

**THE RELATIONSHIP BETWEEN LEADER BEHAVIOR,
TEAM COHESION AND PERFORMANCE
IN HIGH SCHOOL SPORTS**

by

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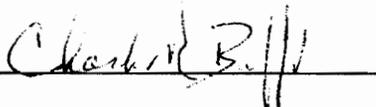
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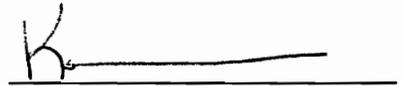
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ABSTRACT

The present study examines the relationship of perceived coaching behavior, team cohesion and performance in different types of sport. It also looks at the development of cohesion over time and if it is effected by other variables. Coaching behavior was defined using Chelladurai's (1978) Multidimensional model of leadership, and team cohesion is defined using Widmeyer's et al. (1985) Conceptual Model of Cohesion. This examination was done using high school soccer and baseball teams. It was determined that the coaches for the baseball and soccer teams rated highest in training and instruction, and positive feedback. For this reason, an analysis of leadership between the sports was not possible. A MANOVA was carried out to determine if time, and other variables of leadership, team differences, and sport differences played a role in the development of cohesion. Time had no significant effect on cohesion, and there were just moderate effect on team differences in individual attraction to group-task and social. A logistic regression revealed that soccer teams who were more successful tended to have higher cohesion as opposed to baseball teams who were more successful tended to have lower cohesion. This demonstrated the differences in baseball and soccer in which soccer

is a more interactive sport and requires greater cooperation and coordination to be successful.

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CHAPTER I

Introduction

The purpose of this study was to examine the relationship between leader behavior, team cohesion and performance using sport-related models and measures. Included in this examination was an attempt to further understand team cohesion and leader behavior. Team cohesion is a widely researched topic, but there are many more questions to be answered about it. Furthermore, some team cohesion research is fraught with methodology problems, and this researcher hoped to avoid some of these pitfalls. Likewise, leader behavior is also widely researched, but it is met with definitional issues which prevent theorist from agreeing on one working definition or a common understanding. Both of these topics deserve further investigation, and more importantly they need investigation using sport-related measures. Prior to 1979, much of the research on team cohesion and leader behavior was done using non-sport-related measures. The attempt was to apply working definitions from other disciplines to sport, but the general result of this tatic has been unsubstantiated findings or contradictory findings because measures from other disciplines do not take into account the unique relationships found in sport settings.

The newness of sport related research has caused many definitional issues to arise among theorist and researchers. In this paper, there are several terms that could potentially have several meanings. First, leadership behavior and coaching behavior will be used interchangeably because this paper is dealing with coaches as leaders even though there can be leaders on the team who are not coaches. An examination of those leaders is worth discussion, but it will not be addressed here.

Secondly, success and performance are terms that have two closely tied definitions. Success usually refers to the quality of an outcome such as a win/loss record whereas performance is how well an action is carried out such as batting average. For the purposes of this paper, I will use success and performance interchangeably, and I am mostly concerned with success as a win/loss record. Many believe that win/loss is not a good way to measure success, but in real world terms it is typically the most accepted way to measure success. If a team has a "good" coach with a losing record for a couple of seasons, it is most likely that person will not be coaching there anymore. Researchers like to find different ways of measuring performance because there are too many outside factors that play a role in deciding wins and losses. It is impossible to limit these factors because whatever the sport, it is a competition among athletes with rules to guide and officials to judge and it is imperfect. Whatever performance measures a researcher uses, they will always be imperfect because sports are imperfect.

This paper begins by first examining cohesion and the current thinking in sport-related cohesion research using Widmeyer, Brawley and Carron's Multidimensional Model of Cohesion (1985). Leadership is then discussed using Chelladurai's Multidimensional Model of Leadership (1978), and following this is a discussion of the relationship between cohesion, leadership and performance. It is important to establish what framework to use when examining this relationship because there are several perspectives of leadership and cohesion. It is my attempt to extend the knowledge of team cohesion and leadership and to better understand their relationship with performance.

CHAPTER II

Review of Literature

2.1 Cohesion

The study of team cohesion in sport science until recent years has had many problems. These problems result from the use of definitions that are inappropriate for the sport setting, the lack of a conceptual model on which to base research, and an insufficient way of measuring cohesion. It was not until the mid-eighties that researchers began to develop definitions and research tools that are valid and reliable for a sport setting.

In early definitions of cohesiveness it was considered a one dimensional property of a group. It was defined by social psychologists, Festinger, Schachter and Back as all the forces that cause individual to maintain their membership in specific groups (Baron, 1987). This definition is not clear representation of what is actually involved in cohesion particularly in a sport or team setting. The major problem is that it deals with, primarily, the individuals' attractiveness to the group. It leaves out many of the properties that influence cohesion, and does not portray cohesion as a dynamic process but a static one (Carron, 1993). It also was only relevant to groups that are formed on socioemotional basis and not on a task basis as one might find in a sport setting (Anderson 1975).

2.1.1 Cohesion Defined

In 1982, Carron developed a definition that demonstrates cohesion as a multi-dimensional property. Carron defined cohesion as the "the 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). This definition is twofold. First, it deals with cohesion as a "dynamic process" which illustrates the idea that cohesion is not static property

(Carron, 1993). As time passes and the experiences of the group change so will their feelings about one another, the group as a whole, their goals and their objectives. It is a property that is continually changing throughout the season and throughout the existence of the group. For example, if the team is going through a losing streak or a winning streak, this will have an effect on the level of cohesion involved. Research has demonstrated that a winning streak will generally have a positive effect on the level of cohesion, and a losing streak will generally have a negative effect on the level of cohesion (Cox, 1990).

Secondly, the definition deals with the groups' goals and objectives. This demonstrates that groups might be very different in what they are trying to accomplish, and these goals and objectives are complex and varied (Carron, 1993). Many teams will have differing goals and objectives. A team who has not won a game in several seasons might only have a goal to win one game, but conversely a team who is successful every year might have the goal of winning a championship. These are two different goals, and each will effect the level of cohesion differently. In addition, the level of commitment to the goals will also have an effect. They will help to define the group and the strength of their cohesion.

From their definition, Widmeyer, Brawley and Carron (1985) created a conceptual model of cohesion which offers a solid base for understanding cohesion in sport-related context, and attempted to develop a reliable sport-related measure of cohesion (figure 2.1). After examining previous research even though much of it had methodology problems, Widmeyer et al. saw two major distinctions. The first distinction is between the individual and the group and the second distinction is between the task and social concerns of the group (Brawley, 1990). The first distinction is divided into two categories: Group Integration and Individual's Attractions to the Group. Group

Integration (GI) is "the perception of the closeness, similarity, and bonding within the group as a whole" (Widmeyer et al., 1985). This concept depicts the "members' perceptions of the group as a totality" (Widmeyer et al., 1985). Put simply this refers to how the group functions as a team. Individual's Attractions to the Group (ATG) is "the interaction of motives acting on individuals to remain in the group" (Widmeyer et al., 1985). This takes into consideration how a team member feels about the team, the degree to which team members identify with the team, and the quality of member interaction (Cox, 1990).

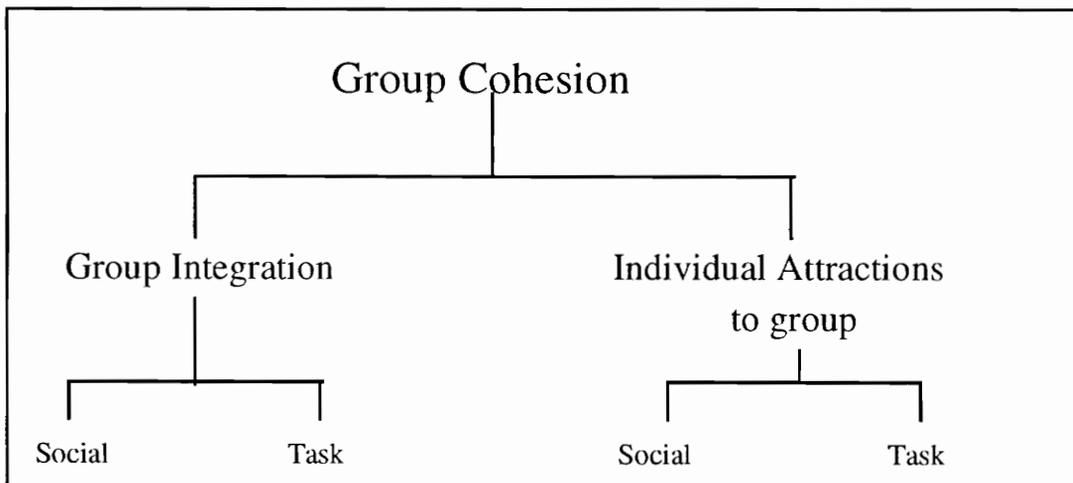


Figure 2.1: Conceptual Model of Group Cohesion (Widmeyer et al., 1985)

The second distinctions are important because they help to further demonstrate cohesion as a multidimensional property. Task Orientation is defined as "a general orientation or motivation towards achieving the group's goals and objectives" (Widmeyer et al., 1985). Conversely, Social Orientation is defined as "a general orientation or motivation toward developing and maintaining social relationships within the group" (Widmeyer et al., 1985). Unlike previous models, this model makes the important

distinction of separating social and task cohesion. Researchers' original concern was that a group could only be socially cohesive, but Widmeyer et al. (1985) demonstrated that groups have both social and task cohesion, and this becomes even more apparent when one considers sport groups. Considering only the social aspect of cohesion will have a differing effect when considering factors that effect cohesion and factors that are effected by cohesion. A real life example of this is the 1978 Yankees who were known for fighting amongst each other on the field and in the locker room (low social cohesion), but they were able to capture the World Series that year (high task cohesion) (Cox, 1990).

Table 2.1 Four Constructs of Cohesion*

Construct	Definition
Group Integration-Task	Individual team member's feelings about the similarity, closeness, and bonding within the team as a whole among the group's task
Group Integration-Social	Individual team member's feelings about the similarity, closeness, and bonding within the team as a whole among the group as a social unit.
Individual Attractions to the Group-Task	Individual team member's feelings about his/her personal involvement with the group task, productivity, and goals and objectives
Individual Attractions to the Group-Social	Individual team member's feelings about his/her personal involvement, acceptance, and social interaction with the group.

* (Widmeyer et al, 1985)

Social cohesion only models would not explain how the Yankees were able to win the World Series while being so low in social cohesion, and the models would further illustrate that cohesion is not related to performance. These distinctions are divided to create four constructs -- Group Integration-Task, Group Integration-Social, Individual's Attractions to the Group-Task, and Individual's Attractions to the Group-Social (these are defined in Table 2.1).

2.1.2 Antecedents and Consequences of Cohesion

Antecedents are factors that are believed to contribute to the development of cohesion. The study of antecedents of cohesion has been a difficult one, primarily, because the majority of older research does not stand up to statistical scrutiny, and the use of inadequate measures has made it difficult to determine which are causes and which are effects of cohesion. Widmeyer et al. (1985) produced an extensive list of suspected antecedents in their book Measurement of Cohesion in Sport Teams. Some of the suspected antecedents were similarity of attitudes, social backgrounds, size, clarity of group goals, shared group failure, and shared group success. Authors and researcher developed smaller list or groups of factors. Cartwright (1968) compiled a list of determinants (antecedents) of cohesion. His list contained cooperation, stability, homogeneity, and size. This list is way too simplistic and does not contain a good portion of the suspected antecedents of cohesion. It is better represented by Brawley (1990) in which he groups antecedents as environmental factors, personal factors, team factors, and leadership factors.

Environmental is a variety of factors that influence the development of team cohesion through the environment. For example, geographic restriction on the team or eligibility rules for players may restrict which players can join a certain team. Geography also includes physical and functional proximity which influences team member

interaction (Brawley, 1990). Proximity includes team locker rooms, residence halls or team training rooms or in youth sports scheduling games that require teams to travel together (Carron, 1993). Distinctiveness is also a factor. The more a group becomes distinct and has a feeling of oneness from other groups the greater unity it will have thus increasing cohesion. This is done through team slogans, uniforms, special initiation rites or demanding sacrifices (Carron, 1993). Other environmental factors might include social pressures from within or outside the group and team size. Team size is important to note because large teams find it more difficult to develop team cohesion without some systematic attempt at intervention (Brawley, 1990). Larger groups will often develop more divisive subgroups known as cliques and, as Brawley (1990) points out, research shows that group size effects both task and social cohesion as well as the level of cohesion. This has recently been demonstrated by Widmeyer, Brawley, and Carron (1985) in which there was an inverted-U relationship between social cohesion and group size. Moderate size group showed the greatest amount of social cohesion and small and large size groups showed the least. With respect to task cohesion, this study showed that task cohesion varies as a function of team size.

Personal is the variety of factors that are influenced by the team member's personal characteristics. Social background, personality differences, socioeconomic status, and gender can contribute to the level of cohesion developed. An empirical study done by Eitzen (1973) reported that teams with greater homogeneity (similarity of personal characteristics) developed fewer cliques, and enjoyed greater success. Cohesion develops differently within all male and all female teams. The more similar a team is in personal characteristics the greater the chance to develop team cohesion. A study by Carron et al. (1988) depicted an individual's perception of social closeness as being significant to whether athletes will stay with a team or whether they will drop from the

team. The dropouts from athletic teams and fitness classes used in this study were perceived as less attracted to their group's task and social aspect (Carron, 1988).

Team factors deal with the structural aspects that make up a team and the shared experiences of a team. The structural aspects are position, status, roles and norms. Positions are the geographic location that a collection of individuals takes when they meet regularly (Carron, 1993). Roles are the rules or understanding of the tasks that a person occupying certain position within a group are expected to perform (Baron, 1987). There are both formal and informal roles. Formal roles are usually decided by a coach or leader and informal roles develop through the interaction of the group members. Role clarity and role acceptance can be predicted from task and social cohesion (Dawe & Carron, 1990). Norms are "the rules in a group indicating how an individual should behave in various situations" (Baron, 1987). The interaction of group norms and cohesion is circular. The increase in group norms increases the level of cohesion (Carron, 1993). Studies indicate that norms can have both a positive and a negative impact on group performance. Norms can cause a group to not try to succeed too high. The norm might be mediocrity, and attempt at breaking to higher level would result in exile from the group.

The shared experiences of teams help to develop cohesion. If a team has a series of successes or failures, it might promote a greater sense of unity (Brawley, 1990). Shared experiences include both interactions on and off the field. This interaction on the field is demonstrated by the level of interdependence in a particular sport and it may play important role in how cohesion is developed. It also effects the importance of being highly task cohesive or highly social cohesive. In sport situations where there is a high level of interdependence, called interactive sports (for example soccer), the players will have an increased opportunity for interaction during competition and their shared

experiences will increase. This is opposed to a low interdependent team sport, called coactive sports (such as competitive team golf), in which competition does not increase shared experiences. Research of interactive sports has demonstrated that cohesion plays an important role, but in coactive sports the role of cohesion and its importance is far less defined. For example, a study done by Landers and Luschen (1974) demonstrated a negative relationship between performance (high) and cohesion (low). It was not until 1990 when Williams and Widmeyer demonstrated that cohesion (high) and performance (high) are positively related in low interdependence or coactive sports. It is still yet unclear the effect cohesion has in coactive sports.

Leadership factors are the complex interrelationships between coach, athlete, cohesiveness and performance (Carron, 1993). The coaches are influential in the development of cohesion, player behavior and player interactions. It is important to note that different leadership styles (to be discussed later) will effect the development of cohesion differently. Current research just gives a broad picture of these effects. A study by Westre and Weiss (1991) illustrated the effects of coaching behavior and group cohesion on high school football teams. The study showed that a relationship does exist between coaching behavior and team cohesion. In addition if a coach limits the amount of participation players have on decisions it will effect this relationship. The inclusion of individual athlete attention can contribute to or detach from the team member interaction which will eventually effect team cohesion (Brawley, 1990). Also, the compatibility of the coach and the athlete, group goals, and communication will contribute to the level of cohesion developed.

Consequences of cohesion are widely researched, but much of the research is limited, and contain methodological problems. In Carron's (1982) framework there are two suspected consequences: group outcomes and individual outcomes. Group

outcomes deal largely with the cohesion-performance relationship. The study of this relationship hinges on three factors: 1) the type of measurement used to measure cohesion and performance; 2) the nature of the sport involved (level of interdependence); and 3) the direction of causality (Cox, 1990). It is currently believed that cohesion is more important for performance in interactive sports than in coactive sports. In a review of literature, Carron (1988) found that studies tended to show a positive relationship more than a negative one. Many of these studies used measures that were sociometric in nature, and measured social cohesion without regard to task cohesion. When both (task and social) are included or just task cohesion is measured, the performance-cohesion relationship is positive (Cox, 1990). Group outcomes also include increased team satisfaction, stability, motivation and communication.

Individual outcomes are impacted on the individual's performance, satisfaction and level of shared responsibility in victory or defeat. Individual outcomes are by-products that effect their perceptions and behavior (Brawley, 1990). For example, a stronger cohesive team will have higher level responsibility for victory or defeat, and individuals will feel more satisfied.

2.2 Leadership

"The coach is the key to the benefits that will accrue to the players as a result of their participation in sport. He wields a powerful influence over his players"

John Bunn (p. 15)

This quotation from John Bunn (1994) demonstrates the power and influence coaches and leaders have over players and subordinates. But does not demonstrate what it means to be a leader, and it does not describe what leadership is. It is not easy to describe or to define leadership. In fact, there are well over 350 documented definitions of leadership (Bennis & Nanus, 1985), and there is still not a widely accepted definition. Part of the reason for this is the definitions come from many different disciplines, and

while one might work well in one discipline it does not in all. To gain an understanding of leadership in sport, one must find a definition that is the most germane. An adaptation of Stogdill's (1974) definition offers some basis into the understanding of leadership. Leadership is the process of influencing and motivating the activities of individuals or groups in their effort toward goal setting and goal achievement. It should be noted that this is not a complete definition, but in the confines of a sport setting this definition fits well. Some of the reasons this definition fits is because when athletic directors, fans, and owners examine coaches and their success they look at several factors: has the coached achieved a certain record; are the players reaching their potential; does the coach have control over his/her team; is the coach an effective leader. The coach is examined for having power and influence over their players, and this power and influence is not given, it must be earned over a period of time (Cox, 1990). This is important distinction because a person placed in a leadership position does not always have the power, influence or motivation to be able to lead a certain group. Why does this occur? It is this dilemma that causes researchers to develop their theoretical approaches to leadership.

There are three theoretical approaches to leadership: Trait Approach; Behavioral Approach; and Situational Approach. At this point a lengthy discussion into these approaches is not relevant. It is important to have a general understanding of each, but for this study only the conceptual model used (Multidimensional Model of Leadership) deserves the most discussion. Several authors offer excellent descriptions and examples of theories of the Trait Approach, Behavior Approach and the Situational Approach (Chelladurai, 1985; Cox, 1990; Murray & Mann 1993), but the following is a general definition of each. The Trait Approach is based on the idea of the "great man theory" that suggests the leaders have certain personality characteristics that make them ideal for leadership (Cox, 1990), i.e., they are born to be leaders. The Behavioral Approach is the

belief that successful leaders have certain universal behaviors, and these behaviors once identified could be taught to potential leaders everywhere (Cox, 1990). The Situational Approach is a system in which the leadership consists of the situation, the leader, the members and the organizational context from which they operate (Chelladurai, 1985). In other words the effectiveness of the leader is how well they operate in a certain environment with certain members.

2.2.1 The Multidimensional Model of Leadership (Chelladurai, 1978)

The multidimensional model of leadership (figure 2.2) proposes three states of leader behavior -- required, preferred and actual, and the antecedents of these three states: the characteristics of the situation, the leader, and the members (Chelladurai, 1990). Group performance and team satisfaction are the products of the interaction of the three states of leadership.

The required leader behavior is behavior expected of the leader by the demands of the organization and the parameters of the environment. The leader is expected to behave in a certain way by the organization. This behavior is adjusted by the "formal organizational structure of the team and the larger system (e.g., those of the professional versus high school teams) the group task and the associated technology (e.g. team versus individual sports), the social norms, cultural values, and government regulations" (Chelladurai, 1990). For example, coaches are limited by the number of players they can keep on their team usually by the rules of the conference in which they belong, and this will influence their required leader behavior. Furthermore, the members characteristic such as intelligence, ability, and experience and personality dispositions might prevent them from being able to make valid judgments in a given situation and the leader is required to make a judgment for them.

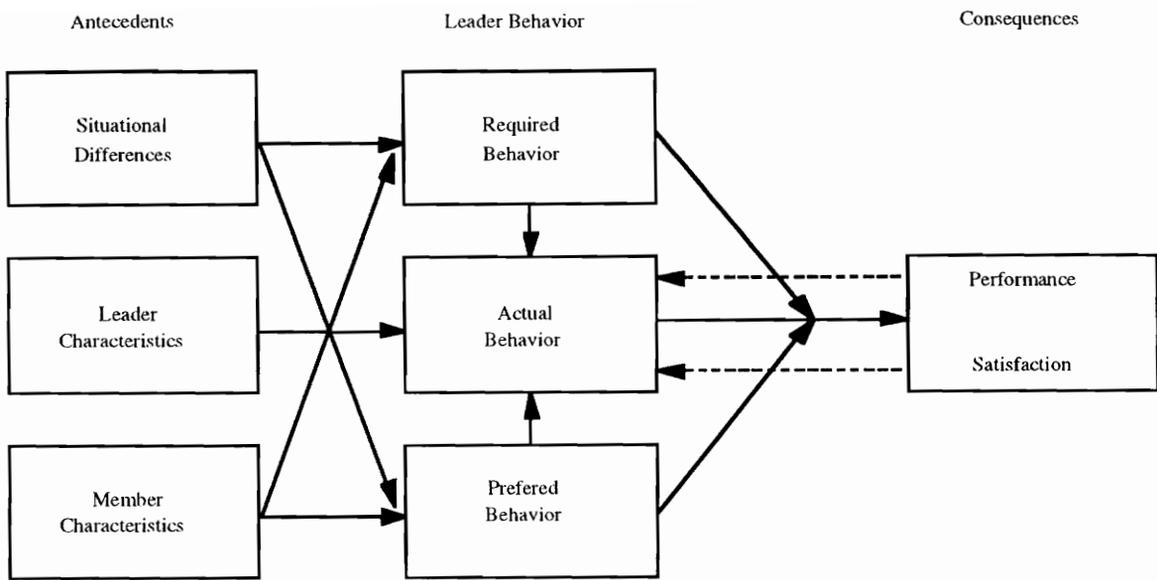


Figure 2.2: Multidimensional Model of Leadership

Preferred leader behaviors are those behaviors that members would like to see in their leaders. These behaviors are a function of the members' characteristics and the situational characteristics. The individual characteristics are "need for achievement, need for affiliation, cognitive structure, and competence in the task influence a member's preferences for coaching and guidance, social support and feedback" (Chelladurai, 1990). For example, the expectation of winning is generally held by both the organization (a situational characteristic) and the athletes (member characteristics), and the strength of this expectation will play a role into the preferred leader behavior.

Actual leader behavior is the influence of the leader's characteristics including personality, ability, and experience. It is behavior that is further influenced by the required leader behavior and the preferred leader behavior. For example, the relative experience of team, whether a team is largely composed of rookies or veterans, would influence the goals of the team and this would influence both the requirements and the preferences of the coach to exhibit differing leadership behaviors. This would have a great effect on the actual leader behavior.

The level of congruence among the three leader states results in performance and satisfaction for the individuals and the team as a whole. Chelladurai and Carron (1978) pointed out that performance and satisfaction are both directly linked to leader behavior and are not independent of each other. For example, if the athletes are oriented toward goal setting and goal accomplishment and the coach satisfies these preferences this will result in both enhanced satisfaction and enhanced performance.

Chelladurai and Saleh (1980) and Chelladurai and Carron (1981) wanted to identify these coaching behaviors. Through research of high school and university athletes in various sports, Chelladurai et al extracted a pool of 99 items (reduced it to 50) and performed a factor analysis to reveal five dimensions of leader behavior -- training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback (rewarding behavior) -- are described in Table 2.2. Training and instruction is related to task accomplishment whereas positive feedback is related to the degree of task accomplishment (Chelladurai, 1985). Democratic and Autocratic behaviors refer to the social process of decision making, and social support is concerned with the personal needs of the athletes (Chelladurai, 1985).

These five dimensions of leader behavior have been tested using Leadership Scale for Sport (Chelladurai and Saleh, 1980) which is a sport specific measure. The Leadership Scale for Sport can be used to measure "athletes' preference for specific leader behaviors, athletes' perception of their coaches' leader behaviors, and/or coaches' perceptions of their own behavior" (Chelladurai, 1990).

Table 2.2: Five Dimensions of Leader Behavior

Training and Instruction	Coaching behavior 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.
Democratic Behavior	Coaching behavior which allows greater participation by the athletes in decisions pertaining to group goals, practice methods, and game tactics and strategies.
Autocratic Behavior	Coaching behavior which involves independent decision making and stresses personal authority.
Social Support	Coaching behavior characterized by a concern for the welfare of individual athletes, positive group atmosphere, and warm interpersonal relations with members.
Positive Feedback	Coaching behavior which reinforces an athlete by recognizing and rewarding good performance.

From: Chelladurai 1984.

Several studies have used the Leader Scale for Sports to gain a better understanding of leadership and to test Chelladurai and Carron's Multidimensional Model of Leadership. The majority of these studies have attempted to find theoretical relationship between either an antecedent (situational, leader or member characteristics) to leadership behavior or a consequence (satisfaction or performance) of leadership behavior. Some of these relationship which have been studied are as follows: leader

behavior and athlete maturity (Chelladurai & Carron, 1983); leader behavior and performance (Gordon, 1988; Horne & Carron, 1985; Serpa, Pataco, & Santos, 1991; Weiss & Fredrichs, 1986; Westre & Weiss, 1991), and leader behavior and team cohesion (Westre & Weiss, 1991). The next section will discuss how leadership behavior will relate to team cohesion.

2.3 Leadership and Cohesion Relationship

With an understanding of both leadership and team cohesion is now important to examine the relationship between the two. Westre and Weiss (1991) first demonstrated a link between perceived coaching behavior and team cohesion in high school football teams. In their research they illustrated that the leadership behaviors of training instruction, democratic style, social support and positive feedback were all related to team cohesion. In addition, they indicated that higher perceptions of the coaching behaviors of training instruction, positive feedback, social support, and a democratic style were associated with higher levels of task cohesion. This link between coaching behavior and team cohesion gives support to Carron's multi-dimensional model of cohesion. It also gives support to the idea that leadership is an antecedent to cohesion. In their study they also examined other factors that influence the relationship of team cohesion and coaching behavior which are as follows: perceptions of success: team performance; perceptions of success: individual performance; starter/nonstarter status; position on defense; and position on offense. They found in the team performance relationship that teams who perceived more team and individual success rated coaches higher in positive feedback and democratic styles and had exhibited greater task cohesion. In their other analysis they found that perceptions of coaching behavior did not change with player status, but starters had a higher since of task cohesion, and their analysis of player

position did not show any significant relationship with leader behavior and team cohesion.

While this study established a link, it still leaves several questions as to the relationship. First, Westre and Weiss only examined cohesion from a single time-point measure. As Brawley (1990) points out there are several pitfalls in cohesion research. Two of these pitfalls are examining cohesion from a single time-point research and ignoring investigation of the cohesion of different types of sport groups.

2.3.1 Multiple Time-point Measurement

One of the problems with single time-point research is it leaves many questions because cohesion is closely related to the condition of the team at the time of measurement. If a team is in the middle of a losing streak even though they are still a successful team, their level of cohesion might be affected by this losing streak. In addition, since this study uses high school athletes as does Westre and Weiss', it is evident that these athletes will have some level cohesion developed at the beginning of the season. Many of the athletes might have played on teams together for years, and with the nature of United States schools they also might have spent many years in the same classrooms. With this in mind it becomes more important to examine cohesion in multiple time-point measurement. Following this logic, this study will examine cohesion in using this method.

2.3.2 Situational Differences

Secondly, cohesion should be examined in different types of sport groups. Different sports require differing levels of interaction or interdependence. These types are divided into two categories: coactive or interactive. Interactive sports require teams to work together to achieve success and team goals, and coactive sports that do not require team integration to achieve success and team goals (Cox, 1985). There are, of

course, varying degrees of the coactive and interactive continuum. Tasks that require little interaction among team members for success exemplify low means of interdependence and are coactive in nature, and tasks that require considerable interaction among team members for success exemplify high means of interdependence, i.e., interactive in nature. A classification system by Cratty (1983) is presented in figure 2.3. The level of interdependence is critical when considering its relationship to cohesion (specially task cohesion). The amount of task cohesion needed increases as the interdependence increases. That is the more athletes need to depend on each other for success the greater their task cohesion will need to be. This highlights that situational differences will have varying effects on cohesion.

Coacting Teams	Mixed Coacting-interacting	Interacting Teams
Low means-interdependent tasks	Moderate means-interdependent task	High means-interdependent tasks
Archery	American football	Basketball
Bowling	Baseball/softball	Soccer
Field events (track)	Figure Skating	Ice Hockey
Golf	Rowing	Rugby
Skiing	Track events	Volleyball

Figure 2.3 The nature of the sport and player interaction (Presented by Cox, 1985)

Situational differences will also effect leadership specially when using Chelladurai's model of leadership. Following Chelladurai's model, leader behaviors will effect each sport differently. This is not to say that one leader behavior will be good for one sport and bad for another. It is the effect the leader behaviors have that is important. A study by Gordon (1986) using university soccer players found that coaches with teams with more success rated highest in training and instruction followed by autocratic, social

support, and positive feedback. Westre and Weiss (1991) found that high school football coaches rated highest in social support followed by training and instruction, positive feedback, and democratic style. In a similar study by Riemer and Chelladurai (1995), they found that defensive football players perceived greater amounts of democratic behavior, autocratic behavior and social support than did offensive players. While there are not huge differences in these examples, it does demonstrate that situations will effect leader behavior.

2.3.3 Leadership, Cohesion and Performance

The research on leadership and cohesion on performance has been difficult and there are still no highly supported results. It is generally accepted that both cohesion and leadership influence performance, but there is little evidence pointing to which leader behaviors have the greatest influence on team performance, and there is no direct cause and effect relationship between team cohesion and performance. In research, high task cohesion has resulted in high performance, but because of single time-point approach there is no way to determine if performance caused cohesion or if cohesion caused performance or the influence they have on each other. Many theorists today believe that the performance and cohesion relationship is circular - as performance rises so does cohesion and as cohesion rises so does performance. In sports that require more coordination and cooperation (more interactive) cohesion helps to facilitate performance. Since a study by Widmeyer and Williams (1991) showed a relationship of cohesion and performance in coactive sports, cohesion should help to facilitate performance in all types of sports with varying degrees and dependent on the level of interaction or coordination requirements. It is easy to see that sports in which communication and teamwork are keys to successful play would have a greater need for higher task cohesion.

Leadership and performance relationship is much easier to understand because very rarely does bad or ineffective leadership lead to performance, but because many factors influence leadership and leader behavior it is not possible to pinpoint the ideal leader behavior. A leader behavior might work well under one situation, but this does not necessarily mean it works well in another. This idea prevents researchers from being able to point to one leader behavior and agree that it is the ideal behavior to have if a coach wants to be successful. It becomes more important to understand which leader behaviors have the greatest influence on performance, and in which situations these behaviors work the best. Research using Chelladurai's model has not been as fruitful as researchers would like. Weiss and Fredrichs hypothesized that collegiate basketball coaches with higher win/loss percentages would rate highest in training and instruction, but the only relationship they were able to find was a negative one between social support and performance. The coaches who rated highest in social support had the worse performance records. Conversely, when Horne and Carron (1985) compared leadership and performance from a variety of sports, positive feedback was the only variable that had a significant relationship with performance. The differences in these studies actually gives strength to Chelladurai's model in that the situations will effect the leadership. Even though there are several studies on this relationship (Gordon, 1986; Horne & Carron, 1985; Serpa, Pataco, & Santos, 1991; Weiss & Freidrichs, 1986; Westre & Weiss, 1991) and they do not show conclusive result, they do however reveal a positive relationship between positive feedback, training instruction, and democratic behavior to performance.

To understand the goals of this study, there are three suppositions that need to be reiterated. First, there are two assumptions that can be made about leadership and cohesion: both are effected by the situation, and both are related to performance.

Secondly, cohesion is dynamic process and it is changing throughout the season so it must be examined using multiple time-point approach. Third, leadership is an antecedent to cohesion, and it has a significant weight in the development of cohesion. The different groups in this study are baseball and soccer teams from area high schools. These are both team sports and they have much in common, but they do have differences in their interdependence/dependence relationship. Soccer is high interdependent variable sport, and baseball is moderate interdependent variable sport. Sports can be either classified as variable (soccer) or non-variable (bowling), and this just refers to amount of variance involved when performing the sport. There are three hypothesis that this study will test:

1. The effect of cohesion and leadership on performance will be different between sport groups.
2. The level of cohesion changes over time.
- 3 Leadership effects the development of cohesion differently in different sport groups and on different teams.

Chapter III

Methodology

Participants

The participants were 148 male varsity high school soccer and baseball players. All of the players had obtained a permanent position on the varsity team. The majority of teams play in highly competitive leagues, and the schools chosen were from the top two division levels in Virginia high school athletics. This study began with ten teams, but two teams dropped out because of scheduling and end of season competition conflicts. Eight teams were used from five different area high schools -- four soccer and four baseball. The average size for the soccer teams were 20.75 players with 25 being the largest and 17 being the smallest. The average size for the baseball teams were 16.25 players with 15 being the smallest and 17 being the largest.

The high schools' respective county school administrative offices were contacted by phone to gain permission to use their high school athletes in this study. All but one county gave permission by phone, but it was contingent upon the head coaches wanting to participate in the study. One county requested that a letter (see Appendix 1) be sent to the superintendent stating the purpose of this study and the amount of involvement needed by the county and its students. Permission was granted. The head coaches from each of the teams were contacted, and asked to participate. Originally, fourteen coaches were contacted, but only ten would participate in the study, and two of the ten withdrew before completion of the study.

Instruments

Two instruments were used in this study: The Leadership Scale for Sport (LSS) and the Group Environment Questionnaire (GEQ).

The instrument used to measure leadership was Chelladurai and Saleh's (1980) Leadership Scale for Sport (LSS) which measures the five dimensions of leadership behavior -- Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support and Positive Feedback (discussed in detail in chapter three). The LSS comes in three forms: the athletes' preference for coaching behavior; the athlete's perception of their coaches' behavior; and the coaches' perception of their own behavior. This study used only the athletes' perception of their coaches' behavior questionnaire (see Appendix 2 for complete questionnaire). The perception version of LSS contains forty items prefaced by "My coach...", and is followed by statements such as "sees to it that athletes work to capacity". Each item is scored by always (5), often (4), occasionally (3), seldom (2), and never (1). There are thirteen items for Training and Instruction, nine items for Democratic Behavior, five items for Autocratic Behavior, eight items for Social Support, and five items for Positive Feedback. The sum of the score on the items in a dimension is divided by the number of items in that dimension to derive the dimension score for a subject. The perception version is primarily used because it rates highest in internal consistency, and because this study is looking at the leaders actual behavior which this version measures.

The psychometric properties of the LSS were demonstrated through several studies (Chelladurai, 1984; Chelladurai & Carron, 1983; Chelladurai, Imamura, Yamaguchi, Oinuma, & Miyauchi 1988; Chelladurai, Maloy, Imamura, & Yamaguchi, 1987; Dwyer & Fischer, 1988b; Garland & Barry, 1988; Gordon, 1986; Horne & Carron, 1985; Liukkonen & Saminen, 1989; Robinson & Carron, 1982; Schliesman, 1987; Summers, 1983; Terry, 1984; Terry & Howe, 1984; Weiss & Fredrichs, 1986). The following is an overview of the psychometric properties of the LSS (reviewed by Chelladurai, 1990). Test-retest reliability was originally reported by Chelladurai and

Saleh (1980) using estimates from the repeat responses of 53 physical education majors over a four-week interval - .72 for Training and Instruction, .82 for Democratic Behavior, .76 for Autocratic Behavior, .71 for Social Support, and .79 for Positive Feedback.

The internal consistency estimates are reported by several authors (Chelladurai, 1986, Chelladurai et al., 1988; Dwyer & Fischer, 1988, Keehner, 1988; and Isberg & Chelladurai, 1990). These estimates were originally reported by Chelladurai and Saleh (1980) using Canadian Athletes. The internal consistency estimates for the preference and perception versions respectively are as follows: Training and Instruction - .83(.93); Democratic Behavior - .75(.87); Autocratic Behavior - .45(.79); Social Support - .70(.86); Positive Feedback - .82(.92). The perception version rated relatively higher internal consistency than the preference version, and the Autocratic Behavior specially in the preference version is quite low. Many authors have warned to proceed with caution in statistical analysis when using the Autocratic Behavior measure on the preference version (Chelladurai, 1984; Chelladurai, 1990; Schliesman, 1985). The LSS has also demonstrated convergent, and discriminant validity (as reported by Chelladurai, 1990): youth sports (Chelladurai & Carron, 1981); Indian athletes (Chelladurai, 1984); coaches perceptions of their own behavior (Dwyer & Fischer, 1988); and fitness leadership (Keehner, 1988). Criterion related validity "can be inferred from the empirical support for the theoretical relationships between the five dimensions of leader behavior and selected criterion variables" (Chelladurai, 1990): athlete's satisfaction (Chelladurai, 1984; Chelladurai et al. 1988; Schliesman, 1987; Weiss & Friedrichs, 1986); performance (Weiss & Friedrichs, 1986), and performance level of the athletes (Garland & Barry, 1988).

Group Environment Questionnaire (GEQ) was used to measure team cohesion (see Appendix 3). Carron et al's multidimensional model (as defined in chapter 1) of

cohesion is the basis for the GEQ. The GEQ assess the four dimensions of cohesion (as defined in chapter 1) -- Individual Attraction to group-Task (ATG-T), Individual Attraction to Group-Social (ATG-S), Group Integration-Task (GI-T), and Group Integration-Social (GI-S) (Widmeyer, 1985). The questionnaire contains 18 items on a nine point continuum which are anchored on the extremes by "*strongly agree*" and "*strongly disagree*". Each item is either a positive or negative statement. For example, "I don't like the style of play on this team" would be a ATG-T item, and strong agreement would reflect a low level of attraction (Widmeyer, 1985). The questionnaire is divided into five items for ATG-S, four items for ATG-T, five for GI-T, and four items for GI-S. Scoring is done by summing the individual scores for any particular scale. The representative score for the entire team is calculated by determining the mean response in a scale for the entire group.

The psychometric properties are reviewed in depth in Measurement of Cohesion in Sport Teams by Widmeyer et al. (1985). It is important to note that the GEQ's reliability coefficients (r) are as follows: ATG-T - .75, ATG-S - .64, GI-T, - .70, and GI-S - .76, and its internal consistency using Cronbach's alpha is .75 for ATG-T, .64 for ATG-S, .70 for GI-T, and .76 for GI-S. Predictive validity of the GEQ has been supported by several studies: performance (Widmeyer & Williams, 1991); team building in exercise (Carron & Spink, 1993; Spink & Carron, 1993); and leader behavior (Westre & Weiss, 1991). Criterion validity through empirical research can be inferred between the four dimensions of cohesion and selected criterion variables: group goal-related variables (Brawley et al, 1993); individual adherence to physical activity (Carron et al, 1988); Self-handicapping (Carron et al, 1994) and leadership (Shields et al., 1995).

Procedure

The goal of this study was to understand the relationship between team cohesion, coaching behavior, and performance (win/loss) in different types of sport. As Brawley (1990) stressed, it is important not to measure team cohesion using single time-point research. This is important because cohesion can change throughout the season. Since the participants in this study are all from high schools and because the basic nature of high schools in the United States, they could potentially have developed some cohesion before the season starts. It becomes increasingly important to measure cohesion more than just one time during the season. Furthermore, this study is also looking at the development of cohesion. The GEQ was first administered prior to the first game, but after the final cuts were made, and the coach had chosen his permanent roster. The GEQ was taken by the members of the team either prior to their practice or immediately following. This was dependent on the coaches' preference as to when the test would be administered. There was no mention of the nature of the study, but each group was instructed to answer each question as openly and honestly as they can, and they were also instructed not to consider questions together. The second administration of the GEQ and the administration of LSS took place at the end of regular season and before post-season play began. The same procedure for administering the GEQ the first time was followed the second time. The athletes were asked to indicate their coaches actual behavior when filling out the LSS.

Individuals who were not present at the first administration of the GEQ were asked not to fill out the GEQ (second administration) or the LSS. This was done to permit pre-post test analyses. This amounted to two athletes out of 27 on team and one athlete out of 18 on another team. Since virtually all of athletes answered the

questionnaires on both administrations this should be of little consequence to the end result.

Chapter IV

Results

Individual analysis were done because of the small number of teams, but to account for the team setting leader behavior and team cohesion were standardized by team, and used in analyses with individual used as the unit of analysis (Weiss & Friedrichs, 1986; & Westre & Weiss, 1991). To examine the relationship between leader behaviors and team cohesion, a multivariate multiple regression and a canonical correlation were conducted. These tests were used to determine the strength of the relationship between leader behavior and team cohesion. The overall test of a multivariate relationship revealed a significant relationship between leader behavior and team cohesion, Wilks' lambda = .735 $F(20,512)=2.4779$, $p<.0004$. Using the canonical correlation to determine which specific variables contributed to the relationship, there were three leader behaviors that had a loading greater than .30, which according to Pedhazur (1982) determines significant contribution to the multivariate relationship. These were positive feedback (.88), training and instruction (.87), and social support (.49). All four of the cohesion measures were found to be significant contributors to the multivariate relationship, with ATGS (.78), ATGT (.62), GIS (.69) and GIT (.88). This initial test was done using both the soccer and baseball teams as the units of analyses, but when taken separately neither soccer or baseball demonstrated a difference. Both rated highest in positive feedback and training and instruction. Basically, there were no differences in perceived leadership behaviors between soccer and baseball.

The second analysis was a repeated measures multivariate analysis of variance. This test was used to determine if time had an effect on cohesion, and secondly, if the before and after cohesion variables were different across sports, leader behavior or teams. Time, sport, team, and the leadership variables of Training and instruction (TI),

Democratic behavior (DB), Autocratic Behavior (AB), Social Support (SS), and Positive Feedback (PF) were the independent variables and the four repeated cohesion variables were the dependent variables. It was determined that time had no significant effect on the differences in cohesion.

Table 4.1 Multivariate Relationship between cohesion variables and Team variables.

Source	Time	Sport	TI	DB	AB	SS	PS	Team
ATGS	$F(1,150)$ 0.3485	$F(1,150)$ 0.8033	$F(1,150)$ 6.0152*	$F(1,150)$ 2.0792	$F(1,150)$ 0.0027	$F(1,150)$ 0.187	$F(1,150)$ 0.7449	$F(6,150)$ 2.1653*
ATGT	0.0153	0.9075	0.0081	1.7717	0.0656	0.4608	0.0275	3.4473*
GIS	0.6592	3.7557	0.0151	0.1713	0.629	0.3769	0.1921	0.521
GIT	0.0003	1.155	0.0936	1.5724	0.9271	1.1614	0.4564	0.9102

*p <.05

Even though there were no significant relationships with the time variables, there were however significant relationship between training and instruction and ATGS, ATGS and team variable, and ATGT and team variable. The team variable was found to be significant for both ATGS and ATGT which states that the teams differed from the first measurement of cohesion to the second (see table 4.1). But these relationships are not very strong, and interpretation should be done with caution. Secondly, ATGS and training and instruction was found to be significant, but this could be due to chance and should be interpreted with caution. It has potential to be due to chance because none of the other leader variables showed any significant relationship to the before and after cohesion variables, and sometimes when using this type of analysis with a large number of variables, one variable might show significance when it might not exist.

In order to determine the relationship between cohesion, leadership and performance a logistic regression was used. This type of regression was used because performance was measured as win/loss and it is not a continuous variable. This is a Bernoulli variable in which it has to be one or the other with a finite number of possibilities. Ties were treated as .5 so a record of 15-2-1 would be represented as

15.5/18. There are two problems using this approach. First, logistic regression are limited by the models that are used, and secondly, anytime observational studies are used they could potentially have missing variables. This is to suggest that significance might exist when the proper variables are used. But if a certain variable is left out of the model, it might not show significance where it would otherwise exist. Since there were no significant differences between the first measure of cohesion and the second, the second measure (aftcoh) was used in the logistic regression. In addition, the second cohesion measure demonstrated a greater relationship than the first. Several models were run using sport, leadership, sport/leadership interaction, and sport/cohesion interaction with performance being the dependent variable in all the models. The only model that demonstrated any significance was sport, cohesion and the sport/cohesion interaction (spafcoh) (see table 4.2). When using a logistic regression each model is given a concordance ratio which determines how well a certain criterion can be predicted. This model had a concordance level of 60.5% which is above an acceptable level.

Table 4.2 Analysis of Maximum Likelihood Estimates

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr> Chi-Square	Standardize Estimates
Intercept	1	-1.0011	1.3669	0.5364	0.4639	
Sport	1	13.1280	7.3439	3.1955	0.0738*	3.604638
Aftcoh	1	0.0264	0.0151	3.0755	0.0795*	0.221712
Spafcoh	1	-0.1345	0.0699	3.7045	0.0543*	-3.89364

*p<0.10

This demonstrates a significant level between sport, cohesion, and the interaction of sport and cohesion. There are two separate equations to demonstrate this strength and direction of this relationship. Baseball equation is as follows: $\text{Log}[P(x)/1-P(x)] = 12.128 - 0.1089(\text{Aftcoh})$, and the soccer equation is a follows: $\text{Log}[P(x)/1-P(x)] = -1 + 0.0264(\text{Aftcoh})$. The Aftcoh will be a large number (over 100), and the $P(x)/1-P(x)$ is the odds of performance. These demonstrate that soccer teams who do better tend to be more

cohesive, and baseball teams who do better tend to be less cohesive. This relationship is stronger in baseball. Leadership did not fit in any model because when included there was no significant relationship. This model was accepted because it was the only model in which all the variables showed significance.

Chapter V

Conclusion and Recommendation

These analysis demonstrated that perceived leadership did not play a significant role in either cohesion or performance. In the canonical correlation only showed a moderate relationship with the perceived leader behavior. In addition, both the soccer and baseball teams rated highest in positive feedback and training and instruction. Because of this it became impossible to differentiate leader behavior across sports. If leader behavior could be controlled, it might have differing effects on cohesion and performance. One of the problems with observational studies is that factors cannot be controlled. Result might have been effected if either the sports or the teams had rated differently in perceived leader behavior. This demonstrates some of the problems with the use of perception and the Leadership Scale for Sport.

Second analysis dealt with cohesion over time and its relationship to the variables involved. This analysis did not support the hypothesis that cohesion will change over time. This result could have happened because of the nature of high school athletes. If a team is created in isolation there will be some development of cohesion across a season, and this relationship might be able to be seen in either college or professional athletes, but this is not true in high school athletics. Many times these athletes have been playing with each other for years, and they will play several different sports throughout the season. They will already have some level cohesion developed or at least some idea of how to be cohesive. Attraction to group-social and attraction to group-task both were significantly different among the teams. This is that different teams developed these two cohesion constructs differently. This could imply that individual involvement about the groups task and group goals increases or decreases as season progresses, and since the teams would have slightly different ways of achieving these goals, and the players'

amount of personal involvement might be different among the various teams could develop a difference between the teams. If a coach sets goals for the team or even if the team set its own goals certain players might not feel person involvement with these goals as the season progresses, and they also might lose interest in the group task and not be involved in the group productivity. But if they are winning and reaching these goals, the team will develop stronger feelings of attraction to the group. They will further align themselves with the group goals, tasks and objectives.

The third analysis demonstrated that cohesion/performance relationship is different in baseball and soccer. Soccer teams who were more successful tended to be more cohesive, and baseball who did better tended to be less cohesive. In this study is not possible to express the cohesion/performance relationship as one causing the other, but it can be determined that differences in the sports require different developmental levels of cohesion. Soccer is a sport that takes more coordination and cooperation to be successful, and it is more interactive. It much more difficult to be on the field and not be in the play where as in baseball it is possible to be in an game and not to effect the result at all. In addition, it is possible, specially in high school athletes, to develop a successful baseball team around one or two great players. Baseball relies much more heavily on the individual efforts of the team, and soccer relies on the collective effort of the team for success. This does support the hypothesis that cohesion will have differing effects in the different sports. But does not support the hypothesis that leadership will effect it as well. Perceived leadership rated the same in both soccer and baseball, and did not have a differing effect.

Several problems of this study weakened the results and the overall findings. First, I am worried about the integrity of the high school athletes when answering the questionnaires. It is always a possibility when using questionnaires to have the subjects

not answer the questions properly or just to fill in the blanks. This is of concern because the attitudes of the high school athletes when they were filling out the questionnaire. It seemed to be attempt to get it done instead of actually filling it out, but this might be my impression, and it still might need not be a concern.

Secondly, the sample size is not as large as one would like. This has been the problem with much sport team related research. It has been difficult to get coaches and athletes to participate in studies in large amounts at one time. The result could be much more profound if team analysis could be done more, but when a sample size is only eight it becomes difficult to do any real analysis.

Third, the before and after analysis of team cohesion might have an effect if it was done on college and professional athletes as well. Brawley (1990) stated a need for multiple-time cohesion research, and even though this study found no significant difference, this should not prevent other researcher from exploring this idea further. It does need more testing to further understand how cohesion develops, and what are the properties that effect it.

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APPENDIX I

Permission Letter

February 20, 1995

Dr. Herman G. Bartlett Jr.
Superintendent of Montgomery County Schools
200 Junkin Street
Christiansburg, Virginia 24073

Dear Dr. Bartlett:

I am a graduate student at Virginia Tech, and I am interested in doing some of my research at Montgomery County High Schools. My research involves the use of high school baseball and soccer teams. I am looking at the effects of team cohesion and coaching behavior in different types of sports. I have enclosed a brief description of my methodology, and a purpose for doing this research. The measures I have chosen do not take very long to complete (less than 10 minutes), and would not interfere much with practice of these sports. I am looking to do this research this baseball and soccer season. If you need any more information in order to give me permission please call at 731-3330 or write. I look forward to your reply.

Sincerely,

Nicholas P. Murray

Enclosure:

APPENDIX II

Group Environment Questionnaire

GROUP ENVIRONMENT QUESTIONNAIRE

Albert V. Carron*
Lawrence R. Brawley**
W. Neil Widmeyer**

*The University of Western Ontario (London, Canada)

** The University of Waterloo (Waterloo, Canada)

The questionnaire is designed to assess your perceptions of your athletic team. There are no right or wrong answers so please give your immediate reaction. Some of the questions may seem repetitive but please answer **all** questions. Your candid responses are very important to us.

Your responses will be kept in strictest confidence (Neither your coach nor anyone other than the researchers will see your response). You have been asked to indicate your team name only in the event that we need to match two pieces of information on each player.

Sport (print) _____

Name of Team _____

APPENDIX II (CONT'D)

The following questions are designed to assess **your feelings** about **YOUR PERSONAL INVOLVEMENT** with this team. Please **CIRCLE** a number from 1 to 9 to indicate your level of agreement with each of the statements.

- | | | | | | | | | | | |
|----|--|---|---|---|---|---|---|---|---|-----------------------|
| 1. | I do not enjoy being a part of the social activities of this team. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | | Strongly Agree |
| 2. | I'm not happy with the amount of playing time I get. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | | Strongly Agree |
| 3. | I am not going to miss the members of this team when the seasons ends. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | | Strongly Agree |
| 4. | I'm unhappy with my team's level of desire to win. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | | Strongly Agree |
| 5. | Some of my best friends are on this team. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | | Strongly Agree |
| 6. | This team does not give enough opportunities to improve my personal performance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | | Strongly Agree |
| 7. | I enjoy other social activities more than team social activities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | | Strongly Agree |
| 8. | I do not like the style of play on this team. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | | Strongly Agree |
| 9. | For me this team is one of the most important social groups to which I belong. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | | Strongly Agree |

APPENDIX III

Leadership Scale for Sports

Leadership Scale for Sports
(Athlete's Perception of Coach's Behavior)

Each of the following statements describe a specific behaviour that a coach may exhibit. For each statement, there are five alternatives:

1. ALWAYS; 2. OFTEN (about 75% of the time); 3. OCCASIONALLY (50% of the time); 4. SELDOM (about 25% of the time); 5. NEVER

Please indicate your coach's actual behavior by placing an "X" in the appropriate space. Answer all items even if you are unsure of any. Please note that you are rating your present coach.

My coach:

ALWAYS
OFTEN
OCCASIONALLY
SELDOM
NEVER

1. Sees to it that athletes work to capacity. _____ 1
2. Asks for the opinion of the athletes on strategies for specific competitions. _____ 2
3. Helps athletes with their personal problems. _____ 3
4. Compliments an athlete for good performance in front of others. _____ 4
5. Explains to each athlete the techniques and tactics of the sport. _____ 5
6. Plans relatively independent of the athletes. _____ 6
7. Helps members of the group settle their conflicts. _____ 7
8. Pays special attention to correcting athletes' mistakes. _____ 8
9. Gets group approval on important matters before going ahead. _____ 9
10. Tells an athlete when the athlete does a particularly good job. _____ 10
11. Makes sure that the coach's function in the team is understood by all athletes. _____ 11
12. Does not explain his/her actions. _____ 12
13. Looks out for the personal welfare of the athletes. _____ 13
14. Instructs every athlete individually in the skills of the sport. _____ 14
15. Lets the athletes share in decision making. _____ 15
16. Sees that an athlete is rewarded for a good performance. _____ 16
17. Figures ahead of what should be done. _____ 17
18. Encourages athletes to make suggestions for ways to conduct practices. _____ 18

My coach:

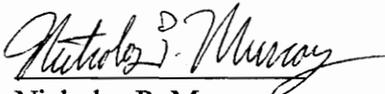
ALWAYS
OFTEN
OCCASIONALLY
SELDOM
NEVER

19. Does personal favours for the athletes. _____ 19
20. Explains to every athlete what should be done and what should not be done. _____ 20
21. Lets the athletes set their own goals. _____ 21
22. Expresses any affection felt for the athletes. _____ 22
23. Expects every athlete to carry out one's assignment to the last detail. _____ 23
24. Lets the athletes try their own way even if they make mistakes. _____ 24
25. Encourages the athlete to confide in the coach. _____ 25
26. Points out each athlete's strengths and weaknesses. _____ 26
27. Refuses to compromise on a point. _____ 27
28. Expresses appreciation when an athlete performs well. _____ 28
29. Gives specific instructions to each athlete on what should be done in every situation. _____ 29
30. Asks for the opinion of the athletes on important coaching matters. _____ 30
31. Encourages close and informal relations with athletes. _____ 31
32. Sees to it that the athletes' efforts are coordinated. _____ 32
33. Lets the athletes work at their own speed. _____ 33
34. Keeps aloof from the athletes. _____ 34
35. Explains how each athlete's contribution fits into the total picture. _____ 35
36. Invites the athletes home. _____ 36
37. Gives credit when it is due. _____ 37
38. Specifies in detail what is expected of athletes. _____ 38
39. Lets the athletes decide on plays to be used in a game. _____ 39
40. Speaks in a manner which discourages questions. _____ 40

VITA

VITA

I received my bachelors from George Mason University in Psychology in 1992, but this degree was not enough. After a semester at University of Tennessee in Athletic Administration, I transferred to Virginia Tech to pursue a degree in Motor Behavior and Sport Studies. My goal was to gain a master, but also put myself to the challenge of writing a thesis. It is my hope that this thesis increase knowledge and understanding of sports.



Nicholas P. Murray