 1997). The main idea behind team-building is that, by strengthening team members' perceptions of cohesion, you will create the foundation for members to (a) work hard toward group goals and (b) value their affiliation with the group. Although team-building tactics are often used to improve team performance, their main function is to help members bond and feel attracted to the team.

One review of 17 interventions revealed that team-building typically produces improved team performance, along with enhanced task and social cohesion, and reduced competitive anxiety (Martin et al., 2009). Importantly, Martin and colleagues advised against "one-off" sessions, as team-building interventions were more effective when delivered across two or more weeks. Clearly, team-building works.

Regarding the "working parts" of team-building, researchers have identified four approaches that are most common (Lacerenza et al., 2018). One type focuses on fostering *interpersonal relationships*, where members participate in activities that aim to strengthen social bonds or build understanding of members' values. Interpersonal relationship strategies are evident in many of the social activities that coaches intuitively use to develop teams. A second tactic is *group goal-setting*, where athletes contribute to the process of establishing collective goals and evaluating goal progress throughout the season. Although goal-setting activities might seem especially task-focused, sport-based interventions reveal that they can increase both task and social cohesion perceptions (e.g., Sénécal et

al., 2008). Third, *problem solving* involves exposing teams to a novel challenge to overcome. Often, these are challenges that a group might not normally face, such as an outing with team members to complete an obstacle course. Fourth and finally, tactics to enhance *individual role involvement* are common. These activities increase role communication among members and with coaches, with a goal of ensuring that members understand and perform their roles.

Other Team Development Categories

Although team-building is the prevailing category of team development interventions in sport, there are three additional families of interventions that group dynamics researchers have distinguished (see Lacerenza et al., 2018). Recall that team-building is designed to enhance cohesion, so the remaining families focus on goals that do not necessarily target cohesion or personal relationships. The first additional category is teamwork training and usually involves training members to efficiently coordinate their actions. Although teamwork training activities can increase cohesion, the chief focus is on ensuring that members can effectively cooperate. Leadership training is the second category and involves helping leaders to better-integrate members and create an inclusive team. Finally, team debriefing is a unique category of strategies that can help guide teammates through adaptive discussions following training sessions or performances. For instance, Martin and Eys (2019) interviewed members of an acrobatic jet team, who indicated that detailed debriefing sessions were essential after every flight. Debriefing was seen as a way to prompt individual learning and reflection, while also providing opportunities for every member to acquire a sense for the group's objectives and approaches to solve problems.

Illustrative Interventions

Examples are perhaps the best way to understand what team development involves. Below, we introduce two example team-building interventions, and one example intervention focused on teamwork training.

Carron, Spink, and Prapavessis's (1997) Team-Building Framework

Carron, Spink, and Prapavessis's (1997) framework outlines an indirect approach, in that the consultant trains coaches who then deliver activities with their teams. The defining feature of this framework is that it is delivered through coaches, who learn to brainstorm tactics to regulate their team environment.

Consultants using this framework conduct coach training across one or more workshop sessions in three stages: (a) introduction (i.e., coaches are introduced to team-building and its value), (b) conceptual (i.e., consultant explains theory regarding the different aspects of groups that can be targeted in team-building), and (c) practical (i.e., coaches brainstorm their intervention plan). During the conceptual and practical stages, coaches are trained to focus on three distinct aspects of groups. Coaches are first prompted to enhance the *group environment*, using strategies to draw members together and help members to feel distinct from other groups. Second, coaches are prompted to enhance the *team structure*, by considering activities that can help clarify roles, embed positive norms, and improve athlete leadership. Third, coaches are trained to prompt positive *team processes* by creating chances for cooperation, goal setting, and for members to make sacrifices for the team. After being educated about these aspects of team-building and brainstorming their strategies, coaches independently implement the plan throughout the season.

Box 26.3

Insights from Group Dynamics Research About Fostering Optimal Groups

1. **Team development should be deliberately implemented.** One misperception is that informal social events or cooperative activities are the primary approaches to team-building. Although informal social activities can effectively foster interpersonal relationships, a risk is that teams will feel that social activities are the *only* way to develop the team. Instead, team development is likely most effective when it targets many aspects of the group environment, and when it is carefully designed by group leaders and athletes.
2. **Strategies to develop groups should last throughout the lifespan of the group.** Another misperception is that team-building is mainly required during the early season. The early season is a critical time, but is not the only time to intervene. Group leaders may find that members waver between conflict and being closely integrated, and that the group can be negatively impacted following key events like poor performances. For instance, one study with intercollegiate athletes revealed that injuries to key players sent shockwaves throughout the team (Surya et al., 2015). Athletes described how this was a time to consolidate the team, and for the coaches to discuss how the group was expected to manage these shifts (i.e., adjusting roles).
3. **Team development starts the moment a member joins the group.** Any time that new members are introduced into a team is a time to consider the group environment. Benson and Eys (2017) specifically reported that positive perceptions like cohesion and commitment were most common in teams where: (a) coaches communicated their role expectations to each newcomer directly while sharing how the athletes could increase the scope of their role, (b) existing members were included in the steps to introduce new members (e.g., mentors), and (c) social activities were planned, and everyone could participate in them.
4. **Team development can replace hazing.** Hazing is a practice that many organizations are striving to eliminate, where more senior members demand that newcomers engage in behaviors that are often risky or embarrassing. Group leaders should consider pathways to replace the socializing functions that athletes ostensibly design hazing to serve. For instance, Johnson and Chin (2016) reported an outdoor adventure activity that teams of intercollegiate athletes completed early in the season, which was seen as a way of reducing risks of hazing in teams.
5. **Athlete leaders can take ownership.** Shared leadership is an attribute of high-performing groups (e.g., Cotterill & Fransen, 2016), whereby leadership functions are shared between coaches and athlete leaders. Athlete leaders—such as team captains—may have special value for team development because they have access to aspects of team relationships that cannot be accessed by coaches. As such, it is important for coaches to cooperate with athlete leaders when determining how they will develop an optimal group environment.
6. **Team development often involves entire organizations.** Team development is often focused on the sport team and specifically on the athletes of a given team. However, sport teams often belong to broader organizations that can include several teams, staff members, and administrative roles (e.g., intercollegiate athletics departments; professional or youth sport clubs). Fletcher and Wagstaff (2009) therefore explain that those in sport should consider how to develop the optimal organization – often borrowing strategies that are used to enhance environments in organizations outside of sport.

Personal Disclosure as Team-Building

Compared with the indirect approach of Carron and colleagues (1997), personal-disclosure mutual-sharing team-building interventions are often completed over a shorter period of time. These interventions involve consultant-led team discussions, where members share personal values/experiences or express what the given sport or team “means” for them (e.g., Barker et al., 2014; Holt & Dunn, 2006). For instance, Barker and colleagues (2014) reported on an intervention with elite adolescent cricket athletes from the United Kingdom during an overseas tour. Athletes on the touring group were oriented to the expectations for the intervention and were asked to prepare written responses to disclosure prompts (e.g., why they compete in cricket). Athletes then attended disclosure sessions during the tour where every member took turns sharing their disclosure.

These discussions can often be powerful experiences that draw members together. Along with the potential for success, disclosure sessions may feel uncomfortable for some athletes. Disclosure may also cause harm to teammate relationships or athletes’ reputation if inappropriate information is disclosed or if their disclosure is used against them. Accordingly, Holt and Dunn (2006) stress the need to carefully present the disclosure expectations (e.g., confidentiality) and to consider whether athletes will be likely to follow these expectations.

Teamwork Training

McEwan and Beauchamp (2020) developed and pilot-tested an intervention that aimed to train teammates to work together more efficiently. In this intervention, athletes received a workbook and engaged in two teamwork training sessions over a 10-week period. The teamwork training intervention sessions included group goal-setting practices alongside several types of activities designed to improve members’ skillsets and knowledge about how to cooperate (e.g., how to provide constructive feedback). Simulations were one example of an intervention activity. Athletes identified the key teamwork behaviors required for their group to perform optimally, and developed simulation activities that targeted these behaviors during a subsequent practice (i.e., scrimmages to simulate competitive environments that stressed certain components of task communication). As another example, athletes worked together to create a team charter during the second workshop session. Each team charter outlined the behaviors that members should expect from one another in terms of: (a) providing social support and (b) resolving interpersonal conflicts.

Conclusion

Many of our sport experiences occur in group contexts. In interdependent sports, we must learn to engage in effective teamwork behaviors to maximize group productivity. Group dynamics are also salient in individual sports, where members interact, train, and compete with teammates, and/or collectively contribute to an overall group achievement. In this chapter, we explored various factors and components that pertain to group member attributes, structures, processes, and states, and also described strategies for developing effective teams. Clearly, groups are complex. It is this complexity that makes it challenging for any leaders to effectively guide their team to success. However, this complexity is also what makes sport participation experiences much richer and more meaningful. Overall, groups are prevalent and influential, and thus considering the nature of groups is fundamental for researchers and practitioners alike for better understanding and enhancing people’s sport experiences.

Box 26.4**Awareness of the Group as a Component of Team Development**

Discussions of team development tend to focus on the tactics that enhance the team. Just as we need to equip leaders with the tools to develop groups, we nevertheless need to foster awareness of the team. Awareness can help group leaders identify the most ideal approaches to enhance their group: If a coach wanted to use the most relevant team development tactic, how might they know which to use? Another reason to develop awareness is that leaders who are aware of what is “going on” among members tend to act in their group’s best interest. As an example, outside of sport, school teachers who are more aware of the network of student relationships are more likely to create classrooms where peers accept one another, compared to teachers who poorly recognize peer relationships (Gest et al., 2014).

We adapted five example items from a tool developed by Bruner et al. (2020) that can help assess group development interventions and foster awareness among members. Specifically, athletes would respond by indicating the extent to which they disagree or agree with comments like:

- Role Clarity: “Team members clearly understand their role on the team.”
- Conformity to Norms: “Team members conform to the team’s established group norms (e.g., if the team prioritizes promptness, members try their hardest to be on time).”
- Cooperation: “Team members work together as a group rather than as individuals.”
- Sacrifices: “Individual team members make sacrifices to benefit the whole team (e.g., team members make sacrifices such as picking up water bottles, ensuring that the dressing room is clean, or listening to others’ warm-up music to benefit the team).”
- Communication: “All teammates interact and communicate freely with one another (e.g., the team uses lots of drills that encourage communication).” (Bruner et al., 2020, p. 69)

These items could readily be used to increase awareness of how members perceive their group. If you lead a group, consider implementing items like these to assess aspects of the group that you value. For example, you can consider including items that assess the group environment in weekly training/coaching journals – if athletes are already monitoring their training volume, why not also track perceptions of the group? To prompt willingness to disclose, coaches might also consider anonymous ways to report on the group environment or enlist an independent individual (i.e., consultant) to manage the data.

Box 26.5

Among the Key Concepts from this Chapter, Here are Several Main Takeaways from Each Section:

Member Attributes. Each group is composed of members with unique combinations of characteristics like age, gender, ethnicity, personality, and personal values. The nature of this composition can shape how members interact with one another.

Structure. Structural components include the roles and norms within the group. These can underlie member interactions because they help members anticipate actions that are expected within their group.

Process. Group processes refer to the things that members actually *do* when working together toward group and individual goals. Members must maintain effective teamwork processes (e.g., planning, coordination, communication) to maximize productivity.

Emergent States. Team members hold several important perceptions regarding the team and teammates. Group cohesion is a key emergent state that can impact individual and team outcomes, although there are several others that sport researchers examine (e.g., social identity, interdependence, collective efficacy).

Developing Teams. It is crucial for leaders and members to deliberately implement various team development techniques to enhance the group's functioning.

Learning Exercises

1. List and briefly describe the five definitional characteristics of a “group” that distinguish them from a random collection of individuals.
2. Call to mind the following three different ‘collectives of individuals’ – and for each example, explain the extent to which you feel that they feature the five ‘hallmark’ characteristics of a *group*:
 - a. a free drop-in program that meets once a week for youth to play pick-up basketball in a community gym, with a different collection of about 20 youth participants on any given week.
 - b. a figure skating club, including adolescent males and females who share the same coaches, training facilities, and logo, but who all compete in different events.
 - c. a women’s national football (soccer) team competing in the World Cup.
3. Describe the two major schools of thought that have been adopted to help explain the impact of cultural diversity on group functioning.
4. Describe the functions of each type of role in sport teams: *specialized task*, *auxiliary task*, *social*, and *leadership*.
5. What are some of the reasons an athlete could experience role ambiguity? Based on these reasons for experiencing ambiguity and the recommendations in this chapter, describe three strategies that a coach can employ to enhance their athletes’ clarity regarding their responsibilities.
6. What is the definition of role commitment, and what are its three antecedent bases?
7. What are the six types of sport teams that are classified based on the degree of structural interdependence? Name an example sport/event of each type.
8. Describe a few ways subgroups can form in a sport team and discuss how coaches/leaders can effectively manage subgroups.
9. What are the four phases of team performance regulation? Identify each phase and describe the subcomponents of each phase.
10. Briefly describe one experience where someone in a group to which you belonged was clearly engaging in social loafing. Describe how that experience made you feel, and then indicate two strategies that you learned in this chapter that you think would have reduced the extent to which that person engaged in social loafing.
11. What is the definition of group cohesion and what are its four dimensions? Create questions that can be used to ask athletes about their perceptions pertaining to each dimension.

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