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Leadership Behavior and Perceived Team Communication Effectiveness: A Study of Division 1 College Hockey Coaches' Perceptions

William Chris Brooks
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LEADERSHIP BEHAVIOR AND PERCEIVED TEAM COMMUNICATION EFFECTIVENESS: A STUDY OF DIVISION 1 COLLEGE HOCKEY COACHES' PERCEPTIONS

by

William Chris Brooks

A Thesis
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Master in Arts
School of Communication

Western Michigan University
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Secondly, I would like to thank the members of my committee, Dr. Autumn Edwards and Dr. Peter Northouse, for taking the time to refine and review my work. Their insight and expertise has been invaluable to me in bringing cohesiveness to the work I am presenting. I would also like to thank all the teachers that I have had as teachers through my Master’s program including, Dr. Mark Orbe, Dr. Autumn Edwards, Dr. Peter Northouse, Dr. Jennifer Machiorlatti, and Dr. Kathleen Propp. You all played a part in getting me to this point in my Master’s program.

Lastly, I would like to thank my wife, Jeannine, daughter Bryar, and son Barrett, for having the patience to support me through the past two years. All of your sacrifices and encouragement never went unnoticed.

William Chris Brooks
The purpose of the research was to begin testing assumptions about coaches' leadership and team communication by starting with an examination of the relationship between a head coach's perception of his leadership behavior and his perception of the effectiveness of his team's communication.

The sample in the study consisted of fifty NCAA Division I Men's Head Hockey Coaches during the 2006-2007 season. Demographic data reported included the following: the participants' age, education level, nationality, number of years as a head coach, number of years as an assistant coach, 2006-2007 record, and number of years as head coach at their current school.

A survey methodology was used to test three hypotheses and combined two scales used in similar research; The Leadership Scale for Sport (Chelladurai & Saleh, 1980) and The Scale for Effective Communication in Team Sports (Sullivan & Feltz, 2003).

Results indicated that coaches who regularly provide training and instruction perceive their team members to accept each other, have distinct identities, and engage in positive conflict. In addition results showed that coaches who regularly provide positive feedback perceived their team members to accept each other and engage in positive conflict.
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CHAPTER I
INTRODUCTION

Leadership has been defined as "a process whereby an individual influences a group of individuals to achieve a common goal" (Northouse, 2004, p. 3). In many settings there are multiple leaders that play a vital function in the leadership process. In addition, leadership has been described as a complex, transactional process that occurs within interdependent groups, such as athletic teams (Turman, 2003a; Loughead & Hardy, 2004; Beam, Serwatka & Wilson, 2004; Home & Carron, 1985, Vargas-Tonsing, Warners, & Feltz, 2003; Hollembeak & Ambrose, 2005; Rocca, Martin, & Toale, 1998; Martin, Rocca, Cayanus, & Weber, 2005).

For most athletic teams, you have a head coach, assistant coaches, a support staff, and players. In different situations within the team, more than one leader may surface and be counted on for leadership. In sports, the significance of effective leadership by athletes and coaches is a vital component to achievement (Chelladurai & Reimer, 1998; Dupuis, Bloom & Loughead, 2006).

Ultimately, a coach's leadership behavior plays an important function in dictating a team's behavior and performance. Players who respect and trust the leadership behavior of their coach will be motivated to play for him or her. However, every athlete is unique, and therefore the coach, as a leader, must know how to get the most out of each player. Athletes want to learn from leaders (coaches) who put emphasis on behaviors aimed at improving athletic performance by stressing skills, tactics, and techniques through positive feedback. Positive feedback (Loughead & Hardy, 2004; Harris, 1997; Turman,
Open communication and its role in effective leadership has also been studied (Dale & Wrisber, 1996; Lyman, 1997). A coach can decide the type of leadership environment he creates. Some coaches choose to be a players coach, while other coaches separate themselves from their team. Thus, the leadership environment created by a coach may also play a key role in the type of leadership environment that is created within the team, as the team often imitates the behavior of the leader. Having an “open door” policy to encourage open communication may be an essential part of the coach and athlete relationship. Leadership behavior that promotes open communication leads to a healthy environment that endorses social support. Providing social support to the players in both sport and social situations must be a priority for a coach. Therefore, an effective communication environment is critical for the coach and player relationship. As Northouse (2004) explained, “Although leaders and followers are closely linked, it is the leader who often initiates the relationship, creates the communication linkages, and carries the burden for maintaining the relationship” (p.3). This link between leaders, followers, and communication has also been argued by Dupuis, Bloom, and Loughead (2006) and Sullivan (1993). Thus, effective two-way communication between coach and athlete is essential for athletic teams to achieve their desired success.
Equally important as the coach to player communication is the communication within a team. Team communication has been studied from a variety of perspectives (Yukelson, 1983; Eccles & Tenenbaum, 2004; Sullivan & Feltz, 2003; Dupuis, Bloom & Loughead, 2006). One such perspective is confidence (Harris, 1997). It is reasonable to believe that communication between teammates will play a role in self and team confidence.

Additionally, team communication has been linked to cohesion, trust, and team unity (Widmeyer, Brawley & Carron, 1985; Carron, 1988; Sullivan & Feltz, 2000). On teams, not every player is equal and not every player gets the same amount of playing time. Hence, it is important that team members make sure that all players on the team are included. Communication amongst team members that builds trust and cohesiveness is crucial. Team members must be able to communicate their feelings openly and honestly, in order to create an environment that is beneficial for the entire team. Players also make mistakes, whether it is during a game, in a practice, or away from the sport. Consequently, a strong support system within a team contributes to cohesiveness when errors are made. It is also important for members of teams to positively discuss issues when problems arise with each other, as often the head coach is unaware of many things that go on within the dynamics of a team. Therefore, creating an effective communication environment within a team is an important aspect of the leadership that a coach must provide his or her team.

Creating such an environment can be done in a variety of ways. In generating an effective communication environment, a coach can promote an atmosphere that
encourages teammates to exchange support and acceptance. In addition, a coach can endorse players to share an inclusive identity, wherein the players view themselves as a team rather than a group of individuals. Furthermore, a coach must know how both positive and negative conflict influences the communication environment of their team. Positive conflict, which is pro-active and non-emotionally charged ways of dealing with interpersonal differences, is much contrasting to negative conflict, which is person-centered, destructive exchanges of differences (Sullivan & Feltz, 2003).

Statement of the Problem

Most coaches assume that when their team communicates as suggested, that they have created an effective communication environment. In addition, most coaches presume that their players and assistant coaches will perceive the environment to be the same as the coach’s perception. In other words, the communication environment will be perceived in similar ways. The purpose of the proposed research is to begin testing these assumptions by starting with an examination of the relationship between a head coach’s perception of his leadership behavior and his perception of the effectiveness of his team’s communication.

In this study, the five variables of the Leadership Scale for Sports (Chelladurai and Saleh, 1980) that will be studied are: 1) training and instruction- coaching behavior aimed at improving athletic performance, 2) positive feedback- compliments student-athletes for performance and contribution, 3) social support- satisfies interpersonal needs of student-athletes, 4) autocratic behavior- limits involvement of student-athletes in decisions, and 5) democratic behavior- allows participation of student-athletes in
decisions. In addition, the four variables of the Scale for Effective Communication in Team Sports (Sullivan and Feltz, 2003) that will be studied are: 1) acceptance- the exchange of support and acceptance between teammates, 2) distinctiveness- the exchange of an inclusive, shared identity, 3) positive conflict- pro-active, non-emotional attempts to deal with interpersonal differences, and 4) negative conflict- person-centered, destructive exchanges of differences.
CHAPTER II
REVIEW OF THE LITERATURE

The review of the literature in this chapter will be divided into two general sections—one on Leadership Behavior in Sports and a second on Communication on Sports Teams. Within the section on Leadership Behavior in Sports there will be two subsection: 1) Leadership Preferences of Athletes, and 2) Coaching and Peer Leadership Behavior on Sports Teams. There will be three subsections within the second part of the review on Communication in Team Sports: 1) Cohesion and Communication, 2) Creating a Communication Environment, and 3) Communication Behaviors.

Leadership and Team Communication are two aspects of team sports that are important to both the coaches and the players on the team. Leadership in sports requires various leaders, whether coaches, captains or players, to provide control and guidance in different situations. Much of the research in leadership in sports has looked at behavior of coaches, preferences of players, and differences among genders.

Team communication in sports is critical for team success. This involves creating an environment that encourages open communication and support and acceptance between coaches and players and amongst players. Many coaches assume that when their team communicates as suggested, that they have created an effective communication environment.

Furthermore, a sports setting is distinctive. According to Zhang, Jensen, and Mann (1997), "the sport setting has the unique characteristics: a) athletic training requires
much more time to prepare for competition, b) athletic winning is always accompanied by losing, and c) athletic teams exist for a specified time period” (p. 106).

Leadership Behavior in Sports

Strong leadership in sports is integral to success. There are many coaches who overlook the relationship between leadership behavior and effectiveness of team communication. As stated by Turman (2003b), “one learning environment that has gone largely unexamined in the communication field is the context of coaching” (p. 73).

Much of past research concerning leadership in sports has centered on the leadership behaviors of coaches using Chelladurai and Saleh’s (1980) Leadership Scale for Sports. The Leadership Scale for Sports represents five dimensions of leader behavior in sport: democratic behavior, autocratic behavior, training and instruction, social support, and positive feedback (see Table 1). The LSS has been used to measure the preferences of athletes for specific leadership behaviors of a coach, the perception of athletes regarding actual leadership behavior of a coach, and a coach’s perception of his/her own leadership behavior.
Table 1

*Dimensions of the Leadership Scale for Sports (LSS)*

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and Instruction</td>
<td>Coaching behaviour aimed at improving the athletes’ performance by emphasizing and facilitating hard and strenuous training; instructing them in the skills, techniques and tactics of the sport; clarifying the relationship among the members; and by structuring and coordinating the members’ activities.</td>
</tr>
<tr>
<td>Democratic Behaviour</td>
<td>Coaching behaviour which allows greater participation by the athletes in decisions Behaviour pertaining to group goals, practice methods, and game tactics and strategies.</td>
</tr>
<tr>
<td>Autocratic Behaviour</td>
<td>Coaching behaviour which involves independent decision making and stresses personal Behaviour authority.</td>
</tr>
<tr>
<td>Social Support</td>
<td>Coaching behaviour characterized by a concern for the welfare of individual athletes, Behaviour positive group atmosphere and warm interpersonal relations with members.</td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>Coaching behaviour which reinforces an athlete by recognizing and rewarding good (Rewarding Behaviour) performance.</td>
</tr>
</tbody>
</table>

Zhang, Jensen and Mann (1997) modified and revised The Leadership Scale for Sports. In revising the LSS, two hypothesized factors were added to the scale: “Group Maintenance Behavior” and “Situational Consideration Behavior”. The “Group Maintenance Behavior” was proposed as coaching behaviors intended at clarifying the relationship among team members, structuring and coordinating the athletes’ activities, and improving coach-athlete relationship and team cohesion. The “Situational Consideration Behavior” was proposed as proper coaching behaviors aimed at considering the situation factors (like time, individual, environment, team and game); setting up individual goals and clarifying behavior to reach different goals; differentiating coaching methods at different stages; and assigning an athlete to the right game position (Zhang, Jensen & Mann, p. 107). In the next part of this section on Leadership Behavior in Sports, research that discusses leadership preferences of athletes will be presented.
Leadership Preferences of Athletes

On sports teams, leaders use many different forms of leadership in different situations. Many aspects of leadership within an athletic setting have been studied using The Leadership Scale for Sports. Much research has been done looking at leadership preferences of athletes.

Turman (2001) looked at athletes’ preferences and perceptions and coaches’ perceptions of leadership styles throughout an athletic season. Turman had varsity athletes and coaches from seventeen high school teams complete surveys at three points during the season. Results showed that an athlete’s perceptions of his or her coaches’ social support styles are affected by the athlete’s experience level across time. Furthermore, athletes on successful teams indicated a slight decrease in training and instruction from the beginning to the middle of the season, which increased towards the end of the season. On the other hand, athletes on unsuccessful teams indicated high preferences for training and instruction, which dropped significantly as the season went on. Lastly, athletes perceived coaches from unsuccessful teams using more autocratic behavior than those on successful teams.

Baker, Yardley and Cote (2003) examined the effect that an athlete’s sport type (individual or team) may have on the relationship among coaching behaviors. The Coaching Model (CM) (Cote, Salmela, Trudeau, & Baria, 1995) was used in this study, which examined the frequency of seven coaching behaviors: physical training and planning, technical skills, goal setting, mental preparation, competition strategies, personal rapport, and negative personal rapport. Their results revealed that older athletes
reported higher satisfaction with their coach. In addition, males reported greater
satisfaction with their coaches than females. Furthermore, individual sport athletes
reported greater satisfaction with their coaches than did team sport athletes. This study
also found that athletes preferred leadership behaviors that emphasized physical training,
goal setting, mental preparation, competition strategies, personal rapport, and technical
skills. These behaviors also had a positive relationship with coaching satisfaction. Baker,
Yardley and Cote summarized that “coaches who are concerned with their athletes
feelings and satisfaction would be advised to include high frequencies of these positive
behaviors while maintaining low levels of negative personal rapport behaviors” (p. 236).

In sports, the importance of successful leadership by athletes and coaches is a
crucial component to achievement. Chelladurai and Riemer (1998) examined the
congruence between perceived and preferred coaching behaviors in relation to team
performance and/or athlete satisfaction. Results revealed that athletes are most satisfied
and prefer coaches who centered their behaviors at improving athletic performance by
emphasizing the skills, tactics and techniques of the sport.

Harris (1997) looked at the relationship between perceived coaching styles and
sport confidence among college student-athletes. The athletes assessed their coach’s
leadership style using The Leadership Scale for Sports and their confidence using The
Trait Sport Confidence Inventory (Vealey, 1986). The results of the quantitative study
showed that athletes preferred behaviors of the coach that praised athletic performance,
and to behavior that expressed genuine concern for the athlete as an individual. In
addition, athlete’s self-confidence was most influenced by these behaviors.
Chelladurai and Riemer (1998) examined the congruence between perceived and preferred coaching behaviors in relation to team performance and athlete satisfaction. They found that athletes perceived that performance was enhanced by coaches who provided positive feedback and rewarded good performance and therefore the athletes preferred these leadership styles.

Martin, Rocca, Cayanus and Weber (2005) looked at the impact of coaches’ use of behavior alteration techniques (BAT’s) and verbal aggression on player motivation and affect for the coach. College undergraduates who had participated in a competitive high school sport completed a questionnaire based on one of their coach’s communication behaviors, as well as a measure of their overall motivation for the sport and their liking of the coach. The results showed that athletes preferred positive behavior alteration techniques and these techniques were positively related to motivation, affect, and positive feedback. On the other hand, negative behavior alteration techniques were negatively related to motivation, affect and positive feedback. Furthermore, the use of verbal aggression was negatively related to motivation, affect and positive feedback. Finally, they found that male coaches use more punishment strategies with male players than with females and there is more verbal aggression in the male-player male-coach relationship (Martin, et al., p. 13).

Riemer and Chelladurai (1995) found differences between the offensive and defensive personnel of football teams in preferred leadership, perceived leadership, and satisfaction with leadership, and the relationships among preferred and perceived leadership, their congruence, and satisfaction with leadership. Riemer and Chelladurai’s
results showed that defensive players, whose actions are often dictated and controlled by actions of opponents during a game, preferred greater amounts of democratic behavior and social support. This is logical, as it would be complicated for a coach to establish what each defensive player's actions would be prior to knowing what the other teams offensive players are going to do, and therefore, the coach would need to be more democratic. On the other hand, offensive players preferred a less democratic leader and one that is more directive, as an offensive coach determines plays and player assignments prior to the play. Their results showed that a football team consists of two units involving two extremely opposite patterns of leadership dynamics. Moreover, they found all athletes preferred and perceived more training and instruction, as well as positive feedback. Whereas, democratic behavior, autocratic behavior, and social support depend on individual preferences and suggested that coaches can maximize their athletes' satisfaction by matching their behavior with the preferences of the athlete.

Beam, Serwatka and Wilson (2004) used The Revised Leadership Scale for Sport (Zhang, Jensen & Mann, 1997) to examine the differences between male and female student-athletes’ preferred leadership behavior for their coaches based on gender, competition level, task dependence, and task variability. Participants included four hundred and eight male and female student athletes from four NCAA Division I and six NCAA Division II universities. Using quantitative analysis, results showed male student-athletes preferred autocratic and social support behaviors and female student-athletes preferred situational consideration and training and instruction behaviors. Female closed sport student-athletes preferred democratic behavior.
Turman (2003a) had coaches and players complete certain portions of The Leadership Scale for Sports three times during the season to examine the influence of coach experience on young athletes’ preferences for, and perceptions of, coaches’ leadership behaviors across an athletic season. The quantitative analysis revealed that players perceived and preferred more autocratic coaching behaviors at the end of the season than at the beginning. Experienced coaches regarded themselves as less autocratic at the end of the season than at the beginning, whereas less experienced coaches perceived the opposite.

Home and Carron (1985) studied compatibility in coach-athlete relationships, using seventy-four female athletes and nine coaches from intercollegiate volleyball, basketball, track and field, and swimming teams as participants. Compatibility was assessed using a sport-adapted version of The FIRO-B and The Leadership Scale for Sports. The results showed differences between the athletes’ perceptions of and preference for coach reward behavior. Furthermore, perception and preference regarding autocratic behavior were associated with incompatibility.

Rocca, Martin and Toale (1998) examined players’ perceptions of their coaches’ nonverbal immediacy, assertiveness and responsiveness. In the study, one hundred and ninety-two college students filled out a questionnaire based on a coach they had in high school athletics. Their results revealed that player’s who perceived their coaches as being nonverbally immediate, also perceived their coaches as being responsive, and to a lesser extent, assertive. They stressed that autocratic leaders are perceived as being more assertive than democratic leaders. Rocca, Martin and Toale stated that “the functions of
coaching might require people to accentuate their assertiveness in order to be effective” (p. 449).

Hollembeak and Amorose (2005) studied perceived competence, autonomy, and feelings of relatedness to mediate the relationships between perceived coaching behaviors and athletes intrinsic motivation, and to see what coaching behaviors are positively or negatively related to an athlete's motivation. Using The Leadership Scale for Sports and The Sport Motivation Scale (Pelletier, Fortier, Vallerard, Tuson, Briere, and Blais, 1995), the findings showed that perceived competence, autonomy, and feelings of relatedness mediate the relationships between perceived coaching behaviors and athlete’s motivation. Furthermore, they found that athletes preferred democratic behavior and it was positively associated with motivation, whereas, athletes disliked autocratic behavior and it was negatively associated with motivation. In addition, they found that autocratic behavior was negatively associated with relatedness. Hollembeak and Amorose stated that “athletes participating with autocratic coaches may be less likely to feel a strong sense of connectedness or belongingness with their coaches” (p. 32).

As presented in this sub-section, a great amount of research has been done that looks at leadership preferences of athletes. This research clearly shows that athletes prefer leadership behavior focused on developing skills through training and instruction. In addition, research on leadership preferences of athletes confirms that athletes prefer reward behavior, positive feedback, and coaches who praise athletic performance. This research also shows that leaders who build a personal rapport and provide social support to the athletes are preferred. The research on athletes’ preferences of democratic or
autocratic leadership is divided. In shifting from leadership preferences of athletes, the next sub-section will present studies that focus on both coach and peer leadership behaviors on sports teams.

*Coaching and Peer Leadership Behaviors on Sports Teams*

Leadership on sports teams is complex. First you have the head coach, who everyone looks to for leadership. The head coach has a support staff that starts with his assistant coaches, his trainer, his equipment manager, strength and conditioning coach and so on. Each person on the support staff plays a role in leadership depending on the situation at hand. At the same time, leadership within the team is crucial. Each team has a captain or captains, who are counted on for leadership when the coaches or support staffs are not around. It is important to realize that every person who provides leadership within the team setting may use a different approach towards leadership. At the same time it is important that the coach and the peer leaders compliment each others leadership.

Sullivan and Kent (2003) examined the relationship between the efficacies of intercollegiate coaches and their leadership styles. Their study consisted of an international sample of two hundred and twenty-four coaches. Their findings showed that as coaches became more confident in their roles as motivators and teachers, they were closer to their image of the ideal leader with respect to positive feedback and appropriate training and instruction and engaged in these behaviors to a greater extent. In addition, the findings showed that as coaches became more confident in their abilities to motivate the athletes, and effectively teach them, they perceived themselves as closer to an ideal with respect to the leadership behaviors of teaching and instruction. Furthermore, their
results showed that coaches could promote higher levels of task cohesion for their players using training and instruction, democratic behavior, social support, and positive feedback styles and avoiding the use of autocratic coaching strategies.

Westre and Weiss (1991) examined the relationship between perceived coaching behaviors and group cohesion in high school football teams. A total of one hundred and sixty-three participants assessed their coach’s leadership style and behaviors. Their results showed that coaches could promote higher levels of task cohesion for their players using training and instruction, democratic behavior, social support, and positive feedback styles and avoiding the use of autocratic coaching strategies.

Beauchamp, Bray, Eys and Carron (2005) explored the relationships between coaching behaviors and athletes’ experiences of multidimensional role ambiguity in sports teams. One hundred and fifty-nine Canadian University athletes and coaches were surveyed early to midway through their respective seasons. In addition, athletes’ experiences of multidimensional role ambiguity in sports teams were studied. Results showed that for starting players, neither training and instruction or positive feedback were associated with any of the role ambiguity dimensions. However for non-starting players, higher levels of training and instruction were associated with lower levels of offensive and defensive role consequences ambiguity, as well as offensive role evaluation ambiguity. Their explanation for this was that coaches typically provide starting players with more opportunities to practice their various role responsibilities in comparison to non-starters.
Turman’s (2003b) had thirty male wrestling coaches’ complete parts of The Leadership Scale for Sports three times during the season. This study looked at the influence a coach’s experience has on young athletes’ preferences for, and perceptions of, a coach’s leadership behaviors across a season. Both coaches and athletes agreed that coaches used positive feedback a lot at the start of a season and that much less positive feedback took place at the end of the season. Turman found that cohesion was reduced when coaches used leadership behaviors that embarrassed and ridiculed players, or demonstrated inequity by showing favoritism to individual athletes or units. On the contrary, team cohesion levels increased when coaches used leadership behaviors that praised and teased athletes, utilized team prayer, and exhibited dedication to the sport.

Laughead and Hardy (2004) examined the leadership behaviors of coaches and peer leaders to study peer leadership in sport. The coaches’ behaviors were studied using the Leadership Scale for Sports and the peer leaders behaviors were operationalized using a modified version of the Leadership Scale for Sports. The quantitative study revealed that coaches and peer leaders demonstrated different leadership behaviors. In addition, it showed significant disparities between coaches and peer leaders in each of the five behaviors measured by the LSS. Their results showed that coaches clearly exhibited training and instruction and autocratic behaviors. On the other hand, peer leaders demonstrated more social support, positive feedback, and democratic behavior.

Dupuis, Bloom, and Laughead (2006) did a study that linked leadership and success. Their study consisted of qualitative research which examined a team captains’ perceptions of athletic leadership on successful teams. The captains felt that both
democratic and autocratic styles of leadership were required on their behalf. They pointed
to their responsibility as a peer leader on the team to improve and manage team
dynamics, team spirit and the importance of leading by example. In addition, they
discussed the importance of organizing formal meetings with the team, fans, sponsors and
other team functions.

The research regarding leadership behaviors by coaches and peers on sports teams
in this section provided several insights into the dynamics of sports teams. First, the
research reviewed in this section showed some significant differences between peer and
coach leadership. Second, the research in this section shows that coaches point to the
importance of emphasizing training and instruction, social support and positive feedback,
while avoiding autocratic leadership behaviors. Third, it also demonstrated that peers feel
it is important to have a mix of democratic and autocratic leadership, in addition to social
support and positive feedback. The next section will discuss studies that look at three
specific parts of communication on sports teams: 1) Cohesion and Communication, 2)
Creating a Communication Environment, and 3) Communication Behaviors.

Communication in Sports Teams

Communication within sports teams has intrigued researchers. First, sports teams
are a bona fide and salient social group and represent a prime area to study such social
issues. Next, unambiguous outcomes, like performance and member satisfaction, allow
for a venue to test the effectiveness of communication styles and patterns. Lastly, team
cohesion and social support are two well-established team dynamics within sport that
both emphasize a task and social distinction, and have both been recognized as explicitly based on the self-disclosure of teammates (Sullivan & Feltz, p. 1695).

Much of the research that has been done has used one particular scale to operationalize effective communication. Sullivan and Feltz (2003) constructed The Scale for Effective Communication in Team Sports (SECTS) to measure the effectiveness of team communication in sports. The SECTS represents four key factors of team communication in sport: acceptance, distinctiveness, positive conflict, and negative conflict (see Table 2). These factors include both verbal and nonverbal indicators. According to Sullivan (2004), "communication is operationally defined within the framework of social exchange, and each of the factors of communication can be seen as either an interpersonal reward (i.e. Acceptance, Distinctiveness, and Positive Conflict) or cost (Negative Conflict) exchanged between teammates" (p. 124).

Table 2

*Dimensions of the Scale for Effective Communication in Team Sports (SECTS)*

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance</td>
<td>The exchange of support and acceptance between teammates.</td>
</tr>
<tr>
<td>Distinctiveness</td>
<td>The exchange of an inclusive, shared identity.</td>
</tr>
<tr>
<td>Positive Conflict</td>
<td>Pro-Active and non-emotionally charged attempts to deal with interpersonal differences</td>
</tr>
<tr>
<td>Negative Conflict</td>
<td>Person-centered, destructive exchanges of differences.</td>
</tr>
</tbody>
</table>

In creating their scale, Sullivan and Feltz (2003) pointed out that "cohesion was chosen to be the first anchor for the effectiveness of the construct of effective communication" (p. 1711).
Cohesion and Communication

Sullivan and Feltz (2003) stated that in developing The Scale for Effective Communication in Sports, “it appears that teams that frequently exchange acceptance with each other, distinctiveness from other groups, and promote positive conflict while minimizing negative conflict will be more cohesive” (p. 1712)

The tendency of teammates to self-disclose and discuss responsibilities and expectations is related to social and task cohesion. Many studies have looked at team communication, cohesion and other aspects of team unity. Communication amongst team members that builds trust and cohesiveness is crucial. Sullivan and Feltz (2000) found that reactions to conflict (e.g. personal criticisms, imposing guilt, avoiding topics of conflict) were negatively related to team cohesion.

In another study on cohesion, Spink, Nickel, Wilson and Odnokon (2005) used multilevel modeling to look at the relationship between task cohesion and team satisfaction by having one hundred and ninety-four male ice hockey players complete team task satisfaction and task cohesion measures near the end of their hockey season. Their rationale for using a multilevel approach was based on the observation that research has ignored the fact that responses about teams are interdependent and may reflect individual and team level influences. Their findings showed that athletes on elite sport teams were likely to be similar to teammates in perceptions of cohesion and thus interdependent. Furthermore, this groupness within teams translated into perceptions of cohesion predicting group-level variance in satisfaction.
Hardy, Eys, and Carron (2005) explored the potential disadvantages of high cohesion in sports teams. An open-ended questionnaire was administered to forty-one male and sixty-four female athletes representing a broad range of athletic abilities from recreational, high school, club, provincial, varsity, and national levels. The majority of athletes reported the potential disadvantages to high social cohesion, whereas only a minority perceived the potential for disadvantages to high task cohesion. In their qualitative study, Hardy et al. identified disadvantages of high social cohesion as time wasting, goal-related problems, communication problems, decreased focus, reduced task commitment, social isolation, and social attachment problems. Disadvantages of high task cohesion were identified as reduced social relations, communication problems, negative affect, incompatible attitude, perceived pressures, and decreased member contribution. Hardy et al. stated that, “The disadvantages of high social cohesion seem to be more strongly related to group locomotion than to maintenance, whereas the disadvantages of high task cohesion seem to more strongly affect group maintenance than locomotion” (p. 184).

Carron (1988) developed a conceptual system in which he identified four categories of antecedents of cohesion. They were: 1) environmental factors, 2) personal factors, 3) leadership factors, and 4) team factors. In his article, he identified communication among team members as contributing to team cohesion. Carron defines 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” (p. 124). In addition, Carron said that through communication “group members come to possess similar
beliefs, hold similar attitudes, and increase the pressures on conformity to the group norms” (p.168). Widmeyer and Williams (1991) posit that Carron’s point of view logically shows that communication should increase cohesion.

This section presented the importance that communication plays in creating a cohesive environment within a sports setting. The research presented on cohesion and communication posits that communication increases cohesion on sports teams. Furthermore it builds trust amongst members of the team, forces them to become interdependent, and increases satisfaction of team members. The next sub-section will build off the relationship between cohesion and communication and it will discuss the significance of creating a communication environment.

Creating a Communication Environment

Having an open communication environment is important in a team setting. It allows everyone to avoid a lot of anxiety and garners respect between all members and staff of the team. It also encourages input from the participants and allows players to know and understand their roles.

Dale and Wrisberg (1996) did a case study of a Division I women’s volleyball team, wherein the “Performance Profiling” technique was adopted for use in a team setting to create a more open atmosphere for communication between coaches and athletes. In their study profiles were conducted one week into the practice season, at the midpoint of the competitive season, and at the end of the competitive season. Their results showed that significant improvements were made on one or more characteristics by each athlete, the team, and the coach. Both athletes and the coach agreed that there
was a more open atmosphere for communication and the athletes expressed gratitude for the increased input they had.

As a means of creating an open communication environment, Dale and Wrisberg (1996) looked at the procedure of “Performance Profiling” and implemented it in their study. “Performance Profiling” which was originated by Butler (1989) appears to have potential for assisting coaches and athletes in opening the lines of communication. Butler’s “Performance Profiling” is based on Personal Construct Theory which encourages input from the individual in question when attempting to gain greater insight into a particular problem. In addition, it allows the athlete as well as the coach to gain greater insight into how everyone feels.

Yukelson (1983) recommended three ways to improve a team’s communication environment as being: 1) making opportunities for team member socializing, 2) encouraging member discussions, and 3) modifying member differences.

Eccles and Tenenbaum (2004) discussed a social cognitive framework for the study of team coordination and communication. They stressed the importance of coordination for successful team performance and in turn the significance of having team members acquire and share knowledge about the team in relation to the task, in order to achieve coordination. Furthermore, they stressed how intra-team communication is necessary to undertake the knowledge sharing process. In addition, they stressed the importance of shared knowledge. In using this term they referred to the fact that a team member must know what he/she is going to do and when he/she will do it and the rest of the team must know and expect it too. For them a key benefit of shared knowledge is that
each team member can create expectations about the behavior of the team and its members so coordination can be achieved. One of the key ways to promote shared knowledge is through communication and planning. Within sports teams, team captains and leaders play a crucial role in creating a positive communication environment.

Lyman (1997) did a study to look at the role of communication in the development of a high school softball team. As a participant observer on a high school varsity softball team, she conducted over one hundred and fifty-five hours of observations, about thirty-five hours of taped interviews, and endless hours of informal interactions with players and the coach. By analyzing interview transcriptions, the field notes and team handouts, she asserted that the communication environment within a team setting is an ongoing interpretive process that is powerfully influenced by a person’s past experience in sport and reference of groups within the team setting (benchwarmer, position, newcomer, starter, returning, etc.).

Hanin (1992) discussed his fifteen years of research and applied work with top Soviet teams, by examining social and psychological perspectives on communication in top performance sport teams. He introduced communication patterns within volleyball teams, basketball teams and handball teams. In looking at volleyball teams he identified four communication profiles: 1) orienting, 2) stimulating, 3) positive evaluations, and 4) negative evaluations. He went on to identify three ways for optimizing the communication environment: 1) Changing the group or team composition, 2) Redesigning group tasks, and 3) Management of players’ communicative behaviors-
changing the content of messages or their form, direction, or frequency. Hanin identified an eight-step model for optimizing communication in top sport teams.

This section discussed the importance of creating a communication environment within a sports setting. The research stressed the importance of an open communication environment that encourages input and discussions, which will in turn allow everyone to gain insight into feelings. In addition, an open communication environment will clearly lead to team coordination and shared knowledge. Throughout the course of a hockey season, various problem situations arise within a team and a positive and open communication environment can play a huge part of helping a team and staff through those circumstances. Furthermore, an open communication environment will provide clear explanations and shared knowledge to the players, so all members know their role on the team and what is expected of them. The last subsection on communication on sports teams will discuss research on communication behaviors within sports teams.

*Communication Behaviors of Leaders on Sports Teams*

All leaders on sports teams communicate differently. Some captains and coaches are vocal, supportive and positive, whereas some are the opposite. Males and females athlete leaders and coaches have contrasting communication behaviors. Sometime during the heat of the battle of a game or practice, a leader or coach must take control and lead. Their communication behaviors in these situations are important to the team.

Turman (2005) looked at the types of regret messages coaches use during competition and how these communication behaviors vary across the course of a football game. In addition, it looked at how coaches’ regret messages vary as a function of team
performance. Accountability regret, which represented “a coach’s need to assign blame or praise for a team’s performance” (Turman, p. 125), emerged most frequently in this study. In addition, coaches of teams who were winning at halftime address accountability by downplaying team success by making attributions to external counterfactual events, like poor performance of opponents and a lucky turn of fate. During much of the pre-game and halftime interaction, coaches used individual performance (self regret), collective failure (how play affected others), and social significance (significance of the game) regret to challenge the players. Turman did point out that the use of regret messages during the course of the game has the potential to focus the athletes on the importance of their individual performance. Additionally, this study found that regret reduction messages (reducing regret) that were used by losing coaches in post-game speeches, seemed to provide coaches with time to discuss the significance of the game, season, and the sport with the players. Lastly, future regret messages were the most detrimental form of regret messages used by coaches, as the coaches used long term emotional regret to focus athlete attention.

Vargas-Tonsing, Warners and Feltz (2003) looked at the relationship between coaching confidence and player and team confidence in an athletic setting. They specifically sought to find whether game strategy confidence, motivation confidence, technique confidence, or character building confidence, predicted individual and team confidence. Their results revealed that coaching confidence was a significant predictor of team confidence, but not of player confidence. In addition, they found that motivation confidence and character building confidence most effectively predicted team confidence.
Therefore, coaches who can effectively motivate and build character through effective communication will have a confident team.

Maniar, Curry, Sommers-Flanagan, and Walsh (2001) studied the preferences of student-athletes in seeking help when confronted with sport performance problems. In their study thirty-four male and twenty-eight female NCAA Division 1 University student-athletes took The Athlete Preference Questionnaire (APQ), which was specifically made for the study. Their results showed that athletes preferred seeking help from a coach over sport-titled professionals, whereas sport-titled professionals were preferred over counselors and clinical psychologists. These results illustrate the importance of effective communication behaviors between coaches and athletes.

Kneidinger, Maple and Tross (2001) monitored and rated touching behavior of four male baseball and three female softball teams. Results showed that females exchanged nonverbal messages more than male athletes, predominantly following negative game events. In addition, females displayed different nonverbal communication behaviors than men. Team activities, such as team hugs and hand piles, were much more common among female athletes. Lastly, all female groups whose members knew each other engaged in overwhelmingly greater exchanges of nonverbal messages.

Dupuis, Bloom, and Loughead (2006) did a qualitative study to examine team captains’ perceptions of athletic leadership on successful teams. Interviewing six former university male ice hockey team captains, their results revealed three common categories: 1) interpersonal characteristics and experiences, 2) verbal interactions, and 3) task behaviors. The team captains’ felt that certain qualities and interpersonal communication
behaviors, such as communicating effectively by being honest, respectful, and by having a positive attitude was important in being an effective leader. When discussing verbal interactions they stressed the importance of choosing the right moment to communicate with the team. The captains also stressed the importance of having a good communication relationship with their coach.

Sullivan (2004) looked at communication behavior differences between male and female team sport athletes. He sampled two hundred and ninety-nine athletes consisting of one hundred and fifty females and one hundred and forty-eight males. His quantitative analysis revealed no significant differences in the way males and females communicate and no differences in respect to the frequency of communication of the sports-specific resources.

The research on communication behaviors of leaders on sports team's shows that coaches use of regret messages clearly affects the team in positive or negative ways. Also, coaches who use motivating and character building through communication behaviors can enhance the confidence of his team. The research also shows that males use non-verbal communication behaviors less than females. Captains of sports teams feel it is important to communicate honestly respectfully, while using a positive attitude to choose the right moment to communicate. Furthermore, captains stressed the importance of a good communication relationship with their coach. The following section will summarize the findings of the research of both leadership and communication within sports teams, and lead to the three hypotheses of this study.
Summary

The research on communication within teams clearly shows the correlations between communication and team cohesion. In relation to the dimensions of The Scale for Effective Communication in Team Sports (Sullivan & Feltz, 2003), the research clearly shows that it appears that teams will communicate effectively if they regularly exchange acceptance with each other, have distinctiveness from other groups, and can engage in conflict in a positive way.

A coach’s leadership behavior often dictates the way their team communicates and behaves, as players often act in similar ways to their coach. Coaching with a leadership style that promotes communication between coach and player and amongst players is critical in creating an environment for success. In addition, most head coaches presume that their players and assistant coaches will perceive the environment to be the same as the coach’s perception. In other words, the communication environment and leadership environment will be perceived similarly. The purpose of the proposed research is to begin testing these assumptions by starting with an examination of the relationship between a head coach’s perception of his leadership behavior and his perception of the effectiveness of his team’s communication. Therefore, three hypotheses were tested for the current study:
Hypotheses

H1- There will be a positive relationship between a coach who says he regularly provides training and instruction to his players and his perception that his team effectively exchanges acceptance with each other regularly, has a distinctive identity, and engages in positive conflict.

H2- There will be a positive relationship between a coach who says he gives positive feedback to his players and his perception that his team effectively exchanges acceptance with each other regularly, has a distinctive identity, and engages in positive conflict.

H3- There will be a positive relationship between a coach who says he provides social support to the players regularly and his perception that his team effectively exchanges acceptance with each other regularly, has a distinctive identity and engages in positive conflict.
CHAPTER III

MEASURES

The previous chapters introduced the five variables of the Leadership Scale for Sports (Chelladurai & Saleh, 1980): training and instruction, positive feedback, social support, autocratic behavior and democratic behavior. In addition, the four variables of the Scale for Effective Communication in Team Sports (Sullivan & Feltz, 2003) were identified: acceptance, distinctiveness, positive conflict and negative conflict. Furthermore, past research on leadership behavior and communication within a sports setting was presented. In this chapter the measures used in the current study to test the relationship between a head coach’s perception of his leadership behavior and his perception of the effectiveness of his team’s communication are presented.

Participants

The sample was comprised of 50 Division 1 men’s head college hockey coaches from the 2006-2007 season in the National Collegiate Athletic Association. Sixty-six percent (n = 33) were American, while thirty-four percent (n = 17) were Canadian. Fifty-eight percent (n = 29) had a Bachelor’s degree, whereas forty-two percent (n = 21) had a Master’s degree. Their ages ranged from 30 to 67 years, with a mean of 46.08 (SD = 8.61). Furthermore, the number of years the participant had held a head coaching position ranged from 1 to 35 years, with a mean of 13.02 (SD = 8.82). The number of years the head coach had served as an assistant coach prior to obtaining his head coaching position ranged from 0 to 21 years, with a mean of 6.68 (SD = 5.37). In respect to the length of
time spent as the head coach at their current schools, the responses ranged from 1 to 34 years, with a mean of 9.10 ($SD = 7.25$).

Procedure

Upon securing institutional review board approval (Appendix A), all 59 coaches in Men’s Division 1 College Hockey were sent an email regarding their willingness to participate in the study. This contact occurred immediately following the completion of the 2006-2007 season. The coaches represented the six individual leagues -- the Central Collegiate Hockey Association (CCHA), the Western Collegiate Hockey Association (WCHA), the College Hockey America (CHA), the Eastern College Athletic Conference (ECAC), Hockey East, and Atlantic Hockey -- in Men’s Division 1 College Hockey. After the initial email contact, surveys were emailed as attachments to each Men’s Division 1 College Hockey head coach. The surveys consisted of the following three measures: The Leadership Scale for Sports (LSS; Chelladurai & Saleh, 1980) (Appendix B), The Scale for Effective Communication in Team Sports (SECTS; Sullivan & Feltz, 2003) (Appendix C), and a brief demographic section (Appendix D).

Coaches were requested to complete the survey and return it to the investigator by fax or in person at the annual American Hockey Coaches Association (AHCA) meetings in Naples, Florida. Additionally, extra copies of the survey were mailed to one coach from each of the six individual leagues who volunteered to gather the surveys from their respective leagues. This was done in case a coach from his league forgot to complete it. As the surveys were returned, all identifying information on the surveys was blacked out to ensure confidentiality and anonymity and they were placed in an envelope.
Following the American Hockey Coaches Association’s meetings, coaches were sent an email thanking those who participated and extending a final opportunity to participate to those who had not yet done so. One additional survey was completed and returned at that time, bringing the sample size to a total of 50 coaches. The corresponding response rate of 85% (50/59) is considered very good (Baxter & Babbie, 2003). Surveys were then randomly numbered one through fifty.

Then the information from all fifty surveys that were returned was entered into SPSS. The demographic information was entered first, followed by the forty items on the LSS, and then the fifteen items of the SECTS. Once all the information from the fifty surveys was entered, demographic information was assessed. Then to run reliability tests for all dimensions of the LSS and the SECTS, each sub-scale was summed and divided by the number of items on that subscale. Lastly, bivariate correlation tests were run on all the sub-scales of both the LSS and the SECTS to test the three hypotheses.

**Instruments**

In this study both the Leadership Scale for Sports (Chelladurai & Saleh, 1980) and the Scale for Effective Communication for Team Sports (Sullivan & Feltz, 2003) were used to explore the hypotheses. In this sub-section both scales will be discussed.

**Leadership Scale for Sports (LSS)**

The LSS (Chelladurai & Saleh, 1980) is a 40-item instrument designed to assess the following five dimensions of leader behavior in the context of sport: training and instruction, democratic style, autocratic style, social support, and rewarding behavior.
The training and instruction sub-scale refers to task oriented responses of coaches focused at improving performance. There are thirteen items on this sub-scale. "Point out each athlete's strengths and weaknesses," is a sample item. The democratic style sub-scale is characterized by actions that promote greater athlete participation in team decisions pertaining to goals, practice methods, tactics, and strategies. There are five items on this sub-scale. "Let athletes work at their own speed," is a sample item. The autocratic style sub-scale represents independent decision making and stresses personal authority. There are nine items on this sub-scale. "Do not explain my actions," is a sample item. Social support behavior represents actions of care and concern for individual team members and efforts toward interpersonal relationships. There are eight items on this sub-scale. "Help athletes with their personal problems," is a sample item. The rewarding behaviors sub-scales refer to reinforcing and positive feedback responses by coaches for the athlete's performance. There are five items on this sub-scale. "See that an athlete is rewarded for good performance," is a sample item.

Participants were instructed to rate the extent to which each item was true of their behavior on a series of 5-point Likert-type scales with response options that ranged from 1 (always) to 5 (never). All items are preceded by the phrase "In coaching I...."

Previous research has shown that the LSS demonstrates content and factorial validity (Chelladurai & Saleh, 1980). Furthermore the LSS has achieved good reliability in earlier investigations. Beauchamp, Bray, Eys, and Carron (2005) report internal consistency coefficients in training and instruction (.89) and positive feedback (.90). Sullivan and Kent (2003) report the following internal reliability coefficients: training
and instruction (.83), democratic style (.79), and positive feedback (.83). Chelladurai and Saleh (1980) report the following internal consistency coefficients: training and instruction (.83), democratic style (.75), autocratic style (.45), social support (.70), and rewarding behavior (.82). Reliabilities of the LSS dimensions in the present study are as follows: instruction and training ($M = 23.90$, $SD = 6.69$, $\alpha = .89$), democratic style ($M = 27.52$, $SD = 4.81$, $\alpha = .76$), autocratic style ($M = 16.16$, $SD = 3.04$, $\alpha = .64$), social support ($M = 20.00$, $SD = 3.78$, $\alpha = .60$), and rewarding behavior ($M = 8.74$, $SD = 2.09$, $\alpha = .78$).

*Scale for Effective Communication in Team Sports (SECTS)*

The SECTS was developed by Sullivan and Feltz (2003), and consists of a 15-item survey designed to measure four aspects of effective team communication, which are acceptance, distinctiveness, positive conflict and negative conflict. Previous research utilizing the SECTS has demonstrated that the four measured aspects of communication are regularly exchanged within sports teams, and that these styles of communication are effective in that they are related to team cohesion and performance (Sullivan, 2002).

With regard to the SECTS, communication is operationalized within the framework of social exchange theories, and each of the four factors of communication can be seen either as an interpersonal reward (i.e. Acceptance, Distinctiveness, and Positive Conflict) or a cost (i.e. Negative Conflict) exchanged by teammates. Acceptance sub-scale refers to messages of interpersonal support or consideration. There are four items on this sub-scale. “Communicate feelings honestly,” is a sample item.
Distinctiveness sub-scale includes those messages of a shared, all-encompassing team identity. There are three items on this sub-scale. "Use nicknames," is a sample item. Positive Conflict sub-scale refers to constructive, emotionally controlled discussion of interpersonal differences. There are four items on this sub-scale. "Are willing to discuss feelings," is a sample item. Lastly, Negative Conflict sub-scale represents disagreements that are expressed in an offensive or destructive manner. There are four items on this sub-scale. "Shout when upset," is a sample item.

Participants were asked to consider their team as a whole and rate the extent to which they perceived their team to engage in the communication behavior referenced in each of the 15 items. Items were rated on 7-point Likert-type scales with response options ranging from 1 (hardly ever) to 7 (almost always). All 15 items are preceded by the phrase "When my team communicates, they...."

The four-factor structure of the scale of the SECTS has been supported through exploratory and confirmatory factor analysis (Sullivan & Feltz, 2003; Sullivan & Short, 2001). Furthermore, the SECTS has achieved good reliability in earlier investigations. Sullivan and Feltz (2003) report the following internal consistency coefficients: acceptance (.86, .85), distinctiveness (.84, .84), positive conflict (.73, .76), and negative conflict (.69, .80). Reliabilities of the SECTS dimensions in the present study are as follows; acceptance ($M = 20.64$, $SD = 3.82$, $\alpha = .80$), distinctiveness ($M = 12.22$, $SD = 3.15$, $\alpha = .67$), positive conflict ($M = 18.04$, $SD = 2.76$, $\alpha = .46$), and negative conflict ($M = 14.30$, $SD = 4.04$, $\alpha = .76$).
CHAPTER IV
RESULTS

The previous chapters introduced the five variables of the Leadership Scale for Sports (Chelladurai & Saleh, 1980) and the four variables of the Scale for Effective Communication in Team Sports (Sullivan & Feltz, 2003), which were used to explore the hypotheses of this study. Furthermore, past research on leadership behavior and communication within a sports setting was presented. In addition, the measures used to test the relationship between a head coach’s perception of his leadership behavior and his perception of the effectiveness of his team’s communication and the procedures followed were discussed. The following provides the results of the current study, which tested three hypotheses.

Hypothesis #1

To explore the relationship between a coach who perceives he provides training and instruction and a coach who perceives his team effectively exchanges acceptance, communicates a distinctive identity, and engages in positive conflict, three Pearson Product Moment Correlations (Pearson r) were performed. (See Table 3)

Results indicated that there was a significant positive relationship between a coach who says he regularly provides training and instruction to his players and a coach who perceives that his team effectively exchanges acceptance with each other regularly, $r(48) = .35, p < .01, r^2=0.12$.

To assess the relationship between a coach who says he regularly provides training and instruction to his players and a coach who perceives his team communicates
a distinctive identity, a second Pearson’s $r$ was conducted. Results indicated that there was a significant positive relationship between a coach who says he regularly provides training and instruction to his players and a coach who perceives his team communicates a distinctive identity, $r (48) = .31, p > .01, r^2=0.10$.

In evaluating the relationship between a coach who perceives he provides training and instruction to his players and a coach who perceives his team engages in positive conflict, a third Pearson’s $r$ was conducted. Results indicated that there was a significant positive relationship between a coach who says he regularly provides training and instruction to his players and a coach who perceives his team engages in positive conflict, $r (48) = .44, p < .01, r^2=0.19$.

Table 3

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Acceptance</th>
<th>Distinctiveness</th>
<th>+Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training &amp; Instruction</td>
<td>.35*</td>
<td>.31*</td>
<td>.44**</td>
</tr>
</tbody>
</table>

**Correlation is significant at the .01 level (2-tailed)
* Correlation is significant at the .05 level (2-tailed)

Hypothesis #2

To explore the relationship between a coach who perceives he provides positive feedback and a coach who perceives his team effectively exchanges acceptance, communicates a distinctive identity, and engages in positive conflict, three Pearson Product Moment Correlations (Pearson $r$) were performed. (See Table 4)
Results indicated that there was significant positive relationship between a coach who says he gives positive feedback to his players and a coach who perceives that his team effectively exchanges acceptance with each other regularly, $r(48) = .45, p < .01$, $r^2 = 0.20$.

In investigating the relationship between a coach who says he provides positive feedback and a coach who perceives his team communicates a distinctive identity, a second Pearson’s $r$ was conducted. Results indicated that there was no relationship between a coach who says he provides positive feedback and a coach who perceives his team communicates a distinctive identity, $r(48) = .25, p > .05$, $r^2 = 0.06$.

To examine the relationship between a coach who says he provides positive feedback and a coach who perceives his team engages in positive conflict, a third Pearson’s $r$ was conducted. Results indicated that there was a significant positive relationship between a coach who says he provides positive feedback and a coach who perceives his team engages in positive conflict, $r(48) = .41, p < .01$, $r^2 = 0.17$.

Table 4

Correlations Among the Dependent Variables for Hypothesis #2

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Acceptance</th>
<th>Distinctiveness</th>
<th>+Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Feedback</td>
<td>.45**</td>
<td>.25</td>
<td>.41**</td>
</tr>
</tbody>
</table>

*Correlation is significant at the .05 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed)

Hypothesis #3

To explore the relationship between a coach who perceives he provides social support and a coach who perceives his team effectively exchanges acceptance,
communicates a distinctive identity, and engages in positive conflict, three Pearson Product Moment Correlations (Pearson r) were performed. (See Table 5)

Results indicated that there was no relationship between a coach who says he provides social support to his players and a coach who perceives that his team effectively exchanges acceptance with each other regularly, $r (48) = .02, p > .05, r^2 = 0.004$.

To assess the relationship between a coach who says he provides social support and a coach who perceives his team communicates a distinctive identity, a second Pearson’s r was conducted. Results indicated that there was no relationship between a coach who says he provides social support and a coach who perceives his team communicates a distinctive identity, $r (48) = .11, p > .05, r^2 = 0.01$.

To look into the relationship between a coach who says he provides social support and a coach who perceives his team engages in positive conflict, a third Pearson’s r was conducted. Results indicated that there was no relationship between a coach who says he provides social support and a coach who perceives his team engages in positive conflict, $r (48) = .10, p > .05, r^2 = 0.01$.

Table 5

*Correlations Among the Dependent Variables for Hypothesis #3*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Acceptance</th>
<th>Distinctiveness</th>
<th>+Conflict</th>
<th>-Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Support</td>
<td>.02</td>
<td>.11</td>
<td>.10</td>
<td>.04</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)
Leadership has been described as a complex, transactional process that occurs within interdependent groups (Loughead & Hardy, 2004; Beam, Serwatka & Wilson, 2004; Hollembeak & Ambrose, 2005; Martin, Rocca, Cayanus, & Weber, 2005). Sport is one context with interdependent groups in which leadership plays a significant role. In sports, the significance of effective leadership by athletes and coaches has been described as a vital component to achievement (Chelladurai & Reimer, 1998; Dupuis, Bloom & Loughead, 2006).

It has been a contention in this thesis that coaches assume that when they communicate in certain ways with their teams that they have created an effective communication environment. In addition, most coaches assume that their players and assistant coaches will perceive the communication environment to be the same as the coach’s perception. In other words, the communication environment will be perceived in similar ways. Thus, the purpose of the research described in this thesis was to begin testing these assumptions by starting with an examination of the relationship between a head coach’s perception of his leadership behavior and his perception of the effectiveness of his team’s communication. This focus was important for at least two reasons. First and foremost, leadership and communication in a team setting are essential. Furthermore, these are areas of study that have received some attention but that still remains somewhat overlooked.
Training and Instruction Behavior and Effective Communication

This study showed that a coach, who says he regularly provides training and instruction to his players, perceives that his team effectively exchanges acceptance with each other regularly, has a distinctive identity, and engages in positive conflict. Therefore, a coach who says he provides training and instruction perceives his team to communicate effectively. Based on these results, coaches must focus on training and instruction behavior in managing their time in preparing their team because this research shows that coaches perceive that this type of behavior leads to effective communication by their team. However, it should be noted that this study did not test this second critical link- coaches behavior leads to effective communication. This is a limitation of the current study that will be discussed more completely in a subsequent section.

Positive Feedback and Effective Communication

This study also showed that a coach, who says he gives positive feedback to his players, perceives that his team effectively exchanges acceptance with each other regularly and engages in positive conflict. Therefore, by providing positive feedback to players, a coach perceives that the team would mirror this behavior and exchange acceptance with each other and engage in positive conflict. As a coach, this is an area that they would concentrate on and prepare for, if they feel it leads to these communication behaviors. But again, this study did not test this second critical link- players mirroring coaches’ behaviors.
Social Support and Effective Communication

The study showed that there was not a relationship between a coach who says he provides social support to his players regularly, and his perception that his team effectively exchanges acceptance with each other regularly, has a distinctive identity, and engages in positive conflict. College hockey is a highly competitive sport in which coaches prepare their players for the next step in their hockey career, while at the same time preparing the student-athletes for life after hockey. At the same time many coaches are also evaluated more on athletic performance than on academic performance. In the intercollegiate athletic environment, each athletic department has a support system set up to help the student-athletes with academic and social issues that often arise. This support system within each athletic department may be a part of the reason why coaches in this study did not perceive a relationship between providing social support to their players regularly, and his perception that his team effectively exchanges acceptance with each other regularly, has a distinctive identity, and engages in positive conflict. In addition, it is possible that much of the social support occurs within the team. When problem situations arise, captains, leaders or upperclassmen are there to deal with the support when needed.

Limitations

There are limitations of this study that need to be addressed. The first and main limitation of this study is that the results of this research are based only on the head coach’s perspective and not their behavior. This occurred in this study, because logistically it was difficult to get cooperation from 59 Division 1 College hockey teams,
which average between 25 and 30 players per team, to complete the survey. Furthermore
in attempting to get cooperation from assistant coaches of the 59 Division 1 College
hockey teams to complete the survey, the assistant coaches were reluctant to participate
because of supervisor/subordinate implications. Head coaches were pulling out of the
study and assistant coaches were reluctant to participate in spite of confidential
anonymity. Even though the findings are based on the head coach’s perception, the
results of this study are significant to the field of leadership and communication.
Ultimately, in researching this topic, both the coaches and the members of the team
would have participated.

Another limitation of this study is that the sample size of 50 participants is small.
With only 59 Division 1 Head College Hockey Programs in the country, the sample size
was going to be small. By concentrating on only Division 1 Hockey programs, accurate
and specific research was accomplished. Division II or Division III Head Coaches could
have been asked to partake in the study to increase the sample size, but they may have
affected the data, based on the differences of resources the they have in comparison to
Division 1 Hockey Programs.

A final limitation of this study was that the Division 1 Head Hockey Coaches who
participated in this study completed the study in late April of 2007, which for many of the
coaches was over a month after the completion of their season. Ultimately, the survey
would have been administered immediately upon completion of their 2006-2007 season,
but logistically it was most convenient to have the coaches complete the survey in late
April at the Annual American Hockey Coaches Association (AHCA) meetings in Naples, Florida.

*Suggestions for Future Research*

Future research could look at not just coaches’ perceptions of leadership and communication, but allow for those perceptions to be compared to others—assistant coaches and players.

Also, in order to increase the sample size of the study, all Division I, Division II and Division III College Head Hockey Coaches could be surveyed to look at their perceptions of their leadership style and their perceptions of their team’s communication effectiveness.

Furthermore, future research could survey the Division I Head Hockey Coaches during the season or at various points throughout the year, instead of upon completion of the season.

In addition, communication differences between male and female coaches and how they communicate differently with their teams could be an area to look at. Also, communication differences between female teams who are coached by male coaches communicate in relation to female teams who are coached by female coaches could be an area of interest.

Future research could also look at how a team captain’s leadership style influences team communication effectiveness. Team captains are all different, as some communicate well with the team and coaches, while others lead quietly by example. This
would be an interesting topic to research in comparison to how a head coach’s leadership style influences team communication effectiveness.

Conclusions

The leadership behavior of a head coach plays central role in creating a positive or negative environment for the team. If a coach is negative and moody as a leader, it is difficult for the team to stay positive. Whereas, if a coach is enthusiastic, caring, positive, and driven, the team will perform for him or her. At the same time, a leader/coach must be able to adapt to his or her players. All players are different, and therefore a leader must be able to use different leadership behaviors with different players.

Along these same lines, it is important for a coach to get to know his players, so he knows what makes each player tick individually. A head coach must be able to motivate his/her players to reach their peak level. If a coach can accomplish this, his/her team will communicate effectively, and succeed. At the same time, a team will follow its head coach’s lead. If a head coach is positive and enthusiastic, the team will be positive and enthusiastic. In addition, a head coach must demand discipline and commitment.

Hockey is not an individual sport, it is a team sport, and everyone on the team must have a common goal and vision. It is the head coach’s responsibility to keep the team on track and focused on the common goal and make decisions that are best for the team and not individuals. Not only is it crucial from coach to player, but also amongst players and amongst coaches. It is critical that a team can communicate effectively in both positive and negative situations that arise throughout a season.
Many times it is the head coach’s leadership style that dictates the communication environment on a team. In addition, a coach who communicates often and effectively, promotes an environment for their team to do the same. Whether it is a few minute discussion before or after practice between player and coach, or a weekly fifteen minute meeting with each player, all communication is positive in a coach athlete relationship if it is done in the right way.

Furthermore, this encourages the core leaders on the team do the same with other players on the team. Strong team communication effects the entire environment of the team. It helps the team through both good times and bad times, both on and off the ice. A team with strong leadership from its head coach or the leaders on within the team is important to team success. Also, I had interest in looking at how coaches perceived their leadership style. The players today require a lot more attention from their coaches and the leaders on the team. Players today aren’t afraid to ask questions on why things aren’t going a certain way, or why he isn’t playing in a certain situation.

Players also want to be accepted into the group. On a team you rely on others for team success. Therefore, it is important that there is strong support amongst teammates. This often means that a leader on a team must be good at identifying that everyone on the team is different, yet at the same time the differences must be accepted by all members and everyone on the team included.

In hockey you deal with players of different ages, different academic classes, different sizes, and different nationalities. Yet, they all want to be accepted as with one identity. That is a team. Players on Division 1 college hockey teams play in high pressure
situations and in front of thousands of people. There are always times when conflict occurs within a team. Much of the conflict that deals with interpersonal differences can be handled within the team. A coach must get involved when selfish and destructive conflict occurs.

Leadership behavior can effect how a team acts and communicates. It is hoped that this study provides increased awareness of the value the leadership behavior of a head coach and their perception of how that behavior affects the communication behaviors of their team.
Appendix A

HSIRB Approval Letter
You are invited to take part in a research project entitled "Leadership Behavior and Team Communication Effectiveness: A Study of Division I Men's Head Hockey Coaches." The information gathered will be used to further research in the area of leadership and communication in Division I college hockey. By participating in this study, you could be a part of meaningful research that will take an in depth look at Division I college hockey. Chris Brooks, a graduate student, is conducting this research for a quantitative research study through Western Michigan University under the advisement of Dr. Autumn Edwards from the School of Communication. This study will also serve as part of Chris Brooks' Master's thesis project.

The goal of this research is to gain an understanding of some of the keys to a successful relationship between coaches and the teams they coach. Benefits may include satisfaction in knowing that your participation in this study may lead to greater knowledge on various aspects of leadership and communication and that the results of this study will serve as a foundation for future research on this topic.

The survey will only take you ten to fifteen minutes to complete. Your replies will be completely anonymous, so do not put your name anywhere on the form. You may choose to not answer any question and simply leave it blank. Returning the completed survey indicates your consent for use of the answers you supply.

If you have any questions, you may contact Dr. Autumn Edwards at (269-387-0358) or student investigator Chris Brooks (269-327-0270). You may also contact the Chair, Human Subjects Institutional Review Board (269-387-8293) or the vice president for research (269-387-8298) if questions or problems arise during the course of the study.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate if the stamped date is more than one year old.
Appendix B

The Leadership Scale for Sports
2006-2007 Leadership Communication Survey - LSS

**Part 2:**
Please circle the appropriate space. There are no right or wrong answers. Your spontaneous and honest response is important to the success of the study.

Please circle according to the following scale:

1. **Always**
2. **Often (about 75% of the time)**
3. **Occasionally (50% of the time)**
4. **Seldom (about 25% of the time)**
5. **Never**

**In coaching I:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. See to it that athletes work to capacity.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. Ask for the opinion of players on strategies for specific competitions.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. Help athletes with their personal problems.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. Compliment an athlete for good performance in front of others.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. Explain to each athlete the techniques and tactics of the sport.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. Plan relatively independent of the athletes.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. Help members of the group settle their conflicts.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. Pay special attention to correcting athlete’s mistakes.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. Get group approval on important matters before going ahead.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10. Tell an athlete when they do a particularly good job.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11. Make sure that the coach’s function in the team is understood by all athletes.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12. Do not explain my actions.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>13. Look out for the personal welfare of the athletes.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>14. Instruct every athlete individually in the skills of the sport.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>15. Let the athletes share in the decision making.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>16. See that an athlete is rewarded for good performance.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>17. Figure ahead on what should be done.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>18. Encourage athletes to make suggestions on how to conduct practice.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>19. Do personal favors for the athletes.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>20. Explain to every athlete what should be done and what should not be done.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>21. Let the athletes set their own goals.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
22. Express my affection felt for athletes.

23. Expect every athlete to carry out one’s assignment to the last detail.

24. Let the athletes try their own way even if they make mistakes.

25. Encourage the athletes to confide in the coach.

26. Point out each athlete’s strengths and weaknesses.

27. Refuse to compromise on a point.

28. Express appreciation when an athlete performs well.

29. Give specific instructions to each athlete on what should be done in every situation.

30. Ask for the opinion of the athletes on important coaching matters.

31. Encourage close and informal relations with athletes.

32. See to it that athletes’ efforts are coordinated.

33. Let the athletes work at their own speed.

34. Keep aloof from the athletes.

35. Explain how each athlete’s contribution fits into the total picture.

36. Invite the athletes to my house.

37. Give credit where credit is due.

38. Specify in detail what is expected of the athletes.

39. Let the athletes decide on plays to be used in the game.

40. Speak in a manner that discourages questions.
Appendix C

The Scale for Effective Communication for Team Sports
**2006-2007 Leadership Communication Survey: The SECTS**

The following items are concerned with how your players on your team communicate with each other. Please consider your team as a whole when answering these questions. Read each question and answer honestly. Circle the number that you feel signifies your team best.

**Answer Using This Scale:**

<table>
<thead>
<tr>
<th></th>
<th>Hardly Ever</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. use nicknames.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. shout when upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. get all the problems out in the open.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. trust each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5. when disagreements arise, they try to communicate directly with those they have a problem with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6. communicate their feelings honestly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7. use slang that only members understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8. get in each other’s faces when they disagree.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9. use gestures that only members understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10. communicate anger through body language.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>11. share thoughts with one another.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12. show that they lose our temper.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13. are willing to discuss their feelings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>14. try to make sure all players are included.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>15. compromise with each other when they disagree.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Appendix D

Demographic Questions
2006-2007 Leadership Communication Survey - Demographics

Age: ____

Education Level: High School  Bachelors  Masters  PHD

Nationality: ________________

# of years as a head coach: _____

# of years as an assistant coach: _____

# of years as a head coach at current school: _____

2006-2007 Win/Loss Record: __________
REFERENCES


