

# **Group Dynamics in Sports: An Overview and Recommendations on Diagnostic and Intervention**

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Working with teams and training groups is a common and major challenge for applied sport psychologists. This document is a position statement on the rationales, methods, and procedures of team-focused approaches in the practice of sport psychology. Furthermore, practice recommendations and research desiderata are discussed. To develop the paper, a consensus conference with nine experts from

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North America and Europe was held in Spring 2010. First, the paper presents the rationale for team-focused interventions and addresses the concepts of team cohesion, team efficacy, team potency, and a task involving leadership style. Second, the contributions of sport psychologists to enhancing group functioning are discussed, including methods for enhancing interpersonal skills, team climate, and coach athlete relationships. Third, determinants of how sport psychologists decide procedure and build trust in working with teams are articulated. Finally, the consensus group recommends an intensified effort to examine the effects and practice applicability of theory-driven, ecologically valid interventions.

The social environment shapes us almost everyday and almost everywhere. Groups and relationships seem to be ubiquitous. Coaches, athletes, applied sport psychologists, and sport scientists work with groups or within groups. These individuals feel positively or negatively affected by relationships with team mates, friends, or colleagues. In sport, this impact of interpersonal processes applies especially, but not only, to team sports. In addition, training groups of individual sport activities and substantial athlete-athlete or coach-athlete relationships are important issues of group and interpersonal research in sport. Every meaningful textbook covers chapters on group-related topics (e.g., Hackfort, Duda, & Lidor, 2005; Singer, Hausenblas, & Janelle, 2001; Tenenbaum & Eklund, 2007). Furthermore, as far as diagnostics are concerned, there is a special section on *group dynamics* in Joan Duda's compendium from 1998. And of course, handbooks of social psychology in sport (Jowett & Lavallee, 2007) give an overview on different approaches to relationships and group processes in sport. Finally, both practitioners and researchers are able to resort to specific book publications on group processes and interpersonal relations (Beauchamp & Eys, 2007; Carron, Hausenblas, & Eys, 2005).

Despite this general importance and presence of *group* and *team* topics in sport psychology, these topics are underrepresented or in decline in congresses and handbooks compared with other sport psychology topics (Birrer & Seiler, 2008). Moreover, when a practitioner or researcher needs information on specific procedures and measures in terms of working with groups, the literature seems to be sparse and systematic overviews lacking. The impression may arise that questions like "What diagnostic or intervention is reliable and useful in my case?", "Where do I find a research based toolbox for my team?", "What is the best way for me as a sport psychologist to gain access to a team?" are difficult to answer. To confirm or confound this impression, a consensus conference was held in spring 2010. The intention of this conference was to have a discussion in a small group consisting of theoretical and applied experts from different countries. Led by German organizers, experts were invited from Canada, US, UK, and Switzerland due to their thematic experience and scientific visibility. Moreover, persons with experience in working with teams on a high international level (e.g., Olympic teams) were also involved. The purpose of the two-day conference was to identify structures, important areas, and special challenges of the state and the future of group dynamics in sports. Furthermore, author teams were defined to build a common position of the group in special areas. The current paper, as a result of this process, should demonstrate both our reasoned opinion or appraisal and our recommendation for desiderata of research. In addition, the paper is intended to catalyze the debate on what has to be done in terms of the development of diagnostic approaches, intervention programs, and educational concepts in the area of group dynamics in sport.

The paper is divided into four sections. Section 1 answers the “Why” of working with teams: Which plausible goals can we address? What effects can we expect? Which psychological team constructs are important and modifiable? Section 2 answers the “What”: Which areas of work do we have to consider as consultants? What kinds of interventions and diagnostics are helpful? Which tools are common and which are evaluated in intervention studies? Section 3 focuses on the “How”: Which approaches and entries to a team and its coaching staff are typical? Which factors determine the ways an applied sport psychologist works with a team? How are the uses of diagnostics and interventions decided on? Finally, Section 4 on “Where to go” gives a review on desiderata for research and practice of working with teams, based on literature and as a consequence of the former three sections: What are the theoretical and methodological challenges of group dynamics in sports? Which recommendations and expectations should be formulated for the work of researchers and applied sport psychologists?

## Section 1: Rationale for Team-Focused Interventions

### General Effectiveness of Group-Focused Interventions

Psychological interventions that focus on the team as a collective are generally referred to under the rubric of *team building* “a method of helping the group to (a) increase effectiveness, (b) satisfy the needs of its members, or (c) improve work conditions” (Brawley & Paskevich, 1997, p. 13). A first issue that arises in any discussion of team-focused interventions is, are they effective? Do they work? Although some research exists to help address these questions, that research does have its limitations (Martin, Carron, & Burke, 2009).

One limitation is associated with statistical power; scientists and practitioners interested in testing the efficacy of their intervention generally have not been able to secure a sufficient number of teams to provide for valid tests. A second, related limitation is associated with scientific control; a number of team building studies have used a single team and pretest-posttest design. Finally, and possibly related to the above two, it is difficult to access a substantial portion of the research because it is in the form of unpublished dissertations and theses.

With these limitations as a caveat, Martin et al. carried out a meta-analysis on team building research; they found 17 studies that provided 80 effect sizes (*Hedges g*). An analysis of those effect sizes led them to conclude that team building interventions have an overall positive effect ( $g = .43$ ). Encouragingly, for both the coach and applied sport psychologist, team building interventions are equally effective<sup>2</sup> no matter who implements them (i.e., the sport psychologist,  $g = .41$  or the coach,  $g = .45$ ).

In the organizational development literature, an often cited criticism of team building interventions is that they are too short in duration to produce an effect (e.g., DeMeuse & Leibowitz, 1981). A similar situation exists in sport; Martin et al. found that interventions that last less than 2 weeks have minimal effect ( $g = .11$ ); conversely, those that last from 2 to 20 weeks ( $g = .45$ ) or for periods longer than 20 weeks ( $g = .56$ ) exert a moderate effect. Given the limited amount of research that has been carried out on team building in sport, it is hardly surprising that only a selected number of intervention protocols have been used. Of those, Martin et

al. found that the most to least successful interventions focused on (a) team goal setting, (b) interpersonal relationships, (c) adventure experiences, and (d) a broad set of task variables that might include some combination of the development of group structure (e.g., roles), environment (e.g., developing distinctiveness), and/or processes (e.g., cooperation;  $g = .71, .49, .47, \text{ and } .16$  respectively).

Finally, Martin et al. found that team building interventions have a different effect on different types of outcomes. They do not seem to influence task cohesion, roles, or anxiety but they have a small positive effect on social cohesion ( $g = .21$ ) and large positive effects for both performance ( $g = .71$ ) and enhanced cognitions (e.g., perceptions of individual satisfaction, quality of life;  $g = .79$ ).

## The Importance of Group Constructs

A growing body of research has demonstrated that a large number of group variables are positively associated with team success, and, therefore, could be a target for group interventions. Furthermore, researchers have benefited from the development of a number of psychometrically sound measurement tools to assess athletes' and coaches' perceptions regarding group constructs. Some of these assessment tools will be discussed or referred to briefly; however, resources are available for a more comprehensive measurement review for interested readers (e.g., Duda, 1998; Tenenbaum, Eklund, & Kamata, 2011). The primary ones are discussed here and include cohesion, team efficacy and potency, team roles, and team leadership (indirectly through motivation).

**Cohesion.** Aside from leadership, cohesion is probably the most heavily researched construct in group dynamics in sport. In 2002, Carron, Colman, Wheeler, and Stevens undertook a meta-analysis to statistically summarize the relationship between cohesion and team performance in sport. They found that both task and social cohesion have a moderate to large effect on team performance (Cohen's  $d = .61$  and  $.70$  respectively). Further, type of sport is not a moderating variable; cohesion is positively associated with team success in both interactive (e.g., basketball,  $d = .68$ ) and coactive sports (e.g., tennis,  $d = .66$ ).

**Team Efficacy and Team Potency.** In group dynamics (Gully, Incalcaterra, Joshi, & Beubien, 2002), a distinction is made between team efficacy (i.e., perceptions of the team's task specific capabilities) and team potency (i.e., perceptions of the team's capabilities across tasks and contexts). To date, no meta-analysis has examined team efficacy and potency in sport, but two meta-analyses that have been carried out on groups in general include studies on sport teams (Gully et al., 2002; Stajkovic, Lee, & Nyberg, 2009). Gully et al. reported that team efficacy and team potency are moderately (and positively) related to team performance ( $r = .36$  and  $.33$  respectively). When the team's task interdependence (i.e., the extent to which group interaction is required to complete the task) is taken into consideration, the relationship between team efficacy and team performance was stronger when interdependence was high, but task interdependence did not moderate the group potency-team performance relationship. Stajkovic and his colleagues showed similar results and further found that collective efficacy fully mediated the relationship between team potency and team performance. Research on experimental and field studies within sport has demonstrated a strong and reciprocal positive relationship

between collective efficacy and performance (e.g., Bray, 2004; Feltz & Lirgg, 1998; Hodge & Carron, 1992; Myers, Payment, & Feltz, 2004).

**Team Roles.** Roles are critical structural components of sport groups (Eys, Beauchamp, & Bray, 2006) and are defined as the set of specific behavioral expectations for an individual group member (Biddle & Thomas, 1966). The complexity of effective role performance is underscored by the number of perceptions group members may hold about their role including the degree to which they understand (i.e., role clarity), accept, enjoy (i.e., role satisfaction), and feel capable in fulfilling (i.e., role efficacy) their responsibilities (see Eys et al., 2006 for a review). While there are no studies explicitly linking role perceptions directly with *team* performance, it is generally accepted that the successful execution of individual role responsibilities will offer greater opportunities for positive group outcomes (Carron et al., 2005). Furthermore, athletes' perceptions of their role have been previously linked to group (e.g., cohesion; Eys & Carron, 2001) and leadership-oriented constructs (leader behaviors, Beauchamp, Bray, Eys, & Carron, 2005; coaching competency, Bosselut, 2008) that have subsequent positive effects on team performance.

**Team Leadership.** A relatively strong relationship has been shown between coaches' leadership style, in terms of motivational climate, and athlete motivation (Duda, 2001), team cohesion (e.g., Heuzé, Sarrazin, Masiro, Raimbault, & Thomas, 2006), collective efficacy (Magyar, Feltz, & Simpson, 2004), and athletes' physical and mental health (Reinboth & Duda, 2006). Research generally suggests that a task-involving motivational climate (i.e., mastery-based) is more positive for team functioning but may be limited to certain contextual factors (e.g., age level, ability level, gender).

A coach's sense of his or her own efficacy to influence the learning and performance of athletes (i.e., coaching efficacy) has also shown a significant relationship with team performance variables (Feltz, Short, & Sullivan, 2008). Feltz and her colleagues (Feltz, Chase, Moritz, & Sullivan, 1999) developed a model of coaching efficacy to provide a framework for studying the relationships among coaching efficacy, coaching behavior, and the motivation and performance of athletes and teams. Through several studies, Feltz and her colleagues have shown a significant and positive relationship between coaches' efficacy beliefs in their coaching capabilities and their team's satisfaction, collective efficacy, and performance (Feltz et al., 2008).

## Section 2: Applied Sport Psychologists' Contributions to Enhancing Group Functioning

This section provides an overview of an applied sport psychologist's contribution to effective team functioning. Effective team functioning and the achievement of group psychological outcomes are associated with success (i.e., cohesion, collective efficacy), and rest on a complex and dynamic integration of a number of important individual and inter-individual subfactors, processes, and behaviors (e.g., self-regulation skills, role clarity, communication skills, leadership style, peer acceptance). The applied sport psychologist (ASP) plays a fundamental role

in awareness building, assessment, education, strategy development, and counseling at the level of the individual member, dyadic relationships, and the group as a whole. All of these specific roles serve the ultimate goal of enhancing team functioning and competitive performance through enhanced team member and support staff behavior. However, whereas these roles are inherently focused on positive team development (i.e., facilitating improvements in a given factor), the expert panel noted how the roles of an ASP in youth team settings may differ to those characterizing the approach of a consultant within a senior team. Specifically, a greater focus on the foundational development of individual psychological skills and strategy use (for enhanced individual contributions) in youth sport may contrast with the greater investment in optimizing the group's interpersonal skills, relational perceptions, social structures, and behaviors that is made by the practitioner in adult sport.

A number of specific task-related areas that exemplify the scope of an ASP's potential contributions to enhanced group functioning. Some of the tasks reflect awareness and educational activities, while others focus on assessment, counseling, relationship development, conflict management, and self/group reflection work. These are described forthwith.

## Foundational Psychosocial Skills Training

Within youth teams, the assessment and education of foundational psychological and social skills are important stages in the player and team development process. Holt and Dunn (2004), for example, refer to the psychosocial competencies required of adolescent footballers to make the transition to elite levels. Such intraindividual competencies (e.g., commitment, discipline, and resilience) reflect the importance of understanding goal setting principles, goal evaluation/self-appraisal, emotional control, and concentration strategies that pertain to optimizing an individual's performance for the team in that specific sport context. In addition to this intraindividual perspective, Harwood's (2008) 5 C's (i.e., commitment, communication, concentration, control, and confidence) approach to player development in football also reinforces the *teaching of communication skills* including emotional, esteem, and informational support to teammates. These skills should serve the promotion of positive peer relationships as an important group variable and appear to be basic developmental starting points for the youth team ASP. The assessment of these psychosocial skills may greatly depend upon the philosophy and model of practice adopted by the consultant. From an educational perspective, use of the Test of Performance Strategies (TOPS; Thomas, Murphy, & Hardy, 1999) may assist both athlete and consultant in understanding the current level of use and development of pertinent psychological skills in training and competition settings. Harwood's (2008) approach did not assess athletes per se, but focused on identifying the behaviors and responses in soccer players that most represented a particular skill (e.g., control; concentration; communication). These lists of behaviors emerged from workshop discussions with coaches, and allowed coaches to consider the ideal behavioral model for a player with such psychosocial skills. Coaching strategies to assist in the shaping and reinforcement of these behaviors were then discussed and implemented by coaches.

## Facilitating an Optimal Coaching Environment

Following the extensive amount of research attention on coaching roles, there is an informative literature championing the importance of the ASP's work with, support toward, and handling of the coach (e.g., Carron, Spink, & Prapavessis, 1997). An ASP may often find a more effective *modus operandi* if they position themselves in a 'coach the coach' role and work with them in creating an optimal 'psychological development' and 'motivational' climate for the team (see Grau, Moller, & Gunnarsson, 1988; Smoll, Smith, & Cumming, 2007). An ASP's *assessment of coaching environment* might take a variety of forms including:

- Intake interview with the coach that may include a self-profile of his/her coaching style, strengths, areas for improvement, and openness for support/change.
- Interviews and third party appraisals with players and support staff regarding coaching preferences and the degree to which current coaching practices and behaviors promote mastery achievement goals and autonomy, confidence, positive affect, and other elements of individual player and team development. Furthermore, it would be beneficial to gain an understanding of athletes' perceptions of their coaches' competencies/effectiveness. Recent research highlighted the importance of these perceptions in relation to other important variables in sport including, for example, satisfaction with the coach (Myers, Beauchamp, & Chase, 2011) as well as athletes' effort, commitment, enjoyment, self-efficacy, and prosocial behaviors (Boardley, Kavussanu, & Ring, 2008).
- Administering psychological scales such as the LSS (Chelladurai & Saleh, 1980) may augment or complement the more valuable qualitative information that is gained from the team/staff, provided that the scale is fit for purpose and offers usable, valid information that will assist in any educational intervention. Furthermore, obtaining information from the coaches themselves regarding their perceptions of their own behaviors might provide a more complete picture of leadership within teams.
- Behavioral observations of the coaches in a variety of contexts with players and support staff, perhaps with a specific focus on the degree to which they integrate and model psychological concepts into their working practices and create a positive, autonomy supportive, and task involving motivational climate (Conroy & Coatsworth, 2007; Cumming, Smith, & Smoll, 2006; Harwood, 2008; Smoll et al., 2007).

Drawing together such sources of information presents the ASP with an opportunity to 'see the bigger picture' from a 360 degree position, and to synthesize the material in a manner that may educate and empower the coach toward improving and consolidating their practice. The ability to empower the coach in this manner requires a great deal of skill, sensitivity, sport specific knowledge, and conceptual prioritization on behalf of the consultant as they focus on the strengths, the gaps, the areas in need of knowledge gain, the contexts requiring greater attention, and the people requiring greater attention as well. Smoll and colleagues (2007) offer a practical and empirical example of a motivational climate intervention with coaches. Basketball coaches were split into control and experimental groups with the latter group receiving an educational intervention focused on enhancing a mastery-oriented motivational climate for their team. Compared with athletes

coached by individuals from the control condition, players taught by the mastery-oriented coaches reported elevations in task involving climate, higher levels of task orientation and lower levels of ego orientation following the coaching intervention.

## Developing the Coach-Athlete Relationship

An important aspect of facilitating an optimal coaching climate is the development and encouragement of appropriate relationships between individual team members and their coach. The quality of these dyadic relationships is believed to underpin other group processes such as group cohesion, development of goals, and communication of role responsibilities (Jowett, 2007). Working with the coach and/or athlete, the ASP has the potential to evaluate and enhance salient perceptions of the coach-athlete relationship proposed by Jowett and colleagues (Jowett & Chaundy, 2004; Jowett & Ntoumanis, 2004), including closeness (i.e., the degree of emotional connection between coach and athlete), commitment (i.e., the degree to which both individuals wish to maintain their relationship), and complementarity (i.e., the degree of cooperation present between the coach and athlete). Furthermore, ensuring that both coach and athlete have an accurate understanding of how the other views the relationship (i.e., co-orientation) is also suggested to be an important component. Overall, as Jowett (2007) noted, opening “channels of communication (verbal and non-verbal) appear to be an obvious mechanism that would allow coaches and athletes to know and understand each other” (p. 71). To pragmatically assess or profile the quality of coach-athlete relationships, a dyadic approach to athlete performance profiling may be used. In this respect, the athlete or coach may list attributes or processes that they personally feel are central to an optimal, effective relationship. Each may then rate (usually from 1 to 10) the degree to which they feel that these characteristics exist in their current relationship. Having gained both perspectives (from coach and athlete) to the same list of characteristics, the consultant develops a clearer idea of the congruent strengths and areas for development in the relationship, as well as any mismatched perceptions that require further discussion in subsequent sessions.

## Enhancing Role Perceptions

As highlighted in the previous section, the proper execution of individual role responsibilities is vital to group functioning. In concert with the coach and players, the ASP has opportunities to educate, analyze, and integrate the group with respect to role development. For example, giving consideration to the formal and informal group structures provides in-depth information about the variety of behaviors that can be expected from group members. Formal structure refers to the roles that are specifically delineated to group members (e.g., captain) while the informal structure results from roles derived from interactions within the group but not formally prescribed to individuals (e.g., mentor, team clown, informal leaders; Cope, Eys, Beauchamp, Schinke, & Bosselut, 2011). Furthermore, the assessment and enhancement of individual role perceptions (e.g., role clarity, role acceptance, role efficacy, etc.) will optimize the degree to which the team is integrated around the task and social objectives of the group. A current challenge for the field of sport psychology is the lack of valid measurement tools to assess athlete perceptions of a wide range of role perceptions. However, Beauchamp, Bray, Eys, and Carron (2002) published and

extensively used a measure for perceptions of role ambiguity in a sport environment that could be useful to gain a sense for the degree to which athletes understand their role responsibilities. Overall, facilitating effective communication (e.g., individual meetings, group discussions) among coaches and athletes with respect to role expectations for all group members is a starting point toward enhanced role performance.

## Increasing Group Cohesion

A significant amount of research in group dynamics in sport focuses on the concept of cohesion, defined as “a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs” (Carron, Brawley, & Widmeyer, 1998, p. 213). The previous research findings support the contention that cohesion may be considered the most important small group variable (Golembiewski, 1962) and, as previously noted, there is a well-established positive link between cohesion and performance (Carron et al., 2002). The body of literature pertaining to cohesion in sport has been facilitated by the development of assessment tools. Notably, Carron, Widmeyer, and Brawley’s (1985) Group Environment Questionnaire (GEQ) is extensively used to assess adult perceptions of cohesion on four dimensions: (a) individual attractions to task aspects of the group, (b) individual attractions to social aspects of the group, (c) the group’s integration revolving around task objectives, and (d) the group’s integration revolving around social objectives. A result of the extensive use of the GEQ is the existence of normative data (Carron, Brawley, & Widmeyer, 2002) across genders and sports (i.e., individual and team sport), and practitioners could make use of these norms to situate (from a cohesion perspective) the teams they are working with relative to others.

More recently, Eys, Loughhead, Bray, and Carron (2009) and Martin, Carron, Eys, and Loughhead (2011) developed *assessment tools* specifically for youth (age 13–17) and children (age 9–12), respectively. In contrast to the GEQ, these latter questionnaires assess only task and social cohesion generally (i.e., there is no breakdown between individual attractions to the group and group integration). Overall, the available questionnaires offer researchers and practitioners the ability to diagnose perceptions of cohesion on athletic teams and/or assess the efficacy of team-building interventions (see Martin, et al., 2009 regarding team-building literature in sport).

## Collective Efficacy

Two definitions of collective efficacy are typically cited in sport literature. First, Bandura (1997) suggested that it represents the “group’s shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments” (p. 477). As a second example, Zaccaro, Blair, Peterson, and Zazanis (1995) forwarded that collective efficacy is “a sense of collective competence shared among individuals when allocating, coordinating, and integrating their resources in a successful concerted response to specific situational demands” (p. 309). Chow and Feltz (2007) provided a comprehensive overview of collective efficacy as it pertains to its definitional issues (which are beyond the scope of this summary), characteristics, and antecedents (i.e., sources). Researchers have developed *measures* to assess collective efficacy in sport (Paskevich, Brawley, Dorsch, & Widmeyer, 1999; Short, Sullivan, & Feltz, 2005); although they differ with respect

to the number and type of dimensions in addition to the conceptual definition that underpins their operationalizations. Most measures are sport-specific (e.g., Feltz & Lirgg, 1998; Paskevich et al., 1999), but the Collective Efficacy Questionnaire for Sports (Short et al., 2005) was developed to measure collective efficacy across sports. Such a measure would be useful for practitioners as well as researchers interested in different sports within the same study. In any case, there is consistent evidence that perceptions of collective efficacy are linked with group cohesion (Carron et al., 2005; Paskevich et al., 1999; Short et al., 2005) and, as Chow and Feltz (2007) suggested, “it stands to reason that increasing cohesion through team building activities that promote role clarity and acceptance may foster teams’ judgments of their capabilities to succeed” (p. 241). Greater consideration of collective efficacy is important given its positive link with team performance (Feltz & Lirgg, 1998; Greenlees, Graydon, & Maynard, 1999).

### **Counseling Organizational and Environmental Stressors**

Through the process of rapport building and developing working relationships with individual clients in a team context, a number of issues and topics may surface that affect the performance and psychological well being of the team member. While some of these factors may be competition or match-related (e.g., competition stressors), many may be considered to be organizational stressors (Fletcher, Hanton & Mellalieu, 2006; Fletcher & Wagstaff, 2009; Woodman & Hardy, 2001). Adapting the work of Cooper, Dewe, and O’Driscoll (2001) in organizational psychology, Fletcher et al. differentiated between five dimensions of organizational stressors that may be experienced by sports performers: factors intrinsic to the sport (e.g., travel; training schedules); roles in the sport organization (e.g., role ambiguity; lack of role acceptance); sport relationships and interpersonal demands (e.g., communication with teammates; social cliques; language barriers; conflicts with coaching staff); athletic career and performance development issues (e.g., selection; funding/salaries, contractual issues; retirement); and organizational structure and climate of the sport (e.g., levels of autonomy; result vs. developmental focus; contribution to decision making). When working as an ASP, a humanistic appreciation of the very different individual ‘worlds’ that each team member experiences from a group environmental or organizational perspective can be of great value. A client-centered counseling approach that incorporates both factual and emotional listening skills may be central to work that an ASP does in relation to assisting team members with these nonperformance stressors and concerns that may subsequently impact on both individual and group level functioning.

## **Section 3: How Sport Psychologists Should Work With Teams**

Whereas the previous section provides a structure of “what” an ASP can do in terms of team diagnostics and intervention (i.e., which instruments, methods, treatments, and interventions can be applied in working with a team), this section focuses the “how”. This “how” should explain the *procedure* by which these tools are selected, combined, and embedded within a specific ecological situation of applied sport psychological work. Furthermore, in contrast to the “what”, the “how” describes the

way and the process by which sport psychologists find entry and use tools to assess a specific target person or group. Third, the “how” is strongly connected with the core goal of a sport psychologist’s work with a team: establishing and maintaining trust, credibility, and respect (Ravizza, 1988). Altogether, consultation with teams requires “knowing what works with which persons in which situations” (Brown, Gould, & Foster, 2005, p. 51). Whereas much literature can be found focusing on *what* works, only few papers review the procedure, the approach, and trust building in working with teams. The objective of this section is to briefly review these papers.

Although procedure, approach, and trust are on different levels of abstraction they strongly overlap and interrelate. Furthermore, procedure, approach and trust help to identify important and central points of decision when working with teams. These decision points have to be seen in the light of a situational approach to applied sport psychology (Nitsch, 1985). Thus, three situational components determine procedure, approach, and trust building in working with teams: (1) The sport psychologist himself or herself, (2) the given tasks and demands, and (3) the social and organizational structure (Figure 1).

### The Sport Psychologist as a Determinant of How to Work With Teams

It seems to be a trivial point that *profession, knowledge, and experience* of a psychological consultant are important for working with teams. However, it is necessary that a sport psychologist reflects his or her personal resources when he or she defines the course of action (Poczwardowski, Sherman, & Henschen,

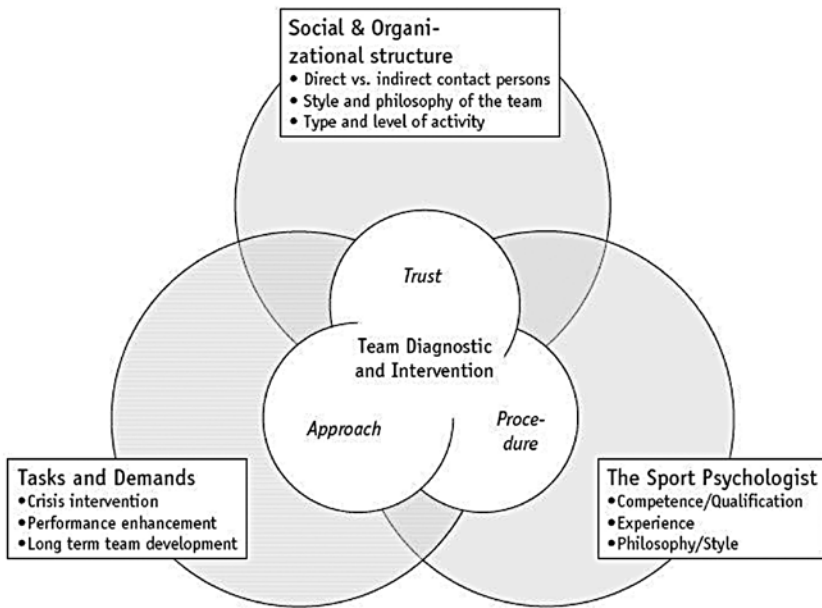


**Figure 1** — Situational components which determine procedure, approach, and trust building in working with teams.

1998). Such “practicing within areas of competence” (Gardner & Moore, 2006, p. 206) is not only a question of efficiency but also an ethical concern. Moreover, personal resources and competencies pertain to knowledge about not only diagnostic or intervention tools (i.e., technical competence) but also communication and cooperation skills (i.e., social competence; e.g., Ward, Sandstedt, Cox, & Beck, 2005). Technical and social competence affects both the decision regarding which kind of tools are applied and the decision of the target group for diagnosis and intervention (i.e., coach, single team players, small groups within the team, whole team; Hemmings & Holder, 2009). These decisions can be defined as the “ability to tailor interventions to the specific situation” (Brown, 2009, p. 312) as a matter of contextual intelligence (Brown et al., 2005). Furthermore, technical and social competence are connected to transparency (e.g., clarify intentions of diagnostic and intervention) and traceability (e.g., explain steps of the coaching process) and therefore are important issues in trust building.

Beneath competence and experience, the sport psychologist’s *attitude, philosophy, and style* (Vealey & Garner-Holman, 1998), essentially his/her view of how to work with teams, influence the approach, the course of action, and the method of trust building. For instance, some consultants perceive themselves less as working with teams and rather as giving advice to the team’s coach (*indirect* approach; see Carron, Shapcott, & Burke, 2007; Grau et al., 1988). How a consultant presents his or her ideas when meeting the coaching staff or athletes is obviously a question of his or her personality (Brown, 2009; Ravizza, 1988). In addition, whether observation, questionnaires, or interviews are seen as an appropriate assessment in team diagnostics is very often a question of the sport psychologist’s attitude, self-concept, and theoretical perspective. Finally, the decision for a qualitative and/or quantitative diagnostic approach is often rather a matter of self concept and a reflection of “personal core beliefs and values” (Poczwardowski, Sherman, & Ravizza, 2004, p. 450) than the consequence of rational considerations (Halliwell, 1990). Accordingly, the ASP’s reflection on determinants of the way he or she is working with a team (e.g., self-reflection, supervision) is an important requirement.

## Tasks and Demands as Determinants of How to Work With Teams

Typical goals in the practice of sport psychological work with teams are motivating the team, promoting cooperation and communication, or at least enhancing cohesion and team efficacy (Carron et al., 2005; Eys, Schinke, & Jeffrey, 2008; Feltz, Short, & Sullivan, 2008; Hemmings & Holder, 2009; Kremer & Moran, 2008). Such goals are embedded within *three types* of team consultation, which follow different but overlapping purposes or meanings: (1) Team development (long-term; i.e., an educational approach), (2) performance enhancement (medium-term), and (3) crisis intervention (short-term). Thus, depending on whether the core task is to develop a team, to enhance its performance, or to eliminate acute problems and conflicts, the approach to be chosen and the way of trust building are different (as are the consequences of each type of consultation).

*Long-term team development* begins very often with an education program (e.g., a series of workshops or meetings), where—especially younger—team members might find an introduction to sport psychology given by the ASP. In team sport, the goals of such education programs are to strengthen self-regulation

skills and to develop team competencies (e.g., communication techniques) in every individual player. The procedure is more influenced by intervention—namely education—than by the use of diagnostic tools. Even if direct communication with the player is the preferred entry, an additional involvement of the coach seems to be an important measure to ensure acceptance and effectiveness of a long-term team development.

In terms of *performance enhancement* in teams, interventions and measures are typically diagnostic driven. Thus, assessments are used to analyze and identify key processes of bad performance that are suitable to enhance performance. Though athletes often “hate paperwork” (Beckmann & Kellmann, 2003, p. 338), psychological assessment procedures (quantitative or qualitative) can be used to ensure trust, credibility, and acceptance since they point to the progress in psychological issues (e.g., social well being, perceived group efficacy, cohesion), and also give proof of the effectiveness of the ASP’s work. However, a necessary condition for the use of such prepost testings is the athlete’s trust in the ASP, that the latter handles diagnostic with esteem for the athlete.

*Crisis interventions* are a very ambivalent field of applied sport psychology. On one hand, crisis intervention is a common task in sport psychological work because the consultant is often called when a problem appears. On the other hand, especially to get a sufficient state of trust and to gain entry, it is not productive for the ASP to act rashly. Rather, the team structure and team processes should be analyzed carefully (e.g., Andersen, 2000; Fifer, Henschen, Gould, & Ravizza, 2008). Accordingly, a long-term perspective should be given preference to a quick fix (e.g., Ravizza, 1988). Hence, crisis interventions in teams seem to require a special kind of “how”: Whereas performance enhancement focuses on *key functions*, for crisis interventions it seems to be essential to define *key persons* (e.g., coach, captain, playmaker). Changing a person’s role and function therefore is often a faster—but maybe not in every case stable—way to have an impact on team performance in contrast to working on team competencies. Finally, even if in a crisis it is important to analyze the situation, the focus should be on interventions since that fosters the feelings of activity and efficacy for all involved.

## **The Social and Organizational Structure as a Determinant of How to Work With Teams**

Whereas in applied team sport psychology the social structure is often the object of interventions (e.g., team building, cohesiveness enhancing strategies; cf. Carron & Brawley, 2008; Carron et al., 2008), in this section we refer to social structure as a component of the complex action situation the sport psychologist has to deal with and within (Nitsch, 1985). As a part of this situation, the social structure covers both persons with direct contact to the consultant (e.g., athlete, teammates, coach) as well as persons with indirect contact (e.g., manager, family, friends, fans). These persons or groups as a part of the social structure are both a source of problems, conflicts, or barriers and a source of resources support and help. In contrast to the social structure, the organizational structure contains the type and level of activity, as well as the style, culture, and philosophy of the team, club, or organization (see the multidomain assessment framework for applied sport psychology; Vealey & Garner-Holman, 1998). Resources from organizational structure can be seen, for

example, in the availability of tangible aid (e.g., money, rooms) and an adjuvant culture and philosophy of the whole team, all of which support the sport psychologist in his or her work on team processes.

Both, the social structure and the organizational structure influence approach strategies, gaining-trust strategies, and procedure decisions. This influence depends on typical conditions of social and organizational structures: (a) gender, age, personality or experience of the involved persons, (b) type of sport (e.g., professional soccer vs. professional rowing team), (c) performance level (e.g., Olympic competition vs. regional competition), and (d) goals of institutions, teams, or coaches (e.g., winning the championship vs. enhancing relaxation competence). For example, the primary goal of a team (e.g., winning an important game) in combination with the organizational background (e.g., a professional soccer team) leads to a certain approach for the sport psychologist. For instance, if short term success is important in professional environment, the ASP has to work with a quickly effective intervention, which may be conducted with the coach as the key figure to team access. As a part of the social structure also the coach's and the team's experience with sport psychology determine how to work with and within teams. The experience that coaches and teams already have made in working with a sport psychologist influence particularly the way of gaining entry, credibility, and/or trust (Ravizza, 1988). For an ASP it is easier to be accepted when, in team philosophy and style, the sport psychologist has his or her place (e.g., because he or she has already worked with the team during the last season). Sometimes this acceptance can be found in professional teams, where the sport psychologist is honored as a member of the coaching staff. On the other hand though, in certain sport disciplines the sport psychologist has to stay in the background because his or her work is still viewed skeptically and critically or the culture of the consulted team forces him or her to stay "behind the scenes" (Halliwell, 1990).

Finally, age and gender of target groups have to be considered as determinations of how to work. Concerning the preference of assessments and intervention programs, for example, sport psychologists have to choose and apply diagnostic and intervention procedures carefully, which fit to the age of their specific consulted group (e.g., differences in working with elder or junior athletes). They have to consider both the cognitive *and* emotional skills of the specific persons they work with before choosing and assessing certain measures or intervention programs.

## Section 4: What Has to Be Done?

Group dynamics in sports is still a comparably young field for researchers and practitioners. Although a considerable body of research has been developed in the past three decades—most of it in relation to the concepts of group cohesion and leadership—much is still needed to come to a comprehensive understanding of the dynamics of efficient group functioning in sport settings. While there is a general agreement that the processes and concepts mentioned in the previous sections are of high importance, their integration into research and even more into practice still is unsatisfying. In this concluding section, we take a stand for a better theoretical foundation of sport psychology interventions in teams, and point out future directions for both research and practice, including diagnostics and interventions.

## General Theoretical Conception of Interventions

In general, psychological interventions follow a principle that has been called “the law of indirect effect” by Hansen and McNeal (1996, p. 205). Interventions target, according to this law, one or more mediators that are assumed to affect subsequent behavior. A theoretical model of the interrelation of the potential mediators is therefore required. For example, an intervention may modify norms and attitudes which are expected to change intention and subsequent behavior, as stated in the theory of planned behavior (Ajzen & Fishbein, 1980). Once an intervention is designed to affect one or more potential mediators, its effect sizes have to be calculated from controlled intervention studies, as compared with no intervention or between different types of interventions. The maximum overall intervention effect on the outcome variable (e.g., behavior) that may be expected from such an intervention is directly affected by the strength of the relationship between mediators and behavioral outcome (Hansen & McNeal, 1996).

## Research Needs

Section 2 showed that cohesion, team efficacy, team potency, and a task involving leadership style are well researched psychological constructs. Even though some empirical evidence is found for a positive relation of team factors and team constructs with group performance, we are far from having a full nomological knowledge about when and how a group phenomenon occurs. Such phenomenon may be effective team functioning as well as collective collapse (Apitzsch, 2006). One or more explanatory theories are lacking, which might explain the interdependence and (probably nonlinear) mutual interactions of the different group constructs and characteristics, and how these account for group behavior. Researchers are challenged to theoretically develop a more elaborated general model of group actions that might serve as an explanatory theory. Based on the ideas of von Cranach, Ochsenein, and Valach (1986), elements of importance to be considered in such an explanatory theory seem to be the task structure (e.g., independent or dependent single tasks in a group), the social structure in the team (e.g., leadership, roles, and status), the information processing structure (e.g., communication) and the execution structure (e.g., cooperation). Their interrelation and interdependence need to be elaborated. Research needs to be based on real-world problems in sport (Andersen, 2005). As an example, it is important to identify the requested outcome for different teams and for effective group action: A team in competitive sports should strive for the highest possible performance, in a leisure sports group, maybe longevity of team membership is the goal and so forth.

Based on the theoretical conception, relevant determinants for specific groups and goals (or outcomes) need to be identified. In addition to the traditional constructs used in sport psychology, more recent concepts emerging partly from general psychology or occupational psychology, such as team optimism (West, Patera, & Carsten, 2009), emotions (Allen, Jones, & Sheffield, 2009), or collective cognitive processes (DeChurch & Mesmer-Magus, 2010) should be taken into consideration. With regression analyses, the relative contribution of the different constructs to explain the desired outcome parameters and the respective standard errors may be identified. This magnitude of the relation remains stable, irrespective of an intervention (Hansen & McNeal, 1996).

In some cases, diagnostic tools need to be developed with sound psychometric properties thus allowing prediction and assessment of changes in single cases, that is, single teams (Carron, Shapcott, & Burke, 2007). The issue of equivalent language versions is another problematic area where much effort is needed not only for cross cultural studies, but also for the reality of multiethnic and multilanguage teams in European and international sports. Nonverbal assessment tools may open a back door to this problem.

So far, research on team building interventions show no effect on task cohesion and roles, only small effect on social cohesion, and a large direct effect is found on performance. One explanation for the scantiness of effects is that interventions may not have been designed in line with theories of, for example, task or social cohesion. As an example from a nonsport setting, Brown (2003) found positive effects of verbal self-guidance on collective efficacy and performance and explained the effect by vicarious verbal persuasion.

Once a more comprehensive explanatory theory of efficient group functioning is developed, possible interventions need to be designed with a theoretical idea as to why these interventions are likely to influence which constructs and determinants (Carron & Brawley, 2008). For example, it seems reasonable to assume that different interventions such as team goal setting and adventure experience are exerting different effects on distinct determinants (moderators or mediators) of team behavior, such as the social structure, or the communication structure. Thus, valid empirical designs are needed to test an intervention theory, which means to identify the effect sizes of different interventions versus no intervention or other types of interventions. Researchers are confronted with specific difficulties in the field of high level competitive sports because of the small number of teams at this level. Repeated measures designs with a limited number of teams offer a feasible way to overcome this difficulty. Longitudinal single case studies at the team level using multiple baseline measures, alternating treatment designs and ABA-designs are possible alternative approaches (Kinugasa, Cerin, & Hooper, 2004). A prerequisite is the validity of diagnostic tools, the need of which was identified in the previous paragraph. In research on group dynamics, often data of individuals are nested in teams. If the effect of an intervention on, for example, collective efficacy is investigated in several top performance teams, effects are likely to show significant amounts of between-team variance and therefore would benefit from using multilevel modeling (Myers & Feltz, 2007). Several authors deplore the lack of multilevel perspective in group dynamics research so far (Carron & Brawley, 2008; Myers & Feltz, 2007). Researchers should in the future carefully analyze their research question and the structure of their data to decide whether the use of multilevel modeling is appropriate or not.

## Practice Needs

When sport psychologists start to work with a team, they are often urged to start immediately and thus underestimate the importance to clear certain aspects in advance, which can lead to misunderstandings and problems during the process of team counseling. To avoid problems, four advices can be given to practitioners: (1) Have a clear overview of the situation, (2) be aware of your target group, (3) use diagnostics with care, and (4) share your experience.

***Have a Clear Overview of the Situation.*** As in interventions with individual athletes it should be clear before the beginning who initiated the whole process, who is the employer and who gets any reports about the work. Important questions emerging are: Who is getting which part of the information gathered through diagnostics, counseling and conversation with different people? Is the sport psychologist allowed to talk to the coach, manager or anyone else about the information he or she gets? Or does he or she *have to* share information? A clear agreement about this point may help the sport psychologist to overcome severe ethical dilemmas (see also Figure 1).

Furthermore, practitioners working with teams still tend to mostly react to what the team members are telling them and try to start interventions immediately—mainly because they think they need to justify their employment. However, for the future it would be helpful to first identify the determinants that need to be addressed to affect the desired outcome. Interventions should be chosen theory based, so it can be expected from research that the intervention will have an effect on the determinants which are to be addressed. The amount of intervention (duration, costs, effort, etc.) in relation to the expected effect should be considered. The sport psychologist should challenge him or herself if it is possible to attain the same result with a lesser dose of intervention (efficacy). Using validated diagnostic tools, the progress regarding the selected determinants should be assessed.

***Be Aware of Your Target Group.*** Another important point to clarify before the beginning of collaboration with a sports team is the question “Who will I be working with?” It is possible to do counseling with individual athletes only, so the sport psychologist’s job will be performance enhancement of every single athlete. On the other hand it is thinkable to work only with the team as a whole—in this case, the focus is on enhancement of group dynamics to improve group performance. The third option is a systemic approach where an effect on group performance is aimed for by working only with the coach or the staff to optimize for example communication, motivational climate or leadership aspects (Grau, Moller, & Gunnarsson, 1988). Each of these approaches has its advantages and disadvantages. It should just be clear to the sport psychologist that different target groups and situations ask for different approaches, skills and behaviors. As the German team psychologist Lothar Linz stated during the panel discussion: “If you have a lot of time with a team and only few publicity, you can work with the team as a whole. If there is a lot of publicity and only little time, never do this kind of counseling, but rather work with the coach or single athletes.”

Working with youth teams in elite sports differs from working with adult teams. Even if neither of them has worked with a sport psychologist before, an adult who is taking part in competitions for many years has developed more or less successful strategies to cope with stressful situations. In contrast, young athletes are more likely to be still working on this or even struggling. Thus, as a team psychologist, it will probably generate more effect on performance to work with the whole team of adults to enhance group dynamics. With young athletes, focus might be more on development of individual strategies regarding important aspects like motivation, relaxation, goal setting, and other personal skills. For example only if the athletes of a team have developed a certain amount of self efficacy, it will be useful to talk about team efficacy. Nevertheless, these skills can be trained during group sessions with

the whole team. In this manner, the athletes learn that others also struggle with the same situations and little problems and thus will be more likely to accept suggestions from others. Taken together, when working with young teams, focus should be more on education and prevention instead of intervention. Athletes should learn strategies which they subsequently are able to use independently in stressful situations.

**Use Diagnostics With Care.** Some researchers and sport psychologists claim that no counseling or intervention should be started without prior standardized diagnostics of the most important sport psychological constructs (e.g., Beckmann & Kellmann, 2003). However, as false (negative or positive) decisions may have serious consequences for a team or an athlete, sport psychologists should rather rely on their personal, often unstandardized observations than applying a test which is not valid or which they do not understand completely. If valid and theory based tests are available, they can serve as additional source of information, be a good instrument to monitor the progress of a team and prove success of an intervention to the employers and the team. If possible, repeated measures should be applied instead of relying on single measures to reduce the risk of false positive or negative results. It should also be kept in mind that there are no perfect tests and results have to be interpreted with caution. Applying different methods to assess a phenomenon from more than one side (triangulation) would be the best way to use standardized diagnostics (Hackfort & Birkner, 2003).

**Share Your Experience.** A last aspect which is still mostly neglected by practitioners is the fact that supervision and peer-coaching help increasing the quality of sport psychological counseling. Discussions with colleagues help to “become better psychologists and serve as a form of continuing education and professional development” (Speed, Andersen, & Simons, 2005, p. 16). Instead of being anxious that others might “steal” own special concepts and clients, practitioners should focus on their own gain from these peer consulting sessions. The whole field of sport psychology will profit from practitioners who are willing to share their knowledge, learn from each other and become better counselors.

## Conclusion

The conclusion and recommendation of the consensus group is basically to restructure the scientific process: At the current point of this scientific process the most important desiderata is the description of practice needs, which means exigent questions and important challenges of applied sport psychologists, coaches and teams. Based on this description of practice needs, theoretical approaches need to be found or developed to explain mechanisms which are related to practical problems and challenges. These theoretical approaches must contain the common and obviously—from a scientific point of view— interesting psychological and psychosociological constructs of research in the past three or four decades. Then, existing strategies and interventions, both, from the area of research designs and practical habits, have to be scrutinized whether they fit to the causal mechanisms given by theoretical approaches. After all, field studies and experimental research has to be conducted with two main aims: showing whether theory-driven interventions are effective and examining whether these interventions are acceptable and applicable

in practice. In a few issues of group dynamic in sport (e.g., cohesion) this research process has been built in a pretty good way—in a wide range of other issues we do have only some mosaics stones of the whole picture up to date. To restructure and complete this unfinished mosaic we need communication, both between practice and research and within the group of researchers. Further small group conferences would be helpful to reach this goal.

## Notes

1. An effect size is a standard score. A considerable number of different types of effect sizes can be reported in meta-analysis research. The three discussed here are Cohen's *d*, Hedges *g*, and the correlation coefficient. Insofar as the former two are concerned, effect sizes in the range of .80, .50, and .20 are interpreted as large, moderate and small respectively (Cohen, 1988). Insofar as the latter is concerned, coefficients in the range of .50, .30, and .10 are interpreted as large, moderate and small respectively (Cohen, 1988).
2. Throughout the discussion, the claim that a difference was or was not found is associated with the fact that a statistical test was undertaken and the results were found (or not found) to exceed (at a minimum) the probability level of .05.

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