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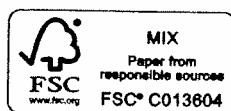
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# TEAM COHESION IN SPORT

## Critical overview and implications for team building

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### **Introduction**

Team unity or cohesion is one of the cornerstones for helping a group of athletes achieve a common goal (e.g. Pain and Harwood 2009; Yukelson 1997). In fact, empirical research has indicated that coaches feel that team cohesion is directly linked to improvements in team performance and success (Bloom *et al.* 2003; Carron *et al.* 2002a). One of the most effective ways for coaches to improve team cohesion is through the implementation of team building activities (Bloom *et al.* 2003). According to Woodcock and Francis (1994) an effective team building program can lead to the following six outcomes: (1) team leadership being coherent, visionary, and acceptable; (2) team members understanding and accepting their responsibilities and roles; (3) team members dedicating their efforts to the team's goals and objectives; (4) a positive, empowering climate surrounding the team; (5) team members making better use of their time and resources during meetings; and (6) team members being able to identify and correct team weaknesses.

Consequently, the purpose of this chapter is to critically review the area of team cohesion and team building in sport. This chapter will provide readers with an overview of cohesion research as applied to sport coaching by examining how cohesion has been conceptualized and measured, and its relationship to performance in sport. Further, this chapter will also provide a critical overview of team building research in sport and implications for team building research by examining Carron and Spink's (1993) team building model and approaches to team building. The chapter will conclude by highlighting potential future directions in the area of team building.

### **Critical overview of team cohesion research**

Cohesion has been viewed historically as the most important small group variable (Golembiewski 1962; Lott and Lott 1965). As a result, researchers have attempted to define

and operationalize the construct of cohesion. One of the first definitions of cohesion was advanced by Festinger *et al.* (1950) in their research examining group dynamics in a student housing community at the Massachusetts Institute of Technology. These researchers suggested that cohesion be viewed as 'the total field of forces that act on members to remain in the group' (164). Gross and Martin (1952) argued that the Festinger *et al.* definition emphasized individual perceptions and failed to consider the importance of the group as a totality. As a result, Gross and Martin (1952) defined cohesion as 'the resistance of a group to disruptive forces' (553). However, Mudrack (1989) noted that both the Festinger *et al.* and the Gross and Martin definitions were virtually impossible to operationalize leading to numerous inconsistencies in research findings. Another limitation of these two definitions was that they viewed cohesion as a unidimensional construct, focusing on either the individual or group orientation of cohesion (Carron *et al.* 1998). Furthermore, these unidimensional definitions of cohesion failed to distinguish between the task and social concerns of groups and their members. Given these shortcomings in trying to explain cohesion, Carron (1982) argued that a multidimensional definition of cohesion was needed that incorporated both the group/individual and task/social orientations. Consequently, Carron (1982) defined cohesion as 'a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its goals and objectives' (259). This definition was later revised by Carron *et al.* (1998) to include an affective dimension and was 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' (213). The Carron *et al.* definition is the most widely used and accepted definition of cohesion (Loughhead and Hardy 2006).

### **Conceptual model of cohesion**

Based on Carron's (1982) definition of cohesion, Carron *et al.* (1985) proposed a conceptual model of cohesion based on three fundamental assumptions from group dynamics theory. The first assumption was cohesion can be assessed through the perceptions of individual team members. That is, teammates interact with one another and experience various social situations together, leading individual team members to develop certain beliefs about their team.

The second assumption focused on the need to distinguish between the team and the individual. Thus, the cognitions that each individual team member holds about the cohesiveness of the team are related to the team as a whole, and to the degree the team satisfies personal needs and objectives. These cognitions were labelled *group integration* and *individual attractions to the group*. In particular, *group integration* reflects an individual's perceptions about the closeness, similarity, and bonding within the group as a whole, and the degree of unification of the group. In contrast, *individual attractions to the group* reflects an individual's perceptions about personal motivations acting to retain the individual in the group, and the individual's personal feelings about the group.

The third assumption distinguished between task- and social-oriented concerns of the group and its members. The *task orientation* represents a general orientation or motivation towards achieving the team's goals. Conversely, the *social orientation* represented a general orientation or motivation toward developing and maintaining social relationships and activities within the team.

Based on these three assumptions, the Carron *et al.* (1985) conceptual model of cohesion is a combination of the individual/group and task/social orientations that resulted in a four

factor conceptual model. This multidimensional model of cohesion is represented by the following four factors:

- *individual attractions to the group-task* (ATG-T)
- *individual attractions to the group-social* (ATG-S)
- *group integration-task* (GI-T)
- *group integration-social* (GI-S).

The cohesion factor of ATG-T is defined as the attractiveness of the team's task, productivity, and goals for the individual personally. The cohesion factor of ATG-S is viewed as each group member's feelings about his or her personal acceptance, and social interaction with the team. The cohesion factor of GI-T represents an individual's perceptions of the similarity, closeness, and bonding within the team as a whole around the team's task. Finally, the cohesion factor of GI-S refers to an individual's perceptions about the similarity, closeness, and bonding within the entire group as a social unit.

### ***Measurement of cohesion: the Group Environment Questionnaire***

Using the conceptual model of cohesion as a basis, Carron *et al.* (1985) then developed a measure of cohesion that incorporated these four factors (i.e. ATG-T, ATG-S, GI-T, GI-S). The result was the development of the *Group Environment Questionnaire* (GEQ), an 18-item inventory that assesses the four dimensions of cohesion. Specifically, the ATG-T scale consists of four items and an example item is: 'I am unhappy with my team's level of desire to win'. The ATG-S scale consists of five items and an example item is: 'Some of my best friends are on this team'. The GI-T scale comprises five items and an example item is: 'Our team is united in trying to reach its goals for performance'. Lastly, the GI-S scale comprises four items and an example item is: 'Members of our team would rather go out on their own than get together as a team'. All items are measured on a nine-point Likert scale anchored at the extremes of 1 (*strongly disagree*) to 9 (*strongly agree*). The GEQ is the most widely used inventory to assess cohesion in sport and has been used in many team-building studies (Prapavessis *et al.* 1996; Senécal *et al.* 2008; Stevens and Bloom 2003). One reason for its widespread use is related to the fact that this inventory has demonstrated to be a valid and reliable measure of cohesion (Carron *et al.* 1998).

### ***Cohesion and performance***

One question often asked by coaches is whether developing cohesion via team building is related to performance. Research findings have been equivocal, finding either a positive (e.g. Carron *et al.* 2002a; Tziner *et al.* 2003; Williams and Widmeyer 1991), a negative (e.g. Landers and Lueschen 1974), or no relationship (Davids and Nutter 1988) between cohesion and performance in sport. Given these mixed findings, a more systematic and objective method to summarize research in this area is by examining the results of two comprehensive meta-analyses on the cohesion-performance relationship.

The first meta-analysis was conducted by Mullen and Copper (1994) using 49 studies from a variety of sub-disciplines that included business, the military, and sport. Overall, the results revealed a small effect in that cohesion was positively related to performance. A second meta-analysis was carried out by Carron *et al.* (2002b), partly because they felt the results from Mullen and Copper were limiting given the number of sports studies sampled

was quite low (only eight of their 49 studies were in sport). Thus, Carron *et al.*'s (2002b) meta-analysis only included research examining the cohesion-performance relationship in sport. A total of 46 studies were obtained for analysis that contained data on 9,988 athletes from 1,044 sport teams. The overall result revealed a significant moderate to large ( $ES = 0.66$ ) positive relationship between cohesion and performance, indicating that higher cohesion in teams was related to better performance. Equally important, this meta-analysis also examined the influence of several variables on the cohesion-performance relationship. In particular, the authors examined how the type of cohesion, sport type, athlete gender, and competition level influenced the cohesion-performance relationship.

When examining whether the type of cohesion (ATG-T, GI-T, ATG-S, GI-S) moderated the cohesion-performance relationship, Carron *et al.* (2002b) found that both task (ATG-T, GI-T) and social (ATG-S, GI-S) cohesion were equally related to successful performance in team sports. Thus, both task and social cohesion are important for enhancing performance. In terms of sport type, the results indicated that regardless of the team sport, from interdependent (e.g. basketball, baseball) to coactive (e.g. wrestling, track and field), having strong team cohesion is positively related to performance. When gender was examined, the findings indicated that both male and female athletes benefited from being on a cohesive team since it led to better performance. However, female athletes benefited to a greater extent than male athletes. Finally, when the authors examined the level of competition, the results showed that professional, intercollegiate, high school, and recreational athletes benefited equally from being on a cohesive team. In other words, regardless of the level of competition being on a cohesive team is associated with teams that perform better.

In sum, the meta-analysis by Carron *et al.* (2002b) showed a positive relationship between being on a cohesive team and performance in sport. This relationship transcends the gender of the athlete, the type of team sport being played, is present regardless of the level of competition, and affects all types of cohesion. Given that cohesion is universally beneficial for sport performance, it is not surprising that attempts have been made to enhance cohesion and ultimately performance through team building.

### **Critical overview of team building in sport research**

Although it might be relatively easy to argue that team building is important to develop in sport teams, translating its importance into an operational definition has been a challenge for this field. Consequently, researchers have defined team building from several different perspectives (Hardy and Crace 1997). One approach defines team building as a method to help a group achieve four objectives: (1) satisfy the needs of team members; (2) increase team effectiveness; (3) improve working conditions; and (4) enhance team cohesion (Brawley and Paskevich 1997). Another approach views team building as a method of assisting a team to promote an increased sense of unity and cohesiveness and enable the team to function more smoothly and effectively (Newman 1984). A third perspective from Widmeyer and DuCharme (1997) describes team building as the process of attempting to enhance a team's locomotion as well as its maintenance. Locomotion is related to productivity or performance whereas maintenance is reflective of a team's ability to stay together or be cohesive. A final definition that has been forwarded for physical education teachers may also be applicable for coaches. According to the authors (e.g. Glover and Midura 1992; Midura and Glover 2005), team building involves intellectual, physical, and emotional problem-solving tasks and challenges, while emphasizing elements of fun, cooperation, communication, and adventure.

In sum, whatever definition is used, one thing that remains clear is the emphasis placed on enhancing a team's cohesiveness.

Given that there is no one accepted definition of team building, it is perhaps not surprising that research from this body of knowledge has yielded equivocal results. Some studies have found a positive team building-cohesion relationship (e.g. Senécal *et al.* 2008; Stevens and Bloom 2003; Voight and Callaghan 2001) while others have found no changes in perceptions of cohesion (e.g. Bloom and Stevens 2002; Prapavessis *et al.* 1996) following a team building intervention program. On the one hand, Voight and Callaghan examined the effects of a team building intervention program with elite soccer teams. The results demonstrated that the team building interventions enhanced individual and team performance, and improved team unity. Similar findings were noted by Stevens and Bloom in their investigation of the effectiveness of a multidimensional team-building intervention program (consisting of role behaviour, social support, team leadership, social interaction, and clarification of team goals) with elite softball teams. Results indicated the team-building group reported significantly higher perceptions of both task and social cohesion following the intervention compared to the control group.

On the other hand, Prapavessis *et al.* (1996) conducted a team-building intervention study with coaches who were randomly assigned to a team-building, an attention-placebo, or a control condition. Coaches in the team-building condition attended a workshop and developed team-building strategies related to the clarification of roles, leadership, team norms, and team goals that were implemented with their teams. Coaches in the attention-placebo condition were provided with information on topics such as nutrition. Perceptions of cohesion were assessed at three different times throughout the season, but no differences were found across the three conditions. Bloom and Stevens (2002) carried out an intervention study on one university equestrian team to examine whether the implementation of a team building program consisting of various topics (e.g. development of leadership, norms, and communication) would enhance perceptions of cohesion. Results revealed no significant differences in perceptions of cohesion between pre- and post-intervention.

Because empirical sport research on team building in sport is still in its infancy, a lot of information can be gleaned from examining the studies on team building in sport and particularly looking at some of the factors that may have contributed to their findings. For example, the *research design* has not always involved a control group. One study that did use a control group was Senécal and colleagues (2008) whose season-long team-building intervention program used team goal-setting with female high school basketball teams. The authors randomly assigned teams to either a team goal-setting condition or a control condition. Results revealed that levels of cohesion for athletes in the team goal-setting condition remained stable while athletes' perceptions of cohesion in the control condition decreased over the season. Without the use of a control group, these authors would have concluded that the team-building intervention had no influence on cohesion, when in fact the opposite was true. Related to that point, some studies have been limited by only using quantitative measurements. For example, while the quantitative measurement used in the Bloom and Stevens (2002) equestrian study did not find any significant differences, the qualitative portion of their study revealed improved team harmony and closeness, and improved coach-athlete and athlete-athlete relationships.

Another explanation influencing the results of previous team-building research is the *individual in charge* of implementing the team-building program. For example, Eitington (1989) noted not all coaches will be successful as the agent of change in a team-building intervention. More specifically, coaches may lack motivation, patience, commitment, and

the know-how to successfully introduce and facilitate the team building intervention (Brawley and Paskevich 1997). Moreover, the interventions may not be able to overcome the possibilities that differences may result from coaching style, performance records, and team atmosphere (Bloom and Stevens 2002).

An additional reason is the *duration* of the interventions. Several studies have assessed the effects of team building on perceptions of cohesion over a relatively short-term period, usually less than eight weeks. It has been noted that the assessment of any team-building intervention in sport should require a minimum of one full season for any meaningful, enduring changes to be validly assessed (Brawley and Paskevich 1997). In fact, Martin *et al.* (2009) found that team-building interventions lasting 20 weeks or more were the most beneficial for teams at enhancing cohesion and performance; while interventions lasting two weeks or less had no impact on the team environment.

One final explanation influencing the results of the team-building interventions has been the use of *multiple team building strategies*. While several researchers have implemented multiple intervention strategies concurrently, some researchers have implemented only one team-building intervention and assessed its influence on cohesion. In their evaluation of intervention types, Martin *et al.* (2009) found that the most effective team-building interventions focused on only one type of intervention compared to interventions that implemented multiple strategies.

## **Implications for coaching practice**

### ***A model of team building in sport***

As noted earlier in the chapter, one of the main goals of team building is to enhance team cohesion. Carron and Spink (1993) created a team-building model that focuses on the development of cohesion by manipulating the team's environment, the team's structure, and its processes (see Figure 28.1). Although there is no one formula or strategy to improve cohesion using this team building model, what follows is the rationale for having each factor in the model and examples of how coaches can impact those factors.

In terms of the team's *environment*, Carron and Spink (1993) noted that when features related to the team's immediate physical environment and/or the appearance of the actual team members are distinctive, athletes develop a stronger sense of 'we', distinguishing themselves from non-team members (i.e. 'they') more often, and ultimately developing stronger perceptions of cohesion. For example, coaches can implement strategies that involve making the team feel distinctive by using team slogans and having team apparel.

As for the team's *structure*, it is comprised of role understanding, team leadership, and team norms. Carron and Spink (1993) noted that when team members understand and accept their role within the team, team cohesiveness is enhanced. One strategy to help foster the team's structure is to clarify player roles. To achieve this, athletes say what they perceive to be their responsibilities to their teammates and the coaching staff. Following this, the coaching staff and teammates discuss the responsibilities listed by each player. The use of this strategy should be avoided if the team is not comprised of mature athletes offering a supportive environment. This approach helps clarify each player's role in front of the coaches and their teammates. A second method to enhance the team's structure is to include team leaders in team decision-making. It is hypothesized that cohesion is influenced when coaches allow for a participative style of decision-making. One example is to establish a team council allowing team leaders to bring issues forward to the coaching staff for discussion. A third method of



Team cohesion in sport

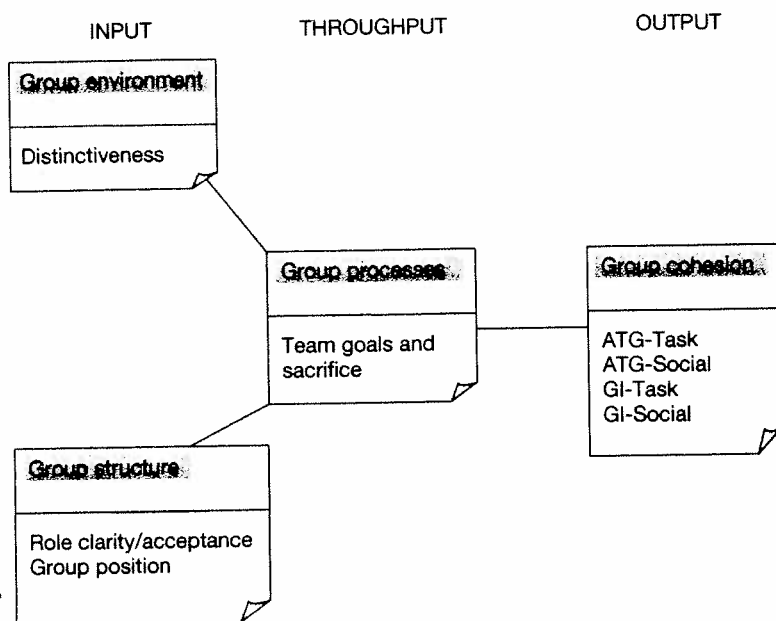


Figure 28.1: Model for team building (adapted from Carron *et al.* 1997).

impacting the team's structure is to develop team norms. Athletes who conform to the expectations of the team contribute to enhancing a team's cohesiveness. To accomplish this objective, coaches and team leaders work together to establish a behavioural code of conduct on matters that are important to team functioning. For example, team members are asked to generate a profile of how an ideal teammate would react to particular game or practice situations. The team is divided into small working groups having the same list of hypothetical but realistic situations for which they generate ideas on how the ideal teammate would react. The team then discusses and reaches a consensus as to what is acceptable and unacceptable behaviour for the situations. Upon consensus, it is agreed that this is the standard by which teammates should judge one another.

A final factor in this model is team *processes*. This involves individual sacrifices, team goals, and team cooperation. When high-status team members (e.g. team leaders) make sacrifices for the good of the team, team cohesion is enhanced. For instance, when a coach asks a team captain to 'take a player under his/her wing' whereby the team captain is responsible for integrating the new member into the team's fabric it represents a sacrifice by the team captain that is being made for the good of the team. As for team goals, involving all team members in establishing a team's collective objective will improve perceptions of team cohesion. One strategy coaches can implement is regularly scheduled team meetings to develop various team goals and objectives. For team cooperation, it is assumed that athletes displaying cooperative behaviours are superior to improving both individual and team performance, which in turn enhances team cohesion. For instance, when a coach encourages his/her veteran athletes to provide individual athletes with instruction on the skills and strategies that are beneficial for team functioning.

### **Approaches to team building**

Within the team-building literature, two general approaches have been advanced by researchers and sport psychology consultants. The first approach involves the sport psychology consultant working directly with the coaching staff. Thus, the implementation of ideas and strategies for developing a more cohesive team becomes the direct responsibility of the coaching staff in consultation with the sport psychology consultant. In essence, the sport psychology consultant works via the coach to influence team cohesiveness. Consequently, this has been termed the *indirect* approach to team building (Carron *et al.* 1997).

Carron and Spink (1993) developed a protocol for implementing an indirect approach to team building for the exercise domain, which has since been adapted for the sport environment (see Carron *et al.* 1997; Prapavessis *et al.* 1996). Their indirect approach to team building consists of four stages. The sport psychology consultant typically covers the first three stages in a workshop with the coaches. First, the *introductory stage* presents the rationale for the team-building program, and the benefits of having high team cohesion are highlighted (e.g. improved team cohesion, better team communication, enhanced role clarity). Once the benefits have been outlined, the second step presented is the *conceptual stage* where the coaches are presented with an overview of Carron and Spink's (1993) team-building protocol (see above for a complete description of the model). The goal in presenting the team building is linked to the idea that coaches will gain a greater understanding of the elements or factors that go into building a highly cohesive team. The third step is labelled the *practical stage*, which allows the coaches to brainstorm with the sport psychology consultant to identify strategies that will impact on the factors included in the team-building model. That is, specific and concrete team-building strategies are developed that focus on enhancing aspects of the team structure, team environment, and team processes. Based on the strategies developed in the previous step, the fourth and final step labelled the *intervention stage* has the coaches returning to their respective teams in order to implement the team-building strategies previously developed. Advantages to utilizing an indirect approach to team building include reduced time commitment for the sport psychology consultant as well as the application of the program when there is a geographical barrier between sport psychology consultant and the coaching staff.

The second approach to team building involves the sport psychology consultant working closely with the team and its players in a hands-on fashion. That is, athletes, coaches, and the sport psychology consultant form a partnership, working together to build a more cohesive team. This has been labelled the *direct* approach to team building where the sport psychology consultant is a direct participant in the team-building process (Carron *et al.* 1997). In addition to the consultant working directly with the team members, another difference between the two approaches is that the direct method actively includes athletes in the team-building process, thus empowering them, which in turn fosters a sense of ownership in the team-building program. Yukelson (1997) advocated this approach and reported his experiences working with sport teams at Penn State University in the United States. Yukelson's direct approach to team building consists of four stages. First, the *assessment stage* allows the consultant to gain an understanding of the existing team dynamics. Observation and discussion with team members, coaches, and support staff helps to achieve this end. Second, the *education stage* presents an overview of the nature of groups. This could include discussion of Tuckman's (1965) model of group development (i.e. forming, storming, norming, and performing). Third, the *brainstorming stage* involves the identification of areas for

improvement. And fourth, the *implementation stage* consists of applying tailored team-building strategies that were generated in the previous stage. Advantages of the direct approach to team building include the active attempt to empower team members throughout the process, the ability to purposely shape the team-building program to the needs of the team as well as allowing the sport psychology consultant to lead team sessions.

This begs the question as to which team-building approach, indirect or direct, is best for enhancing team cohesion. Based on results of a recent meta-analysis examining team building in sport (Martin *et al.* 2009), the answer is both are equally effective in enhancing team cohesion. In fact, Loughhead and Hardy (2006) suggested that a mixed-method approach containing elements from both the indirect and direct approaches to team building may be useful to coaches and sport psychology consultants. While there is no simple and easy recipe to improving team cohesion (Yukelson 1997), incorporating elements from both approaches may be beneficial in terms of filling in the gaps that exist in both approaches; thus making for a more complete and comprehensive method of team building. For instance, Prapavessis *et al.* (1996) noted the absence of an assessment stage in the indirect team building method is a limitation. However, Yukelson stressed its importance in his approach to team building, suggesting that assessing the situation is a critical component of any good team-building intervention program. Consequently, it would be best practice for either the coaches or sport psychology consultant to assess the team's dynamics paying particular attention to the components contained in Carron and Spink's (1993) team-building model. A result of using this combined approach has the advantage of applying sound theory, in the case of Carron and Spink's team-building model, along with the thorough assessment of actual team dynamics as suggested by Yukelson. Assessing the team's dynamics prior to implementing a team-building program allows the coaches and/or sport psychology consultant to pinpoint areas for improvement specific to the team's needs. As a result, more efficient use of team-building strategies is achieved.

### **Future research directions**

Despite the benefits of team building, much research is still required in this area. Future research should address best practices from a coach's perspective, including how coaches identify strategies that should be used to enhance the cohesiveness of their teams. In addition, research would benefit from knowing how coaches at different skill levels (youth sport, intercollegiate, professional) develop and implement team-building strategies. Moreover, empirical research supporting the benefits of team building in sport is restricted to able-bodied athletes. This is unfortunate because team building may be particularly important for those athletes with a physical disability who are at greater risk than those without a disability (Campbell and Jones 2002; Giacobbi Jr *et al.* 2008). For example, Campbell and Jones found that wheelchair athletes identified poor group interaction and ineffective communication about team and individual performances as sources of stress.

Another avenue for future research is to examine the effectiveness of incorporating interventions from the physical education setting into sport. One such program is the Team Building through Physical Challenges (TBPC) program which is implemented by physical education specialists for their students (Glover and Midura 1992; Midura and Glover 2005). This program involves intellectual, physical, and emotional problem-solving tasks and challenges, while emphasizing elements of fun and adventure. Gibbons and Black (1997) tested the effectiveness of a TBPC program on the self-concepts of seventh and eighth grade physical education classes. Activities included tasks focused on teamwork, organization,

communication, and cooperation. Results revealed participants in the team building intervention experienced increased self-perceptions of athletic competence, social acceptance, scholastic competence, and global self-worth compared to the control group. Similar results were found by Ebbeck and Gibbons (1998) in their investigation of the effectiveness of a TBPC program on the self-conceptions of sixth and seventh grade students. Their post-intervention results revealed both male and female students in the team-building group were significantly higher on perceptions of global self-worth, athletic competence, physical appearance, and social acceptance than the control group.

Drawing on the principles of the TBPC program, Newin *et al.* (2008) created and implemented a season-long team building intervention program for youth hockey teams. Coaches attended an introductory workshop at the beginning of the season where the rationale for the team-building program was explained, where they were given a description of the team-building activities, and where they had their roles and responsibilities explained to them. Each coach then proceeded to implement five team-building activities over the course of the season using the TBPC principles. The results of this study provided initial evidence that the TBPC principles could be applied to the youth sport setting. In particular, coaches believed athletes enjoyed the team-building program and developed a variety of important life skills and abilities (e.g. listening, teamwork) due to their participation. Likewise, coaches felt their own communication and motivational skills improved as a result of their involvement in the team-building program. Coaches also felt athletes bonded during activities and improved their abilities to work together as a team. Finally, and perhaps most importantly, coaches endorsed the program for athletes of all ages and ability levels, and said they would continue conducting the team-building sessions even if this program were no longer available. While these results were positive from this one study, more research is required to determine if this program is suitable for other age groups and skill levels.

Although it is evident that team-building programs whose duration is greater than 20 weeks produces the best results (Martin *et al.* 2009), future research should examine the impact of team building over longer periods of time. For instance, coaches who implement team-building protocols with their teams over several seasons should be monitored to determine the impact this has on the team's structure, environment, and processes. It would be hypothesized that coaches who adopt a long-term approach to team building would not only have teams that are more cohesive but also would have developed a team climate or culture that fosters a positive approach to athlete growth and development.

As explained earlier in the chapter, Carron and Spink (1993) proposed a theoretical model of team building to enhance perceptions of cohesion. Despite being used in applied studies (e.g. Newin *et al.* 2008; Sénécal *et al.* 2008), very little research has tested which components (e.g. group environment, group structure, group processes) of the model have the greatest impact on perceptions of cohesion. While it could be argued that all of the components are important to team building, it would be interesting to determine which components of the model are effective under different conditions (e.g. soccer vs. swimming).

Another area for future investigation is to compare approaches to team building. As noted earlier in the chapter, Martin *et al.* (2009) found that both the direct and indirect approaches to team building were equally effective. However, Loughead and Hardy (2006) proposed that a mixed-method approach that combined both elements of direct and indirect may be the most beneficial. Despite this claim, no research has directly examined if the mixed-method approach is viable and its effectiveness in relation to either the direct or indirect approaches.

The general focus of this chapter has been to outline recent literature in the area of team building with a focus on enhancing perceptions of team cohesion. In comparison to other areas in sport psychology (e.g. leadership, imagery), team-building research is in its infancy. However, the influence of team building on enhancing perceptions of cohesion cannot be overstated. Any attempt by coaches to improve the cohesiveness of their teams is welcomed. It is evident that the development of cohesion is one effective way of building a sense of team.

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