The Relationship Between Leadership Style and Career Winning Percentage of NCAA Division II Football Coaches

Murray A. Anderson

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The Relationship Between
Leadership Style and Career Winning Percentage
of NCAA Division II Football Coaches

BY

Murray A. Anderson

A thesis submitted
in partial fulfillment of the requirements for the
degree of Master of Science
Major in Health, Physical Education, and Recreation
South Dakota State University
1986
The Relationship Between Leadership Style and Career Winning Percentage of NCAA Division II Football Coaches

This thesis is approved as a creditable and independent investigation by a candidate for the degree, Master of Science, and is acceptable for meeting the requirements for this degree. Acceptance of this thesis does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

/Dr. James E. Lidstone Date
Thesis Advisor and HPER Research Coordinator

Dr. Jack Ewing Date
Graduate Coordinator

Dr. Harry Forsyth, Director Date
Department of Health, Physical Education, and Recreation

Forty-three head football coaches from NCAA Division II completed the T-P Leadership Questionnaire. Task and person scores from the T-P were related to the head coaches' career winning percentage. A mail survey was employed for data collection. A total of 43 of 68 head coaches or 63.2% participated in the study.

A two step PROC REGRESSION procedure indicated that task orientation and person/people orientation account for 14.8% of the coach's career winning percentage. A three variable regression procedure was also carried out adding years of coaching at Division II. This combination of variables resulted in an $R^2$ value of .249 or 24.9% of career winning percentage.

A Student's $t$-test compared the most successful coaches (CWP $\geq .550$) and the least successful coaches (CWP $\leq .450$) on task, person, and years of experience. There was no significant difference ($p > .05$, df= 33) between the two groups on either task orientation or person/people orientation. However, a significant difference was noted between the two groups with respect to years of experience ($p= .005$, df= 33). Specifically, coaches with a career
winning percentage of .550 and above had more years of coaching experience.

The mean leadership styles, task orientation and person/people orientation combined, for all three CWP categories appear in the High Task and High Relationship quadrant on the Ohio State Leadership Grid.
ACKNOWLEDGEMENTS

The author wishes to express sincere appreciation to his thesis advisor, Dr. Jim Lidstone, for his encouragement, guidance, and many hours of assistance throughout this study. I also wish to express deep gratitude to Dr. Fred Oien, Dr. Jack Ewing, and Dr. Darrell Jensen for their advice and encouragement throughout this project and my course of study.

Thanks are also extended to the subjects of the study, 48 head football coaches, for their participation. Without their cooperation this project could never have been completed.

Finally, my deepest gratitude goes to my wife, Kaye, without whose love, encouragement, sacrifice, and patience this study could not have been possible.
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CHAPTER I
INTRODUCTION

To achieve a goal or an objective a group must have a leader. Very seldom does an undirected group achieve its goals or objectives. Factors involved in leadership include activity, movement, and the accomplishment of group goals. "Leadership is one of the very important interpersonal processes that takes place in full view of group members and those who choose to observe (Fiedler, 1981, p. 631). As the saying goes, you can't be a leader if no-one is following.

Authors writing about leadership offer various definitions of leadership. Tead (1935) defined leadership as "the activity of influencing people to cooperate toward some goal which they come to find desirable" (p. 20). According to Hersey and Blanchard (1982), leadership is the process of influencing the activities of an individual or a group in efforts toward some goal achievement in a given situation" (p.20). Although 57 years had passed between the writings of Tead and Hersey and Blanchard there appears to be little difference in thinking regarding leadership. This is testimony to its enduring quality.
Definitions of coaching from the literature seem to be ambiguous but two of the most clear and understandable come from Tutko and Richards (1971) and Gallon (1974). Tutko and Richards state that coaching is, "the job of helping the athlete develop his/her potential" (p.3). Gallon believes that, "coaching represents the pursuit of excellence" (p.22).

As can be seen by these definitions leadership and coaching are closely related. Both are mechanisms used to guide a person or group of people toward a specific goal. Coaches are significant in the development of the social and physical skills of their athletes therefore the influence, power, and effect that coaches have cannot be underemphasized. Leadership in sports should be concerned with enhancing the ethical and positive growth of athletes (Murray, 1986).

Coaching and leadership share many of the same traits and styles, but to be an effective leader we must rid ourselves of the problems of unregulated authority and realize the relationship between leadership authority and athletics. As coaches we become teachers of skills, educators that combine reality and responsiveness to the real needs of our athletes. Coaches must try to foster growth with dedication, initiative, and foresight to
become efficient and effective leaders (Kelly, 1975). "The quality of leadership given to an athletic program determines to a great extent its success" (AAHPER, 1959, p.i). Hopefully, this study will contribute to our understanding of the relationship between leadership and success.

Statement of the Problem

The purpose of this study was to investigate the relationship between leadership style and coaching success. More specifically, the study sought to determine if a linear relationship existed between leadership style as measured by the T-P Leadership Questionnaire and the career winning percentage of NCAA Division II Head Football Coaches.

Hypotheses

Stated in the null form, the specific hypotheses to be tested in this investigation are:

1. There will be no relationship between career winning percentage and person orientation score as measured by the T-P Leadership Questionnaire for NCAA Division II Head Football Coaches.
2. There will be no relationship between career winning percentage and task orientation score as measured by the T-P Leadership Questionnaire for NCAA Division II Head Football Coaches.

3. There will be no relationship between career winning percentage and leadership style (task orientation and person orientation score in combination) as measured by the T-P Leadership Questionnaire for NCAA Division II Head Football Coaches.

**Definition of the Terms**

For the purpose of this investigation the following terms are operationally defined:

**Task.** The variable task refers to the style of leadership which concerns itself exclusively with accomplishing the task of the group (Hersey & Blanchard, p.96). In the present study task will be operationally defined as the score obtained on the items related to task on the T-P Leadership Questionnaire.

**Person/People.** The variable person/people refers to the leadership behaviors which are directed toward the maintenance of personal relationships between the leaders and the group members (Hersey & Blanchard, p.96). In the
present study person/people will be operationally defined as the score obtained on the items related to person/people from the T-P Leadership Questionnaire.

**Career Winning Percentage.** The variable career winning percentage refers to the number of games won in relation to the total number of games coached. In the present study the number of games won was divided by the games coached at Division II to arrive at the percentage of games won. The coaching records were obtained from the NCAA publication entitled, *1985 NCAA Football*.

**Assumptions Underlying the Research**

The following are set forth as assumptions and therefore are not subject to validation as part of the proposed research:

1. It is assumed that leadership style can be measured using a paper and pencil instrument.

2. It is assumed that coaches perceptions of their leadership style are adequate reflections of their behavior.

3. Since almost no reliability and validity information was uncovered it is assumed that the T-P Leadership Questionnaire is a valid and reliable measure of perceived leadership style.
4. It is assumed that coaches are responding honestly to the items contained on the T-P Leadership Questionnaire.

Scope of the Study

The data were gathered during the 1986 Spring academic semester. The data are limited to the responses of head football coaches in NCAA Division II regarding their perceptions of personal leadership style determined by the T-P Leadership Questionnaire. As such, the reader should be cautioned against generalizing to groups or individuals not represented by the respondents in this study.

Significance of the Study

Leadership in physical education and athletics is an area that has recently attracted serious scholarly attention but, as yet, the findings are either inconclusive or conflicting. Very little of the related literature pertains to the relationship between leadership style and performance. Perhaps if coaches and educators knew what style of leadership was the best for success they would alter their behavior patterns.

This study dealt with a coach's own perceptions of his leadership style. Scores were obtained for each coach on person orientation and task orientation variables
using the T-P Leadership Questionnaire. Because of the nature of their occupation and the undue pressure placed on coaches to win in order to retain their jobs it is hypothesized that coaches may emerge as being more task oriented in their leadership style. It is hoped that this study will provide some insight into the relationship between leadership style and success.

**Theories of Leadership**

A great deal of research has been conducted on leadership and its effect on groups. Evidence of this can be seen in the sheer number of theories. A thorough examination of these theories is necessary in order to have a strong foundation from which to conduct leadership research.

**The Great Man Theory**

This theory evolved from the monarchs of Europe. It was based on the premise that individuals born of title and family prominence inherited all the skills needed to lead (Maltz, 1978). In reviewing the history of this period, "we see that the aristocracy had a monopoly on leaders" (Rose & Astin, 1972).
CHAPTER II
REVIEW OF RELATED LITERATURE

For ease of presentation this section will be subdivided into five areas: (a) theories of leadership, (b) types of leadership, (c) characteristics necessary for coaching athletics, (d) coaching styles, and (e) research on leadership in athletics and physical education.

Theories of Leadership

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The Great Man Theory

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Functional Approach Theory

Knickerbocker (1948) and Adair (1968) stated that leaders that use the functional approach theory are concerned with the needs of the group and the final objective that the group is trying to achieve. In reviewing the group needs the leader must examine group teamwork as well as individual physiological needs. Following this assessment the group is structured so as to best achieve the group's objective.

Contingency Theory

Marriner (1978) identified the three basic elements of this theory as, (a) leader-member relations, (b) task structure, and (c) position power. Leader-member relations deals with the amount of loyalty the group members have for the leader. Task structure constitutes the number of correct solutions for a particular situation. Position power is dependent upon the amount of support from the leader's organization. The theory depends extensively on the situation and its variables, and thus provides the limits for the leader's influence on the group (Hersey & Blanchard, 1982).
Permissive Theory

The permissive theory of leadership is founded on two basic principles (Bass, 1965). First, definitive boundaries are established by the leaders. Second, the leaders learn what power they have, how to use it, and when to use it. The leader then lets the group proceed on its own within the defined boundaries to achieve the set goals. When problems do arise the leader steps in to resolve them. This type of leadership permits a great deal of freedom to group members but necessitates that the group be competent and mature.

Scientific Management

The scientific management theory is very mechanistic in nature. Under a "scientific" manager subordinates are viewed primarily as instruments or parts of a machine. The scientific manager seeks to improve the efficiency of the machine through the manipulation of the parts. The leader cares little about the human being and focuses primarily on the organization and the task (Hersey & Blanchard, 1982).

Human Relations

The antithesis to the scientific theory is the human relations theory (Hersey & Blanchard, 1982). Leadership
within this theory is specifically concerned with the individual needs of the working unit. It provides for levels of personal growth and development while attaining a cooperative goal.

Path-Goal Theory

The Path-Goal theory focuses on the minimizing of obstructions to group goals by the leaders. The leader helps the group members assess their needs, explores the alternatives for problem solution, and then helps group members make the most advantageous decision to attain group goals. A unique aspect of this theory is that rewards are provided for group members when the goals or objectives are met. It also supplies additional opportunities for individual goal satisfaction (Marriner, 1978).

Theory X & Y

McGregor (1960), working with Maslow's hierarchy of needs, identified Theories X & Y in the area of leadership. Theory X deals with the lower order needs such as physiological and safety needs. Theory Y addresses higher order needs such as esteem and self-actualization.

Theory X leaders assume that group members are lazy, irresponsible, unresponsive, incapable, and resistant to
change (Lovell & Wiles, 1983). As a result, they lead in an autocratic fashion, concerned almost exclusively with the task. In response to this, group members sometimes become passive and resistant to organizational goals. Motivation to work comes from wages, avoidance of punishment, and fringe benefits.

Theory Y is a much more positive type of leadership. It tends to unleash the potential of group members. The leader believes that members already possess the motivation and responsibility to reach group and organization goals by themselves. The leaders who work within this theory attempt to manipulate the environment to fulfill the organizational goals while at the same time facilitating the needs of group members and their development (Stogdill, 1974).

Hygiene-Motivational Theory

The hygiene-motivational theory was developed by Fredrick Herzberg and concerns itself with the extrinsic and intrinsic needs of the workers. Hygiene can be defined as extrinsic needs of the worker's environment which serve to prevent job/worker dissatisfaction. Examples of extrinsic needs include, (a) money, (b) status, (c) working conditions, and (d) company policy.
All of these factors, if they are not satisfactorily met, can contribute to job dissatisfaction.

Intrinsic needs are the motivational factors in this theory. These needs make the workers feel good about themselves and lead to above par performances. Examples of these needs are, (a) achievement, (b) professional growth, (c) responsibility, and (d) recognition. Meeting these needs necessarily leads to the growth and development of group members. It is important to realize that elimination of the extrinsic dissatisfiers (hygiene factors) does not necessarily lead to job satisfaction.

Job satisfaction is brought about through intrinsic satisfiers (motivational factors) which the make the worker feel good about the process of reaching group goals.

The next two theories of leadership, situational and trait, are the most widely researched and discussed. Many of the preceding theories or aspects of them can be classified under one of these two.

**Trait Theory**

The trait theory is so named because it seeks to identify the traits necessary to exercise leadership. Marriner (1978) has pointed out that much of the early
research held that leadership traits were inherited. Trait theory proposes that all humans have the potential to become leaders. It also helps us to realize that leaders are subject to success and failure (Adair, 1968).

Stogdill's (1958) survey of the literature was concerned with studies that attempted to determine the traits and characteristics of leadership. Stogdill only listed those traits that were investigated by three or more researchers. In his analysis of the data he questioned "to what extent are the results influenced by the differences of the social composition of the groups, differences in methodology, and differences in leadership criteria?" (p.51).

Stogdill's survey found that the most common traits could be classified under general headings. The headings were:

1. Capacity (intelligence, alertness, verbal facility, originality, judgement).
2. Achievement (scholarship, knowledge, athletic accomplishments).
3. Responsibility (dependability, initiative, persistence, aggressiveness, self-confidence, desire to excel).
4. Participation (activity, sociability, cooperation, adaptability, humor).
6. Situation (mental level, skills, needs, interests of the followers, objectives to be achieved, etc.).

These characteristics related to leadership are not independent but work together in combination to achieve the desired leader behavior.

Gouldner (1958) cited some problems with trait theory. He noted that traits of leadership are not distributed evenly throughout the population. Even when they are distributed they will be affected by intelligence, experience, and work ethic. He also stated that, "traits of the leaders are limited by the traits of the population from which the leadership is drawn" (p. 77). An obvious drawback to this theory is the individuality of leaders. Even though two people may have the same traits they may use them differently.

Situational Theory

Situational theory is based on the premise that leadership and its processes are dictated by the situation the group and its leader become involved in. Keane & Cheffers (1977) offer a description of situational leadership. "The leader is an individual and is subject to environmental constraints, cultural and social heritages, and the impact of those around him/her. That
is, the leader is not merely a 'stimulator', but he/she is being stimulated" (p.17).

Gibb (1958) identified four elements for situational leadership;

1. the structure of interpersonal relations within the group,

2. group and syntality characteristics such as those defined by group dimensions,

3. characteristics of the total culture in which the group exists and draws its members from,

4. the physical conditions and the task the group is concerned with (Vol.II, p.879).

Several authors (Adair, 1968; Marriner, 1978; Stogdill, 1948), have stated that leaders will vary their behavior in the group depending upon the situation the group is now experiencing. "Leadership is a relation that exists between persons in a situation and persons who are leaders in one situation may not necessarily be leaders in other situations" (Stogdill, 1958, p.59).

Variables for the situational theory were cited by Marriner (1978). Some of the common variables were;

(a) personality, (b) performance requirements, (c) attitudes, (d) needs, (e) expectations, (f) interpersonal contact, (g) time pressures, (h) environment, (i) organization, and (j) outside influences.
Knickerbocker (1948) sums up situational leadership as follows: "The leader emerges as a consequence of the needs of a group of people and of the nature of the situation within which that group is attempting to operate" (p.3).

Adair (1968) believes that there are two drawbacks to the situational theory when it is communicated to individuals. First, it is not appropriate in most organizations to let leadership change hands a number of different times. This will happen when the situation changes and calls for a new leader. Second, the theory does not accommodate those individuals with general or adaptable leadership abilities who exert an influence over the group in a wide range of situations.

Types of Leadership

Following an examination of leadership theories it is important to look at types of leaders. These classifications of leaders are found in any situation where leadership is required. Leadership styles range from the standard to the very unique.

Ross & Hendry (1957) discussed three unique types of leadership. The first type identified was the so-called "ahead of the group" leader. This type of leader is
identified in terms of a particular characteristic, such as intelligence, that sets them apart from the rest of the group. The "ahead of the group" leader may also be a person who has achieved expert status through outstanding achievements or accomplishments.

The second type of leader identified by the authors was the "head of the group" leader. This type of leader is elected or designated by group members. An example of this type of leader could be a union representative in a job force or an elected political official.

The third type identified by Ross & Hendry is the leader who is "a head" of their respective group. This type of leader typically emerges from the group as it is subjected to a particular situation. An example of this leader type would be the soldier who becomes the leader of a platoon after all the ranking officers have been killed or wounded.

Blake (1982) also attempted to classify leaders. He stated that there were five types of leaders: (a) impoverished, (b) country club, (c) task, (d) middle of the road, and (e) team. According to Blake, leaders can be classified based on their concern for the group member and the member's production. The "impoverished" leader lacks concern for the group members while also having a low
concern for achievement of the group goal or objective. This leader will deplete the group’s effectiveness through this lack of concern. The "country club" leader is very concerned about the group members and they exhibit this concern by being very social, talkative, and caring. A major disadvantage to this style is that these leaders have little concern for the group’s production or achievement. The "task" type of leader on the other hand will push, prod, and force group members to achieve the group goals. Obviously with this style there is a high concern for the task but very little concern shown for the individuals in the group. The fourth type of leader identified by Blake was the "middle of the road" leader. This leader will show some concern for the group member while showing medium concern for task accomplishment. Leaders of this type are felt by the group members to be false in their concern for either task or person. Finally, "team" leaders can be identified by their expression of genuine concern for the group member and the group goal. Leaders of this type are able to achieve more because members can see the leader’s concern manifested in his or her behaviors and actions. This leadership model brings to mind Herzberg's theory and the appropriate employment of job satisfiers.
In 1934, Bogardus identified seven unique styles of leadership. They are, (a) direct, (b) indirect, (c) partisan, (d) scientific, (e) social, (f) executive, and (g) mental.

A direct leader deals with people rather than goals and objectives. Tasks are accomplished because of the leader. He/she pleads, requests, and gives orders to subordinates.

In contrast to the direct approach, indirect leadership sets things in motion that sooner or later change human activity. This leader creates changes in areas such as economics, living conditions, and social practices. Ultimately, the group members respond with increased production.

Partisan leadership is leadership that is exerted on behalf of someone else or some group. Every public interest group or political group has this type of leader. Examples of this type of leader would be Ralph Nader or Ronald Reagan. Many times the drawback to this type of leadership is the narrowness of goal focus.

The scientific leader as the name implies is found primarily in the field of science. This leader is often forced to give up interests, beliefs, and ideas when new facts are discovered that are in conflict with what the
leader holds as a truth. This leader's focus is on the ultimate truth. He or she will arrive at what is true through scientific inquiry.

According to Bogardus, the social leader is somewhat of a performer, leading in social situations exclusively. This type of leader will get attention by being creative and enthusiastic. The leader basically exists for the recognition from the group being led.

The mental leader is characterized by the work being done in seclusion and he/she requires peace and quiet in order to reflect and think and, therefore, to produce. In seclusion the leader evolves creative and practical ideas and derives satisfaction and reward when those ideas are accepted and supported by the group members.

The executive leader possesses the traits of both the mental and social leaders. This leader works well with people and is constantly suggesting new ideas about how to complete the group tasks. The leader must still find time to reflect on solutions to long range problems.

The first common type of leadership that gained widespread acceptance was the autocratic style (Bogardus, 1934; Hein & Nicholson, 1982). The autocratic leader leads without consulting the group. It is used to achieve the goals of the leader by exercising maximum
control over the group. This leader will be quite aggressive and strive to exert complete dominance over members. The autocratic leader will rarely admit if an error was made. If an error is brought to her/his attention they will seldom, if ever, take the blame but will transfer the blame to other group members.

Democratic leadership is another common type (Bogardus, 1934; Hein & Nicholson, 1982; Lovell & Wiles, 1983; Stogdill, 1974). This type of leadership has also been called person oriented leadership. Democratic leadership is characterized by the positive relations it seeks to develop within the group as it pursues its goals. Democratic leaders have varying degrees of control over the group with said control vacillating between group members and the leader. One of the drawbacks to this type of leadership is that the group must be well educated in the methods of attaining the goals of the group. Stogdill (1974) also found that democratic leadership does not improve group goal achievement.

The last common type of leadership identified in the literature was laisse-faire (Hein & Nicholson, 1982; Lovell & Wiles, 1983; Stogdill, 1974). Laissez-faire leaders appear to be very ambiguous with respect to authority. Groups under this type of leadership
experience very little control by the leader. The initiative to achieve goals is supplied solely by the group members. This type of leader will provide the group members with the information needed for goal attainment while encouraging group members to participate. An obvious drawback to this type of leadership is that leaders are seen as weak and unconcerned. Obviously laisse-faire leaders are the antithesis to autocratic leaders.

Characteristics Necessary for Coaching Athletics

In our particular culture a very common and prominent application of leadership tools and techniques can be seen in the area of athletic coaching where leaders (head coaches) seek to exert influence on subordinates (assistant coaches and players) in an effort to attain group goals. The following section of the literature review deals with leadership characteristics that are necessary in the athletic domain.

Suggested Characteristics

A synthesis of the coaching literature reviewed reveals seven major characteristics suggested for coaching. Obvious parallels can be seen to the leadership literature. Suggested characteristics
necessary for coaching are; (a) knowledge of the sport, (b) organization, (c) personal conduct, (d) human understanding and empathy, (e) professionalism, (f) flexibility, and (g) honesty and fairness (AAHPER, 1959; Ault, 1981; Clary, 1982; Gallon, 1974; Llewellyn & Blucker, 1982; Martens, Christina, Harvey & Sharkey, 1981; Moore, 1962; Moore, 1970; Stier, 1983; Tutko & Richards, 1971; Warren, 1983). Twenty-two other different traits, including leadership, were suggested.

### Coaching Characteristics Identified Through Empirical Research

In 1966, Shirley surveyed all the physical education majors at George Washington University and asked them to list the qualities essential to good coaching.

1. A coach is first and foremost a teacher. They must be interested in the needs of the students, educationally prepared, and part of the total school.

2. A coach must have a true love for their sport. Interest in their special sport is reflected by the fundamental knowledge the team displays in competition. The team will exhibit fair play and accept defeat without excuses.

3. A coach is aware of the physical and mental needs of the players. Immediate action is taken to fulfill these needs by proper conditioning. The coach should keep health records and work closely with the local medical personnel.
4. A coach commands respect from all persons associated with him/her and his/her sport. Respect is gained through the coach's ability to impart his/her ideas, to exhibit evidence of fair play, to be an informed conversationalist, and to be considerate of others' opinions and desires (Shirley, 1966, p.59).

Shirley sums up his article by reminding us that when a student/athlete calls us "Coach" it is up to us to live up to that responsibility.

The second study reviewed was conducted by Fuller in 1979. The study dealt with the deficiencies in professional preparation of high school football coaches in Texas, Louisiana, Arkansas, and Oklahoma. Fuller solicited responses from 200 coaches and had a 56% response rate. Major deficiencies noted in the preparation of high school coaches were as follows:

1. Significant lack of preparation in the areas of exercise physiology, nutrition, and athletic training. Thirty-two percent of the respondents had never taken a human anatomy class.

2. Serious deficiencies were reported by 96% in exposure to philosophies and principles of various offenses, defenses, and kicking formations, as well as strategy for attack.

3. Ninety percent stated that they were not prepared to handle the administration duties associated with coaching.

4. Ninety-two percent indicated a need for more practical experience at the undergraduate level (Fuller, 1979, p.81).
A significant motive behind the study was to try and persuade the reader that development of athletic coaching certification is needed and that adherence to the proposed guidelines should be monitored. Seventy-five percent of the respondents supported the concept while 86% recommended that such standards should mandate at least a minor in physical education (Fuller, 1979).

Brunnemer (1980) studied the characteristics and attributes of highly successful intercollegiate football and basketball coaches. Brunnemer received responses from 37 NCAA Division I football and basketball coaches using something called the Delphi Technique. The Delphi method consists of three separate controlled opinion feedback questionnaires. The eight traits found to be important to coaching success were, (a) drive to succeed, (b) ability to communicate, (c) organizational skills, (d) ability to motivate, (e) fairness, (f) leadership skills, (g) knowledge of the sport, and (h) discipline. The trait mentioned most frequently was the drive to succeed.

Gratto (1983) asked all the high school coaches in Section VII of the New York Public High School Athletic Association to rank 27 coaching competencies according to their importance when evaluating a coach. The competency
criteria came from the Beaverton, Oregon school district evaluation form. The investigator received 41% of the questionnaires sent. Competencies were ranked on a 0 to 5 Likert scale with 5 being extremely important. Those that received scores of 4.5 or higher were, (a) prevention and care of athletic injuries, (b) consistent discipline, (c) supervision, (d) presentation of fundamentals, (e) enthusiasm for the sport and students, (f) conduct of the coach, (g) communication with the players, (h) conditioning, and (i) organization. It should be noted that the first three were ranked higher than the other six.

A final characteristic that coaches and leaders alike should demonstrate in dealing with groups and teams is empathy. In 1982, Woodall and Kogler Hill investigated the relationship between empathy and style of leadership. The investigators used 127 undergraduates from Cleveland State University for their study. The instrument used to measure empathy was the Barret-Lennard Relationship Inventory (Barret-Lennard, 1962). Leadership style was determined by the Least Preferred Co-worker Scale (LPC). The LPC was designed by Fiedler (1967) and is used to assess leadership style based on contingency theory.

Coaches who score high on the LPC have a "person"
type of leadership, while coaches who score low have a task oriented method of leadership. Findings supported that empathy was a significant determinant of leadership style. Coaches and leaders need to exhibit empathy so that leadership style will be accepted and effective with subordinates.

To summarize, of the seven major suggested traits outlined earlier in this chapter, six of them appear frequently in the research. It should also be noted that leadership, specifically, was mentioned only in Brunnemer's study. Although this may superficially appear to be a criticism of the present study, close examination of the traits deemed necessary for success reveals that many of these are essential components of the multidimensional trait of leadership.

Coaching Styles

This second section dealing with coaching will focus on the different styles of coaching. The complexity of personality and human behavior mandates that there will be many different coaching styles -- some successful and some not.

Cratty (1983) cited Percival's (1971) study on coaching styles. Percival collected data from 382
athletes representing 25 different sports in Canada. Additional data were collected from 66 coaches.

Percival identified a wide range of coaching styles. He grouped them into two specific groups, one reflecting negative styles and the second positive qualities. The negative styles were:

1. The insulter - by far the most disliked type of coach.
2. The shouter - feels that coaching success depends on the decibel rating.
3. Avenger - leads athletes to believe that their failures are threatening to the coach's job thus the coach takes a vengeful view on less than adequate efforts.
4. Choker - fine at practice but goes into shock when the game approaches.
5. Shaky - loses control in competition.
6. General Custer - a coach whose strategies never change, thus leading to the team's demise in competition.
7. Hero - constantly rushes up to congratulate winners so everyone knows who the coach is.
8. The Scientist - scientifically "psychs" out the athletes by overly complex game plans, strategies, and preparations.

The positive styles noted by Percival were:

1. Supporter - this coach was on the athlete's side, offered emotional support when the action was tough, admonished them for mistakes but offered encouragement for better performances.
2. Mr., Ms., Mrs. Cool — these coaches do not become ruffled in tense situations, they make sound decisions under stress, provide a positive model of self-control, exhibit good control of the team and only criticize in private.

3. The Shrink — uses fear as an advantage, understands an athlete’s emotions before, during, and after a performance, can get athletes up for all types of competition, is able to handle defeat well.

4. Tourist — relates to all team members well, talks to those doing well and those with problems, gives everyone and everything attention (Cratty, 1983, pp. 240-41).

An interesting finding from the study, apart from the coaching styles, was the difference in the responses between the coaches and their athletes regarding coaching behavior. The findings indicated a 40% difference on a 10 point scale between the coach’s self-evaluation and the athlete perceptions of the coach’s behavior. If nothing else this should serve as a caution against assuming that self-perceptions are the same as actual behavior.

Cervinka (1984) identified five types of coaches. They were, (a) the impatient coach, (b) the past experience coach, (c) the former athlete, (d) the modern coach, and (e) the complainer. The impatient coach, coach pushes the young athlete very hard but becomes frustrated by the older athlete because of the deterioration of his or her physical skills.
The past experience coach is the type who was a successful athlete him/herself. This coach's development ceased when his/her playing days ended. These coaches try to achieve team success by coaching in the same manner as they were coached.

The third type of coach, the former athlete, is very similar to the past experience coach. These coaches know little except their own experience and training regimen. This coach is characterized by a failure to appreciate that everyone is unique.

As the name implies, the modern coach is just now emerging. This coach reads everything that he/she can regarding the latest training methods and new techniques. The coach who has all this knowledge tries to implement it in the practical setting. Coaches of this type blindly accept all that they read and hear as fact and, if they experience success they are uncertain as to what caused it.

The final type of coach identified by Cervinka was the complaining type. This coach has a well-planned training program but no outstanding athletes on the team. Coaches of this type are constantly complaining about the lack of the athlete's abilities simply because they want to be involved with the superior athlete.
Martens, Christina, Harvey and Sharkey (1981) identified three different types of coaches, (a) command, (b) submissive, and (c) cooperative. According to these authors the command type of coach has doubts about her/his capabilities. Many of the young coaches adopt this style because many of their former coaches used it or they have seen other coaches use it. On the surface, this style appears logical because teams need organization. The command style is also effective if winning is the primary objective. Athletes today tend to rebel against the command style because it stifles an athlete's creativity and motivation. The player plays primarily for extrinsic reasons such as a coach's praise or to escape their wrath. Drawbacks of this style are that athletes are treated like robots, athletes are prevented from fully enjoying their sport, and accomplishments are attributed to the coach and not the athletes.

In the submissive style of coaching the coaches make as few of the decisions as possible. This type of coach provides no instruction, resolves discipline problems only when absolutely necessary, and exerts little influence on the athlete. Coaches who adopt this style are usually too lazy to meet coaching responsibilities, lack
competency in instructional and guidance techniques, or are misinformed as to what coaching is and what it requires.

The best style of coaching, according to Martens et al. (1981), is the cooperative style. A cooperative coach shares decisions with those being affected by the decision. These coaches provide leadership and guidance while promoting growth by encouraging decision-making in their athletes. Cooperative coaches rely on trust, communication, and the development of intrinsic motivation. There are two drawbacks to this style. First, the coach must have an excellent ability to individualize instruction of techniques and training methods of the athlete. Finally, it may mean sacrificing winning in the interest of the player's well being. This coach falls between the command and permissive styles of coaching.

In 1971, Tutko & Richards identified five types of coaches. They were, (a) the hard-nosed authoritarian, (b) the nice guy, (c) the intense and driven coach, (d) the easy going coach, and (e) the business-like coach. The authoritarian coach has many of the same characteristics as the command type of coach mentioned perviously (Martens et al., 1981). The coach demands
certain types of responses from the athletes. The coach pushes them constantly toward the achievement of the goals that the coach has set. Admiration of this coach is dependant upon three factors, (a) degree of success achieved, (b) similarity of goals and objectives to those of the athletes, and (c) physical stature and athletic prowess. Typical characteristics and behavior of authoritarian coaches are, (a) strong discipline, (b) punishment to enforce rules, (c) lack of flexibility, (d) cruel, sadistic, and insulting mannerisms, (e) cool or cold personality, (f) well-organized, (g) often religious and moralistic, (h) prefers weak people as assistant coaches, (j) bigoted and prejudiced, and (k) difficulty in relating socially to others. This type of coaching does have its limitations. Since this coach is stubborn and tenacious their judgement is not always sound. These coaches sometimes lack the ability to analyze a problematic situation and arrive at the most advantageous solution. These character deficiencies can lead to undesirable responses from subordinates and team members.

In defense of this type of coach Penman, Hastad, and Cords (1974) studied the success rates of authoritarian coaches. The authors, through the response of 64
football and basketball coaches, determined that the more authoritarian the coaches were the more successful they were.

The second type of coach identified by the authors was the so-called "nice guy" coach. This type of coach is the antithesis of the authoritarian coach. The "nice guy" coach is flexible, personable, concerned with player welfare, and well-liked. Teams coached by this type of coach have a high degree of team "togetherness", athletes produce beyond what is expected of them, and the team is relaxed and has fun. Problems on the team are easily handled. The major drawback to this type of approach is that many times the coach is viewed as weak due to the absence of pressure by the coach. These coaches can often be taken advantage of because of their flexibility and somewhat unorthodox methods.

The third type of coach as seen by Tutko and Richards was the driven coach. This coach is very similar to the "authoritarian". The major difference between the two is that the driven coach is more emotional and less punitive. In being more emotional this coach lacks composure in situations the authoritarian coach would be able to handle. Driven coaches have particular characteristics which set them apart from all the other types. The
driven coach is frequently worried, feeling that something is always left undone and will eventually lead to the team's defeat. This coach will dramatize or overemphasize situations. These coaches will chew on towels, scream, and constantly harass the officials. They will take things personally, motivate by example, have a complete knowledge of the game, and continually push themselves to be better. There are drawbacks to this type of coaching. They are too demanding, their teams tend to burn out before the end of the season, their demands are sometimes unrealistic, and their teams are often ashamed of their coach's emotional outbursts.

The easy going coach is in direct opposition to the driven coach. This coach realizes no pressure from the game situation. The coach realizes that it is just a game; nothing more, nothing less. The coach does not take things seriously so he/she does not become flustered and will give the impression that everything is under control. Obvious advantages to this coaching type are that there is little perceived pressure, little dissention about hard work, and a feeling of independence among team members. The major drawback to this approach is that pressure is not handled well by the team thus they may be prone to panic in unrehearsed situations.
The last type of coach identified by Tutko and Richards was the business-like coach. This type of coach is prevalent in the coaching ranks. Business-like coaches attempt to learn as much as possible about their sport. They are seldom selfish and never claim to have all the answers. This coach is well-organized and has a logical approach to the sport. Business-like coaches put a major emphasis on strategy and out-maneuvering an opponent. They are always open to new ideas and techniques. Drawbacks to this type of coach are, (a) they have little concern for others, (b) they are hard on unorganized athletes, and (c) the players at times feel dehumanized like game pieces in a chess match.

Research on Leadership in Athletics and Physical Education

In 1982, Brooks investigated the leadership style of 37 elementary, high school, and college basketball coaches. The study sought to identify the leadership styles of these coaches and to determine the relationship between leadership style and the criteria by which coaches select players for certain positions. The coaches were administered the T-P Leadership Questionnaire while the players were given the Least Preferred Co-worker Scale (LPC).
Results of the T-P Leadership Questionnaire showed that coaches were more concerned with winning (task) than developing and fostering interpersonal relationships. The results from the LPC scale also showed that these coaches were perceived as autocratic and unwilling to share authority of leadership. The investigator pointed out that coaches chose players not for their leadership ability but rather for their athletic skills. This supports the current popular notion that coaches may be unwilling to relinquish authority, even on the court.

Green (1980), found that leadership style was a major factor in accounting for differences in an athlete's self-concept of ability. Self-concept of an athlete will many times influence the performance of the athlete in the contest thus affecting the won-loss record of the coach. Green obtained responses from 146 high school basketball coaches using the Managerial Philosophies Scale (modified version). Based on the responses, three separate types of leadership were identified: (a) autocratic, (b) democratic, and (c) situation-specific. The specific findings were:

1. Autocratic leaders tended to lower their athlete's self-concept of ability,

2. Democratic leaders raised self-concept more than autocratic leaders but not as much as situation-specific leaders,
3. athletes of the situation-specific leaders had the highest self-concept of their ability to perform (Green, 1980).

In conclusion, Green pointed out that athletes apparently require a mix between the autocratic and democratic leadership to derive the maximum benefit from sport in personal and social development.

In 1980, Wisneiski conducted a study to investigate the leadership behaviors of tennis and softball coaches. Sixty-eight athletes were administered the Coaches Behavior Description Questionnaire (CDBQ). The CDBQ consists of 140 questions describing the aspects of (a) teaching, (b) consideration, (c) initiation, (d) pressure, and (e) representation. Teaching involves providing the players with an educational experience in the sport. Consideration concerns the selection of team members. Initiation deals with the organization and the starting of team activities. Pressure refers to the amount of criticism used as a motivator. Finally, the term representation describes how high the team is held above criticism and review, in other words, the team comes first and nothing outside the team will influence it.

Findings revealed that the team sport coaches (softball) were rated higher in teaching, initiation, pressure, and representation than the individual sport
coaches (tennis). Second, individual sport coaches were rated higher in consideration. Interestingly enough, given the findings reported earlier (Percival, 1971), the coaches' perceptions of their leadership behavior matched those of the athletes.

In 1977, Kemp investigated the relationship of physical educators' perceptions of leader behavior of women administrators in Physical Education. Specifically, Kemp was concerned with the influence of gender in regard to perceptions of leadership behavior. The sample consisted of 129 subjects from eight universities and colleges. A Q-sort was used to evaluate the responses of the subjects. Statements represented Stogdill's concept of leader behavior dimensions, initiation and consideration. According to Halpin (1956) initiation is the relationship between the leader and group members. A leader exhibiting initiation behavior endeavors to establish well-defined patterns of organization, channels of communication, and methods of procedure. Consideration is the extent to which the group members feel that leaders manifest behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and members of the group.

Results of the study revealed that physical educators perceived that female administrators failed to exhibit the
natural characteristics necessary to be an effective administrator. Analysis of the data indicated that gender of the physical educator was not a strong influence on perceived leader behavior and that the physical educator's perceptions of the behavior of the female administrators was relative to a concern for individuals and a concern for getting the job done (task).

Christensen, Milner, and Christensen (1977) investigated the relationship between the gender of physical education faculty members and the gender of department heads using the perceived leader behavior qualities of the department heads. The sample was composed of 14 physical education departments with female heads and 14 departments with male heads. The LBDQ was used to measure the perceptions of leader behavior. The LBDQ contains 40 items describing leader behaviors. "Whether men or women were better leaders, as perceived by the men and women faculty members, was not considered" (p. 270). The two dimensions of leadership behavior examined were initiation and consideration (Stogdill, 1974). A 2 x 2 factorial design was used to analyze the data. Initiation and consideration were the dependent variables while gender of the faculty members and
department heads was the independent variable. Analysis of the data revealed that:

1. Female faculty members perceived female department heads significantly higher than the males on initiation,

2. Male faculty members did not perceive the male department heads significantly different from the female department heads on initiation,

3. Male faculty perceptions of initiation of either the male or female department heads did not differ significantly from female perceptions,

4. Male faculty perceived the male department heads higher than female department heads on consideration,

5. Female faculty perceptions of consideration for female department heads did not differ significantly from their perceptions of male department head consideration,

6. Perceptions of male faculty of consideration were not significantly different from female faculty for both male and female department heads (pp. 273-274).

In 1977, Allen investigated the administrative leadership and group interaction in departments of physical education for women at colleges and universities. Specifically, the study sought to measure preceptions of leadership behavior, leadership style, group acceptance, and position authority of women physical administrators, as well as identify the existing relationships between perceived leader behavior, style, position authority, and
group atmosphere. Twenty-seven administrators were given the LBDQ XII and 176 faculty from their departments were given the LPC. Results from the analysis showed that leaders were perceived higher in relations orientation than they perceived themselves. Allen concluded that administrators did not favor one style of leadership but were slightly higher in person orientation than task orientation. The amount of authority attributed to their position was directly related to the administrative style used by the administrator.

Keane and Cheffers (1977) investigated the relationship between gender, coach's behavior, leadership style, and player/coach interaction in a university setting. Subjects for the study were five female coaches, five male coaches, and six randomly chosen players from each sport coached. The coaches were administered the LBDQ XII to determine leader behavior. The players were given the LPC for their perceptions of leadership style of the coach. Results indicated that the gender of the coach was not a factor in leadership style or leader behavior. Keane and Cheffers pointed out that significant differences exist within the sexes rather than between with respect to leadership style and behavior. It was found that as total coach contribution
to athletes increased the leaders became more task oriented. Also the more emphasis the coach put on technique and training methods the more person oriented leader/coaches became. The investigators, citing Fiedler (1974), concluded that, "in order to pursue goals in athletics it is helpful or even necessary for the coach to exhibit person oriented behavior" (p. 37).

The last study reviewed dealing with gender was conducted by Young (1981). This study compared the leader style, leader behaviors, and effectiveness of male and female coaches. Subjects for the study were 89 varsity basketball coaches. Sub-samples consisted of 44 male coaches that coached male teams, 26 females that coached female teams, and 19 males that coached female teams. Five to 12 players were chosen from the respective teams also. The LBDQ XII was administered to the coaches and the LPC to the players. Results revealed that there were significant differences in leadership style between the female and male coaches with the male coaches less task oriented than the female coaches.

In 1985, Cho compared the leadership styles of college and university administrators of physical education programs in the United States and Korea. The sample consisted of 32 Korean and 98 U.S. physical education administrators. The data collection instrument
used was the T-P Leadership Questionnaire (Sergiovanni, Metzcus, & Burden, 1969). Using a \( t \)–test for independent samples Cho found that there was no significant difference between the two groups on task orientation. Although the U.S. administrators were found to be significantly higher concerning person orientation, both group means appeared in the high task/high relationship quadrant on the Ohio State Leadership Grid (Stogdill & Coons, 1957).

In a recent study, Megard (1986) compared the leadership styles of college physical education instructors and college football coaches. Seventy-five coaches and physical education instructors from the North Central Conference were given the T-P Leadership Questionnaire.

Results of a Student's \( t \)–test revealed that there was a significant difference between the coaches and instructors in task orientation with the coaches having a higher task mean. In regards to person orientation, no significant difference was observed.

Vos Strachte (1979) conducted a study that dealt with the perceptions of players regarding the leadership of coaches. The subjects for the study were 390 female players from 20 women's varsity basketball programs in five southern California conferences. Instruments used in the study were the LBDQ XII and the LBDQ ideal form.
The LBDQ ideal form determines how players think a leader should behave (Stogdill, 1963). The LBDQ XII was used to determine the "actual behavior" of the coaches as observed by the players (p.681). The data revealed that:

1. players on losing teams perceived their coaches to display a higher tolerance for uncertainty,

2. players on the winning teams perceived their coaches to display leader behavior concerned with production emphasis, predictive accuracy, and persuasiveness,

3. winning coaches were perceived as having helped subordinates clarify realistic expectations and as having reduced barriers to goal accomplishment in a more effective manner than the losing coaches (p.682).

To summarize the study, Vos Strach offered that, in order to be effective, "coaches need to be aware of the factors of persuasiveness, production emphasis, predictive accuracy, tolerance of uncertainty, representation, and demand reconciliation. New attention to leader behavior strategies may redirect coaching energies in a positive direction and assist in maximizing effective coaching style and qualities" (p.686).

Friedrichs (1984) conducted an investigation that studied leader behavior in terms of training and instruction, democratic and autocratic decision styles, social support, and rewarding behavior. The investigator used the Leadership Scale For Sports (Chelladurai & Saleh,
In a study relating leadership to coaching success, Bird (1977) proposed that successful teams are coached by task oriented leaders. Instruments used in the study were the Group Atmosphere Scale (Fiedler, 1976) and the LPC. The sample consisted of 71 players and 8 coaches from a southern California volleyball league. The league was divided into two divisions with the first teams (Division I) containing the highly skilled athletes and the second group of teams (Division II) containing the lesser skilled athletes. The top two teams from each division were labeled "winning" and the lower two teams from each division being the "losing" subjects. Results of the study revealed that coaches perceived themselves to be task oriented while the players perceived them to be
more socioemotional. A cross analysis of the data between winning and losing groups and divisions showed that winning Division I and losing Division II players perceived their coaches as being more socioemotional. The task oriented coach was found in the perceptions of losing Division I and winning Division II players.

A second study concerning leadership and success was conducted by Brooks (1974). The study proposed, (a) to determine the personality profiles of selected successful and unsuccessful varsity level baseball coaches, players, and basketball coaches, (b) to assess the leadership style of selected college baseball and basketball coaches, and (c) to assess the perceived leadership styles of various baseball teams. The sample, coaches and players, came from the teams competing in the West Virginia Intercollegiate Athletic Conference. The investigator administered the Personality Research Form to both the coaches and players. Brooks concluded that:

1. there were no significant differences between the successful and unsuccessful coaches on the variable of leadership style,

2. the baseball coaches had a significantly lower score on people oriented leadership than did the captains and players, with no significant difference between the players and captains,

3. the basketball and baseball coaches possessed various levels of task and people oriented leadership,
4. there was no unique leadership style that characterized the successful coaches (p.11).

In 1977, Wardell studied leadership style and coaching success using a cross-sport comparison. Wardell assessed the leadership of 84 high school coaches in football, track and field, basketball, and wrestling using the LPC. Wardell found that coaches exhibiting "person" leadership in football and wrestling had significantly more team success and received superior performances from team members.

Finally, Pickman (1980) studied the leadership style of successful high school basketball coaches with application to Fiedler's Contingency Model. Leadership style was determined by the LPC on 77 New York City high school basketball coaches. Contrary to Wardell (1977), Pickman found that leadership style appeared to be unrelated to team success. Pickman noted, however, that coaches exhibiting task oriented leadership achieved a greater degree of success in post season play.

Summary

In this chapter, the related literature reviewed focused on five areas, (a) theories of leadership, (b) types of leadership, (c) characteristics necessary for coaching sports, (d) coaching styles, and (e) research on leadership in athletics and physical education.
From the literature reviewed it can be seen that coaching and leadership share many of the same types, traits, and styles. Methodological differences, particularly in terms of data collection instruments, make it difficult to draw substantive conclusions from the empirical research. With respect to the relationship between leadership and success, conflicting results emerge. Some studies have indicated that a relationship exists (Bird, 1977; Wardell, 1977) while others have not (Brooks, 1974; Pickman, 1980). Hopefully the present study will contribute to our understanding of this phenomenon.
CHAPTER III

METHODS AND PROCEDURES

The purpose of this study was to determine the relationship between leadership style and coaching success. More specifically, the study attempted to determine if a linear relationship existed between leadership style as measured by the T-P Leadership Questionnaire and the career winning percentage of NCAA Division II Head Football Coaches.

Data Collection Instrument

Due to the significance of the questionnaire in a survey research project much consideration went into its selection. It was the judgement of various experts on the campus of South Dakota State University that the T-P Leadership Questionnaire (Appendix A) was best suited to determine task oriented and person/people oriented leadership behavior. This decision was based on the following factors: (a) the reputation of the test creators, (b) the instrument measured the variables of interest, and (c) the T-P Leadership Questionnaire required only 10-15 minutes to complete.
The T-P Leadership Questionnaire is a result of revisions by Sergiovanni, Metzcus, and Burden (1969) to the Leadership Behavior Description Questionnaire (LBDQ). The LBDQ had been developed during the 1950's at Ohio State University. The LBDQ originally measured two elements of leadership behavior, initiating structure, and consideration. The fourth revision, the LBDQ XII, consisted of 100 items and measured 12 different dimensions of leadership behavior. Revisions of the LBDQ XII were made by the authors because they felt that it was not objective. The product of their concern, the T-P Leadership Questionnaire, consists of 35 items and was designed to determine the degree of task orientation and person/people orientation present in perceived leadership behavior.

Efforts to identify relevant reliability and validity studies pertaining to the T-P Leadership Questionnaire produced nothing substantial. Consequently, readers may question the results of this study due to the fact that the instrument, to the knowledge of this investigator, has not been proven reliable or valid at the present time. An examination of the test items lends credibility to this researcher's claim of content (logical) validity. Another ongoing investigation will hopefully validate the
instrument by comparing "self" and "other" perceptions of leadership style.

**Determination of the Sample**

It was desired to obtain sufficient data to detect any relationship that might exist between the leadership style of head football coaches in NCAA Division II and their Division II career winning percentage or rate of success. In all of NCAA Division II football there are 115 head coaches. However, only coaches with three or more years of experience were included in the sample. It was the judgement of this researcher that coaches with less than three years of head coaching experience might skew the findings due to a lack of leadership experience as a head coach at this level. Similarly their winning percentage at this level would not have had sufficient time to stabilize.

Identification of the sample came from the NCAA publication entitled *1985 NCAA Football*. The handbook includes the coach's won-loss record in Division II, years of experience, and the 1985 schedule of the teams. From this publication 68 coaches meeting the above criteria were selected for the sample. This represents 59% of the colleges and universities affiliated with NCAA Division
II. Twenty-two different states and the District of Columbia were represented in the sample.

The Dependent Variable

The dependent variable in this study is the career winning percentage (CWP) of head football coaches in NCAA Division II. Career winning percentage was selected as the dependent variable because it was felt that it was the best indicator of success. The Division II level was chosen because, in the researcher's opinion, it involves the ideal number of coaches in a staff to exert leadership behaviors. In the upper divisions, staffs are so large and specialized that leadership may come more from the area coordinators than the head coach. Career winning percentage is determined by dividing the number of games won by the number of games coached.

Administration of the Survey

In reviewing the options for data gathering, it was determined that a survey questionnaire administered through the mail would be the most viable of the available alternatives. The fact that the coaches selected for the study were located all over the United States negated both personal administration and any observation-type
approaches. Hayman (1968), Tuckman (1972), and Wiersma (1969) all support survey research as a viable means to gather data. This type of research design is really the only practical method for gathering data from a widely distributed sample such as the one in the present study.

The entire administration process required four separate mailings. The initial mailing consisted of an introductory letter (Appendix C) with an accompanying consent postcard (Appendix D) that the coaches were instructed to return indicating their willingness or unwillingness to participate in the study. This mailing also included a letter to the coaches from Dr. Jim Lidstone, HPER Research Coordinator at South Dakota State University, endorsing the research project (Appendix E). The first mailing was sent to the coaches on February 28, 1986. The first postcards indicating willingness to participate were received on March 3, 1986. After the consent postcard was received a second mailing consisting of the T-P Leadership Questionnaire (Appendix A), a cover letter explaining the administration procedures (Appendix F), and a stamped, addressed return envelope was sent to the subject. On March 24, 1986 all the coaches who had not returned the postcard were sent a reminder letter (Appendix G). The reminder letter contained a
replacement postcard in case the subject had misplaced or disposed of the original.

A reminder letter for the unreturned questionnaires was mailed 14 days after the questionnaire packet had been sent to the individual coach (Appendix H). The reminder letter contained another questionnaire and a stamped, addressed return envelope. The extra questionnaire was sent in case the original had been misplaced or disposed of by the subject. The first reminder letter was not sent out until April 8, 1986.

At this point the researcher attempted some telephone follow-ups to expedite the returns. During these follow-ups an interesting thing happened which further reinforced the selection of the T-P Leadership Questionnaire for data collection. Fifteen coaches who had failed to return the postcard and/or questionnaire agreed to have the questionnaire administered over the telephone. A time was therefore arranged and the researcher read the 35 items to the coaches and hand-recorded their answers. Such a procedure would not have been possible with a lengthier, more involved instrument.
Data Reduction and Analysis

Following receipt of the completed questionnaires they were hand scored using the T-P Leadership Questionnaire Scoring Instructions (Appendix B). A person/people orientation score and a task orientation score was determined for each participating coach. The range of possible scores on the person and task variables are 0-15 and 0-20 respectively. The higher score indicates a higher concern for that leadership dimension.

Scores for each coach on the task and person variables along with their career NCAA Division II football winning percentage and years of coaching at Division II were entered into the IBM 4381-P12 computer facilities at South Dakota State University. The data were analyzed using the PROC REGRESSION procedure and the Student's t-test procedure of the Statistical Analysis System (SAS). An initial XY plot of the three independent variables (task, person, and years of coaching) with the dependent variable revealed that the best fit would be made using linear regression procedures.
Chapter IV

RESULTS AND DISCUSSION

The purpose of this study was to determine the relationship between leadership style and coaching success. More specifically, the study attempted to determine if a linear relationship existed between leadership style as measured by the T-P Leadership Questionnaire and the career winning percentage of NCAA Division II Head Football Coaches.

Presentation of Results

Data obtained from administration of the T-P Leadership Questionnaire are presented in tabular form. For purposes of contrast the subjects have been divided, in some cases, into career winning percentage (CWP) categories of (a) .550 and above, (b) .451-.549, and (c) .450 and below. As indicated in Table 1, the rate of response was very good with 43 out of 68 or 63.2% of the total coaches selected for the study responding. The response percentages for the different CWP categories, .550 and above, .451-.549, and .450 and below were 71%, 57%, and 58% respectively. The raw data are listed by CWP in Appendix I.
TABLE 1
Questionnaire Response From Head Coaches
(N = 43)

<table>
<thead>
<tr>
<th>Categories</th>
<th>.550 and Above</th>
<th>.451 to .549</th>
<th>.450 and Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>20 71</td>
<td>8 57</td>
<td>15 58</td>
</tr>
<tr>
<td>Non-Response</td>
<td>8 29</td>
<td>6 43</td>
<td>11 42</td>
</tr>
</tbody>
</table>

Whenever less than 100% response is realized it is prudent to critically evaluate whether the non-responses interjected any systematic bias into the study. Reasons given for not participating in the study included: (a) not enough time, (b) the coach had taken another job, (c) the coach had retired from the position, and (d) the coach had been relieved of his duties. Since an adequate representation of successful coaches (.550 and above) and unsuccessful coaches (.450 and below) was obtained it was determined that those who responded were an adequate representation of all whose participation was solicited.

Table 2 presents a grouped frequency distribution of the task orientation scores for all of the coaches participating in the study.
TABLE 2
Grouped Frequency Distribution of
Task Scores
(N = 43)

<table>
<thead>
<tr>
<th>RANGE</th>
<th>f</th>
<th>%</th>
<th>cf</th>
<th>c%</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-20</td>
<td>6</td>
<td>13.95</td>
<td>43</td>
<td>100.0</td>
</tr>
<tr>
<td>13-16</td>
<td>20</td>
<td>46.51</td>
<td>37</td>
<td>86.0</td>
</tr>
<tr>
<td>9-12</td>
<td>15</td>
<td>34.88</td>
<td>17</td>
<td>39.5</td>
</tr>
<tr>
<td>5-8</td>
<td>2</td>
<td>4.65</td>
<td>2</td>
<td>4.6</td>
</tr>
<tr>
<td>1-4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

In examining the data in Table 2 it is apparent that the sample is not distributed equally throughout the ranges. Rather, it is negatively skewed with the top three intervals containing 95.4% of the responses. The highest task orientation score recorded was 18 while the lowest was 6. The highest possible people/person score a subject can obtain is 20. The 13-16 interval contained the largest percentage of scores (46.51%) while only 4.6% of the coaches had a score of 8 or less with 0 observations falling in the 1-4 interval.

Table 3 presents the person orientation scores for the entire sample.
Again, as with the task scores, the data are negatively skewed with 95.4% of the responses in the top three ranges. The most populated range was the 10-12 interval containing 58.13% of the person orientation scores. The highest score possible is 15. The lowest observed score was a 1 while the highest was 13.

Descriptive statistics are presented in Table 4 for the task, person, years of coaching, and career winning percentage variables. The mean person score for the entire sample was 10.2 with a standard deviation (S.D.) of 2.22 and a standard error of the mean (S.E.M.) equal to .339. The overall mean task score was 13.37 while the standard deviation was 2.65, with an S.E.M. of .405. The
mean years of coaching for the coaches surveyed was 11.3 with a standard deviation of 7.26 and S.E.M. of 1.108. The mean career winning percentage of these men was .526 with a standard deviation of .136 and an S.E.M of .021.

**TABLE 4**

Descriptive Statistics for the Variables of Interest

(N = 43)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>S.D.</th>
<th>S.E.M.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>13.37</td>
<td>2.65</td>
<td>.405</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>People</td>
<td>10.2</td>
<td>2.22</td>
<td>.339</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Career Winning Percent</td>
<td>.526</td>
<td>.136</td>
<td>.021</td>
<td>.129</td>
<td>.767</td>
</tr>
<tr>
<td>Years of Coaching</td>
<td>11.3</td>
<td>7.26</td>
<td>1.108</td>
<td>3</td>
<td>28</td>
</tr>
</tbody>
</table>

In regards to the standard error of the mean (S.E.M.) Jaccard (1983) notes that if this figure is small (close to zero), we have increased confidence in the sample mean as an estimate of the population mean. Two factors that could have influenced the S.E.M.s for this study were the size of the sample and the variability of the scores in the sample.

In reviewing the task orientation variable from Table 4 we see that the S.E.M. for the entire sample was .405. Using this figure (.405) a 95% confidence interval of
$12.55 \leq u \leq 14.19$ was computed. This confidence interval is acceptable given the size of the sample ($N$).

Examination of the person/people orientation scores of the sample indicates an S.E.M. of .339. The 95% confidence interval that was computed resulted in an interval estimation of $9.51 \leq u \leq 10.88$. Again, taking into account the range of possible scores and size of the sample ($N$) this confidence level is deemed acceptable.

Tables 5, 6, and 7, present the descriptive statistics by CWP category.

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>S.D.</th>
<th>S.E.M.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>12.15</td>
<td>2.53</td>
<td>.556</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Person</td>
<td>10.3</td>
<td>2.68</td>
<td>.601</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Career Winning</td>
<td>.643</td>
<td>.065</td>
<td>.015</td>
<td>.553</td>
<td>.767</td>
</tr>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Coaching</td>
<td>13.65</td>
<td>6.96</td>
<td>1.55</td>
<td>3</td>
<td>27</td>
</tr>
</tbody>
</table>

Examination of these three tables (5, 6, and 7) reveals some interesting trends with respect to the relationship between leadership variables, years of experience and success. As you can see from the tables,
the mean career winning percentage of the most successful coaches (.550 and above) is .643. The least successful coaches (.450 and below) have a mean career winning percentage of .379. The middle category (.451-.549) has a mean career winning percentage of .508.

TABLE 6
Descriptive Statistics For Coaches With CWP of .451-.549
(N=8)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>S.D.</th>
<th>S.E.M.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>13.12</td>
<td>2.53</td>
<td>.895</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Person</td>
<td>9.8</td>
<td>1.55</td>
<td>.549</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Career Winning Percent</td>
<td>.508</td>
<td>.038</td>
<td>.014</td>
<td>.455</td>
<td>.546</td>
</tr>
<tr>
<td>Years of Coaching</td>
<td>12.75</td>
<td>9.73</td>
<td>3.44</td>
<td>3</td>
<td>28</td>
</tr>
</tbody>
</table>

Further examination of the tables reveals that the task means increase as the CWP decreases, a fact which will be supported by the correlation and regression procedures. Along this same line, the number of years of coaching experience increases as the CWP increases. Perhaps coaching success is more a function of experience than leadership style. Finally, in looking at the mean
person scores, it can be seen that they are relatively constant among the CWP categories. The most successful and least successful categories have basically the same mean person scores 10.3 and 10.93, respectively. This fact, too, is supported by subsequent relational procedures.

TABLE 7
Descriptive Statistics For Coaches With CWP of .450 and Below
(N=15)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>S.D.</th>
<th>S.E.M.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>14.13</td>
<td>2.88</td>
<td>.742</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>Person</td>
<td>10.93</td>
<td>1.71</td>
<td>.441</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Career Winning</td>
<td>.379</td>
<td>.076</td>
<td>.02</td>
<td>.129</td>
<td>.448</td>
</tr>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Coaching</td>
<td>7.4</td>
<td>4.44</td>
<td>1.14</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 8 presents the Pearson Product Moment Correlation matrix for the variables in the study, task orientation, person/people orientation, career winning percentage, and years of experience. The reader is reminded that this procedure is used to analyze the relationship between two variables. The size of the correlation coefficient (r) indicates, "the degree to which two variables are linearly related to one another" (Jaccard, 1983).
TABLE 8
Pearson Product Moment Correlation Matrix
For Variables In The Study

<table>
<thead>
<tr>
<th></th>
<th>Task</th>
<th>Person</th>
<th>CWP</th>
<th>Yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>1.000</td>
<td>-.308</td>
<td>-.301</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>p = .044</td>
<td>p = .049</td>
<td>p = .973</td>
<td></td>
</tr>
<tr>
<td>Person</td>
<td>1.000</td>
<td>-.137</td>
<td>-.203</td>
<td>p = .378</td>
</tr>
<tr>
<td></td>
<td>p = .378</td>
<td>p = .191</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWP</td>
<td>1.000</td>
<td>.359</td>
<td>p = .018</td>
<td></td>
</tr>
<tr>
<td>Yrs</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In examining the results of the procedure three definitive statements can be made about the sample. There is a significant direct relationship between years of experience and career winning percentage with a Pearson r of .359 (p = .018). Further examination indicates that an inverse relationship (r = -.301, p = .049), exists between task orientation scores and career winning percentage. Finally, virtually no linear relationship exists between task orientation score and years of experience (r = .005, p = .973).

To determine if a multivariate linear relationship existed between the dependent variable, CWP, and the independent variables, task and person orientation scores, a stepwise multiple regression procedure was performed.
using PROC REGRESSION of the Statistical Analysis System (SAS). Results are found in Table 9.

**TABLE 9**

Stepwise Regression Procedure for Dependent Variable Coaches Winning Percentage Using Task and Person Variables

<table>
<thead>
<tr>
<th>Step Number 1</th>
<th>Variable entered: Task</th>
<th>R^2 = .090</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard error= 3.766</td>
<td>R2= .090</td>
<td></td>
</tr>
<tr>
<td>Analysis of Variance</td>
<td>DF</td>
<td>SS</td>
</tr>
<tr>
<td>Regression</td>
<td>1</td>
<td>.070</td>
</tr>
<tr>
<td>Error</td>
<td>41</td>
<td>.703</td>
</tr>
<tr>
<td>Step 1 Summary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variables in the equation</td>
<td>B</td>
<td>F to remove</td>
</tr>
<tr>
<td>(constant)</td>
<td>.732</td>
<td>4.10</td>
</tr>
<tr>
<td>TASK</td>
<td>-.015</td>
<td>4.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step Number 2</th>
<th>Variable entered: Person</th>
<th>R^2 = .149</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard error= 3.00</td>
<td>R2= .149</td>
<td></td>
</tr>
<tr>
<td>Analysis of Variance</td>
<td>DF</td>
<td>SS</td>
</tr>
<tr>
<td>Regression</td>
<td>2</td>
<td>.115</td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>.657</td>
</tr>
<tr>
<td>Step 2 Summary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variables in the equation</td>
<td>B</td>
<td>F to remove</td>
</tr>
<tr>
<td>(constant)</td>
<td>.9447</td>
<td>6.15</td>
</tr>
<tr>
<td>TASK</td>
<td>-.0194</td>
<td>6.15</td>
</tr>
<tr>
<td>PERSON</td>
<td>-.0155</td>
<td>2.77</td>
</tr>
</tbody>
</table>

The R values from Table 9 provide an indication of the degree to which the independent variables in the analysis explain or account for the variability in the dependent variable. In the first step of the regression procedure the variable entered was task orientation. This is because the task variable had the highest
correlation ($r = -0.301$, $p = 0.049$) with CWP (see Table 9).

Alone, task explains 9% of the dependent variable ($R^2 = 0.09$). By adding the person orientation variable in step two of the regression procedure the $R^2$ value increases to 0.149 or 14.9%. The ratio of explained variability to error variability ($F = 3.52$, $df = 2.42$) is significant ($p = 0.039$). Based upon this regression model, then, it can be said that 14.9% of a coach's winning percentage is due to leadership style.

While on the surface it may not appear that we have accounted for much of the variability in the dependent variable, the reader is reminded of the multi-dimensional phenomenon that is intercollegiate athletics. There are many variables that can influence a coach's career winning percentage. In addition to leadership style these variables might include the maturity level of the coaching staff, the maturity level of the players, recruiting practices, scheduling, budget, and years of coaching experience. Since the latter variable was readily available from the NCAA publication entitled 1985 NCAA Football, the decision was made to include it in another stepwise multiple regression procedure. Table 10 presents the three variable model including years of experience, task orientation, and person orientation.
TABLE 10
Stepwise Regression Procedure for Dependent Variable Coaches Winning Percentage Using Years of Experience, Task, and Person Variables

<table>
<thead>
<tr>
<th>Step Number</th>
<th>Variable entered:</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Years</td>
<td>.129</td>
</tr>
<tr>
<td>2</td>
<td>Task</td>
<td>.221</td>
</tr>
<tr>
<td>3</td>
<td>Person</td>
<td>.249</td>
</tr>
</tbody>
</table>

**Step Number 1**
Variable entered: Years
Standard error = 6.287

<table>
<thead>
<tr>
<th>Analysis of Variance</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>.0997</td>
<td>.0997</td>
<td>6.07</td>
<td>.018</td>
</tr>
<tr>
<td>Error</td>
<td>41</td>
<td>.6735</td>
<td>.0164</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step 1 Summary**
Variables in the equation
(constant) B  F to remove
YEARS .450  6.07

**Step Number 2**
Variable entered: Task
Standard error = 3.50

<table>
<thead>
<tr>
<th>Analysis of Variance</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2</td>
<td>.170</td>
<td>.085</td>
<td>5.68</td>
<td>.006</td>
</tr>
<tr>
<td>Error</td>
<td>40</td>
<td>.602</td>
<td>.015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step 2 Summary**
Variables in the equation
(constant) B  F to remove
TASK -.0155  4.73
YEARS .006  6.68

**Step Number 3**
Variable entered: Person
Standard error = 4.00

<table>
<thead>
<tr>
<th>Analysis of Variance</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3</td>
<td>.193</td>
<td>.0644</td>
<td>4.33</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>39</td>
<td>.580</td>
<td>.0148</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step 3 Summary**
Variables in the equation
(constant) B  F to remove
TASK -.0183  6.06
PERSON -.0111  1.50
YEARS .006  5.21
The first variable entered into this second stepwise multiple regression procedure was years as a head coach. This is not surprising since the Pearson Product Moment Correlation Coefficient from Table 8 between years as a head coach and CWP was \( r^2 = .359 \) (\( p = .018 \)). The \( R^2 \) value with only one variable in the equation is .129 or 12.9% of the coach's winning percentage. The second variable entered was task orientation and this raised the \( R^2 \) value to .221 or 22.1%, a significant increase. The last variable entered at the third step of the regression procedure was person orientation. This, combined with the first two variables raised the \( R^2 \) value to .249 or 24.9%. The ratio of explained variability to error variability (\( F = 4.33, \) df = 3.39) is significant (\( p = .01 \)). While it is true that approximately 75% of the variability in career winning percentage remains unaccounted for, three variables, years of experience, task orientation, and person orientation explain almost one-fourth of the dependent variable.

To ascertain if significant differences existed between the most successful coaches (CWP \( \geq .550 \)) and the least successful coaches (CWP \( \leq .450 \)) on task, person, and years of coaching, a series of Student's \( t \)-tests were performed. Results showed that there were no significant differences between groups (\( p \geq .05 \)) on the task and person variables (see Tables 11 and 12).
### TABLE 11
Results of the T-Test for Independent Samples for the Task Variable

<table>
<thead>
<tr>
<th>CWP</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.E.M.</th>
<th>DF</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>.550 and Above</td>
<td>20</td>
<td>12.9</td>
<td>2.53</td>
<td>.742</td>
<td>33</td>
<td>1.35</td>
</tr>
<tr>
<td>.450 and Below</td>
<td>15</td>
<td>14.13</td>
<td>2.88</td>
<td>.566</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 12
Results of the T-Test for Independent Samples for the Person Variable

<table>
<thead>
<tr>
<th>CWP</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.E.M.</th>
<th>DF</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>.550 and Above</td>
<td>20</td>
<td>9.8</td>
<td>2.68</td>
<td>.601</td>
<td>33</td>
<td>1.43</td>
</tr>
<tr>
<td>.450 and Below</td>
<td>15</td>
<td>10.9</td>
<td>1.710</td>
<td>.441</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As indicated in Table 13, the t-test on the years of coaching variable did yield a significant difference between the two groups (p \( \leq \) .05) with the more successful coaches (CWP \( \geq \) .550) having more years of experience.
TABLE 13
Results of the T-Test for Independent Samples for the Years of Experience Variable

<table>
<thead>
<tr>
<th>CWP</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>S.E.M.</th>
<th>DF</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>.550 and Above</td>
<td>20</td>
<td>13.65</td>
<td>6.96</td>
<td>1.558</td>
<td>33</td>
<td>-3.04*</td>
</tr>
<tr>
<td>.450 and Below</td>
<td>15</td>
<td>7.4</td>
<td>4.43</td>
<td>1.146</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

For illustrative purposes the mean leadership styles of NCAA Division II Head Football Coaches are plotted on the Ohio State Leadership Grid in Figure 1.

As conceptualized, the grid consists four quadrants, (a) High Task and High Relationship, (b) Low Task and High Relationship, (c) High Task and Low Relationship, and (d) Low Task and Low Relationship. At a glance it can be seen that all of the leadership means for the different CWP categories and the mean for the entire sample fall in the High Task and High Relationship quadrant of the grid.
**Figure 1**

THE MEAN LEADERSHIP STYLES FOR THE CWP CATEGORIES AND THE COMBINED SAMPLE

A - Total Sample
B - .550 and Above
C - .451 to .549
D - .450 and Below
Figure 2
DISTRIBUTION OF LEADERSHIP STYLES
FOR COACHES WITH CWP OF .550 AND ABOVE
Figure 3
DISTRIBUTION OF LEADERSHIP STYLES
FOR COACHES WITH CWP OF 451-549

- High Relationship &
  - Low Task

- Low Task &
  - Low Relationship

- High Task &
  - High Relationship

- High Task &
  - Low Relationship
Figures 2, 3, and 4, show the individual coaches plotted on the grid for the three CWP categories. The observations are plotted according to their scores on task orientation and person orientation.

Figure 2 indicates that 16 or 80% of the most successful coaches are in the High Task and High Relationship quadrant. Only one coach in the .550 and above CWP category was found in the High Person and Low Task quadrant. Two of the coaches (10%) appear in the High Task and Low Relationship quadrant, while one observation falls on the boundary between High Task, High Relationship and High Relationship, Low Task.

Seventy-five percent or six coaches in the .451-.549 category were plotted in the High Task and High Relationship area on the grid (Figure 3). One coach (12.5%) in this category was plotted on the boundary between the High Relationship, Low Task and the High Task, High Relationship quadrants. The remaining observation was found in the quadrant labeled High Task and Low Relationship.

Fourteen coaches or 93.3% of the .450 and below CWP category are found in the High Relationship and High Task quadrant as illustrated in Figure 4. Only one coach (6.6%) was found in the High Relationship and Low Task quadrant.
Figure 4
DISTRIBUTION OF LEADERSHIP STYLES
FOR COACHES WITH CWP OF .450 AND BELOW
Discussion of Results

As can be seen on Tables 5, 6, and 7, the average task scores for each CWP category increase as the career winning percentage decreases. The average task score for the most successful coaches (CWP ≥ .550) was 12.15 while the least successful coaches (CWP ≤ .450) had a mean score of 14.13. The mean task score for the .451-.549 category was 13.12. The mean difference therefore between the most successful coaches and the least successful coaches is 1.98. While these differences were not found to be statistically significant using Student's t-test procedures, correlation and regression analyses revealed a small, but significant, linear relationship between task score and CWP.

It is interesting to note that while the mean task scores increase as CWP decreases, the mean person scores remain relatively the same throughout the categories.

The differences between the most successful category (CWP ≥ .550) and the middle category (.451-.549), and the most successful category and the least successful category (CWP ≤ .450) are .5 and .63 respectively.

Several studies of athletic coaches have been conducted using the T-P Leadership Questionnaire. Brooks' (1982) study revealed that the mean leadership style of coaches, when plotted on the Ohio State
Leadership Grid, was High Task and Low Relationship. The actual mean scores of coaches in Brooks' sample for task and person orientation were 15.41 and 6.86 respectively.

Leadership scores of football coaches from the North Central Conference were obtained using the T-P by Megard (1986). The mean task score for Megard's sample was 13.92 while the mean person score was 8.74. When these scores were plotted on the Ohio State Leadership Grid it was found that the leadership style of these coaches was High Task and High Relationship as well.

Findings from the present study are comparable to those of Megard. The mean person score found herein was 10.2 with a mean task score of 13.37. When these two values were plotted on the Ohio State Leadership Grid the "average" leadership style of the coaches in the present study was also High Task and High Relationship.

Examination of Figures 2, 3, and 4 reveals that 36 coaches or 83.7% of the entire sample are plotted in the High Relationship and High Task quadrant. An explanation for this phenomena comes from the very nature of the coaching profession. Relationship behavior is essential to good coaching. The head coach in any sport must try to foster good relationships with the people he or she works with if they are to have any hope of achieving stated goals. The overemphasized goal of winning probably accounts for the high task scores. Increasing
pressure to win and the consequences of losing result in
the head coach being reluctant to relinquish any form of
control in the decision making process. The coach finds
it necessary to exhibit that control through increased
task behavior.

The hypotheses stated in Chapter 1 stipulated that
there would be no relationship between task orientation,
person orientation and leadership style with career
winning percentage of NCAA Division II Head Football
Coaches. The data presented here have indicated that a
linear relationship, though a slight one, does exist
between leadership style and a coach's career winning
percentage. When leadership style is broken down into
its component parts, task and person, it can be seen that
one of the variables is more strongly related to CWP than
the other. Task orientation, from the stepwise multiple
regression procedures, was entered first and accounted for
9% of the variability in CWP while person orientation,
when added to the model contributes only an additional
5.9% of explained variability. Additionally, it was
observed the relationship between task scores and CWP was
an inverse one.

Given these findings three possible explanations are
offered. An obvious explanation would be that the
coaching staffs that these successful coaches hire are
competent and mature about the processes required to attain team goals. Therefore, the leader of these individuals, in a situational model, can concentrate on relationship behaviors confident that the task will be accomplished. A second explanation may simply be that these coaches have more experience ($M = 13.65$ years) and thus more knowledge of skills and strategies. These coaches would know from experience how to mix the task and person orientations. This might be a good argument that older is better. The last explanation is along the same line as the first but deals with players. It is believed by this researcher that if a program is successful it will draw the better players. Many times these better players do not need to be reminded or pushed toward their goals and therefore coaches can concentrate on fostering good interpersonal relationships to help them through the rigors of college football and academia.

Coaching is a different profession in that crowds of people judge your ability to coach based on what happens on the field, in the arena, or on the ice, in a game played by a group of young men/women or boys/girls. As indicated by the relatively small amount of variability accounted for using regression analyses leadership is but one of the components influencing the multi-dimensional
variable that is career winning percentage. Much work remains to be done to identify variables which will account for the remaining variability.
Chapter V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine the relationship between leadership and coaching success. More specifically, the study attempted to determine if a linear relationship existed between leadership style as measured by the T-P Leadership Questionnaire and the career winning percentage of NCAA Division II Head Football Coaches.

Summary

Forty-eight head football coaches from NCAA Division II institutions completed the T-P Leadership Questionnaire to compare leadership styles, encompassing task orientation and person/people orientation, to the career winning percentage (CWP) of the head coach. A mail survey was the principle method employed in data collection. Some responses were obtained via the telephone. A total of 43 of 68 head coaches contacted (63.2%) participated in the study.

Following receipt of the completed questionnaires they were tabulated by hand. A person/people orientation score and a task orientation score was determined for each participating coach. The range of possible scores on the person/people and task variables were 0–15 and 0–20
respectively. The higher score indicates a higher concern for that leadership dimension.

Scores for each coach on the task and person variables along with their career NCAA Division II football winning percentage and years of experience coaching at Division II were entered into the IBM mainframe computer at South Dakota State University. The data were analyzed with the PROC REGRESSION procedure and a Student's t-test procedure using the Statistical Analysis System (SAS). Separate analyses were conducted, first using only two independent variables and second, adding a third independent variable, years of experience.

Results of the two variable stepwise multiple regression procedure indicated that the task orientation of the coach accounted for 9% of the coach's CWP. The second step of the regression procedure introduced the person/people orientation score and raised the amount of explained variability to 5.8%. The F ratio (F = 3.52, df = 2.42) was significant at the .05 level (p = .039).

Results of the three variable stepwise multiple regression procedure indicated an $R^2$ value of .249. The first variable entered was years of experience ($R^2 = .129$), followed by the task variable ($R^2 = .221$ at step 2) and the person variable ($R^2 = .249$ at step 3).
In order to determine if differences in leadership style existed between the extremes of the sample, subjects were classified into most successful (CWP = .550 and above) and least successful (CWP = .450 and below) and compared using Student's t-test procedures. Results indicated that there was no significant difference at the .05 level between the two groups on either the task or person variables. However, in terms of years of coaching at Division II, at the .05 level of significance and 33 degrees of freedom, there was a significant difference noted. Coaches with a CWP of .550 and above had more years of experience at the NCAA Division II level.

Even though there were dramatic individual differences in leadership styles, the average leadership styles (mean task orientation scores and mean person/people orientation scores combined) for all three CWP categories appear in the High Task and High Relationship quadrant on the Ohio State Leadership Grid (Stogdill & Coons, 1957).

A word of caution is in order at this point. The responses by the coaches on the T-P Leadership Questionnaire are their personal perceptions and disclosures regarding how they react to certain situations with their coaching staff. It may or may not be the case that the coaches' responses are indicative of how they
actually behave in these situations. Thus, the reader is cautioned against assuming that these self-perceptions are actual leadership behaviors.

Conclusions

The following conclusions are offered based upon the data gathered from 43 NCAA Division II head football coaches during the Spring 1986 academic semester. As such, the reader should be cautioned against generalizing from the findings to individuals or groups not represented in this study.

1. There is no linear relationship between the person variable, alone, and coaching success as indicated by career winning percentage.

2. There is a statistically significant linear relationship between the task variable, alone, and career winning percentage. The Pearson Product Moment Correlation of -.301 (p=.049) indicates an inverse relationship between task scores and winning percentage i.e. the higher the task score the less likely you are to succeed.

3. There is a small but statistically significant linear relationship between leadership style, comprised of task and person variables of the T-P Leadership Questionnaire, and coaching success as
indicated by career winning percentage.

Stepwise multiple regression procedures indicate that, in combination, the task and person variables account for 14.9% of the variability in the dependent variable.

4. When years of experience is added to the analysis as an independent variable, it is entered first in the stepwise multiple regression procedure and an $R$ value of .249 or 24.9% results from the three variables in combination. However, the person variable, added last, contributes only .028 or 2.8% to the model.

5. There was no significant difference between the most successful coaches (CWP $> .550$) and the least successful coaches (CWP $< .450$) on either the task or person variables.

6. The mean leadership styles, task and person/people orientation scores combined, of the entire sample as well as of the three CWP categories appear in the High Task and High Relationship quadrant on the Ohio State Leadership Grid.
Recommendations for Further Study

As stated in the introduction every group needs a leader in order to facilitate the achievement of group goals. Nowhere is the phenomenon of leadership more important than the competitive athletic setting. We have only begun to examine it from a scholarly perspective. Given this, the following recommendations are offered for further research in leadership and athletics.

Different instruments could be used to compare leadership behaviors/styles of coaches in football. Some of the different instruments that could be used would be the LPC, LBDQ XII, and the Managerial Philosophies Scale. However, before this is attempted, it is the strong recommendation of this researcher that appropriate validity and reliability information be determined prior to extensive field use of these instruments.

It would also be interesting to compare the results from the present study to leadership scores of head football coaches in NCAA Divisions I and III. The study at hand might also be replicated using head coaches of other sports such as baseball, basketball, and tennis. Another area of potential investigation would involve comparing the leadership styles and behaviors of head coaches in team
sports and individual sports. Finally, it is recommended that the leadership styles/behaviors of team captains, the on-field leaders, be evaluated and related to team success.


BIBLIOGRAPHY


APPENDIX A
T-P LEADERSHIP QUESTIONNAIRE

Reproduced with permission from
A Handbook of Structured Experiences for Human Relations Training, Volume 1
J. William Pfeiffer and John E. Jones, Editors
San Diego: UNIVERSITY ASSOCIATES Publisher, Inc., 1974

The following items describe aspects of leadership behavior. Respond to each item according to the way you be most likely to act if you were the leader of a coaching staff. Circle whether you would be likely to behave in the described way always (A), frequently (F), occasionally (O), seldom (S), or never (N).

As Head Football Coach when I am the leader of the staff....

A  F  O  S  N  1. I act as spokesperson for the group.
A  F  O  S  N  2. I encourage overtime work.
A  F  O  S  N  3. I allow staff members complete freedom in their work.
A  F  O  S  N  4. I encourage the use of uniform procedures.
A  F  O  S  N  5. I permit staff members to use their own judgement in solving problems.
A  F  O  S  N  6. I stress keeping ahead of competing groups.
A  F  O  S  N  7. I speak as a representative of the staff.
A  F  O  S  N  8. I needle members for greater effort.
A  F  O  S  N  9. I test my ideas by presenting them to the staff.
A  F  O  S  N 10. I let the staff do their work the way they think best.
A  F  O  S  N 11. I am working hard for a promotion.
A  F  O  S  N 12. I am able to tolerate postponement and uncertainty.
A  F  O  S  N 13. I speak for the staff when visitors are present.
A  F  O  S  N 14. I keep the work moving at a rapid pace.
A  F  O  S  N 15. I turn the staff loose on a job and let them go to it.
A  F  O  S  N 16. I settle conflicts when they occur in the staff.

OVER
As Head Football Coach when I am the leader of the staff....

17. I get swamped by details.
18. I represent the staff at outside meetings.
19. I am reluctant to allow the staff freedom of action.
20. I decide what shall be done and how it shall be done.
21. I push for increased production.
22. I would let some of the staff have authority.
23. Things usually turn out the way I predict.
24. I allow the staff a high degree of initiative.
25. I assign staff members to particular tasks.
26. I am willing to make changes.
27. I trust the staff to exercise good judgment.
28. I ask the staff to work harder when necessary.
29. I schedule the work to be done.
30. I refuse to explain my actions.
31. I persuade others that my ideas are to their advantage.
32. I permit the staff to set its own pace.
33. I urge the staff to do better than its previous performance on a similar task.
34. I act without consulting the staff.
35. I ask that staff members follow standard rules and regulations.

Thank you for participating in this study.
APPENDIX B
T-P Leadership Questionnaire Scoring Instructions

1. Circle the item number for items 8, 12, 17, 18, 19, 30, 34, and 35.

2. Write the number 1 in front of a circled item number if you respond S (seldom) or N (never) to that item.

3. Also write a number 1 in front of item numbers not circled if you responded A (always) or F (frequently).

4. Circle the number 1's which you have written in front of the following items: 3, 5, 8, 10, 15, 18, 19, 22, 24, 26, 27, 30, 32, 34, and 35.

5. Count the circled number 1's. This is your score for concern for people. Record the score in the blank following the letter P at the end of the questionnaire.

6. Count the uncircled number 1's. This is your score for concern for task. Record this number in the blank following the letter T.
Dear Coach

To introduce myself, my name is Murray Anderson and I am a graduate student at South Dakota State University. I am studying the administration of physical education and athletics. At the present time I am conducting a research project which will investigate the relationship between perceived leadership style and coaching success.

The purpose of this letter is to ask for your cooperation and participation. I realize that this is an imposition for you and I apologize for that. You will be responding to questions pertaining to your leadership behavior with your coaching staff.

After I receive the enclosed postcard confirming your willingness to participate, you will receive a leadership assessment instrument; the T - P Questionnaire. The instrument was selected, partly, because of its brevity. It will only take 10 to 15 minutes to complete. If you could find the time in your busy schedule to help me with my research I would be most appreciative. Your response means a great deal to the integrity of this research project.

Thank you once again for your cooperation.

Sincerely,

Murray A. Anderson

Enclosure
APPENDIX D

Participation Consent Postcard

I, Coach ______________,

_____ am willing to participate in Mr. Anderson's study.

_____ am not willing to participate in Mr. Anderson's study.

If you are participating in the study do you wish to see the results? YES or NO

Mr. Murray Anderson, a candidate for the Master of Science degree at South Dakota State University, is soliciting your cooperation as part of his Master's Thesis. Mr. Anderson is studying leadership aspects of athletic coaching and his study will make a significant contribution to our understanding of this phenomenon. Your participation will provide information on the work.

The purpose of this letter is to certify your consent. Mr. Anderson has the approval of the South Dakota State University's Health, Physical Education, and Recreation and South Dakota State University for his research. We thank you for your participation.

Sincerely,

Mr. Murray Anderson
Department of HPER
Box 2820
South Dakota State University
Brookings, SD 57007

© USPS 1985
February 27, 1986

Dear Sir:

Mr. Murray Anderson, a candidate for the Master of Science degree at South Dakota State University, is soliciting your cooperation as part of his master's thesis. Mr. Anderson is studying leadership aspects of athletic coaching and his thesis will make a significant contribution to our understanding of this phenomenon. Your participation will enhance the significance of the work.

The purpose of this letter is to certify that Mr. Murray Anderson has the approval and full support of the Department of Health, Physical Education, and Recreation and South Dakota State University in his research. We thank you for your participation.

Sincerely,

James E. Lidstone, Ed. D.
Coordinator of HPER Research

Enclosures
Dear Coach,

Thank you very much for agreeing to participate in my research. Enclosed please find a copy of the T-P Leadership Questionnaire that I promised to send. It was designed so that it can be completed in a very short period of time, approximately 10-15 minutes. I have also enclosed a stamped, addressed return envelope for your use.

As I shared with you in my introductory letter, I am very interested in gaining a greater understanding of the relationship between leadership style and success. The questionnaire will measure select aspects of your behavior in your role as a leader/head coach.

In your busy schedule, I hope that you can find the time to complete and return the questionnaire. In order to meet spring graduation requirements I am hoping to have the completed questionnaires returned by March 21st. Thank you once again for consenting to participate. Your response will mean a great deal to the integrity of the findings.

Sincerely,

Murray A. Anderson

Enclosures: TPLQ
SARE
March 24, 1986

Dear Coach

Several weeks ago I contacted you concerning my research study on the relationship between leadership style and coaching success. In that letter I asked you to consider serving as a subject for the study.

However, at the present time, I have not received the reply postcard from you. Thus, I am sending you a reminder letter to you to consider again to fill out the postcard. In the case that you misplaced the original card I am sending you another for your use. It is critical to the integrity of the study that we get as close to 100 percent response as possible.

I hope that you can find a few moments in your busy schedule to complete and return the postcard as quickly as possible. Thank you once again for your consideration.

Sincerely,

Murray A. Anderson

Enclosure; pcd.
Dear Coach

Several weeks ago you consented to participate in my research study on the relationship between leadership style and coaching success.

However, at the present time, I have not received a reply from you. Thus, I am sending a reminder letter to you to consider again filling out the T-P Leadership Questionnaire. In case you have misplaced the original questionnaire I have enclosed another questionnaire and a stamped, addressed return envelope for your use. Since you were chosen and consented to participate in the study it is critical to the integrity of the study that we get as close to 100 percent response as possible.

I hope that you can find a few moments in your busy schedule to complete and return the questionnaire as quickly as possible. Thank you once again for your consideration.

Sincerely,

Murray A. Anderson

Enclosures; TPLQ.
SARE.
APPENDIX I

The Data

Coaches with CWP at 550 or Above
(N = 20)

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Coaches with CWP between 451 - 549
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