Case Study:
A Team-Building Mental Skills Training Program
with an Intercollegiate Equestrian Team

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ABSTRACT
Relatively few mental skills training programs have solely focused on team-building issues. The purpose of this article is to briefly describe the design, implementation, and evaluation of a team building mental skills training program for an intercollegiate equestrian team. In particular, theoretical and methodological rationales for the team-building intervention are provided. The data are analyzed and future recommendations are offered for using team-building intervention programs.

Introduction

Practitioners have adopted a strategy known as team-building to promote consistent and effective teamwork. Team-building is the deliberate process of facilitating the development of an effective (task) and close (social) group (Beer, 1980). Beckhard (1972) and Woodcock and Francis (1994) suggested the following purposes of any team building intervention: a) to set clear team goals; b) to clarify role behavior; c) to examine team functioning (e.g., communication patterns, norms); d) to examine relationships between members; e) to ensure meetings and practices are efficient; f) to diagnose potential weaknesses and minimize their influences and; g) to ensure coherent and visionary leadership. Beckhard further argued that the primary focus of any team-building strategy should be task related as interpersonal problems often result from problems with team functioning.
Team-building has only recently been introduced as a method of intervention in the sporting environment (cf. Hardy & Crace, 1997) and has typically been conducted according to either an indirect or a direct approach. The indirect approach has been described as a four-stage process in which coaches and the sport psychologist work together to design team specific strategies to improve cohesion (Carron, Spink, & Prapavessis, 1997). The coaches then are the agents that implement team-building strategies. The indirect approach to team-building has been found to be effective in promoting adherence and cohesiveness in an exercise setting (Carron & Spink, 1993; Estabrooks & Carron, 1999; Spink & Carron, 1992). However, a study using this approach on soccer teams did not find that team-building interventions improved perceptions of cohesiveness compared to an attention control or a control condition (Prapavessis, Carron, & Spink, 1996).

The direct approach to team building is based on the action research model typically used in organizational settings (see Table 1; Beckhard, 1972; Beer, 1980) and differs from the indirect approach along two important dimensions. First, athlete empowerment has been identified as a very important element of team functioning (Bloom, 1996) and the direct approach is based on the belief that athletes want to feel empowered or self-determining. Team members become active agents in the team-building process, as they are involved in diagnosis, planning, and evaluation of team functioning. Second, the sport psychologist works directly with both the coaching staff and the athletes in all stages, including the implementation of strategies, to improve group effectiveness.
## Table 1
### The Direct Approach to Team Building

<table>
<thead>
<tr>
<th>Stage</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discussion with Coaches</td>
<td>Make coaches active in team-building process</td>
</tr>
<tr>
<td></td>
<td>Role of coach in team-building process</td>
</tr>
<tr>
<td></td>
<td>Evaluation of coach behaviors</td>
</tr>
<tr>
<td></td>
<td>Additional information (e.g., identify problem areas, team atmosphere, member characteristics)</td>
</tr>
<tr>
<td>2. Education and Contracting</td>
<td>Educating team members</td>
</tr>
<tr>
<td></td>
<td>Identify athlete and team-builder roles</td>
</tr>
<tr>
<td></td>
<td>Confidentiality</td>
</tr>
<tr>
<td>3. Data Collection</td>
<td>Collect objective and comprehensive data</td>
</tr>
<tr>
<td>4. Data Analysis</td>
<td>Key issues identified</td>
</tr>
<tr>
<td></td>
<td>Determine root cause of behavior (not just symptoms)</td>
</tr>
<tr>
<td>5. Presentation of Data</td>
<td>Coaches and athletes provide a general summary of information gathered in Stages 3 and 4</td>
</tr>
<tr>
<td>6. Step-by-Step Intervention</td>
<td>Interventions designed to facilitate change in team functioning</td>
</tr>
<tr>
<td>7. Final-Action Planning</td>
<td>Final interviews and/or questionnaire assessment to determine change</td>
</tr>
<tr>
<td>8. Ongoing Monitoring/Support</td>
<td>Follow-up meetings and continued support</td>
</tr>
</tbody>
</table>

Note: Adapted from Beckhard (1972); Beer (1980)
In a review of thirteen direct approach team-building investigations in business, Sundstrom, DeMuese, and Futrell (1990) reported that 80% of the studies resulted in perceptions of improved group effectiveness. The relationship between team-building and performance was less conclusive. Sundstrom et al. found that fewer than half of the interventions resulted in improved performance. Consequently, this approach may be more effective in enhancing teamwork than in improving performance.

Empirical studies carried out on the sport of equestrian have rarely been conducted. In fact, a search of the scientific literature revealed a lack of empirical research done on psychology and the sport of equestrian. However, Schinke and Schinke (1997) wrote a book that offered riders of all levels with suggestions on how to develop mental abilities in tandem with their technical skills. There have been other written accounts of equestrian in sport specific magazines, however no research on equestrian can be found in academic journals. While the sport of equestrian is generally considered to be an individual sport, at the intercollegiate level of competition points are awarded for team and individual performance, meaning it is referred to as a coacting sport. As such, riders need to develop an individual and team orientation to practice and competition. Consequently, an investigation into the psychological processes and team dynamics influencing members of an equestrian team is timely.

Based on the literature regarding team-building, the empirical and theoretical literature on group dynamics, and the equestrian environment, a season-long team-building intervention program was employed in an attempt to facilitate the development of an effective team. More specifically, the purpose of the current study was to describe a theoretical and methodological rationale for implementing a team-building mental skills training program and to present data to facilitate discussion of this topic.

Method

Participants

Female participants (N = 45) from a NCAA Division I equestrian team, ranging in age from 17 to 35, participated in the study. The coaching staff consisted of the head coach and one assistant coach. The team had been competing at the intercollegiate level for only one year and the athletic season ran from the first week of October to the first week of May.

Instruments

Three methods of data collection were employed in the current study. These included the Group Environment Questionnaire (GEQ; Carron, Widmeyer, & Brawley, 1985), Group Interviews, and the Team-Building Evaluation Form.

The Group Environment Questionnaire. Cohesion was assessed by the Group Environment Questionnaire (Carron et al., 1985). The 18-item GEQ assesses athletes' perceptions of team cohesiveness across four dimensions: Individual Attraction to the
Group-Task (ATG-T; 4 items); Individual Attraction to the Group-Social (ATG-S; 5 items); Group Integration-Task (GI-T; 5 items) and; Group Integration-Social (GI-S; 4 items). Each item is rated on a 9-point scale anchored at the extremes by "strongly disagree" (1) and "strongly agree" (9). The larger the score on the scale, the greater the perceptions of cohesion. Brawley, Carron, and Widmeyer (1987) demonstrated evidence for the concurrent, predictive, and construct validity of the GEQ. In the present study, measures of internal consistency from Time 1 to Time 2 respectively were .60 and .61 (ATG-T), .80 and .64 (ATG-S), .46 and .79 (GI-T), and .71 and .61 (GI-S). Due to poor internal consistency at Time 1, the subscale GI-T was dropped from further analyses.

**Group Interviews.** Focus group methodology (see Carey, 1994; Krueger, 1994, 1998; Morgan, 1998) was implemented in the current investigation. According to Fontana and Frey (1993), the group interview or focus group is a method of interviewing that has gained support among social scientists. Group interviews are viewed as an effective method of triangulating or complementing other methodological techniques because they add the "human element of the voices" (Fontana & Frey, 1993). Interviews with small groups of the team were conducted pre- and post-intervention. The purpose of the pre-intervention interview was to further explore team functioning to aid the researchers understanding of the issues facing the team. The post-intervention interview was designed to allow the athletes to comment upon changes in team functioning resulting from the implementation of the various team-building strategies.

**Team-Building Evaluation Form.** At the end of the season, the team members were asked to anonymously complete a six-item questionnaire to help evaluate the team-building program. The questionnaire was comparable to that used by Partington and Orlick (1991) with Olympic athletes. The team-building evaluation form allowed athletes to express any feelings about team functioning, the sport psychology program, or the sport psychologist that they did not feel comfortable with discussing aloud.

**Procedure**

The head coach of the equestrian team approached the primary investigator about the possibility of creating a sport psychology intervention program (which focused on team-building). The coach expressed many reasons for this request including a strong belief in the value of sport psychology, the inexperience of team members with mental training and intercollegiate competition, the nature of the sport of equestrian and the high athlete-to-coach ratio (45:2). Given the above information, a direct approach to team-building was employed.

**Pre-intervention.** Athlete perceptions of their team were assessed via two measures. First, athletes were asked to complete the GEQ to assess team cohesion. The GEQ was completed by 37 of the 45 active members who were in attendance at a team meeting. Based on the results of the GEQ and an interview with the head coach, a series of semi-structured group interview questions were created to further explore team functioning and to facilitate researcher comprehension.
Team members were divided into heterogeneous groups of six to eight athletes. Each interview session lasted approximately 1.5-2 hours. The primary researcher recorded athlete responses to each of the four questions and then summarized and transcribed responses immediately after each session. Each of the interview transcripts were reviewed and summarized independently by the two investigators, who searched for re-occurring themes. The general themes that affected team functioning were lack of athlete leadership; unclear team norms; little accountability for one's actions; weak coach-athlete communication; and limited member social interaction.

Season-long intervention program. A team-building intervention program was subsequently created for the remainder (four months) of the equestrian season based on the results of the GEQ and the group interviews. More precisely, five team sessions were carried out; none of which were more than three weeks apart. The team-building sessions are discussed in the order that they were presented to the team.

1. **Leadership.** The data clearly indicated that the athletes did not feel they had enough say in the daily operations of the team and that team functioning was ineffective. It was determined that through the development of athlete leadership some of these areas of concern could be alleviated. Consequently, it was decided to elect team captains who would oversee specific areas of team functioning including task (e.g., lack of horse and barn care by some team members, lack of available teaching time with the head coach) and social (e.g., weak team spirit) aspects of the team. A team-building session was conducted with the intent on having the athletes identify who they thought would be effective leaders. The six individuals who were asked to be captains enthusiastically accepted their responsibilities. Before being introduced to the team, the captains met with the sport psychologist for a two-hour meeting whereby their roles and responsibilities were discussed.

2. **Team Covenant.** The team had a covenant or set of norms or guidelines on how to act (i.e., team spirit, respect, positive attitude) towards each other and in public. During the interviews it became clear that the covenant needed to be re-addressed as the team felt it was not adhering to the norms they had earlier developed. The purpose of this session was to revisit the covenant and highlight its importance. The goal was to make this session process-oriented so that the athlete’s developed the strategies that would enable them to adhere to the covenant.

3. **Communication.** A handout was prepared on both athlete-athlete communication and coach-athlete communication. It focused on effective nonverbal and verbal communication skills so the athletes could improve their abilities to receive and interpret harsh feedback from coaches and teammates. A separate handout was prepared for the two coaches regarding effective communication skills with athletes.

4. **How to Handle Being Chosen for Competition.** While the number of athletes on the team is quite large, very few (less than 20%) are afforded the opportunity to compete at the elite/national competitions. The athletes reported feelings of jealousy on or around the time of major competitions. This led to resentment and
team disarray. The goal of this presentation was to prepare the athlete's for the coach's choices of who competed at the major championships.

5. **Preparing for Nationals.** The eight athletes who qualified for the national championship met privately with the sport psychology consultant before the competition. The goal of the meeting was to increase harmony amongst those heading to the tournament, and also to prepare these athletes psychologically. In particular, small group team-building exercises were administered that focused on social support and competitive spirit of the traveling team members.

**Post-intervention check.** The final stage of the study involved re-administering the GEQ to the athletes as well as group interview sessions in order to determine if the team-building intervention program was successful. The GEQ was re-administered at a team gathering after the regular and post season were completed, but prior to the National Championships. The year-end team exit group interview consisted of four sessions and the format was similar to the pre-intervention interview (e.g., number of athletes in each session, length, and environment). Upon completion of the post-intervention interview, the athletes were left alone in the room and asked to anonymously complete the Team-Building Evaluation Form.

**Results**

**Cohesion**

The descriptive statistics for the pre- and post-intervention cohesion scores are presented in Table 2. In order to determine whether the team-building program had an impact on cohesion a MANOVA was conducted. Results of the analysis showed no significant difference in perceptions of cohesion following the intervention (Wilks' lambda = .91, F(3, 22) = .70, p > .05). Consequently, univariate results were not examined.

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Time 1</th>
<th></th>
<th>Time 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>ATG-T</td>
<td>27.04</td>
<td>5.60</td>
<td>36.00</td>
<td>5.20</td>
</tr>
<tr>
<td>ATG-S</td>
<td>33.84</td>
<td>9.83</td>
<td>35.84</td>
<td>7.53</td>
</tr>
<tr>
<td>GI-S</td>
<td>21.96</td>
<td>5.86</td>
<td>23.76</td>
<td>4.75</td>
</tr>
</tbody>
</table>
Exit Interviews

A social aspect of team functioning was the first dimension addressed in the exit interview. In general, the comments of the athletes indicated an improvement in team harmony and closeness over the course of the season. In particular, the athletes felt more support from teammates at competitions and that the cliques were disappearing.

The second dimension of team functioning focused on team tasks/chores including role definition, communication, and accountability for one's actions. While improvements were reported, athletes still believed that progress could be made. The main area of concern related to responsibility and accountability, particularly with respect to barn and horse chores. A captain was elected to oversee the completion of this task; however, it was perceived by team members that instead of delegating chores throughout the team, she only delegated tasks to a small group of team members (including herself). Consequently, a stricter system for next year whereby everyone is held accountable and contributes equally to this task, in addition to reinforcing the captain's role in this area may be beneficial.

A third area of concern related to who was chosen by the coach to show at competitions. The athletes felt there was a discrepancy between the criteria identified by what the coach said and who ended up being chosen. The athletes felt that accountability for one's actions was never properly considered. The team intervention session #4 was designed to help the athletes understand the best method of dealing with being chosen (or not chosen) for competition. In the past, the athletes felt unprepared for handling the coach's decision and often resented the coach and other teammates just prior to team competitions. This often left those athletes who were chosen to compete feeling guilty and/or disenchanted with themselves and their teammates. During this session it was explained that the coach does not have to explain her reason for choosing her traveling squad. However, the coach does have to make sure that she considers the information provided by the captain, such as attendance at team practices and meetings, etc.

Communication skills and lack of available teaching time were concerns identified by the team that centered on the coaching staff. The athletes felt the coach was overworked, and because of it, often took out her frustrations on certain athletes in front of the team. This was the main reason that a communication intervention session was created. It was intended to explain how to deal with criticism and how to explain why people act in certain ways. Furthermore, the sport psychologist spoke with the head coach throughout the course of the season about managing work overload and stress, as well as the most effective means of communication. The year-end exit interview revealed that the athletes felt that the coach's communication style improved from the beginning of the season to the end. In particular, the athletes understood that the coach's comments were not personal, as well as coping strategies for handling the coach's verbal outbursts.

The final component of the exit interview allowed the athletes to voice concerns in any area(s) of team functioning they chose. The two most common responses were improved athlete accountability and responsibility and the need for more teaching time.
with the head or assistant coach. Finally, concern was expressed for better horse care and for all athletes to make a more concerted effort to show up on time. While improvement appeared to occur in these areas, more work is still necessary. The coach and the sport psychologist will make further attempts to improve team functioning across these areas on next year's team.

**Sport Psychology Evaluation Form**

Analyzing the anonymous evaluation form revealed a number of positive and productive responses (see Table 3). Nearly 39% of the responses indicated that they appreciated having the opportunity to express their opinions in a non-threatening manner. This directly related to the two interview sessions that were held. Other areas that were mentioned, but to a much lesser degree, included helping with communication and working out team problems.
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How did the sport psychology program help you?</td>
<td>Expression of my opinions</td>
<td>12</td>
<td>38.7</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>3</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>Someone to talk to</td>
<td>3</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>Positively influenced team</td>
<td>3</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>Not much</td>
<td>3</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>Work out group problems</td>
<td>2</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>Individual improvement</td>
<td>2</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>Three responses with a frequency of 1</td>
<td>1(x3)</td>
<td>9.6</td>
</tr>
<tr>
<td>2. How could it better meet the needs of the team?</td>
<td>Individual sessions, including time management</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Five responses with a frequency of 1</td>
<td>1(x5)</td>
<td>41.5</td>
</tr>
<tr>
<td>3. What should be done next year?</td>
<td>Expand the &quot;buddy system&quot; of horse care</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Better enforce team rules (chores)</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>Keep the captains</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>Improve athlete commitment</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>More individual coaching</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>More meetings without coaching staff</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>No psychology at team meetings</td>
<td>1</td>
<td>8.3</td>
</tr>
</tbody>
</table>
4. Strengths of sport psychologists

- No meetings at all: 1 (8.3)
- Improved organization: 1 (8.3)
- Set higher team standards: 1 (8.3)
- More individual sessions: 1 (8.3)

Outlet for athlete discussion: 6 (21.4)
Listening skills: 4 (14.3)
Provided structure/leadership: 3 (10.7)
Caring/understanding: 3 (10.7)
Improved team unity: 2 (7.1)
Understood team dynamics: 2 (7.1)

8 responses with a frequency of 1: 1(x8) (28.8)

5. Weaknesses

- Lectures were too long: 2 (25.0)
- Meetings weren't long enough: 1 (12.5)
- Lack of familiarity with sport: 1 (12.5)
- Needs more meetings with coaches: 1 (12.5)
- Come to more meetings: 1 (12.5)
- Preconceived notions: 1 (12.5)
- Confidence issues in groups: 1 (12.5)

Discussion

The purpose of the present investigation was to briefly discuss the design, implementation, and evaluation of a team-building mental skills training program on an intercollegiate equestrian team. A strength of the current study was the combination of qualitative and quantitative measures as it provided a more complete understanding of the different thoughts, feelings, and dynamics of the team. In the former, perceptions of team cohesion were assessed via the GEQ, pre- and post-intervention. Results of the analyses
revealed no significant differences in cohesion. While significance was not found, observation of the mean cohesion subscale scores reflects a trend towards improved cohesion, especially with respect to the ATG-T subscale. ATG-T assesses the individual group member's perceptions about her personal involvement with the group task, productivity, and goals and objectives. With importance placed on individual member involvement in the diagnosis, planning, and implementation of the program in the current investigation, changes across this subscale are not completely surprising. Team members were encouraged and expected to take a more active role on their team. Team goals and expectations were also clarified, which may have led to improvements across this subscale. No significant changes in perceptions of cohesion is comparable to Prapavessis et al.’s (1996) results.

Results from the qualitative interviews provide additional support for this suggested trend toward improved team functioning. Athletes reported improvements in coach-athlete relationships and athlete-athlete relationships. It could be that holding the athletes accountable for horse care and team attendance at meetings and practices helped reduce the unequal distribution of work. Many of the athletes wanted the duties spread more evenly among team members. The continuation of a sound method of tracing athlete accountability will undoubtedly lead to higher perceptions of team cohesion.

Beer (1980) has noted that the coach must support the team-building process if it is to be successful. We concur with this statement and feel that the support and trust of the head coach allowed this intervention strategy to be most effective. On the other hand, many coaches may be reluctant to allow an "outsider" access to his/her athletes, even when confidentially of the athletes is assured ahead of time. In these instances, the indirect approach may be most suitable. According to Carron et al. (1997), many coaches like to retain all the power and authority. In sum, perhaps the environment that the sport psychologist enters dictates the best approach to use.

For the direct approach to be effective, the sport psychologist must be able to adapt to the team environment. While the indirect approach allows the sport psychologist to work with the coaching staff in designing intervention programs, the direct approach allows the sport psychologist to design the sessions with the input of the coaches and athletes, and also to lead the sessions. This approach can be more productive for the team only if the sport psychologist is able to adapt to the team environment. It is important for the sport psychologist to be viewed as an intermediary between the coaches and athletes. Both parties should feel comfortable speaking with the sport psychologist without feeling nervous or threatened. More importantly, the sport psychologist must build rapport with the coaches and athletes, without overruling the coach. If there is a problem, then the athlete should be directed on the how to best manage and understand his/her feelings.

**Future Directions**

This study has attempted to examine a number of areas that have received limited attention in the applied sport psychology literature. While many applied sport psychologists have been working with teams for years, few have actually documented
what they have done. In the case of team building research, it was our desire to begin an exchange of information about this topic. While we did not intend to assess the advantages and disadvantages of the direct and indirect approaches to team-building, there is no doubt that an area of future research may be to compare the effectiveness of each approach. More research is also encouraged on the sport of equestrian, which is quickly expanding at the intercollegiate level, especially for female athletes. This sport is categorized as coacting, since the athletes compete individually but the results are used for team scores. Williams and Widmeyer (1991) were one of the first researchers to find that cohesion positively contributes to success or other desirable outcomes of coacting sports. Despite their plea for more research in this area, up to this time, there has not been a great deal of empirical studies, let alone on the sport of equestrian.

There are certain limitations in designing and assessing the effectiveness of a mental skills training program (Grove, Norton, Van Raalte, & Brewer, 1999). Our study employed a pre-experimental methodological design in examining the effectiveness of the direct approach to team-building. As such, conclusions regarding cause and effect relationships are limited (Berg & Latin, 1994). While this approach is consistent with much of the team-building research found in organizational psychology (Brawley & Paskevich, 1997), subsequent research design examining the feasibility of this approach should employ a more sound methodological approach (i.e., quasi or true experimental designs). Brawley and Paskevich outlined other methodological considerations that need to be addressed when conducting team-building research. These included attention to sampling and measurement issues and study duration.

In summary, the qualitative portion of the study revealed that the team-building intervention program produced some positive first steps. We feel that our goal of beginning an exchange of information about the topic of team-building by providing a theoretical and methodological rationale has been accomplished. We concur with Grove et al. (1999) who noted that more applied research studies are needed if our field is to continue to grow. We hope that this article will bring attention to the topic of team-building and encourage other practitioner’s to conduct research and offer new frameworks on this fascinating topic of team dynamics.

*Footnote: Copies of the pre- and post-intervention interview schedule, and sport psychology evaluation form can be obtained from the first author upon request.*
References


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