1993

Comparison of leadership styles and team cohesion

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COMPARISON OF LEADERSHIP STYLES AND TEAM COHESION

by

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An Abstract

of a thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Science in the Division
of Health, Physical Education,
and Recreation at
Ithaca College

September 1993

Thesis Advisor: Dr. A. Craig Fisher

ABSTRACT

This study investigated the relationship between perceived levels of team cohesion of sectional softball teams and perceived leadership qualities of coaches of the same teams. Female high school players (N = 93) completed the Leadership Scale for Sports (LSS), comprising training and instruction (Trinst), democratic behavior (Dem), autocratic behavior (Auto), social support behavior (Socs), and positive feedback behavior (Reward). Subjects also completed the Group Environment Questionnaire (GEQ), which categorizes attraction to the task (ATGTask) and social aspects of the group (ATGSocial), as well as feelings of task (GITask) and social unity (GISocial). Pearson product-moment correlation coefficients revealed a high relationship between Socs and GISocial and a low relationship between GITask and Auto. Moderate correlations were found between Trinst and all four perceived cohesion categories. Multiple regression of the leadership predictor variables on perceived cohesion revealed that the variable Trinst was a significant predictor in all four equations. The predictor variables of Auto and Socs were also found significant with GITask and GISocial, respectively. Canonical

correlation analysis revealed the following profile as the best predictor of the existing levels of high GISocial, moderately high ATGTask and ATGSocial, and low GITask: High Trinst, moderately high Socs, moderately low Reward, and very low Dem and Auto. It was concluded that all five leadership behaviors are related situationally to task and social cohesion.

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A Thesis Presented to the Faculty of
the Division of Health, Physical
Education, and Recreation
Ithaca College

In Partial Fulfillment of the
Requirements for the Degree
Master of Science

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by
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September 1993

Ithaca College
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CERTIFICATE OF APPROVAL

MASTER OF SCIENCE THESIS

This is to certify that the Master of Science Thesis of

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submitted in partial fulfillment of the requirements for the degree of Master of Science in the Division of Health, Physical Education, and Recreation at Ithaca College has been approved.

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Date: August 16, 1993

ACKNOWLEDGMENTS

The investigator would like to thank everyone involved in the completion of this study:

1. To Dr. Pat Frye for the great amounts of time, patience, and support given to me throughout the data portion of this thesis.

2. To Dr. A. Craig Fisher, my thesis advisor, for the time and guidance given through the years involved in writing this thesis.

3. To my friends for staying behind me and always pushing.

4. To my family, especially my parents, for the opportunities and love they have given me.

5. To Dr. Beth McManis for rediscovering my statistical programs and working them out.

6. To Jakie for always giving me a reason to smile.

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Chapter 1

INTRODUCTION

Cohesion, a somewhat controversial issue, has been a topic of steady interest to sport psychologists for years, yet gray areas still exist. Results of studies have shown evidence for and against the importance of cohesion in sport, yet its benefits, if any, still remain equivocal. Even though equivocity is present, it is a commonly held belief by many sport psychologists and coaches of team sports that cohesion is an important factor in team success.

One of the earliest definitions of cohesion, and one still accepted today, is Landers and Luschen's (1974) definition of cohesion: Cohesion is the result of all situations or forces that influence the members to remain in the group. Expanding on the above definition, Widmeyer, Brawley, and Carron (1985) identified a great number of factors suspected to lead to group cohesion and grouped them into the following three categories: (a) characteristics of the group members, (b) characteristics of the group, and (c) situations experienced by the group. Under these three categories most forces or situations that lead to group cohesion can be categorized. Thus, their

suggestion is that any leader who hopes to foster cohesion in his/her group can do so by (a) selecting members with certain qualities, (b) fostering certain conditions within the group, and/or (c) providing certain experiences for the group. Widmeyer et al.'s research clarifies that the leader of a group can be highly responsible for the degree of cohesion present in that group.

Leaders (coaches) come in many shapes and forms, and this raises the question of coaching styles. Many researchers state that there is no one best style of leadership and the most appropriate leadership style for a coach varies with the situation (Anshel, 1990; Mountjoy, 1980). Straub's (1978) research supports this perspective when he claimed that different sport groups require different types of leadership. What the coach has to do is examine the situation and determine what would be the best choice for the group. Thus, from a cohesion standpoint, the coach needs to act accordingly to enhance the team's unity. The question arises: Is there a style of coaching that better develops and/or maintains cohesion?

From the previous claims of cohesion's importance in sport and the role the leader has on situations that

affect cohesion, the relationship between cohesion and leadership will be examined in this study. Self-report assessment devices for both cohesion and leadership were administered to assess the relationship between these variables.

Scope of Problem

This study examined the relationship of perceived leadership behavior and perceived levels of cohesion. Two self-report questionnaires were administered to 93 female softball athletes from high school sectional teams from various sections of New York.

Leadership behavior was measured using the Leadership Scale for Sport (LSS) (Chelladurai & Saleh, 1980) (Appendix A). The LSS consists of 40 statements that, when answered by placing an "X" in one of five categories ranging from "always" to "never", identify a perceived leadership type. The LSS comprises the following leadership dimensions: (a) training and instruction behavior, (b) democratic behavior, (c) autocratic behavior, (d) social support behavior, and (e) positive feedback behavior. Cohesion was measured by the Group Environment Questionnaire (GEQ) (Widmeyer et al., 1985) (Appendix B). The (GEQ) is a 18-item instrument designed to assess perceptions of

the cohesion present on athletic teams. The items of the (GEQ) are divided into the following four categories: (a) individual attractions to the group--task, (b) individual attractions to the group--social, (c) group integration--task, and (d) group integration--social.

The data allowed for the examination of the relationship between leadership styles and cohesion. Data were subjected to Pearson product-moment correlation, multiple regression, and canonical correlation to assess the various relationships that existed within the data.

Statement of Problem

The relationship between leadership behavior and perceived levels of cohesion was investigated in this study. Perceived levels of cohesion were identified as the four criterion variables while the five leadership behaviors served as the predictor variables. The data obtained from these measures were analyzed in an attempt to answer the following question: Do leadership styles relate to the level of athletes' perceived team cohesion?

Hypothesis

Perceived cohesion can be predicted from leadership style.

Assumptions of Study

The following assumptions were made for the purposes of this study:

1. Leadership behaviors are measured effectively by the LSS.

2. Team cohesion is measured effectively by the GEQ.

3. The athletes were able to relate to the situations on the LSS and GEQ and gave honest replies.

4. Softball teams chosen for sectional competition represent successful teams.

Definition of Terms

The following definitions clarify the meaning of terms used in this investigation:

1. Training and Instruction Behavior (Trinst): behavior of the coach aimed at improving the performance of the athletes by emphasizing and facilitating hard and strenuous training; by instructing them in the skills, techniques, and tactics of the sport; by clarifying the relationship among the members; and by structuring and coordinating the activities of the members.

2. Democratic Behavior (Dem): behavior of the coach that allows greater participation by the

athletes in decisions pertaining to group goals, practice methods, and game tactics and strategies.

3. Autocratic Behavior (Auto): behavior of the coach that involves independence in decision making and that stresses personal authority.

4. Social Support Behavior (Socs): behavior of the coach characterized by a concern for individual athletes, for their welfare, for positive group atmosphere, and for warm interpersonal relations with members.

5. Rewarding (Positive Feedback) Behavior (Reward): behavior of the coach that includes providing reinforcement for an athlete by recognizing and rewarding good performance.

6. Sectional Softball Team: team that has over a .500 win/loss record and is selected to compete within its section of New York State for a championship.

7. Group Integration--Task (GITask): individual team member's feelings about the similarity, closeness, and bonding within the team as a whole around the group's task.

8. Group Integration--Social (GISocial): individual team member's feelings about the similarity, closeness, and bonding within the team as a whole around the group as a social unit.

9. Individual Attractions to the Group--Task (ATGTask): individual team member's feelings about personal involvement with the group task, productivity, goals, and objectives.

10. Individual Attractions to the Group--Social (ATGSocial): individual team member's feelings about personal involvement, acceptance, and social interaction with the group.

Delimitations of Study

The following were the delimitations of this study:

1. This study involved only high school female athletic teams (N = 11) in New York State.

2. Team cohesiveness was measured only by the GEQ, a self-report assessment tool.

3. Leadership behaviors were assessed only by the LSS, a self-report assessment tool.

Limitations of Study

Procedures necessitated the following limitations.

1. The results of this study can only be generalized to female softball athletes who are considered similar to the athletes in this study.

2. Leadership styles and cohesion were examined only within the confines of the definitions provided and the tests administered.

Chapter 2

REVIEW OF LITERATURE

The review of literature related to this study focuses on the following areas: cohesion defined, the assessment of cohesion in sport, coach-athlete relationships, importance of leadership to cohesion, and summary.

Cohesion Defined

The term cohesion is one that cannot be easily defined by a simple one-sentence definition due to its great complexity and lack of specificity. The most widely used definition or one most other definitions were derived from is that of Festinger, Schachter, and Back (1950). They described cohesion as the resultant forces that act on members to stay in a group. Cartwright (1968), in his early studies, suggested that these forces all had to do with interpersonal attraction.

Most early research on cohesion focused on interpersonal attraction. Shaw's (1971) research, however, suggests that cohesion consists of more than interpersonal attraction among group members because this stresses only individual attraction, yet cohesion can be altered by other things like the number,

strength, and pattern of attractions within the group. Every group has its goals or objectives and these are interwoven into the development of the group and result in the members sticking together and remaining united as a social unit.

Landers and Luschen (1974) supported Shaw's (1971) research by suggesting that the forces and situations that influence members to remain in the group can be broken into two categories: (a) social cohesion--the degree of attractiveness an individual has to the group, and (b) task cohesion--the degree to which group members pursue common goals. Through the need to further distinguish between the individual and the group, as well as between social and task concerns, researchers began to do more extensive studies. Widmeyer et al. (1985) supported Landers and Luschen's research that implied cohesion can be altered by social, task, individual, or group situations and developed four cohesion constructs they believed covered all areas. The constructs are group integration to the task, group integration to social concerns, individual attraction to the group because of the task, and individual attraction to the group for social concerns. The development of the constructs by

Widmeyer et al. are those used by contemporary researchers to study cohesion because they are believed to address the major categories that comprise cohesion.

The Assessment of Cohesion in Sport

The importance of cohesion has been a subject of sport research for many years, based on the belief that cohesion is necessary for team success (Bird, 1977a; Carron, 1993; Gill, 1978; Widmeyer & Martens, 1978; Widmeyer et al., 1985; Williams & Widmeyer, 1991). However, research does not totally support this commonly held cohesion-performance relationship. For example, Lenk's (1969) study showed that team cohesion was not necessary for an Olympic crew team. Fiedler (1954), using basketball teams, and McGrath (1962), using rifle teams, also found a negative relationship between team success and cohesion. Even though there is evidence of a negative relationship and even a negligible relationship in some studies, most cohesion researchers still tend to support a positive relationship.

In 1978, Widmeyer and Martens unveiled convincing evidence in the defense of the importance of cohesion to groups. They suggested the following: (a) cohesive teams do not have to spend a great deal of time on

group maintenance, therefore, more time can be spent on task performance; (b) members of a team who are attracted to that group will work harder to achieve the group's goals; (c) the great communication that appears in cohesive groups will improve that quality of performance; and (d) cohesive teams show more of a willingness to interact than do noncohesive teams. In rebuttal to Widmeyer and Martens' last point, Gill (1978) and Carron (1984) both found that teams with a great deal of cohesion may not perform as well as teams with less cohesion because individual members may let the striving for group maintenance get in the way of the task performance. Even though the findings are equivocal, it has been argued that the better conducted studies generally demonstrate a positive relationship between cohesion and performance. In fact, the more recent research has not been concerned with whether cohesion contributes to performance but rather with the degree to which it contributes to performance (Widmeyer & Martens, 1978) and with identifying variables that might mediate the cohesion-performance relationship (e.g., leadership) (Carron & Chelladurai, 1981).

In research on task demands of a sport team, reviewers of cohesion research typically conclude that the cohesion-performance relationship is positive in interacting teams but negative or non-existent in coacting teams (Carron, 1993; Gill, 1978). In interacting sports, success depends upon appropriately combining each player's diverse skills in an interdependent pattern of teamwork (e.g., basketball). In coacting sports, players independently perform the same skills, and team success is determined by the sum of individual performances (e.g., golf) (Williams & Widmeyer, 1991). The reason for the different results between interacting and coacting sports is as follows: cooperative tasks as in interactive sports facilitate interaction that in turn leads to greater cohesion and task performance. On the other hand, in coacting sports cohesion is not necessarily a desirable component because rivalry is thought to produce the best performance in independent tasks. If an athlete becomes too concerned with the welfare and feelings of coactors, this might detract from one's own performance. Therefore, one would choose to develop cohesion in interacting teams and not develop cohesion in coacting teams (Carron, 1993).

Coach-Athlete Relationships

As indicated by Widmeyer et al. (1985), leader-member relationships are important to the presence or development of group cohesion. The leader-member cohesion and performance relationship is quite complex but should not be shied away from by coaches and leaders because of its importance. Throughout the development of fitness and skills, attention must also be focused on coach-athlete relationships in order to achieve the best overall outcome of a group (Carron & Chelladurai, 1981).

It seems reasonable to assume that coaches have the power to affect both team cohesion and performance as far as success or failure is concerned by their leadership style (Bird, 1977b). Carron and Chelladurai (1981) support Bird's position and indicated which type of coaching style gets the best results with various types of teams. They suggested that, for teams with low amounts of cohesion, a task-oriented leader is best. But for teams with pre-existing cohesion, a leader who focuses on interpersonal issues is best.

In 1980, Chelladurai and Saleh's interests in the area of sport leadership led them to develop a

leadership scale comprising of what they and past researchers determined were the most important dimensions of leadership behavior. The Leadership Scale for Sports (LSS) consists of the following dimensions: training and instruction behavior, democratic behavior, autocratic behavior, social support behavior, and positive feedback behavior. The leadership scale was designed to analyze coaching behavior by administering the questionnaire to athletes.

Carron and Chelladurai (1981) suggested that the nature of the coach-athlete relationship and its effect on athletic performance is worthy of investigation because (a) cohesion and leader-member compatibility are similar and (b) both have apparent importance in sport. Those environments where positive coach-athlete relationships and team cohesion are found will likely promote greater athlete satisfaction and more effective performance. As is evident from the leadership investigations, knowing how the athletes feel about their leaders and their relationship to them may be related to team cohesion and in the end team performance (Chelladurai & Saleh, 1980).

Importance of Leadership to Cohesion

The problem of what constitutes the best leadership style has long been a subject of controversy and discussion among coaches, players, and the general sporting public. As group leaders, coaches have been traditionally characterized as disciplinarians, enforcers of rigid rules, and impersonal in their attitudes and treatment toward players (Tutko & Richards, 1971).

In arriving at their definition of leadership, Chelladurai and Saleh (1978) described it as the behavioral process of influencing subordinates toward organizational goals. Accepting the above definition, the question then is not if leadership is important to cohesion. There is support that leader-member relationships are important to the development or presence of group cohesion (e.g., Bird, 1977b; Widmeyer et al., 1985). The question is, does knowing what type of leadership works best for certain situations and teams relate to cohesion and subsequently to performance. The answer to the above question was partially answered by Weiss and Friedrichs (1986) when they discovered that the coaching behaviors of reinforcement, organization and control, encouragement

when mistakes were made, and instruction when mistakes were made were the most favored characteristics by athletes to make them perform better. Carron and Chelladurai (1981) also offered some indication of preferred leadership styles. In teams with low cohesion, they found that a leader who is task oriented is best; but for teams with high cohesion, a leader who is interpersonal with the members is best.

One of the problems with leadership research is that most of the past studies have been done on coaches' personality, coaches' behavior, coach-athlete relationships, or on trait and personality differences among coaches or between coaches and noncoaches. These approaches ignored important considerations such as situational factors or needs of the athlete (Weiss & Friedrichs, 1986).

Current research has attempted to identify specific behaviors that are thought to be effective for coaches. While certain behaviors have been associated with desirable athletic outcomes, it is apparent that situation differences (e.g., levels of competition, age of athletes, type of sport, gender) mediate the effectiveness of these leader behaviors. The view that leadership effectiveness is a function

of both situational and individual characteristics is more credible and has gained general acceptance in the last few decades (Chelladurai, 1984a; Straub, 1978).

Fiedler's (1967) leadership theory was one of the first published theories that utilized the contingency approach. This approach to leadership suggests that leader effectiveness is somehow situation specific and that leader behaviors that are effective in one situation may not be effective in another (Chelladurai, 1984b).

Bird (1977b) examined the application of Fiedler's leadership model to sport and speculated that the most effective coaching style, rather than coaching behavior, requires flexibility according to the level of skill or competition. Chelladurai's studies with Carron and Saleh (Chelladurai & Carron, 1978; Chelladurai & Saleh, 1978) introduced a leadership approach that focused on the varying behaviors of the coach that are appropriate to different athletic situations. After the identification of behaviors, Chelladurai & Saleh (1980) proposed a multidimensional leadership model that specifies that the coaching behavior should be contingent upon the preferences of team members and the particular situation.

Because older leadership behavior questionnaires dealt with organizations other than sport, Chelladurai and Saleh (1980) took on the task of developing a sport-specific inventory to deal with areas previous inventories did not. Their efforts produced the LSS in 1980. The LSS consists of one direct task factor (Trinst), two decision-style factors (Dem and Auto), and two motivational factors (Socs and Reward). Chelladurai and Saleh concluded that, although the scale may not explain all of the total variance in perceived leadership data, the LSS is a valuable tool that has advantages over other instruments and can be used profitably in the analysis of coaching behavior.

As is evident from the preceding paragraphs, effective leadership does not depend solely on a set of universal traits or behaviors. Rather, the relationship between traits and behavior depends on the situation. What is effective in one situation may not be effective in another (Chelladurai, 1984a). Chelladurai and Carron's (1978) leadership model and Chelladurai and Saleh's leadership scale provide great background for the study of situational leadership. Yet, further research is always necessary because leader-member relationships are very complex and because

many factors can act on the behaviors of the group or team leader to affect the environment (Weiss & Friedrichs, 1986).

Summary

Researchers have studied cohesion for many years and have found it to be an important factor in team success (Bird, 1977a; Carron, 1993; Widmeyer et al., 1985). Suggested effects of cohesion on groups range from greater communication, which improves the quality of performance, to having to spend less time on group maintenance. Therefore, with more time to spend on task performance, performance is improved.

Early research on cohesion indicated some positive, some negative, and even negligible cohesion-performance relationship results. However, the latest research has not been concerned with whether cohesion contributes to performance but rather with the degree to which it contributes to performance (Widmeyer & Martens, 1978) and with identifying variables that tend to mediate the cohesion-performance relationship. An additional point that must be mentioned is that most of the literature on cohesion-performance outcomes supports a positive relationship in interacting teams, but a negative relationship in coacting teams (Carron,

1993; Gill, 1978).

Supporting the evidence that cohesion is important and has a positive impact on performance, Carron and Chelladurai (1981) began to give attention to leader-member and cohesion-performance relationships. They claimed that the nature of coach-athlete relationships was worthy of investigation because cohesion and coach-member compatibility are similar and both have importance in sport. They further argued that those environments in which positive coach-athlete relationships and team cohesion are found will likely show greater athlete satisfaction and more effective performance.

Another variable with relevance to sport performance is leadership behavior. Chelladurai (1984b) stated the coach, the person in the most powerful position on the team, has the greatest influence on establishing team climate, thus making the role the leader plays a great one. Early research focused on personality traits due to the belief that great leaders are born not made. However, later research began to focus on leader behaviors and situations with the inception of Fiedler's (1967) and other theories of leadership. What was uncovered in the latest research

is that, while certain behaviors have been found to be associated with desirable athletic outcomes, it is apparent that situation differences (e.g. levels of competition, age of the athlete, type of sport, gender) mediate the effectiveness of these leader behaviors. Leadership can take on many dimensions because there are so many factors that can act on the team leader to affect the environment. Therefore, what behavior works in one situation may not be effective in another. Any leader will be most successful if he/she analyzes the situation and matches his/her behavior to fit the circumstances.

Chapter 3

METHODS AND PROCEDURES

The following chapter outlines the methods and procedures used in this investigation. Selection of subjects, testing instruments, methods of data collection, scoring of data, treatment of data, and a summary will be addressed.

Selection of Subjects

The subjects involved in this investigation (N = 93) were high school female varsity softball players of sectional teams. Letters explaining this study were initially sent to 160 New York State girls' varsity softball coaches whose teams had qualified for sectional competition. Sectional teams were chosen in an attempt to have only successful teams participating in the study. Of the 160 teams initially chosen, 30 responded and agreed to participate, but only 11 actually completed the questionnaires and mailed back the results. Of the 11 packets of results received, three did not include results from all athletes on the team.

Testing Instruments

The following tests were administered to the subjects: the Leadership Scale for Sports (LSS) (Chelladurai & Saleh, 1980) (Appendix A) and the Group

Environment Questionnaire (GEQ) (Widmeyer et al., 1985) (Appendix B).

The LSS consists of 40 items representing five dimensions of leader behavior in sports. A brief description of the five dimensions is as follows: (a) training and instruction behavior (Trinst)--behavior of the coach aimed at improvement of performance, emphasis is on hard and strenuous training; (b) democratic behavior (Dem)--behavior of the coach that allows participation of the athletes in decisions; (c) autocratic behavior (Auto)--behavior of the coach that involves independence in making decisions, personal authority is stressed; (d) social support behavior (Socs)--behavior of the coach that involves concerns for athletes' welfare, positive group atmosphere, and interpersonal relations with members; (e) rewarding behavior (Reward)--behavior by the coach that provides reinforcement by recognizing and rewarding good performance.

The athletes responded to each item according to how they perceived their coaches' behavior. For each statement there were five Likert-type alternatives: always (5), often (4), occasionally (3), seldom (2), and never (1). The sum of the scores on the items in

a dimension was divided by the number of items in that dimension to derive the dimension score for a subject.

To assess the athletes' perception of their team's cohesiveness, the GEQ was administered. The athletes responded to each item according to how they perceived their team in that particular situation. The GEQ consists of 18 statements, nine dealing with athletes' personal involvement with the team and nine dealing with athletes' perception of the team as a whole. A 9-item Likert-style response format was used, ranging from strongly disagree (1) to strongly agree (9). The GEQ is divided into the following four categories: (a) group integration--task (GITask)--bonding within the team as a whole around the group's task; (b) group integration--social (GISocial)--bonding within the team as a whole around the group as a social unit; (c) individual attractions to the group--task (ATGTask)--individual member's feelings about one's personal involvement with the group task; (d) individual attractions to the group--social (ATGSocial)--individual member's feelings about one's personal involvement with the group.

Methods of Data Collection

Each athlete received the following items:

informed consent form, LSS, and GEQ. Athletes were advised to complete the questionnaires as honestly as possible. Because the data were collected through the mail, the coach of each individual team administered the tests in a group or on an individual basis. The coaches were asked to explain the testing procedures and to encourage a quick response rate. Upon collecting the complete tests, the coach returned them to the investigator. All data were collected between May and July, 1988.

Scoring of Data

The data from the athletes' LSS as well as the data from the athletes' GEQ were transferred to general purpose optical scanning sheets. The LSS was transferred to a 5-option scanning sheet. The computer program was written so that, when the answer sheets were scanned, values were reversed in order to match the correct point value of the response. The GEQ was transferred to a 10-option scanning sheet, which matched the questionnaire's scoring method, so recoding was not necessary. These data were then scanned onto a VAX file for future analysis.

Treatment of Data

The SPSS program was used for all analysis of data.

To obtain a general overview of the interrelationships among the nine variables, Pearson product-moment correlation was used. Pearson correlations were followed by multiple regression analysis of the five leadership variables on the four cohesion variables, respectively. Canonical correlation was utilized to assess the multivariate relationship between the predictor variables (leadership) and the outcome variables (cohesion). In all cases, the .05 level of statistical significance was utilized.

Summary

High school female varsity softball players (N = 93) representing successful teams completed the LSS and the GEQ. To assess interrelationships among the nine variables, Pearson product-moment correlation was used. Pearson correlations were followed by multiple regression analysis of the five leadership variables on the four cohesion variables, respectively. Canonical correlation was utilized to assess the multivariate relationship between the predictor variables (leadership) and the outcome variables (cohesion). In all cases, the .05 level of statistical significance was utilized.

Chapter 4

ANALYSIS OF DATA

The results of the investigation are presented in this chapter. The chapter is divided into the following sections: (a) intercorrelations of the leadership dimensions and cohesion categories; (b) multiple regression of the leadership dimensions on ATGTask, ATGSocial, GITask, and GISocial, respectively, (c) canonical correlation of the leadership dimensions on cohesion categories; and (d) summary.

Intercorrelations of the Leadership Dimensions and Cohesion Categories

Pearson product-moment correlation assessed the relationship among all variables. Pearson *r* values ranged from a low of -.13 (Auto with Trinst) to a high of .63 (Reward with Dem).

Results from Table 1 reveal moderate Pearson *r* values between the cohesion categories ATGSocial and GISocial, *r* = .59; ATGSocial and GITask, *r* = .56; ATGTask and ATGSocial, *r* = .54; and ATGTask with GISocial and GITask, *r* = .47. Moderate *r* values were also revealed between the leadership dimensions Dem and Reward, *r* = .63; Auto and Reward, *r* = .55; Dem and Auto, *r* = .46; and Dem and Socs, *r* = .45.

Table 1

Intercorrelations of Leadership Dimensions and Cohesion Categories

	2	3	4	5	6	7	8	9
1. ATGTask	52*	47*	47*	38*	25*	-15	25*	36*
2. ATGSocial		56*	59*	35*	19*	-15	24*	20*
3. GITask			55*	38*	13	-29*	15	29*
4. GISocial				37*	28*	-22*	43*	29*
5. Trinst					39*	-13	39*	43*
6. Dem						-46*	45*	63*
7. Auto							-14	55*
8. Socs								36*
9. Reward								

Note. Decimals omitted.

*$p < .05$.

Examination of the relationships between the cohesion categories and the leadership dimensions revealed the largest *r* value between Socs and GISocial, *r* = .43; and the smallest *r* value between GITask and Dem, *r* = .13.

Trinst showed moderate correlation with all perceived cohesion categories, *r*s ranging from .35 to .38. Slightly lower *r* values (.20 to .36) were found between Reward and the cohesion categories.

The lowest correlations were found between the variables of Auto and Dem and the four cohesion categories with no correlation exceeding ± .30.

The remaining variable of Socs showed low to moderate positive correlations with the four cohesion categories. The *r* values ranged from .15 to .43.

Multiple Regression Analyses

In order to assess the overall degree of relationship between a set of predictor variables (Trinst, Dem, Auto, Socs, and Reward) and a single criterion measure of cohesion (ATGTask, ATGSocial, GITask, and GISocial, respectively), the SPSS stepwise procedure of multiple regression was utilized. Values from the multiple regression analyses can be found in Table 2.

Table 2

Multiple Regression of Leadership Dimensions on Cohesion Categories

Predictor Variables	RsqCum	t
ATGTask		
Trinst	.15	2.323*
Reward	.19	1.952
Socs	.20	0.801
Dem	.20	-0.398
Auto	.20	0.098
ATGSocial		
Trinst	.13	2.709*
Socs	.14	1.026
Auto	.15	-0.919
Reward	.15	-0.162
Dem	.15	-0.160
GITask		
Trinst	.15	3.455*
Auto	.21	-2.523*
Dem	.23	-1.700
Reward	.24	0.663
Socs	.24	0.290

(table continues)

Predictor Variables	RsqCum	t
GISocial		
Socs	.19	3.119*
Trinst	.24	2.080*
Auto	.26	-1.286
Dem	.26	-0.352
Reward	.26	0.177

Note. ATGSocial = individual attractions to the group--social. ATGTask = individual attractions to the group--task. GISocial = group integration--social. GITask = group integration--task. Auto = autocratic behavior. Reward = rewarding behavior. Dem = democratic behavior. Socs = social support behavior. Trinst = training and instruction behavior.

*$p < .05$.

ATGTask

Multiple regression of the leadership predictor variables on the cohesion category ATGTask revealed one significant variable. Trinst predicted approximately 15% of the variance in perceived ATGTask.

ATGSocial

Multiple regression of the leadership predictor variables on the cohesion category ATGSocial revealed one significant variable. In this prediction equation, Trinst explained approximately 13% of the ATGSocial variance.

GITask

Multiple regression of the leadership predictor variables on the cohesion category GITask revealed the following two significant variables: Trinst and Auto. These two variables predicted approximately 21% of the variance in perceived GITask. When Trinst was the only variable in the equation, it accounted for 15% of the variance in predicting GITask.

GISocial

Multiple regression of the leadership predictor variables on the cohesion category GISocial revealed two significant variables: Socs and Trinst.

These two variables predicted approximately 24% of the variance in GISocial. When Socs was the only variable in the equation, it accounted for 19% of the variance in predicting GISocial.

Canonical Correlation Analysis of Leadership Dimensions and Cohesion Categories

The overall measure of the multivariate relationship between the outcome measures (ATGTask, ATGSocial, GITask, and GISocial) and the predictor variables (Trinst, Dem, Auto, Socs, and Reward) reached statistical significance, $p < .05$. Dimension reduction analysis indicated that roots 1 to 4 were significant. However, when the first root ($Rc = .551$) was removed from the analysis, none of the other roots were statistically significant. These results along with the results from the multiple regression equations support the acceptance of the hypothesis, which states that perceived cohesion can be predicted from leadership style.

The first root of the canonical correlation explained approximately 30% of the cohesion variance. Examination of the canonical variates revealed the following relationship between the cohesion outcome measures and leadership predictor variables: High

GISocial, moderately high ATGTask and GITask, and low ATGSocial was described by high Trinst, moderately high Socs, moderately low Reward, and low Dem and Auto. This profile characterizes coaches who focused primarily on training and instruction, added with concern for their players welfare, as being able to develop high group integrated social cohesion and moderately high group integrated task and individual task cohesion.

The high predictive value of Trinst suggests it is the best of the leadership variables in producing high levels of ATGSocial and moderately high ATGTask and GITask cohesion. The moderately high Socs value also suggests that softball coaches who are socially supportive will have teams that exhibit relatively high social and task cohesion values. Further examination of the first root of the canonical correlation can be seen in Table 3.

Summary

Pearson product-moment correlations revealed a moderate relationship between Socs and GISocial and a low relationship between GITask and Auto. Moderate correlations were also found between Trinst and all four perceived cohesion values. Slightly lower *r* values were found between Reward and the cohesion categories.

Table 3

Canonical Loadings for the Leadership (Predictor) and Cohesion (Criterion) Variables

Variable	Function 1
Predictor Variables	
ATGTask	0.362
ATGSocial	-0.020
GITask	0.332
GISocial	0.538
Criterion Variables	
Trinst	0.608
Dem	-0.210
Auto	-0.310
Socs	0.401
Reward	0.247

Note. ATGSocial = individual attractions to the group--social. ATGTask = individual attractions to the group--task. GISocial = group integration--social. GITask = group integration--task. Auto = autocratic behavior. Reward = rewarding behavior. Dem = democratic behavior. Socs = social support behavior. Trinst = training and instruction behavior.

Multiple regression of the leadership predictor variables on perceived cohesion revealed that the predictor variable Trinst was a significant predictor in all four equations. The predictor variables of Auto and Socs were also found significant with GITask and GISocial, respectively.

Canonical correlation analysis revealed the following profile of high GISocial, moderately high ATGTask and GITask, and low ATGSocial: high Trinst, moderately high Socs, moderately low Reward, and low Dem and Auto.

Chapter 5

DISCUSSION OF RESULTS

The results presented in chapter 4 are discussed in this chapter. Topics include the following: intercorrelations of the leadership dimensions and cohesion categories; multiple regression analysis of leadership dimensions on ATGTask, ATGSocial, GITask, and GISocial; canonical correlation of leadership and cohesion variables; and summary.

Intercorrelations of the Leadership Dimensions and Cohesion Categories

The intercorrelation values for leadership and cohesion variables are reported in Table 1. Correlations were in the direction (i.e., positive or negative) expected by the investigator. The order of magnitude of the relationships between leadership profile items and task and social cohesion were as follows: Trinst, Reward, followed closely by Socs, then Dem and Auto.

The highest r value between any leadership dimension and a cohesion category was $r = .44$ between Socs and GISocial. The above r value is understood by looking at the definitions of Socs and GISocial. Socs behavior is characterized by creating a positive group

atmosphere and warm interpersonal relations (Chelladurai & Saleh, 1980). GISocial is bonding within the team as a whole around the group as a social unit (Widmeyer et al., 1985). Examining the definitions together suggests that if the coach demonstrates behaviors of social support, the group is likely to bond well as a social unit, thus explaining the high *r* value. Even though the Socs-GISocial relationship did reveal the highest *r* value, the similarity of definitions might have suggested even a more significant relationship.

Correlations between Trinst and the cohesion categories revealed moderate correlations of *r*s = .35 to .38. These correlations were the highest values of any leadership dimension. The *r* values for Trinst with the cohesion categories show that if coaches were to use only one style of coaching and wanted cohesion on their team, Trinst would appear to be the best behavior to emphasize. The *r* values also revealed significant but lower correlations between both Reward and Socs and the cohesion categories. Initially, the high Trinst *r* values were unanticipated by the investigator, however, careful investigation into the definition of Trinst and the review of literature

supported that role clarity, strenuous training and instruction, and high organization are favorable qualities of coaches as viewed by athletes (Silletta, 1982).

Correlations between the Auto behavior of the coach and the cohesion categories revealed no unexpected results. Low correlations (*rs* = -.15 to -.29) resulted. The Auto behavior of the coach, which involves independence in decision making and the exercise of personal authority, on the surface would not appear to foster favorable levels of cohesion. However, it has been suggested that teams with common experiences, even bad ones, can exhibit high levels of cohesion (Widmeyer et al., 1985). Even though the authoritative leader does not promote care for the individual, the experiences the team goes through together may make them feel close. Although all the relationships between Auto and the cohesion categories were low, the relationships between Auto and GITask and between Auto and GISocial were statistically significant. The significant relationships point out that Auto behavior should not be ignored completely when describing the profile of a coach who would best promote cohesion.

Multiple Regression Analysis of Leadership Dimensions on ATGTask, ATGSocial, GITask and GISocial

ATGTask

Multiple regression of the leadership predictor variables on ATGTask accounted for 19.9% of the variance. It is important to point out that 80.1% of the variance in ATGTask is unexplained by the leadership variables. The remaining 80.1% represents the unexplained percentage from unmeasured components (e.g., luck, motivation, ability) that could have contributed to the total ATGTask variance.

In the regression equation of ATGTask, only one of the leadership variables (Trinst) was significant. It explained 14.5% of the total variance. This indicates that the leader who aims to improve the performance of athletes by emphasizing and facilitating hard and strenuous training; by instructing them in the skills, techniques, and tactics of the sport; by clarifying the relationship among the members; and by structuring and coordinating the activities of the members is going to be successful in fostering positive feelings that contribute to how individuals feel about their personal involvement with the group task, their goals, and objectives. The Trinst leader is

characterized by spending much time working toward and focusing on the task (Widmeyer et al., 1985), therefore, one would hope that this focus would result in the athletes feeling good about what it is they are trying to accomplish. Carron (1984) supports the above when he suggested that the investment of much effort and time into the task fosters a sense of pride and worth in and about the task.

Contributing to 4.7% of the remaining variance in ATGTask was the predictor variable Reward. Although the Reward value was not significant, the combination of hard and strenuous training and instruction added with positive feedback from the coach about the task makes a more complete profile of predicting perceived ATGTask in a team than the Trinst behavior alone.

The three remaining variables (Dem, Auto, and Socs) comprised just .62% of the variance explained in ATGTask. Thus, in attempting to develop high ATGTask, a combination of strenuous training and instruction with a reward system would appear to give the best results. The reward contribution to the development of individual attraction to the group task is supported by Tutko and Richards (1971) when they

suggested that if a coach uses positive methods during instruction and rewards the athletes' good performance, the players are prone to develop genuine feelings for one another and the coach. When players are close to one another they tend to play well together. Anshel (1990) supports Tutko and Richards' findings and added that players who are given a pat on the back for their efforts will be motivated to try harder and prepare better. As a result, they will likely be more successful competitors and success can lead to greater cohesion.

ATGSocial

Multiple regression of the leadership predictor variables on ATGSocial accounted for 15% of the variance. As was discussed with perceived ATGTask, this is a significant amount of variance considering that other variables not measured in the current study are also related to team cohesion. As in the regression equation with ATGTask, Trinst was the only statistically significant variable. It accounted for 12.9% of the variance. Of the remaining 2.1% of variance explained, Socs accounted for 1.1% with the other three variables comprising the remaining 1.0%. Reward and Dem contributed negligibly to the overall equation. The leadership profile for fostering high

ATGSocial is very similar to that reported previously for high ATGTask. The coach should exhibit behaviors that focus on hard and strenuous training combined with concern and praise for the athletes.

Trinst being the only significant variable is somewhat of a surprise due to the fact that ATGSocial is defined as how athletes feel they fit into the group socially (Widmeyer et al., 1985). It was expected that Socs would be more of a contributor to the overall equation because Socs refers to the leadership behaviors that are concerned with individual athletes and their welfare (Chelladurai & Saleh, 1980). It would appear that a coach who was concerned with the individual athletes and their welfare would try hard to make them feel like they fit into the group socially. One explanation why Socs was not as big a factor as expected might be evident in the training and instruction profile. Part of Trinst deals with how effective the leader is at clarifying the relationships among team members and structuring the activities of the members. Trinst, therefore, best explains the ATGSocial variance because, when roles are clarified, athletes have an increased sense of security and fit better into the team (Widmeyer & Martens, 1978).

Still, the lack of significance of Socs in the overall explanation of the variance is surprising because the two definitions of the leadership dimension and the cohesion category overlap. However, examining the intercorrelation of the variables, only a moderate relationship was revealed between ATGSocial and Socs ($\underline{r}$ = .24) with a seemingly higher ($\underline{r}$ = .35) relationship revealed between ATGSocial and Trinst.

Another explanation of the lack of significance of Socs in ATGSocial is identified in Zander's (1982) research. He suggested that social cohesion develops more readily in homogeneous groups. Anshel (1990) supports the above when he suggested that if coaches' main focus is on individual athletes and their welfare, it could create some diversity if the athletes do not feel they are being treated equally. However, focusing more on the task as in Trinst would force all athletes to encounter more of the same experiences, thereby promoting team unity. Thus, the significant percentage of cohesion variance explained by Trinst is best understood by the belief that the softball coach whose aim is hard and strenuous training for all, regardless of athletes' level of skill (starter vs. nonstarter), is going to make everyone feel the same because of

their hard work. Not only would starters be working hard, but having individuals who feel satisfied about how they have been personally involved fosters high acceptance from all members, thus making the social interaction positive. No one would be singled out, and everyone's experiences would be similiar.

A statement by Widmeyer et al. (1985) further supports Trinst behavior as promoting ATGSocial. They claimed that task and social cohesion within a team are accompanied by reduced individuality and increased conformity behavior. This is perpetuated by coaches who emphasize Trinst behaviors because they focus athletes on the skills and tactics of the sport and they coordinate the members' activities so they all experience the same thing. Widmeyer et al.'s claim also supports the contribution of Auto to the total explained ATGSocial variance because Auto coaches are characterized as the sole decision makers and expect conformity from all participants. The Auto coaches would not accept individuality and force athletes to do as they wish.

GITask

Multiple regression of the predictor variables on perceived GITask accounted for 23.6% of the variance.

Of the four regression equations, GITask was the second highest in explained variance. Within the equation there are two significant variables. Trinst explained 14.9% of the total variance, and Auto explained another 6.1% of the remaining 8.7%.

Both of the variables that were significant are readily explainable as to why they have a high relationship with GITask. If group members are concerned only with the task at hand (GITask), focusing on that task would be easiest with a coach whose style was task oriented (i.e., Trinst and Auto). The Auto leadership style with the role definition of Trinst typically allows no diversion from the focus on the task. Thus, accomplishment of the task would be the main concern. Widmeyer et al. (1985) support this when they suggested that task cohesion develops more readily in groups where members have clearly defined roles. Thus, a team in which all members have roles and carry specific structured tasks reveals high levels of GITask, as would best be promoted by a combination of Trinst and Auto leadership styles.

Simply by examining the definitions of the Trinst style and the GITask category, one would expect a high positive correlation. However, one might predict the

relationship between conformity (Auto leadership) and task cohesiveness (GITask) to be opposite, unlike the results. The negative Auto and GITask relationship is supported by Cartwright (1968) when he stated that, if the standards for behavior and performance are established and approved by the group, their likelihood of acceptance will be high. If coaches want their teams to conform, they should involve players in the decision making process whenever possible. Cartwright's findings suggest that possibly the Dem style of leadership should have contributed more to the equation.

Further examination of the GITask regression equation, reveals that Dem did explain 2.0% of the remaining variance. Although not a significant variable in the equation, the Dem style of leadership would be appropriate to use in some situations so that athletes feel they have some input into the team rules and decisions. The components of the GITask equation lead to the assertion that a coach needs to use all styles of coaching at appropriate times. The data from this investigation show that Trinst is a significant leadership behavior to focus on as a coach, yet not at all times. When the situation warrants, all five leadership behaviors should be used (Anshel, 1990; Mountjoy, 1980).

GISocial

Multiple regression of the leadership predictor variables on GISocial accounted for approximately 25.8% of the variance. Of the four cohesion categories, GISocial was best predicted by the leadership variables. Perhaps this occurred because GISocial encompasses how team members feel about their closeness as a social unit and the leadership dimension of Socs is concerned with the same thing (Chelladurai & Saleh, 1980; Widmeyer et al., 1985), so the predictive value of Socs is understood. Examining the significant variables of the equation supports the above statement because Socs alone explained 19% of the total variance in GISocial.

Carron's (1984) research helps support and explain the current findings with the GISocial cohesion category. He found that, when team members understand their roles and can accept their relationship to the team, cohesion is enhanced. Also, leaders who have great concern for their athletes as people and not just as athletes will help the team members to socialize more closely with the group. If coaches deal with an athlete's personal matters or structure social activities apart from the sport, all members of the

team can feel a part of the group and social cohesion would be enhanced. Removal from the sport or task and insertion into a situation where all have equal opportunities gives athletes (starters or nonstarters) a feeling of equality (Widmeyer & Martens, 1978). This could achieve positive social feelings outside the task about the group and lead to greater overall cohesion. The more one can decrease differences and make the group more homogeneous, the greater the subsequent social and task cohesion (Zander, 1982). Williams and Widmeyer's (1991) research supports Zander's findings when they claimed: People form better units when they are alike, and an effective leader develops oneness within a set by encouraging likeness among members.

From the results from the regression equations, Trinst and Socs would appear to be the best leadership styles to incorporate into softball coaching in an attempt to develop cohesion. However, not one style is always appropriate because the situation or circumstances dictate which style one should use (Chelladurai, 1984b).

Canonical Correlation of Leadership and Cohesion Variables

Canonical correlation revealed that high GISocial,

moderately high ATGTask and GITask, and low ATGSocial was predicted by high Trinst, moderately high Socs, moderately low reward, and low Dem and Auto. This leadership profile explained approximately 30% of the total cohesion variance. As was found in the multiple regression analysis, Trinst is the most effective leadership style to utilize with softball athletes for the development of cohesion among the group members.

Further examination into the specific make-up of the first vector of the canonical correlation shows that the high relationship between Trinst and GISocial means that softball coaches who are organized and pay special attention to clarifying the relationship among the members will have players who feel good about the similarity and bonding within the team as a social unit. This suggests that, as long as members feel good about what they are doing, they generally will perform well. This, however, is not always true. There are potential negative aspects of cohesive groups.

One potential negative, is "social loafing" (Gill, 1984). This is the tendency for some individuals' efforts to decline, because the better athletes can get away with not performing at their maximum. They are good enough without maximum effort.

It allows them not to work to their potential all the time. However, this tendency might not be as evident in a team sport like softball compared to a team sport like volleyball where it is much more difficult to measure individual effort. The softball athletes must depend on themselves when it comes to performance and in many instances volleyball athletes are able to get assistance from another player if they make a mistake. Softball has individual tasks incorporated into a group task, and because of this distribution of effort it would seem necessary to incorporate high levels of Socs and Trinst into one's leadership style. This approach should help to keep athletes focused on the group and not on individual achievements.

Low Reward as a coaching style is logical because singling people out (e.g., stickers for helmets, game balls, etc.) could decrease the group bonding, thus hurting the group's social cohesion. Although I feel it is appropriate to recognize good plays and individual accomplishments, it is important to do it in a way not offensive to the other team members. Leaders in statistics and accomplishments will always emerge, however taking notice of them or creating a reward system is not highly supported by this study. The

results show Reward as explaining only a small portion of the variance.

The idea that reduced individuality and increased conformity come from increased cohesion (Williams & Widmeyer, 1991) suggests that, in the game of softball, the development of cohesion might be more of a problem than in a sport of high interaction such as volleyball because individual effort is more noticeable. To counter this, just as the regression and canonical correlation results show, coaches must incorporate into their coaching the ability to use all styles at appropriate times (Chelladurai, 1984a). This implies that coaches not only need to be knowledgeable about the skills of the sport but also about people. They must understand the psychology of people and be observant to what the team is doing (Carron, 1993).

Summary

The order of magnitude of the relationship between the leadership profile items and task and social cohesion were as follows: Trinst, Reward, followed closely by Socs, then Dem and Auto. All of the leadership variables showed significant results with at least one of the cohesion categories, suggesting all leadership behaviors would be appropriate to use in the

development of cohesion.

The highest r values between any leadership dimension and a cohesion category was that of Socs with GISocial. However, the correlations between Trinst and the cohesion categories revealed the highest averaged values of any leadership dimension. The above results suggest that Trinst and Socs would be effective styles of leadership to use in developing social and task cohesion.

Multiple regression of the leadership predictor variables on ATGTask accounted for 19.9% of the variance. Trinst was the only significant variable in the equation explaining 14.5% of the total variance. The Trinst leader, one whose focus is strenuous training towards the task, is successful in fostering positive feelings about the task (ATGTask). Contributing 4.7% of the remaining variance in ATGTask was Reward. Although not significant, this indicates that a combination of strenuous training (Trinst) added with positive feedback (Reward) makes a more complete profile of predicting perceived ATGTask in a team.

Multiple regression of the leadership predictor variables on ATGSocial accounted for 15% of the

variance. As in the regression equation with ATGTask, Trinst was the only statistically significant variable. It accounted for 12.9% of the variance. The leadership profile for fostering high ATGSocial is very similar to that reported above for ATGTask. The coach should exhibit behaviors that focus on hard and strenuous training combined with concern and praise for the athletes.

The regression equation of GITask with the leadership predictor variables accounted for approximately 24% of the variance. Of the four regression equations, GITask was the second highest in explained variance. Within the equation there were two significant variables. Trinst explained 14.9% of the total variance, and Auto explained another 6% of the remaining 8.7%. Trinst and Auto's significance are easily explained. If group members are concerned with the task at hand (GITask), focusing on that task would be easiest with a coach whose style was task oriented (i.e., Trinst and Auto).

Multiple regression of the leadership predictor variables on GISocial accounted for approximately 26% of the variance. Of the four cohesion categories, GISocial was best predicted by the leadership

variables. Perhaps the reason this occurred was because GISocial encompasses how team members feel about their closeness as a social unit and because the leadership dimension of Socs is concerned with the same thing. Examination of the significant variables does show that Socs alone explained 19% of the total variance in GISocial. This supports the findings that when team members understand their roles and can accept their relationship to the team, cohesion is enhanced (Carron, 1984).

Canonical correlation of the leadership variables and cohesion dimensions revealed that high GISocial, moderately high ATGTask and GITask, and low ATGSocial was predicted by high Trinst, moderately high Socs, moderately low reward, and low Dem and Auto. The above leadership profile explained approximately 30% of the total cohesion variance. As was found in the multiple regression analyses, Trinst is the most effective leadership style to utilize with softball athletes for the development of cohesion among the group members.

Chapter 6

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study investigated the relationship between perceived leadership styles on task and social cohesion. High school athletes (N = 93) from sectional softball teams completed the following two questionnaires: the Leadership Scale for Sports (LSS), and the Group Environment Questionnaire (GEQ).

To assess the interrelationships among all the variables, Pearson product-moment correlation was used. Pearson r values ranged from a low -.13 (Auto with Trinst) to a high of .63 (Reward with Dem). The examination of the relationships between variables of the cohesion questionnaire and the leadership scale revealed the largest r values between Socs and GISocial and the smallest r values between GITask and Dem. Moderate correlations were found between Trinst and all four cohesion values. Slightly lower r values were found between Reward and the cohesion measures.

The stepwise procedure of multiple regression was utilized to assess the overall degree of relationship between the leadership predictor variables and the criterion measures of cohesion.

Multiple regression of the predictor variables on the cohesion measure ATGTask revealed one significant variable, Trinst. Multiple regression on the cohesion measure ATGSocial revealed Trinst as significant also. The remaining cohesion variables both revealed two significant variables in their respective equations. The first, GITask revealed Trinst and Auto as significant contributors, and GISocial's equation revealed Trinst and Socs as significant.

The overall measure of the multivariate relationship between the outcome measures and the predictor variable was determined using canonical correlation analysis. Dimension reduction analysis indicated that roots 1 to 4 were significant. However, when the first root ($\underline{R}c$ = .551) was removed from the analysis, none of the other roots were statistically significant. The first root of the canonical correlation explained approximately 30% of the cohesion variance. High GISocial, moderately high ATGTask and GITask, and low ATGSocial were described by high Trinst, moderately high Socs, moderately low Reward, low Dem and low Auto. This profile characterizes coaches who focus on training and instruction with concern for their players as being able to develop high group

integrated social cohesion and moderately high GITask and ATGTask cohesion.

Conclusions

The results of this study yielded the following conclusions regarding the relationship between the leadership dimensions and the four cohesion measures.

1. Trinst appears to be the most important behavior to focus on in the development of task and social cohesion.

2. All five leadership dimensions have a role in the development of task and social cohesion under appropriate circumstances.

3. Of the four cohesion measures ATGSocial is the least explained by the leadership dimensions.

4. The use of the LSS as a predictor of task and social cohesion is significant enough to warrant its use in future studies.

Recommendations

The following recommendations for further study were made after the completion of this investigation:

1. A study using only the LSS should be conducted, using various types of sport teams to assess preferred leadership.

2. Utilize sport teams other than softball where

cohesion is intuitively more relevant to performance (i.e., volleyball or basketball).

3. Repeat this study with larger samples and with different age groups and male athletes.

4. Compare individual and team sports to assess various degrees of perceived cohesion.

Appendix A

LEADERSHIP SCALE FOR SPORTS

(ATHLETES' PERCEPTION OF COACH'S BEHAVIOR)

Instructions

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

1. ALWAYS
2. OFTEN (about 75% of the time)
3. OCCASIONALLY (about 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.

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

16. Sees that an athlete is rewarded for a good performance.
17. Figures ahead on what should be done.
18. Encourages athletes to make suggestions for ways to conduct practices.
19. Does personal favors for the athletes.
20. Explains to every athlete what should be done and what should not be done.
21. Lets the athletes try their own way even if they make mistakes.
22. Expresses any affection felt for the athletes.
23. Expects every athlete to carry out one's assignment to the last detail.
24. Lets the athletes try their own way even if they make mistakes.
25. Encourages the athlete to confide in the coach.
26. Points out each athlete's strengths and weaknesses.
27. Refuses to compromise on a point.
28. Expresses appreciation when an athlete performs well.
29. Gives specific instructions to each athlete on what should be done in every situation.
30. Asks for the opinion of the athletes on important decisions.

31. Encourages close & informal relations with athletes.
32. Sees to it that the athletes' efforts are co-ordinated.
33. Lets the athletes work at their own speed.
34. Keeps aloof from the athletes.
35. Explains how each athlete's contribution fits into the total picture.
36. Invites the athletes home.
37. Gives credit when it is due.
38. Specifies in detail what is expected of athletes.
39. Lets the athletes decide on plays to be used in a game.
40. Speaks in a manner which discourages questions.

Appendix B

GROUP ENVIRONMENT QUESTIONNAIRE

Instructions

This questionnaire is designed to assess 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 responses). You have been asked to indicate your name only in the event that we need to match two pieces of information on each player or team.

Questions 1-9 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.

Questions 10-18 are designed to assess your perceptions of your team as a whole. Please circle a number from 1-9 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.
2. I'm not happy with the amount of playing time I get.
3. I am not going to miss the members of this team when the season ends.
4. I'm unhappy with my team's level of desire to win.
5. Some of my best friends are on this team.
6. This team does not give me enough opportunities to improve my personal performance.
7. I enjoy other parties more than team parties.
8. I do not like the style of play on this team.
9. For me this team is one of the most important social groups to which I belong.
10. Our team is united in trying to reach its goals for performance.
11. Members of our team would rather go out on their own than get together as a team.
12. We all take responsibility for any loss or poor performance by our team.
13. Our team members rarely party together.
14. Our team members have conflicting aspirations for the team's performance.
15. Our team would like to spend time together in the off season.

16. If members of our team have problems in practice, everyone wants to help them so we can get back together again.
17. Members of our team do not stick together outside of practices and games.
18. Our team members do not communicate freely about each athlete's responsibilities during competition or practice.

Appendix C

INFORMED CONSENT FORM: ATHLETES

To participate is this study you will be required to fill out two questionnaires. The first is the Leadership Scale for Sports, which consists of 40 statements that are to be answered by placing an "X" in one of five categories ranging from "always" to "never" rating your coach's behavior. The second questionnaire you will be required to fill out is the Group Environment Questionnaire, which consists of 18 questions. A circle is placed around a number from 1 "Strongly Disagree" to 9 "Strongly Agree" representing your level of agreement with each statement. The questionnaires will take approximately 45 min to complete.

All information that you provide for this study will be kept in strictest confidence (neither your coach nor anyone other than the researchers will see your responses). You have been asked to indicate your name only in the event that we need to match two pieces of information on each player or team. Should you have any questions about the procedure or require further information, please call Rhonda Faunce at (607) 347-4296 or Dr. A. Craig Fisher at (607) 274-3112.

Your participation is voluntary. You are free to withdraw consent and discontinue at any time.

I have read the above, understand its contents, and agree to participate in this study.

Signature _____ Date _____

Appendix D

RECRUITMENT LETTER TO COACHES

You have been selected from New York State high school varsity softball teams that have met the requirements for sectional competition to represent your sport in a research study. Our interest is the relationship coaches' leadership styles have on team unity and cohesion. The reason that we are selecting sectional teams is because we believe that success may affect the team's level of cohesion, and by randomly selecting just any team we would not be able to determine what variable was responsible for the degree of cohesion.

Because one of the variables we are interested in is cohesion, if your team is characterized as having any unusual interpersonal circumstances, infighting, racial problems, or any other out of the ordinary problems, thank you for your time, but please disregard this letter. If your team is not characterized as having any of the above problems, let me continue to see whether or not you and your team are interested.

Your athletes will be required to fill out the 40-item Leadership Scale for Sports and the 18-item Group Environment Questionnaire, each assessments of

athletes' perceptions of their athletic team. In the Group Environment Questionnaire a circle is placed around a number from 1 "Strongly Disagree" to 9 "Strongly Agree" depending on the agreement with each statement. The questionnaires together will take approximately 45 min to complete.

This study is being done at Ithaca College to fulfill the requirements for a Master of Science degree. Your participation would be greatly appreciated and hopefully beneficial for present and future coaches.

Would you be willing to participate? If yes, please fill out the enclosed postcard and return it as soon as possible.

Thank you!

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