# THE DIRECT IMPACT OF TEAM COHESIVENESS AND ATHLETES' PERCEPTION OF COACHING LEADERSHIP FUNCTIONS ON TEAM SUCCESS IN NCAA DIVISION I WOMEN'S BASKETBALL

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# DEDICATION

I dedicate this dissertation to Howard, my husband, confidant, and eternal companion, for his patience, never-ending encouragement and unconditional love. Without him and the sacrifices he has made, this would not have been possible. He has been and always will be my biggest fan and best friend. To my son, Nelson, for his love and patience for his mom and of whom I am so very proud. To my parents, Harold and Estelle, for their love, sacrifice, and confidence in me throughout my educational experiences. To my brother, Harold, who has carried on with the family business, the loving care of our parents, and whom I admire, love, and respect. To my aunt, Carolyn, who has provided early morning pep talks, special love and care for her family and is one of the strongest women I know. And finally, to my many friends, colleagues, and inspiring students who have continued to support me through these past years.

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ABSTRACT

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THE DIRECT IMPACT OF TEAM COHESIVENESS AND ATHLETES' PERCEPTION OF COACHING LEADERSHIP FUNCTIONS ON TEAM SUCCESS IN NCAA DIVISION I WOMEN'S BASKETBALL

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This study investigated the direct impact of team cohesiveness and student-athletes' perceptions of coaching behavior/leadership functions on the success of NCAA Division I Women's basketball, based on the teams' win/loss records. The research collection was quantitative in nature. Statistical design and analysis provided justification for the use of the paired comparison instrument coupled with other meta-analytic assessments to determine construct validity for all measures addressed in the study. The researcher formulated six questions regarding athletes' perceptions of team cohesiveness and coaching leadership functions. To answer these questions, the researcher administered two survey instruments: the Lowry Leadership Functions Instrument (LFI), and the Lencioni Team Assessment (LTA) questionnaire. The demographic findings gave a snapshot of a typical women's college basketball student-athlete ($N$=73) specific to the region and conference. The institutions were located in Arkansas, Louisiana, and Texas. The data from the LFI showed that players from winning and losing teams selected the same top and bottom leadership functions in their coaches, but there were differences in how winning teams and losing teams rated those

functions. The top-rated coaching/leadership functions were *attempting to keep communication channels open* (70.81%), *keeping members focused on goals* (69.76%), and *providing encouragement* (65.44%). The LTA focused on five indicators of team cohesion (Trust, Healthy Conflict, Commitment, Accountability, Focus on Results) and those behaviors within each function, and showed differences in perceptions on team cohesiveness between winning and losing teams. While there was no conclusive data from the LTA on the effects of winning and losing on demographics and team functionality, five areas of note emerged: a) athletes on losing teams had more trust issues than athletes on winning teams, b) there was a major shift in minority perception of influence over a forty year span between the Lowry (1972) and the Palmer (2012) studies, c) winning teams tended to focus on behaviors that produced quantifiable results, d) losing teams appeared to be more focused on collective results, and e) behaviors involved in achieving a winning outcome may be more important than the outcome itself.

Keywords: LTA, LFI, Cohesiveness, Functionality, Student-athlete

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# CHAPTER I

# INTRODUCTION

Research confirms that in collegiate athletics, coaches and athletes must work together to achieve common goals, and athletes must have some level of satisfaction with coaching behaviors to achieve success (Carron, Bray, & Eys, 2002). It is vital to continue to investigate factors that strengthen the possibility of winning because of the increased pressure in today's society to use a win/loss record as the sole determiner of team success. Carron, Brawley, and Widmeyer (2002) examined the relationship of cohesion to team success and illustrated that the group average can be used to represent the cohesiveness in each team and win/loss percentage can be used to represent team success.

Cohesiveness has often been cited as both a salient and significant element in the development of a team of people working together (Zander, 1975). Cohesiveness has been defined as "a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs." (Carron, Brawley, & Widmeyer, 1998, p. 213)

Team cohesiveness is assumed to be related to greater team success. In fact, researchers have confirmed that the strongest relationship between cohesiveness and group success is present in sport teams. Beal, Cohen, Burke, and McLendon (2003) found that social cohesion matters to performance and the commitment to task had a stronger relationship than interpersonal attraction when it came to outcomes. In contrast,

interpersonal attraction was related to performance behaviors within the group more than task behaviors. Schaub (2010) responded to this finding in his study related to military units or teams by stating:

> "Thus, while commitment to task has a larger relationship than interpersonal attraction and group pride to most measures of performance, the important point is that measures of social cohesion have a large and positive relationship to performance independently of commitment to task." (p. 90)

It appears that social cohesion influences performance and cannot be ignored in favor of measures of task cohesion when considering changes in personnel policy (Schaub, 2010). To do so would underestimate the negative effects that disruptions to social cohesion can cause, as well as underestimate the positive performance effects of efforts to enhance social cohesion (Mullen & Copper, 1994).

Perceptions of team cohesiveness can change under a multitude of conditions; thereby influencing the team climate, which can affect team success. Lencioni (2002) described functional teams as those whose members overcome the human imperfections that stand in the way of trust, conflict, commitment, accountability, and a focus on results.

Just as team cohesiveness potentially influences team success, athletes' perception of effective leadership behaviors of the coach potentially influences team success. Early theoretical frameworks have shown this to be true. In Vroom's (1964) Expectancy Theory, the coach uses motivational plans to attain higher levels of achievement.

Herzberg's (1966) motivation theory uses intrinsic rewards, while McGregor's (1960) theory of human nature also supports the idea of giving people more decision-making power and input. One would hypothesize that by integrating McGregor's, Herzberg's, and Vroom's theories alone, a coach would be able to develop successful plans to motivate athletes, increase their satisfaction, and enhance the possibility for potential personal and team success.

Cartwright and Zander (1968) contended that "leadership is viewed as the performance of those acts which help the group achieve its preferred outcomes." (p. 304) It has also been suggested that for team cohesion to exist, there must be a positive perception of the coaching staff as teachers, mentors, and leaders (Martin, 2002).

There is a stream of thought that views leadership not as individual functions, but as sets of actions performed by different members of a group at different times. A group's situation then determines who fulfills which roles and when. Cartwright and Zander (1968) found that:

> "…groups differ from one another in a variety of ways, and the actions required for the achievement of valued states of one group may be quite different from those of another. The nature of leadership and the traits of leaders will accordingly be different from group to group. Situational aspects such as the nature of the group's goals, the structure of the group, the attitudes or needs of the members, and the expectations placed upon the group by its external environment help

determine which group functions will be needed at any given time and who among the members will perform them." (p. 304)

## Statement of the Problem

Winning and losing teams have different perceptions of coaches' leadership functions and different perceptions of their team's cohesiveness. These perceptions may have a direct impact on their win loss record. Studies of perceptions of team cohesion and coaching leadership functions have been lacking in that they have not compared winning and losing teams. The correlations between winning and losing as a direct impact of student-athlete perceptions is a rich area for investigation.

## Purpose of Study

The purpose of this research was to investigate the direct impact of team cohesiveness and student-athletes' perceptions of coaching behavior/leadership functions on the success of NCAA Division I Women's Basketball teams, based on win/loss records.

To accomplish this investigation, the researcher collected data from the top and bottom four women's basketball teams in the NCAA Division I Southland Conference, based on the 2010 win/loss record, in order to determine their team cohesiveness and perceptions of coaching behaviors/leadership functions and their influence on team success. Results of this study will help those who are charged with the responsibility of directing and developing strong coaching education programs in the future. With this

research, all involved with women's basketball at the collegiate level can re-evaluate their individual contributions to team success.

## Research Questions

### Coaching Leadership Functions

1. What are the perceptions of the female student-athletes of coaching behaviors on winning NCAA Div I basketball teams?
2. What are the perceptions of the female student-athletes of coaching behaviors on losing NCAA Div I basketball teams?
3. Are the perceptions of the female student-athletes of coaching behaviors on winning NCAA Div I basketball teams the same as the perceptions of the female student-athletes on losing NCAA Div I basketball teams?

### Team Cohesiveness

1. What are the perceptions of the selected female student-athletes of team cohesiveness on winning NCAA Div I basketball teams?
2. What are the perceptions of the female student-athletes of team cohesiveness on losing NCAA Div I basketball teams?
3. Are the perceptions of the female student-athletes of team cohesiveness on winning NCAA Div I basketball teams the same as the perceptions of female student-athletes on losing NCAA Div I basketball teams?

## Limitations

This study is limited by:

1. The willingness of student-athletes to be honest in their answers with respect to each of the instruments.
2. The possibility of low sample population of volunteer participants.

## Delimitations

1. Participants in this research may not necessarily be representative of women's basketball teams in other NCAA Div I programs in the United States.
2. Participants will be from public universities with potential differences in funding for their women's basketball programs.

## Definition of Terms

1. Coach, Head or Assistant – "A head or assistant coach is any coach who is designated by the institution's athletics department to perform coaching duties and who serves in that capacity on a volunteer or paid basis." (NCAA Div I Manual (2011-2012), Bylaw 11, Article 11.01.2, p. 47)
2. Student-Athlete (SA) – "A student-athlete is a student whose enrollment was solicited by a member of the athletics staff or other representative of athletics interests with a view toward the student's ultimate participation in the intercollegiate athletics program. Any other student becomes a student-athlete only when the student reports for an intercollegiate squad that is under the jurisdiction of the athletics department, as specified in Constitution 3.2.4.5. A student is not deemed a student-athlete solely

on the basis of prior high school athletics participation." (NCAA Div I Manual (2011-2012), Article 12, Bylaw 12.02.05, p. 62)

3. Cohesion/cohesiveness - "a dynamic process that is reflected in the tendency of a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs." (Carron, Brawley, & Widmeyer, 1998, p. 213)
4. Leadership functions – "Leadership functions are the acts which help the group achieve its preferred outcomes. Leadership functions may be divided into two categories - - task functions and maintenance functions." (Lowry, 1972, p.13)
5. Southland Conference - 13 universities, from Texas, Arkansas, and Louisiana, sponsoring seventeen championship sports, all at the NCAA Division I level.
6. National Collegiate Athletic Association Division I (NCAA Div I)- the NCAA is made up of three membership classifications I, II, and III. Each division creates its own rules governing personnel, amateurism, recruiting, eligibility, benefits, financial aid, and playing and practice seasons- consistent with the overall governing principles of the Association (NCAA Div I Manual (2011-2012).
7. Task functions- "…facilitate and coordinate group effort in the selection and definition of a common problem and in the solution of that problem." (Lippett & Seashore, 1966, p. 47)
8. Team success - the team's win-loss record.

9. Trust - "… the confidence among team members that their peers' intentions are good, and that there is no reason to be protective or careful around the group." (Lencioni, 2002, p. 195)
10. Lencioni Team Assessment (LTA) - a questionnaire, developed by Lencioni (2002), consisting of 15 questions to be used as a diagnostic tool for helping evaluate how members of a cohesive team behave.
11. Leadership Functions Instrument (LFI) - a paired comparison instrument consisting of 14 leadership functions, developed by Lowry (1972), used to determine what student-athletes perceive as "Which action by the coach contributes most to the overall welfare of the team?" (p. 164)
12. Maintenance function- "alter or maintain the way in which members of the group work together and develop loyalty to one another and to the group as a whole." (Lippett & Seashore, 1966, p. 49)
13. Non-coach - an individual who is not a part of the coaching staff or involved with the institution's sport teams.

## Significance of Study

The research will provide the opportunity for coaches, coach educators, researchers, and administrators of sport programs to recognize the impact that student-athlete's perceptions of effective coach leadership behaviors/functions and team cohesiveness have on team success. It is hoped that effective professional development programs for collegiate women's basketball coaches will also be an outcome of this research.

# CHAPTER II

# REVIEW OF LITERATURE

The purpose of this research was to investigate the direct impact of team cohesiveness and student-athletes' perceptions of coaching behavior/leadership functions on the success of NCAA Division I Women's Basketball, based on win/loss records.

A review of literature reveals that no studies specific to this topic have been published related to female basketball collegiate athlete populations in NCAA Div I in the United States. Since the study of group cohesion, perception, and team functionality in sport has long been a fascinating one to theorists and researchers alike, this review of literature focuses on the most closely related areas of study and is organized under the following headings:

1. Selected literature specific to Leadership Function
2. Selected past studies in the sport environment
3. Task and Maintenance functions of coaches
4. Cohesiveness and the Lencioni Instrument

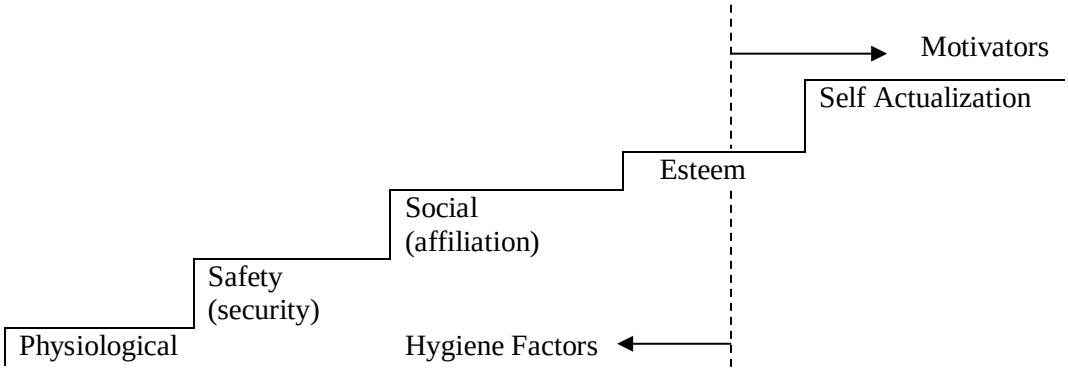
## Selected Literature Specific to Leadership Function

As a former collegiate athlete and basketball coach at the collegiate level, I have observed a seemingly direct correlation between what athletes believe and the effect on their performance. Athletes operate in a highly charged public arena and a culture of

sacrifice. Sport nurtures the concept of sacrifice for success, where athletes and coaches are praised for sacrificing all other aspects of their lives in pursuit of achieving their athletic goals (Dixon, Bruening, Mazerolle, Davis, Crowder, & Lorsbach, 2006; Sage, 1998). Much of the research indicates that if athletes do not think the coach is competent or does not have their best interest at heart, then they believe their performance can be negatively affected. Documentation has shown that an athlete may withhold effort, turn against his/her teammates out of frustration, and leave the team.

Coaches and athletes must work closely together to achieve common goals, because athletes are the people who play the games and score the points, to defeat the opponents in competition. For this reason, positive coach-athlete interactions tend to enhance motivation, induce pleasant emotions, and create satisfactory and positive climates (Bortoli, Robazza, & Giabardo, 1995).

Herzberg developed a model in the 1950's and 1960's called the "Motivation-Hygiene Theory" which used extensive interviews and analysis of job elements that led to employees feeling either especially good or especially bad about their work (Herzberg, 1966). Herzberg's (1966) study noted that motivation-hygiene factors showed that achievement-motivated people wanted task-relevant feedback (Hersey, Blanchard, & Johnson, 2001). In Figure 1, Hersey, Blanchard, and Johnson (2001) show how Herzberg's (1966) hygiene factors correlate to the physiological, safety, social, and esteem needs of Maslow's (1954) Hierarchy of Needs. His motivation factors are paired against Maslow's self- esteem and self-actualization needs.



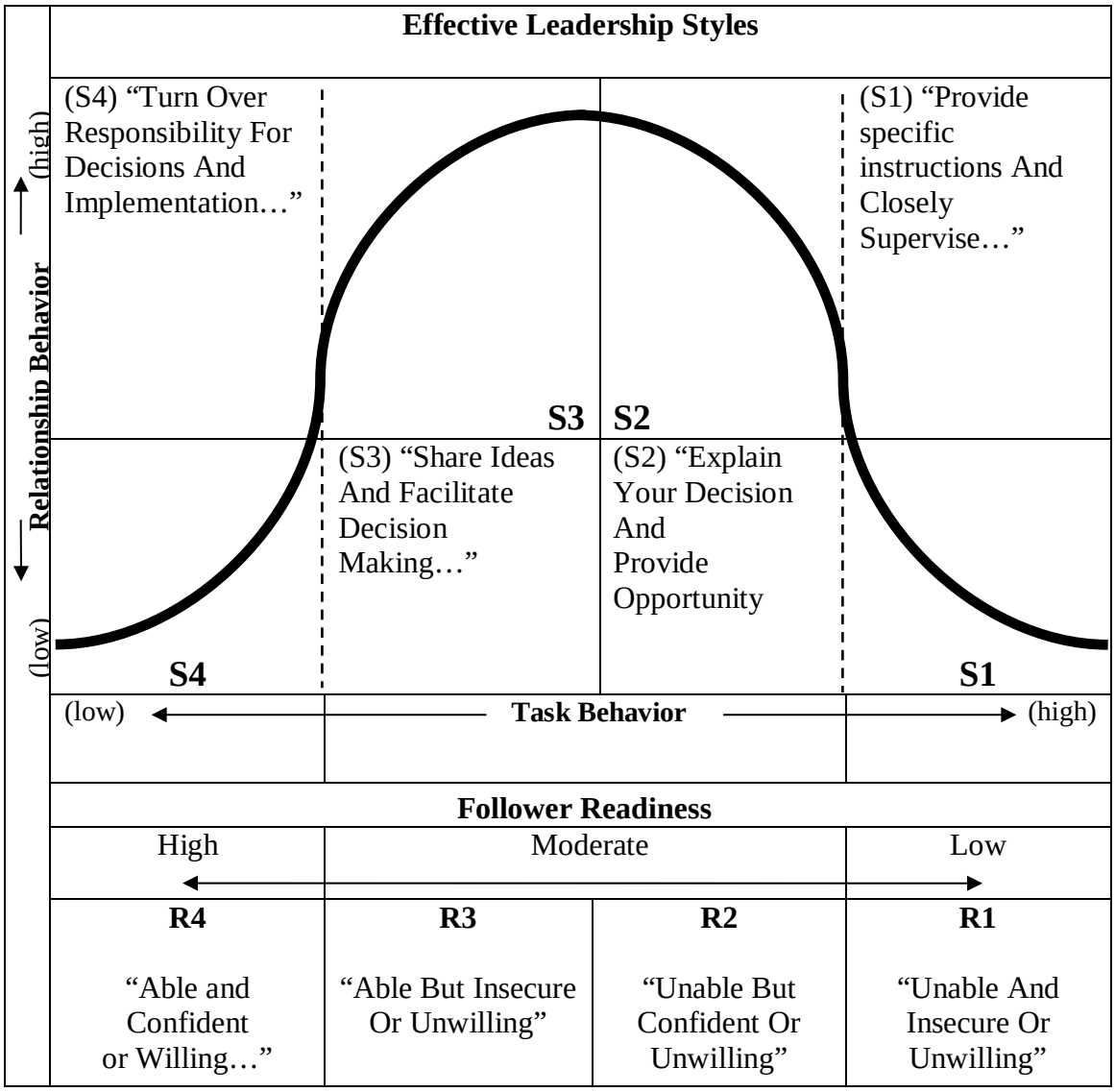

*Note.* Adapted from Hersey, P., Blanchard, K.H., Johnson, D.E. (2001). Management of Organizational Behavior: Leading Human Resources, p. 70.

*Figure* 1- The Relationship Between Herzberg's Motivation-Hygiene Theory and Maslow's Hierarchy of Needs Theory

Some theorists have suggested that the main problem with attempting to extend general theories of leadership to sports settings is the failure to consider the distinct uniqueness of sports teams (Chelladuria & Carron, 1978; Terry & Howe, 1984).

**Situational Leadership Model**

Hersey, Blanchard, and Johnson (2001) have integrated the multiple viewpoints and theories of leadership styles in their Situational Leadership model. This model exhibits motives directed toward goals, resulting in various behavior readiness levels, and appropriate leadership styles for a group to experience satisfaction of needs and reach established organizational goals (see Figure 2).




*Note*. This was adapted from Hersey, Blanchard, Johnson (2001). Management of Organizational Behavior: Leading Human Resources.

*Figure* 2- Relationships Between Leadership Styles (S1-S4) and Follower Readiness Levels (R1-R4)

In Hersey, Blanchard, and Johnson's (2001) presentation of the Situational Leadership model, the member's maturity levels, confidence, and abilities may initially be unknown factors. Hersey, Blanchard, and Johnson (2001) state that McGregor's Theory X and Theory Y (1960) also support the idea of giving people more decision-making power and input since their major extrinsic needs of group membership may have already been met. The two "theories" were not intended to be assumptions that managers make about people, but drew heavily upon Maslow's Theory of Hierarchical Needs. McGregor (1960) also described a link to the "self-fulfilling prophecy" where people in some organizational settings become X-minded. If treated as inferior, lazy, materialistic, dependent, irresponsible, etc., they become so; whereas, people in different organizational settings become Y-minded. If treated as responsible, independent, understanding, goal-achieving, growing, creative people, they become so (McGregor, 1960). Theory X and Y are sets of assumptions, which a manager holds, regarding employees. As a result of these assumptions, managerial methods of control differ. These assumptions can be seen in Figure 3.

| Traditional (X) | Potential (Y) |
|---|---|
| 1. People are naturally lazy; they prefer to do nothing. | People are naturally active; they set goals and enjoy striving. |
| 2. People work mostly for money and status rewards. | People seek many satisfactions in work; pride in achievement; enjoyment of process; sense of contribution; pleasure in association; stimulation of new challenges, etc. |
| 3. The main force keeping people productive in their work is fear of being demoted or fired. | The main force keeping people productive in their work is desire to achieve their personal and social goals. |
| 4. People remain children grown larger; they are naturally dependent on leaders. | People normally mature beyond childhood; they aspire to independence, self-fulfillment, and responsibility. |
| 5. People expect and depend on direction from above; they do not want to think for themselves. | People close to the situation see and feel what is needed and are capable of self-direction. |
| 6. People need to be told, shown and trained in proper methods of work. | People who understand and care about what they are doing can devise and improve their own methods of doing work. |
| 7. People need supervisors who will watch them closely enough to be able to praise good work and reprimand errors. | People need a sense that they are respected as capable of assuming responsibility and self-correction. |
| 8. People have little concern beyond their immediate, material interests. | People seek to give meaning to their lives by identifying with nations, communities, churches, unions, companies, causes. |
| 9. People need specific instruction on what to do and how to do it; larger policy issues are none of their business. | People need ever-increasing understanding; they need to grasp the meaning of the activities in which they are engaged; they have cognitive hunger as extensive as the universe. |
| 10. People appreciate being treated with courtesy. | People crave genuine respect from their fellow men. |
| 11. People are naturally compartmentalized; work demands are entirely different from leisure activities. | People are naturally integrated; when work and play are too sharply separated both deteriorate; “The only reason a wise man can give for preferring leisure to work is the better quality of the work he can do during leisure.” |
| 12. People naturally resist change; they prefer to stay in the old ruts. | People naturally tire of monotonous routine and enjoy new experiences; in some degree everyone is creative. |
| 13. Jobs are primary and must be done; people are selected, trained, and fitted to predefined jobs. | People are primary and seek self-realization; jobs must be designed, modified and fitted to people. |
| 14. People are formed by heredity, childhood and youth; as adults they remain static; “old dogs don’t learn new tricks”. | People constantly grow; it is never too late to learn; they enjoy learning and increasing their understanding and capability. |
| 15. People need to be “inspired” (pep talk) or pushed or driven. | People need to be released and encouraged and assisted. |

*Note.* Adapted from McGregor, D. (1961), *The Human Side of Enterprise* and Lecture by Goodwin Watson in Reports of National Training Laboratories Key Executive Conference (1961).

*Figure 3*- Theory X and Theory Y Assumptions As They Relate to People

The success of the leader is usually assured through the use of different leadership styles that are aligned with the current work environment or the disposition of the followers. Hersey, Blanchard, and Johnson's (2001) Situational Leadership model is a valid tool to use when approaching an organization where there are many unknowns (such as the coach who is unfamiliar with their student-athletes and their readiness levels of maturity to perform necessary tasks and their willingness to do so).

## Selected Past Studies in the Sport Environment

Lillie (1980) conducted a study to determine whether 'successful" and "unsuccessful" coaches of girls' high school basketball teams were identifiable as either autocratic or democratic in their coaching styles and whether there was a relationship between success and coaching styles. Subjects for this study were four coaches of high school girls' basketball in Oklahoma. Two of the coaches were identified as being successful and two were classified as unsuccessful. All four coaches were videotaped on three separate times during the season. A jury of graduate students categorized each coach's behavior as either democratic or autocratic. Also, an opinionaire was given to each athlete to measure the athlete's perception of her coach with regard to leadership style.

Lillie (1980) reported that the results indicated identical characteristics for all four coaches during the in-season practice. Each coach was found to be autocratic in policy, goal, assignment of task and work companion, social distance, and democratic in praise and criticism of the players. Lille (1980) found that successful coaches remained constant

in their leadership styles. The unsuccessful coaches were not constant and the players did not view their coaches as either democratic or autocratic. Finally, she found that the successful coaches were more personally involved with their teams than were the unsuccessful coaches. The successful coaches appeared to take an interest in each individual player and were more involved in practice sessions and games than were the unsuccessful coaches.

White and Lippitt (1953) studied leader behavior and member reaction. They found that leadership style does affect the climate when uninterrupted and can be sustained. For their research findings they studied four groups of 10-year old boys. Each group consisted of five members who met after school to engage in hobbies and social activities. Four adult leaders were trained to exhibit three types of leadership: autocratic, democratic, and laissez faire (see Figure 4). The leaders were shifted from group to group every 6 weeks. Each time the leader moved to a new group, they changed their leadership behavior allowing for each group to experience each style in a different order and with a different leader.

White and Lippitt (1953) found that autocracy can create discontent not always appearing on the surface. This resulted in more dropouts and discontent in the afterschool programs where autocracy was the dominate leadership style. Where the democratic leadership style was displayed there was more group mindedness and more friendliness exhibited.

| Authoritarian | Democratic | Laissez-faire |
|---|---|---|
| 1. All determination of policy by the leader | 1. All policies a matter of group discussion and decision, encouraged and assisted by the leader | 1. Complete freedom for group or individual decision, with a minimum of leader participation |
| 2. Techniques and activity steps dictated by the authority, one at a time, so that future steps were always uncertain to a large degree | 2. Activity perspective gained during discussion period. General steps to group goal sketched, and when technical advice was needed, the leader suggested two or more alternative procedures from which choice could be made | 2. Various materials supplied by the leader, who made it clear that he would supply information when asked. He took no other part in work discussion |
| 3. The leader usually dictated the particular work task and work companion of each member | 3. The members were free to work with whomever they chose, and the division of tasks was left up to the group | 3. Complete nonparticipation of the leader |
| 4. The dominator tended to be "personal" in his praise and criticism of the work of each | 4. The leaders was "objective" or "fact-minded" in his praise and criticism. | 4. Infrequent spontaneous comments on member activities unless questioned |
| 5. Leader remained aloof from active group participation except when demonstrating | 5. Leader tried to be a regular group member in spirit without doing too much of the work. | 5. Leader made no attempt to appraise or regulate the course of events |

*Note.* Adapted from White and Lippit (1943).

*Figure* 4: Leader Behavior and Member Reaction in Three "Social Climates"

Cody (1975) used a sociometric technique, a study of relationships between social structures and psychological well-being to examine the factor of interpersonal liking. The purpose of the study was to examine the relationship between cohesiveness and success in high school girls' gymnastics teams in Colorado. The purpose was to study the effects of group size, interpersonal liking, style of leadership, and similarity of members in cohesiveness and success. Five gymnastics coaches were asked to judge the appropriateness of each criterion selected. Findings indicated a positive linear

relationship between group cohesiveness and team success (< .25), indicating that successful teams tend to be cohesive and vice versa. A Spearman rho was performed between interpersonal liking and cohesiveness. No significant relationship was found between either combination of those variables. With regard to group norms Cody (1975) found a significant negative correlation (> .05) between team cohesiveness and similarity among members with respect to opinions toward group norms. Her findings indicate that the more diverse a team's opinion toward specified member behaviors the more cohesive the team. This may suggest that further examination of data by reviewing individual responses and examining potential patterns of responses between all variables within teams may determine if subgroups possess opinions toward group norms.

Weiller (1986) identified leaders from a professional men's basketball team, the Dallas Mavericks. She focused on two areas: 1) individuals whom the coaching staff, players, fans, and selected sportscasters and sportswriters saw as exhibiting leadership functions relating to the overall goals of the team; and 2) determining the relationship between leadership choices by the coaches, players, fans, and selected sportscasters and sportswriters. Weiller (1986) had the following conclusions from her study: 1) the most effective leaders of the team were satisfactorily identified; 2) directionality of leadership determined; and 3) the influence of leadership was exposed as being either positive, negative or a combination of the two.

## Task and Maintenance Functions of Coaches

### Lowry (1972) Instrument and Leadership Function

The Lowry (1972) instrument determined leadership functions as perceived by 622 female student-athletes from college volleyball and basketball teams. This study recognized 14 leadership functions determined by a survey of literature related to group dynamics and leadership studies by Benne and Sheats (1948); Cartwright and Zander (1968); Lippitt, (1961); and Lippitt and Seashore (1966). The 14 leadership functions were garnered from the 18 functions of previous studies by the utilization of pilot studies that considered which functions were more relevant to team sport group situations. The 14 functions were divided into maintenance or task functions and were classified as such by an international jury of experts composed of Dr. Dorwin Cartwright, Dr. Robert Littlefield, and Dr. Alvin Zander.

The narrowing from 18 to 14 functions met the recommendation of 15 or fewer items in content in order to utilize the paired comparison instrument. The paired comparison instrument was utilized to not only establish ranks, but to provide information concerning the distance between those ranks.

With regard to leadership function and sources of power and influence, and sources of group attraction, Lowry's (1972) study again aligned with Lippitt and Seashore (1966). They stated that task functions are those leadership functions which "…facilitate and coordinate group effort in the selection and definition of a common problem and in the solution of that problem." (p. 47) Maintenance functions are those

leadership functions which “alter or maintain the way in which members of the group work together and develop loyalty to one another and to the group as a whole.” (Lippett & Seashore, p. 49) The Lowry instrument was chosen for use in the present study regarding NCAA Div I female student-athletes.

Another study of note was that of Weiller (1980), who chose to use the leadership functions paired comparison instrument as developed by Lowry (1972). According to her the instrument was chosen because of its thoroughness and its applicability to a team sport group situation. The difference in Weiller’s (1980) study from Lowry’s (1972) was that she chose to gather information to establish an individual profile of leadership functions for each team member. Weiller (1980) collected data from eighteen members of the Texas Woman’s University intercollegiate softball team and coach during the 1979 spring semester.

The general purpose of Weiller’s (1980) study was to identify the leaders and leadership functions of an intercollegiate softball team and to establish their relationship with the overall goals of the team. She utilized two methods in order to fulfill the purpose of her study. The methods involved identification of information on the interactions of the participants as well as a collection of scale-valued information from the subjects: the sociogram method and the paired comparison method. These instruments were found to be effective in identifying the players whom the coach viewed as possessing team leadership and the players ascribed a higher status to those leadership functions dealing with communication or group maintenance.

**Trait Theory**

The survey of literature revealed a variety of research methods used regarding the study of leadership and group functionality. Most of the early research into leadership effectiveness was directed outside of sports settings (usually business, military or education) and tended to use one or two approaches (Horn, 2002). Lowry (1972) notes that in the following studies, several trait approaches were used regarding leadership, although early "…distinguished researchers such as Bird (1940), Jennings (1943), Gibb (1954), Stogdill (1948), and Gouldner (1950) discredited the trait approach by showing inconsistencies and inadequacies in the methodology and findings." (p. 3)

Of those listed, Bird (1940) surveyed leadership trait studies revealing 79 traits mentioned in 20 different studies. Only five percent of those traits mentioned were common in other studies. Then Jennings (1943) found that leadership was a product of "interpersonal interaction and not of the attributes residing within persons." (p. 203) And, according to Lowry (1972), Gibb (1954) and Gouldner (1950) showed that there was a failure of researchers to establish a definitive relationship between personality traits and leadership.

Hersey, Blanchard, and Johnson (2001) held the position of almost all other leadership researchers, when they state "…that leaders are both born and made." (p. 11) Interestingly, Crust and Lawrence (2006) state that the most commonly used approaches were trait and behavioral and that the trait approach assumed that leaders were born and not made or that "effective leadership was founded on innate personality dispositions

rather than a function of learning." (p. 5) This makes the assumption of a behavioral approach that provides leaders who were made and not born or that "effective leadership…was a function of a leader's dominant behaviors." (p. 5)

Lowry (1972) expressed that Cartwright and Zander (1968) explained that certain theorists such as, Barnard (1938), Cattell (1951), French (1949), Likert (1959), Lippitt (1940), Redl (1942), each had this common observation regarding groups: task, maintenance, and leadership functions all influence leadership and/or groups.

Several more recently proposed theories such as Goleman's Theory of Primal Leadership (Goleman, Boyatzis, & McKee, 2002), The Functionalist theory (Coakley, 2004), The Social Categorization or Identity Theory (Stevenson, 1999; Donnelly & Young, 1999), are combined in The Interactionist Theory, which "…focuses on issues related to meaning, identity, social relationships, and subcultures in sports. It is based on the idea that human behavior involves choices and that choices are based on the definitions of reality that people form as they interact with others." (Coakley, 2004, p. 43)

**Generational Influence**

In order to understand the challenges ahead, leaders need to be aware of current studies regarding characteristics of potential members of their group and how they may affect the organizations. One such study, by the Pew Research Center (February 2010), a nonpartisan fact tank that conducts empirical social science research, reviewed the work ethic of Millennials, those 50 million people ages 18-29, from whose ranks current collegiate athletes are drawn. This report showed that this generation is self-confident but

display little appetite for claims of moral superiority. Shapira (April 3, 2010) noted that Millenials are harsh critics of others their age, tend to be free spirited, do not accept that it takes long, concerted effort to build a career or a team. Lackey, Kamena, and Lackey (November, 2009) identified key characteristics of the Millennial generation in order to help senior Army leadership completely redesign training to accommodate the current generational differences. They found that Millennials: 1) normally are considered to be upbeat and optimistic team players, 2) are accustomed to supervision and being told what to do, 3) are receptive to advice from superiors (as long as they know that their job is important), 4) require praise and reinforcement, 5) don't take criticism well, and 6) are very ambitious and money is highly important to them. To date there have been little published research with respect to how these characteristics are reflected on sport teams.

If the military is willing to study millennial behavior in order to provide state-of-the-art training and build cohesive teams of soldiers, coaches may find it just as important to revisit the way they teach, train, and manage their athletes.

## Team Cohesiveness

The definition of cohesion- 'a dynamic process that is reflected in the tendency of a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs' (Carron, Brawley, & Widmeyer, 1998, p. 213) – this may implicitly convey the generally held assumption about team cohesion and team success; that is, greater team cohesiveness is assumed to be related to greater team success.

Perceptions develop within inter-dependent environments. Team members perceive their team's task unity similarly, which provides support for a conceptualization of 'cohesion-as-shared-beliefs' (Carron, Brawley, & Widmeyer, 1998; Carron & Brawley, 2000; Paskevich, Estabrooks, Brawley, & Carron, 2001). One of the effective ways to understand college athletes' behaviors is to know their perceptions of coach behavior, especially since human behavior is determined by his/her perceptions of those around them (Wang & Callahan, 1999). This could present a challenge for the way we interpret that environment in what is seen, heard, or felt affecting bias within measures of cohesion by members of the group since perceptions of team cohesion can change under a multitude of conditions.

Cartwright and Zander (1968) suggested that if a team wishes to develop into a cohesive group they might expect the following from its members:

a) Have a vested interest in the Group Goal—whether for reasons outside the group (personal needs) or personal goal that is a group goal
b) Sensitivity to small differences among members
c) Open and free to identify existing differences
d) Assume they can persuade one another and attempt to do so
e) Know that status and role relationships are dynamic
f) Respond to content of differences rather than to the person speaking
g) And, will move to reconcile differences quickly

Wang, Chen and Jian (2004) and Bortoli, Robazza, and Giabardo (1995) postulated that positive coach-athlete interactions tend to enhance motivations, induce pleasant emotions, and create satisfactory and positive climates. This may mean that while coaches are constantly making evaluations about their athletes, student-athletes are

also formulating assessments about their coaches' personalities and behaviors, which may offer important insights into valuable information needed to improve this relationship.

Team cohesiveness is assumed to be related to greater team success; and, therefore could become a factor in helping groups to remain intact. When Mullen and Copper (1994) carried out their meta-analysis of 49 studies involving various sub disciplines in psychology (e.g. industrial, sport, military, social), their conclusions appeared to provide unequivocal answers for sport psychology.

In fact, Mullen and Copper (1994) reported that the strongest relationship between cohesion and group success is present in sport teams, followed by military groups and then non-military groups. In many ways, the ability to bring a team together through strong leadership can be exemplified in the Army leadership model. Figure 5 graphically illustrates the "Be, Know, Do" model followed in U.S. Army Field Manual 22-100. In this model, The Army Leadership Framework, "Be" deals with character- a person's inner strength. This is the component in which the leader mentors subordinates whether they are assistant coaches, team leaders, or student-athletes. "Know" means a leader must have a certain level of knowledge to be competent. That knowledge is spread across four skill domains: interpersonal skills, conceptual skills, technical skills, and tactical skills. In this component, the effective coach or team leader will be a teacher whose knowledge is gained through application and experience. "Do" refers to leader actions which include influencing, operating and improving. This is the area where leadership behaviors

influence team and individual actions to accomplish goals while minimizing discomfort (HQDA, 1999). From any team building perspective, one would want to belong on the team that can achieve its objectives with a minimum amount of “discomfort”.


*Note.* This was adapted from HQDA (Headquarters, Department of the Army). (August, 1999). *Field Manual 22-100, Army Leadership.* Washington, DC.

*Figure* 5- The Army Leadership Framework

In order for team cohesion to exist, it appears that there must be a positive perception of the coaching staff as teachers, mentors, and leaders. After all, coaches attempt to lead people to accomplish goals, but they also manage resources, materials, and time to the accomplishment of those goals. A student-athlete’s perceptions of their

coaches may also be developed as the coaching staff demonstrates their own character, knowledge, and professional skills. Military research has shown that "once your soldiers respect you, and want your approval, you can guide them to demonstrate unselfish concern for the unit and for other soldiers" (HQDA, 1990), which may be interpreted as team cohesiveness.

Most successful organizations have a common bond of interdependence, mutual interest, interlocking contributions, and simple joy (De Pree, 2004). "The reasons why people participate in sport and physical activity may be broadly classified as (a) pursuit of pleasure, (b) pursuit of skill, (c) pursuit of excellence, and (d) pursuit of health and fitness." (Chelladurai, 2001, p. 31)

## Lencioni Team Assessment

Lencioni (2002) developed a training program that included a questionnaire about team functionality. He wanted to identify whether a group was a real team- one willing to invest time and emotional energy in the process, and one that wanted to define whether an organization could be or become a team of members that shared common goals, rewards and responsibilities for achievement (Lencioni, 2005). He confirmed the fact "…that teams, because they are made up of imperfect human beings, are inherently dysfunctional." (Lencioni 2002, p. vii)

The Lencioni (2002) instrument was tested on hundreds of individuals and over fifty corporate teams. The *Five Dysfunctions model* had been field tested for more than three years before being incorporated in the actual assessment. The instrument was

validated using the Korn/Ferry T7 Model of Team affectiveness, being one of the most comprehensive assessments of team affectiveness, with 303 teams (3,328 participants) in 50 organizations across a variety of industry sectors (DeMeuse, 2009). The Lencioni (2002) instrument was used to gather data about how team members perceive their own team's functionality in five areas: 1) trust, 2) healthy conflict, 3) commitment, 4) accountability, and 5) focus on results. He arranged these five functionalities into a pyramid to demonstrate the hierarchical progression of team development. This progression was similar to Maslow's Hierarchy of Needs Theory (1954), where there are five levels, and each must be satisfied in order to move on to the next level: 1) physiological, 2) safety or security, 3) social or affiliation, 4) esteem, 5) self-actualization.

**Socio-Cultural Environments**

Participants or student-athletes can perceive their team's task of unity similarly, which provides support for a conceptualization of "cohesion-as-shared-beliefs" (Carron, Brawley, & Widmeyer, 1998). When using individual athletes as the unit of measurement, perception in general is characterized by the individual's cognition about cohesion (Carron & Spink, 1995). The Carron, Bray, and Eys (2002) research examining the relationship of cohesion to team success illustrated that the group average can be used to represent the cohesiveness in each team and win/loss percentage can be used to represent team success. For this reason, one of the effective ways to understand college athletes' behaviors is to know their perceptions of those around them (Wang & Callahan,

1999). “Athletic teams are organizations in their own right, possessing the same attributes as conventional organizations; their uniqueness lies in the limited and specified roster and activities, and the publicity of their performance.” (Chelladurai, 2001, p. 59)

# CHAPTER III

# METHOD

Chapter III provides the methodology used in this study. The researcher attempted to investigate the direct impact of team cohesiveness and student-athletes' perceptions of coaching behavior/leadership functions on the success of winning and losing teams in NCAA Division I Women's Basketball. The chapter also includes a description of the selection of subjects, type of instruments used procedures, pilot study, and statistical design and analysis to insure accurate testing and evaluation of the research questions.

The Methods for Conduct of Study section gives a broad overview of the data collection process. The Selection of Subjects section provides a general description of the target population and the size of this study. The Instrument Design section presents the details of the instruments utilized to measure coaching behavior/functions and team cohesiveness. The collection of the data section offers the procedures used for the distribution of the demographic questionnaire and the survey instruments. The pilot study section presents the technique used to determine if the direction for the survey instruments being used and wording of instruments was understood by a collegiate student-athlete population group. The final section, statistical design and analysis, gives justification for the use of the paired comparison instrument.

## Methods for Conduct of Study

The data collection was quantitative in nature. Aliaga and Gunderson (2003) state that the collecting of numerical data and analysis using particular statistics to explain particular phenomena can potentially show influence even when predicated by perception. The quantitative analysis used for this study complimented the research design and data collection instruments.

### Selection of Subjects

Criteria for selection of participants included:

1. Southland Conference top four women's basketball teams, based on win/loss during the 2010 season.
2. Southland Conference bottom four women's basketball teams, based on win/loss during the 2010 season.
3. Permission from the women's basketball coaches from the selected universities in the Southland Conference for the 2010 season for their student-athletes to participate.
4. Female student-athletes on one of the top four women's basketball winning teams.
5. Female student-athletes on one of the bottom four women's basketball losing teams.
6. Female student-athletes at selected universities were current sophomore, junior, or senior basketball players who competed during the 2010 season.
7. Participation was voluntary.

**Instruments**

For this study, the researcher used the following instruments: Demographic Questionnaire, Leadership Functions Instrument (LFI), and the Lencioni Team Assessment (LTA):

1. Demographic Questionnaire: This instrument was used to gain the following information regarding the participants (see Appendix A):
    - Age
    - Race
    - Classification- sophomore/junior/senior
    - Transfer student
    - Years participated in competitive basketball, including high school, summer leagues, AAU
    - Home town classified as either urban or rural
    - Scholarship/non-scholarship
    - Participation in on campus non-athletic student organizations
    - Decisive influence on signing: team's reputation, coach's reputation, university's reputation, or scholarship amount
2. Leadership Functions Instrument (LFI): a paired comparison instrument consisting of 14 leadership functions. This instrument was developed by Dr. Carla Lowry (1972) with a jury of Dr. Dorwin Cartwright, Dr. Robert Littlefield, and Dr. Alvin Zander.

The instrument was based upon the jury's unanimous opinion obtained on classification of each function as trait or interpersonal.

The selection of the paired comparison technique was based upon its appropriateness and reliability as a method of collecting data. The method of paired comparison was employed in this instrument to obtain scale values of coach leadership functions. Yu (2011) stated that this method establishes the hierarchy of the items' ranks and establishes the valence of the difference between ranks. This psychometric method allows the rater to make a comparative judgment between two items as to which of the two is more important. The comparative judgment is made in relation to a question asked or a criterion stated.

The method of paired comparison is a widely used technique for describing preference behavior, based on the principles described by Thurstone (1927). This method requires participants to compare a pair of two items, and choose the item that best answers the posed question. Garner and Engelhard (1997) indicated that the method can reduce preference behavior to its most basic and most easily grasped element- a person's choice between two objects. The method of paired comparison is most often used to collect data for constructing scales based on comparative judgment (Wixted, 2002) (see Leadership Functions Instrument, Appendix B).

3. Lencioni Team Assessment (LTA): This is a straightforward diagnostic tool for helping to assess how members of truly cohesive teams behave. The LTA consists of 15 questions measured by a scale of U= Usually, S= Sometimes, and R= Rarely. This

questionnaire has been proven to be both reliable and valid based on the classification process and the numerous pilot study rankings, as stated by the publisher, Jossey-Bass & Wiley, via e-mail (A. Knox, personal communication, July 29, 2011). Lencioni (2002) developed this questionnaire based on his personal experience working with CEO's of Fortune 500 companies and their teams. From this experience he discovered two critical truths: genuine teamwork in most organizations remains as elusive as it has ever been and organizations fail to achieve teamwork because they unknowingly fall prey to five natural but dangerous pitfalls: absence of trust, fear of conflict, lack of commitment, avoidance of accountability, and inattention to results.

For the purpose of this study, Lencioni's (2002) positive approach was used in order to determine how members of truly cohesive women's collegiate basketball teams behave. Lencioni's (2002) five indicators of cohesive teams are: (1) teams trust one another, (2) teams engage in unfiltered conflict around ideas, (3) teams commit to decisions and plans of action, (4) teams hold one another accountable for delivering against those plans, and (5) teams focus on the achievement of collective results (see Appendix C).

**Data or Procedures Collection**

1. The researcher contacted the Southland Conference office to acquire the win/loss records of their women's basketball teams for the 2010 season.
2. The researcher contacted by phone, followed up with an e-mail, and a written letter to coaches of the top four winning teams and the bottom four losing teams

to explain the study and obtain permission to invite their student-athletes to participate in the study. The researcher informed the coaches that she would provide them with a copy of the findings upon request.

3. The coach was asked to arrange a time and location where the researcher could visit the university and administer the instruments involved in the study.
4. The researcher sent thank you letters for participation to the coaches for allowing their teams to be participants in the study and provided a thank you letter for the coaches to share with their student-athletes.

**Data Analysis**

1. The demographic questionnaire: Completed a sum score and percent of each item by individual teams and a collective profile of winning teams and losing teams.
2. The Leadership Function Instrument (LFI): Obtained a sum score, percentage, and the rank of each of the 14 functions selected by all participants from each of the winning teams and each of the losing teams, and a profile of winning teams and a losing teams.
3. The Lencioni Team Assessment (LTA): Obtained the sum score and percent of each response to each of the 15 items and developed a profile for each of the 8 teams and developed a profile of winning teams and losing teams.

## Pilot Study

Well-designed studies are first field tested (McMillan & Schumacher, 2001). This was accomplished by a pilot study, conducted at a NCAA Div II university that offered a

women's basketball program. Permission from the women's basketball head coach was provided and participants consisted of female student-athletes who were current sophomore, junior, or senior basketball players who competed during the 2010 season. Their participation was voluntary.

During student-athlete participation it was discovered that changes needed to be made to various questions on the survey instruments, to provide a clearer definition of terms used on the survey instruments and to supply clarification for how to complete the survey instruments. Other discoveries included the shortening of the Script for the Test Administrator. All modifications improved the quality of the instruments used and aided in improving the process.

The investigator was able to ensure that subsequent participants clearly understood the questionnaires and survey instruments, as a result of the pilot study.

## Statistical Design and Analysis

Data collected from the student-athletes were described using the statistical software program, SPSS 19.0. The paired comparison instrument was used to establish rank order of percentage of frequency and to provide information concerning the distance between those ranks. Parallel data was presented from the Lowry (1972) study in order to provide context information regarding present measurements. These results are discussed in Chapter V.

**Reliability and Validity Analysis**

The direction and magnitude of the degree of agreement or disagreement in the Leadership Functions Instrument (LFI), for the 14 leadership functions ranked by Lowry's (1972) survey instrument using 622 student-athletes, was determined by computing Spearman Rank-Order Correlations (Bruning & Kintz, 1969). The significance of the obtained coefficients was determined by comparing the obtained coefficient values to tabled coefficient values (Roscoe, 1969). The paired comparison instrument establishes ranks and information concerning the distance between those ranks. The significance of the difference between the ranks was determined by using, The Test for Significance of Difference Between Two Proportions.

The Lencioni Team Assessment (LTA) was found reliable and valid based on the classification process as stated by Jossey-Bass & Wiley, via e-mail (A. Knox, personal communication, July 29, 2011) and the numerous pilot study rankings.

# CHAPTER IV

# PRESENTATION OF FINDINGS

The purpose of this research was to investigate the direct impact of team cohesiveness and student-athletes' perception of coaching behavior/leadership functions on the welfare of winning and losing teams in NCAA Division I Women's Basketball. A selection of results from the full analysis is presented in this chapter.

## Demographics

The frequencies and percentages for the categorical demographic variables are displayed in Table 1. Approximately (50.7%) of the student-athletes were between the ages of 20-21, and a majority (58.9%) were Black. Due to the small number of participants who reported other races, cross-tabulation analyses presented below did not include participants in this group. There were more seniors (41.1%) than sophomores (31.5%) or juniors (27.4%), with the majority (79.5%) being non-transfer students. In addition, 60.3% of students had participated in competitive basketball for 8 or more years. For location, 71.2% of students grew up in urban areas. Almost all of the student-athletes (90.4%) were on an athletic scholarship. 87.7% of those athletes had some form of financial aid and almost three-fourths of the students were not participating in non-athletic student organizations. When asked about what influenced signing to play at their particular college, 43.8% of the student-athletes reported the team's reputation and scholarship amount equally, then university reputation followed by coach reputation.

Table 1

*Frequencies and Percentages for Demographic Variables*

| | Frequency | % |
|---|---|---|
| Age | | |
| 17-19 | 17 | 23.3 |
| 20-21 | 37 | 50.7 |
| 22-23 | 19 | 26.0 |
| Race | | |
| Black | 43 | 58.9 |
| White | 18 | 24.7 |
| Other | 12 | 16.4 |
| Classification | | |
| Sophomore | 23 | 31.5 |
| Junior | 20 | 27.4 |
| Senior | 30 | 41.1 |
| Transfer Student | | |
| No | 58 | 79.5 |
| Yes | 15 | 20.5 |
| Years Participated | | |
| 1-8 Years | 29 | 39.7 |
| 9 or More | 44 | 60.3 |
| Location | | |
| Urban | 52 | 71.2 |
| Rural | 21 | 28.8 |
| Athletic Scholarship | | |
| No | 7 | 9.6 |
| Yes | 66 | 90.4 |
| Non-Athletic Scholarship | | |
| No | 65 | 89.0 |
| Yes | 8 | 11.0 |

(continued)

Table 1, continued

| | Frequency | % |
|---|---|---|
| Non-Athletic Scholarship | | |
| No | 65 | 89.0 |
| Yes | 8 | 11.0 |
| No Financial Aid | | |
| No | 64 | 87.7 |
| Yes | 9 | 12.3 |
| Participation in Student | | |
| No | 53 | 72.6 |
| Yes | 20 | 27.4 |
| Team Reputation | | |
| No | 41 | 56.2 |
| Yes | 32 | 43.8 |
| Coach Reputation | | |
| No | 45 | 61.6 |
| Yes | 28 | 38.4 |
| University Reputation | | |
| No | 43 | 58.9 |
| Yes | 30 | 41.1 |
| Scholarship Amount | | |
| No | 41 | 56.2 |
| Yes | 32 | 43.8 |

*Note.* Frequencies not summing to $N = 73$ reflect missing data.

Table 2 indicates the results of the most chosen categories for the demographic questionnaire.

Table 2

*Highest Percent of Frequency for each Demographic for Student-Athletes from Winning and Losing Teams*

| Demographic Groups | Categories | Percent of Frequency |
|---|---|---|
| Age | 20-21 | 50.7 |
| Race | Black | 58.9 |
| College Classification | Senior | 41.1 |
| Transfer Student | No/Transfer | 79.5 |
| Number of Years Playing | 9 or More Years Playing | 60.3 |
| Hometown of Athlete | Urban Setting | 71.2 |
| Did Student Receive Financial Aid | Athletic Scholarship | 90.4 |
| Student Organization Membership | Athlete does not belong to Student Organizations | 72.6 |
| Why Did Athlete Sign with Program | Other/Combination of Factors | 43.9 |

*Note*. *N* = 73

## Coaching Leadership Functions

The reader is reminded that 14 leadership functions (seven task and seven maintenance functions) were paired with all 13 coaching leadership functions using the paired comparison technique. The frequencies and percentages of the ranks of leadership functions to be performed by the coach as designated by student-athletes from winning teams is displayed in Table 3. The three most frequently selected were 1) *attempts to*

*keep communication channels open*, 2) *provides encouragement*, and 3) *keeps members' attention on goals*. *Expresses group feelings* and *to settle or decide disagreements* were the least chosen expected behaviors or functions of the coach.

Table 3

*Ranks and Percentages of the Ranks of Leadership Functions to be Performed by the Coach as Designated by The 34 Women Student-Athletes from Winning Teams*

| Rank | Leadership Function | Frequency ($n$ = 507) | Percent of Frequency |
|---|---|---|---|
| 1 | Attempts to Keep Communication Channels Open | 357 | 70.41% |
| 2 | Provides Encouragement | 356 | 70.22% |
| 3 | Keeps Members' Attention on Goals | 347 | 68.44% |
| 4 | Evaluates Progress Towards Goals | 286 | 56.41% |
| 5 | Evaluates Quality of Work Done | 284 | 56.02% |
| 6 | Gives Minority a Chance to be Heard | 280 | 55.23% |
| 7 | Keeps Interpersonal Relations Pleasant | 260 | 51.28% |
| 8 | Develops a Procedural Plan | 248 | 48.92% |
| 9 | Initiates Action(s) | 229 | 45.17% |
| 10 | Provides Needed Information | 224 | 44.18% |
| 11 | Seeks Relevant Information | 208 | 41.03% |
| 12 | Increases Interdependence Among Members | 204 | 40.24% |
| 13 | Expresses Group Feelings | 139 | 27.42% |
| 14 | To Settle or Decide Disagreements | 137 | 27.02% |

*Note:* Student-Athletes from Winning Teams ($N$ = 34)

The frequencies and percentages of the ranks of leadership functions to be performed by the coach as designated by student athletes from losing teams is displayed in Table 4. *Attempts to keep communication channels open* and *keeps members' attention on goals* were selected as the two most influential behaviors for the coach to perform. The third most important function selected was *to provide encouragement*. The two least important factors were *expresses group feelings* and *to settle or decide disagreements*.

Table 4

*Ranks and Percentages of the Ranks of Leadership Functions to be Performed by the Coach as Designated by The 39 Women Student-Athletes from Losing Teams*

| Rank | Leadership Function | Frequency ($n$ = 442) | Percent of Frequency |
|---|---|---|---|
| 1 | Attempts to Keep Communication Channels | 315 | 71.27% |
| 2 | Keeps Members' Attention on Goals | 315 | 71.27% |
| 3 | Provides Encouragement | 265 | 59.95% |
| 4 | Evaluates Progress Towards Goals | 249 | 56.33% |
| 5 | Develops a Procedural Plan | 249 | 56.33% |
| 6 | Gives Minority a Chance to be Heard | 242 | 54.75% |
| 7 | Evaluates Quality of Work Done | 236 | 53.39% |
| 8 | Keeps Interpersonal Relations Pleasant | 203 | 45.93% |
| 9 | Provides Needed Information | 195 | 44.12% |
| 10 | Increases Interdependence Among Members | 194 | 44.12% |
| 11 | Initiates Action(s) | 193 | 43.67% |
| 12 | Seeks Relevant Information | 193 | 43.67% |
| 13 | Expresses Group Feelings | 129 | 29.19% |
| 14 | To Settle or Decide Disagreements | 116 | 26.24% |

*Note*. Student-Athletes from Losing Teams ($N$ = 39)

The frequencies and percentages of the ranks of leadership functions to be performed by the coach as designated by student athletes from winning and losing teams is displayed in Table 5. The three most frequently selected functions expected of their coach by the female student-athletes were *attempts to keep communication channels open*, *keeps members' attention on goals*, and *provides encouragement*. *Expresses group feelings* and *to settle or decide disagreements* were the two least chosen functions.

Table 5

*Ranks and Percentages of the Ranks of Leadership Functions to be Performed by the Coach as Designated by The 73 Student-Athletes from Winning and Losing Teams*

| Rank | Leadership Function | Frequency ($n$ = 949) | Percent of Frequency |
|---|---|---|---|
| 1 | Attempts to Keep Communication Channels | 672 | 70.81% |
| 2 | Keeps Members' Attention on Goals | 662 | 69.76% |
| 3 | Provides Encouragement | 621 | 65.44% |
| 4 | Evaluates Progress Towards Goals | 535 | 56.38% |
| 5 | Gives Minority a Chance to be Heard | 522 | 55.01% |
| 6 | Evaluates Quality of Work Done | 520 | 54.79% |
| 7 | Develops a Procedural Plan | 497 | 52.37% |
| 8 | Keeps Interpersonal Relations Pleasant | 463 | 48.79% |
| 9 | Initiates Action(s) | 422 | 44.47% |
| 10 | Provides Needed Information | 419 | 44.15% |
| 11 | Seeks Relevant Information | 401 | 42.26% |
| 12 | Increases Interdependence Among Members | 398 | 41.94% |
| 13 | Expresses Group Feelings | 268 | 28.24% |
| 14 | To Settle or Decide Disagreements | 253 | 26.66% |

*Note*. Student-Athletes from Winning and Losing Teams ($N$ = 73)

Table 6 summarizes winning and losing student-athlete choices of what task and maintenance functions should be performed by the coach. Both winning and losing team student-athletes made the same choices of order for maintenance leadership functions but showed a measureable difference in the frequency of percentage between the function of *provides encouragement*.

Table 6

*Ranks of Frequency and Percentages of Maintenance and Task Leadership Functions to be Performed by the Coach as Designated by The 73 Women Student-Athletes from Winning and Losing Teams*

| Maintenance Leadership Functions | Rank | Winning ($n$ = 507) | % $f$ | Rank | Losing ($n$ = 442) | % $f$ |
|---|---|---|---|---|---|---|
| Attempts to Keep Communication Channels Open | 1 | 357 | 70.41 | 1 | 315 | 71.27 |
| Provides Encouragement | 2 | 356 | 70.22 | 2 | 265 | 59.95 |
| Gives Minority a Chance to be Heard | 3 | 280 | 55.23 | 3 | 242 | 54.75 |
| Keeps Interpersonal Relations Pleasant | 4 | 260 | 51.28 | 4 | 203 | 45.93 |
| Increases Interdependence Among Members | 5 | 204 | 40.24 | 5 | 194 | 44.12 |
| Expresses Group Feelings | 6 | 139 | 27.42 | 6 | 129 | 29.19 |
| To Settle or Decide Disagreements | 7 | 137 | 27.02 | 7 | 116 | 26.24 |
| Task Leadership Functions | | | | | | |
| Keeps Members' Attention on Goals | 1 | 347 | 68.44 | 1 | 315 | 71.27 |
| Evaluates Progress Towards Goals | 2 | 286 | 56.41 | 2.5 | 249 | 56.33 |
| Evaluates Quality of Work Done | 3 | 284 | 56.02 | 4 | 236 | 53.39 |
| Develops a Procedural Plan | 4 | 248 | 48.92 | 2.5 | 249 | 56.33 |
| Provides Needed Information | 6 | 224 | 44.18 | 5 | 195 | 44.12 |
| Seeks Relevant Information | 7 | 208 | 41.03 | 6.5 | 193 | 43.67 |
| Initiates Action(s) | 5 | 229 | 45.17 | 6.5 | 193 | 43.67 |

*Note*. Student-Athletes ($N$ = 73): Winning ($N$ = 34), Losing ($N$ = 39)

## Team Cohesiveness in Winning Teams

The reader is reminded that the Lencioni Team Assessment (LTA) is comprised of five team functions (Trust, Healthy Conflict, Commitment, Accountability, and Focus on Results). The overall scores derived from statement items for cohesive team behavior and functionality in winning teams is displayed in Table 7.

Table 7

*Overall Scores Derived from Statement Items for Cohesive Team Behavior and Functionality in Winning Teams Based on Percentage Win/Loss*

| Team Functionality | Usually | | Sometimes | | Rarely | |
|---|---|---|---|---|---|---|
| Item # - Statement | *f* | % | *f* | % | *f* | % |
| <u>F1 – Trust</u> | | | | | | |
| #4- Team members thoughtfully apologize for actions that could possibly damage the team. | 6 | 15.4 | 15 | 38.5 | 18 | 46.2 |
| #6- Team members openly admit their weaknesses and mistakes. | 3 | 7.7 | 17 | 43.6 | 19 | 48.7 |
| #12- Team members are comfortable discussing each other's personal lives. | 9 | 23.1 | 20 | 51.3 | 10 | 25.6 |
| <u>F2 – Healthy Conflict</u> | | | | | | |
| #1- Team members hold passionate, authentic discussion of issues. | 3 | 7.7 | 23 | 59.0 | 13 | 33.3 |
| #7- Team meetings are compelling, and not boring. | 9 | 23.1 | 21 | 53.9 | 9 | 23.1 |
| #10- During team meetings, all issues may put on the table to be resolved. | 13 | 33.3 | 13 | 33.3 | 13 | 33.3 |

(continued)

Table 7, continued

| Team Functionality<br>Item # - Statement | Usually<br>*f* | <br>% | Sometimes<br>*f* | <br>% | Rarely<br>*f* | <br>% |
|---|---|---|---|---|---|---|
| <u>F3 – Commitment</u> | | | | | | |
| #3- Team members know what their peers are working on to contribute to the good of the team. | 4 | 10.3 | 22 | 56.4 | 13 | 33.3 |
| #8- Team members leave meetings knowing their peers are committed to the team's decision. | 10 | 25.7 | 18 | 46.2 | 11 | 28.2 |
| #13- Team members end discussions with clear goals and action plans. | 2 | 5.1 | 23 | 59.0 | 14 | 35.9 |
| <u>F4 – Accountability</u> | | | | | | |
| #2- Team members expose one another's deficiencies or unproductive behaviors. | 14 | 35.9 | 15 | 38.5 | 10 | 25.7 |
| #11- Team members are deeply concerned about the prospect of letting down their peers. | 10 | 25.7 | 19 | 48.7 | 10 | 25.7 |
| #14- Team members challenge one another about their plans and approaches. | 5 | 12.8 | 25 | 64.1 | 9 | 23.1 |
| <u>F5 – Focus on Results</u> | | | | | | |
| #5- Team members willingly make personal sacrifices for the good of the team. | 9 | 23.1 | 14 | 35.9 | 16 | 41.0 |
| #9- Failure to attain team goals significantly affects behavior. | 17 | 43.6 | 18 | 46.2 | 4 | 10.3 |
| #15- Team members promote others' success at their own expense. | 16 | 41.0 | 10 | 25.7 | 13 | 33.3 |

*Note*. $N = 34$

**Trust**

Slightly less than half of student-athletes reported they rarely *thoughtfully apologize for actions that could possibly damage the team*, and a small number reported

they usually did so. Almost 50% reported they rarely *openly admit their weaknesses and mistakes*, while only a small percentage reported they usually did. Over half reported they were sometimes *comfortable discussing each other's personal lives*.

**Healthy Conflict**

Almost 60% of the time, the student-athletes reported that sometimes *team members hold passionate, authentic discussion of issues*, and a little more than 50% reported that sometimes *team meetings are compelling and not boring*. Results were equally divided between usually, sometimes, and rarely for *during team meetings all issues may be put on the table to be resolved*.

**Commitment**

Slightly more than 50% of student-athletes reported that team members sometimes *know what their peers are working on to contribute to the team*; whereas, less than half reported that team members sometimes *leave meetings knowing their peers are committed to the team's decision.* Sixty percent of the student-athletes reported that sometimes *team members end discussions with clear goals and action plans*.

**Accountability**

Almost 25% of the student-athletes reported rarely and over a third reported they usually *expose one another's deficiencies or unproductive behaviors*. Almost 50% of student-athletes said they were sometimes *deeply concerned about letting down peers*, with the remainder split equally between rarely and usually. Slightly more than 10% reported they usually *challenge one another about plans and approaches*.

**Focus on Results**

Less than 50% reported they rarely and almost 25% reported they usually *willingly make personal sacrifices* for the team. Ten percent reported that *failure to attain goals rarely affects behavior*, while less than half reported that it usually did. Lastly, one third of the student-athletes reported that team members rarely *promote others' success at their own expense* and less than half reported that team members usually did.

## Team Cohesiveness in Losing Teams

The scores derived from statement items for cohesive team behavior and functionality in losing teams is displayed in Table 8.

Table 8

*Overall Scores Derived from Statement Items for Cohesive Team Behavior and Functionality in Losing Teams Based on Percentage Win/Loss*

| Team Functionality | Usually | | Sometimes | | Rarely | |
|---|---|---|---|---|---|---|
| Item # - Statement | *f* | % | *f* | % | *f* | % |
| F1 – Trust | | | | | | |
| #4- Team members thoughtfully apologize for actions that could possibly damage the team. | 5 | 14.7 | 13 | 38.2 | 16 | 47.1 |
| #6- Team members openly admit their weaknesses and mistakes. | 4 | 11.8 | 15 | 44.1 | 15 | 44.1 |
| #12- Team members are comfortable discussing each other's personal lives. | 7 | 20.6 | 17 | 50.0 | 10 | 29.4 |
| F2 – Healthy Conflict | | | | | | |
| #1- Team members hold passionate, authentic discussion of issues. | 2 | 5.9 | 26 | 76.5 | 6 | 17.7 |
| #7- Team meetings are compelling, and not boring. | 7 | 20.6 | 18 | 53.0 | 9 | 26.5 |
| #10- During team meetings, all issues may put on the table to be resolved. | 9 | 26.5 | 15 | 44.1 | 10 | 29.4 |
| F3 – Commitment | | | | | | |
| #3- Team members know what their peers are working on to contribute to the good of the team. | 4 | 11.8 | 16 | 47.1 | 14 | 41.2 |
| #8- Team members leave meetings knowing their peers are committed to the team's decision. | 5 | 14.7 | 19 | 55.9 | 10 | 29.4 |
| #13- Team members end discussions with clear goals and action plans. | 3 | 8.8 | 19 | 55.9 | 12 | 35.3 |

(continued)

Table 8, continued

| Team Functionality<br>Item # - Statement | Usually<br>*f* | <br>% | Sometimes<br>*f* | <br>% | Rarely<br>*f* | <br>% |
|---|---|---|---|---|---|---|
| <u>F4 - Accountability</u> | | | | | | |
| #2- Team members expose one another's deficiencies or unproductive behaviors. | 5 | 14.7 | 21 | 61.8 | 8 | 23.5 |
| #11- Team members are deeply concerned about the prospect of letting down their peers. | 5 | 14.7 | 20 | 58.8 | 9 | 26.5 |
| #14- Team members challenge one another about their plans and approaches. | 6 | 17.7 | 22 | 64.7 | 6 | 17.7 |
| <u>F5 – Focus on Results</u> | | | | | | |
| #5- Team members willingly make personal sacrifices for the good of the team. | 4 | 11.8 | 19 | 55.8 | 11 | 32.4 |
| #9- Failure to attain team goals significantly affects behavior. | 8 | 23.5 | 22 | 64.7 | 4 | 11.8 |
| #15- Team members promote others' success at their own expense. | 5 | 14.7 | 20 | 58.8 | 9 | 26.5 |

*Note*. *N* = 39

**Trust**

Almost 50% of the student-athletes reported they rarely *thoughtfully apologize for actions that could possibly damage the team*, while a small percentage reported they usually did, and over 30% of the time the behavior occurred sometimes. Almost 50% of the student-athletes reported they *openly admit their weaknesses and mistakes*, while very few of the athletes reported usually, but over 40% reported they rarely did. Half of the participants reported they were sometimes *comfortable discussing each other's personal lives*.

**Healthy Conflict**

Slightly over 75% of the student-athletes reported that sometimes *team members hold passionate, authentic discussion of issues,* and over half reported that sometimes *team meetings are compelling and not boring.* Over 30% reported that rarely *during team meetings all issues may be put on the table to be resolved*, while a little over 25% reported that it usually occurred, with almost 50% reporting that it sometimes did.

**Commitment**

Just under 50% of the female student-athletes reported that team members sometimes *know what their peers are working on to contribute to the team,* while over 40% say they rarely knew what their team members were working on. Over 50% reported that team members sometimes *leave meetings knowing their peers are committed to the team's decision,* with almost 30% of time they rarely knew of their peers' commitment. Slightly over 55% reported that sometimes *team members end discussions with clear goals and action plans* while over 30% of the time they rarely did.

**Accountability**

Less than 66% of the time student-athletes from losing teams sometimes *expose one another's deficiencies or unproductive behaviors*; and almost 25% of the time they rarely did. Just over 25% of the athletes were rarely *deeply concerned about letting down peers,* with a little under 60% choosing this team behavior sometimes. Just over 10% of the student-athletes reported they usually exposed one another's deficiencies or were deeply concerned about letting down their peers. Almost 65% of the athletes said they

sometimes *challenge one another about plans and approaches*; student-athletes that reported rarely and usually constituted the remaining percentage equally.

**Focus on Results**

A little over 50% of the student-athletes sometimes *willingly make personal sacrifices*, 33% reported they rarely did, and a little over 10% reported they usually did. Almost 33% chose sometimes for *failure to attain goals affects behavior*, with almost 25% reporting usually. Lastly, about 60% reported that sometimes team members *promote others' success at their own expense*, with a little over 25% reporting that they rarely did.

## Team Cohesiveness in Winning and Losing Teams

The overall scores derived from statement items for cohesive team behavior and functionality in both winning and losing teams is displayed in Table 9.

Table 9

*Overall Scores Derived from Statement Items for Cohesive Team Behavior and Functionality in Winning and Losing Teams Based on Percentage Win/Loss*

| Team Functionality | Usually | | Sometimes | | Rarely | |
|---|---|---|---|---|---|---|
| Item # - Statement | *f* | % | *f* | % | *f* | % |
| F1 - Trust | | | | | | |
| #4- Team members thoughtfully apologize for actions that could possibly damage the team. | 11 | 15.1 | 28 | 38.4 | 34 | 46.6 |
| #6- Team members openly admit their weaknesses and mistakes. | 7 | 9.6 | 32 | 43.8 | 34 | 46.6 |
| #12- Team members are comfortable discussing each other's personal lives. | 17 | 23.3 | 37 | 50.7 | 19 | 26.0 |
| F2 - Healthy Conflict | | | | | | |
| #1- Team members hold passionate, authentic discussion of issues. | 20 | 27.4 | 48 | 65.8 | 15 | 6.8 |
| #7- Team meetings are compelling, and not boring. | 17 | 23.3 | 39 | 53.4 | 17 | 23.3 |
| #10- During team meetings, all issues may put on the table to be resolved. | 22 | 30.1 | 28 | 38.4 | 23 | 31.5 |
| F3 - Commitment | | | | | | |
| #3- Team members know what their peers are working on to contribute to the good of the team. | 27 | 37.0 | 38 | 52.1 | 8 | 11.0 |
| #8- Team members leave meetings knowing their peers are committed to the team's decision. | 15 | 20.5 | 37 | 50.7 | 21 | 28.8 |
| #13- Team members end discussions with clear goals and action plans. | 5 | 6.8 | 42 | 57.5 | 26 | 35.6 |

(continued)

Table 9, continued

| Team Functionality<br>Item # - Statement | Usually<br>*f* | <br>% | Sometimes<br>*f* | <br>% | Rarely<br>*f* | <br>% |
|---|---|---|---|---|---|---|
| <u>F4 - Accountability</u> | | | | | | |
| #2- Team members expose one another's deficiencies or unproductive behaviors. | 18 | 24.7 | 36 | 49.3 | 19 | 26.0 |
| #11- Team members are deeply concerned about the prospect of letting down their peers. | 15 | 20.5 | 39 | 53.4 | 19 | 26.0 |
| #14- Team members challenge one another about their plans and approaches. | 11 | 15.1 | 47 | 64.4 | 15 | 20.5 |
| <u>F5 – Focus on Results</u> | | | | | | |
| #5- Team members willingly make personal sacrifices for the good of the team. | 13 | 17.8 | 33 | 45.2 | 27 | 37.0 |
| #9- Failure to attain team goals significantly affects behavior. | 25 | 34.2 | 40 | 54.8 | 8 | 11.0 |
| #15- Team members promote others' success at their own expense. | 21 | 28.8 | 30 | 41.1 | 22 | 30.1 |

*Note*. *N* = 73

**Trust**

Almost 50% the respondents reported they rarely *thoughtfully apologize for actions that could possibly damage the team*, while a little under 40% reported they sometimes did. For both winning and losing teams, slightly less than 50% of the student-athletes reported they rarely *openly admit their weaknesses and mistakes.* Similarly, slightly less than 50% said they did so sometimes, and about 10% reported usually. Around 50% reported they were sometimes *comfortable discussing each other's personal lives*, with usually and rarely fairly evenly split.

**Healthy Conflict**

A majority reported that sometimes *team members hold passionate, authentic discussion of issues*, with roughly 25% reporting they usually did. For a little over 50% the student-athletes reported, sometimes *team meetings are compelling and not boring*. The remainder was split equally between usually and rarely. D*uring team meetings all issues may be put on the table to be resolved* was split almost equally (33%) between usually, sometimes, and rarely.

**Commitment**

Just over 50% of the respondents reported that team members sometimes *know what their peers are working on to contribute to the team*, and a little over 33% said they usually knew. Fifty percent of the student-athletes reported that team members sometimes *leave meetings knowing their peers are committed to the team's decision*, while almost 30% said that they rarely knew. Again, a little over 50% reported that sometimes *team members end discussions with clear goals and action plans*, while 33% rarely did.

**Accountability**

Around 26% of respondents said they rarely, and 25% said they usually *expose one another's deficiencies or unproductive behaviors*, leaving slightly less than 50% to say they did sometimes. Over 50% the time, student-athletes were sometimes *deeply concerned about letting down peers*; 26% of the time it rarely concerned the student-athletes, and just under 25% reported it usually did. A large majority of student-athletes

recorded sometimes *challenge one another about plans and approaches*, 20% or so reported they did it rarely, and around 15% said they did usually.

**Focus on Results**

A little over 33% of student-athletes reported they rarely *willingly make personal sacrifices*, and slightly under 50% reported they usually do. More than 50% of the student-athletes reported that sometimes *failure to attain goals affects behavior*, and a little over 33% said it usually did. Lastly, slightly over 40% reported that team members sometimes *promote others' success at their own expense* and around 30% of the student-athletes reported that team members usually or rarely do.

Table 10 presents the coaches' leadership function items ranked by most to least based on the percentage of frequency selected from Lowry's (1972) sample and the present sample. Female student-athletes chose *provides encouragement* as the top ranked leadership function in the Lowry (1972) sample, but it is represented as third in the present sample. Student-athletes ranked *attempts to keep communication channels open* first in the present sample but it is shown as the fourth ranked item in the Lowry (1972) sample. Finally the last ranked item for both studies was *arbitrates disputes*.

Table 10

*Ranks and Percentage of Frequencies of Leadership Functions to be Performed by the Coach as Designated by Women Student-Athletes from Various Sports in Texas Colleges versus Student-Athletes on Winning and Losing Women's NCAA Division I Basketball Teams*

| Leadership Function | Rank | Lowry (1972) *n*=8,086 | % *f* | Rank | Palmer (2012) *n* =949 | % *f* |
|---|---|---|---|---|---|---|
| Provides Encouragement | 1 | 6,141 | 75.95 | 3 | 612 | 70.81 |
| Evaluates Quality of Work Done | 2 | 5,282 | 65.32 | 6 | 520 | 69.76 |
| Evaluates Progress Towards Goals | 3 | 5,089 | 62.94 | 4 | 535 | 65.44 |
| Attempts to Keep Communication Channels Open | 4 | 4,780 | 59.11 | 1 | 672 | 56.38 |
| Keeps Member's Attention on Goal | 5 | 4,774 | 59.04 | 2 | 662 | 55.01 |
| Provides Needed Information | 6 | 4,321 | 53.44 | 10 | 419 | 54.79 |
| Initiates Action | 7 | 4,302 | 53.20 | 9 | 422 | 52.37 |
| Increases Interdependence Among Members | 8 | 4,039 | 49.95 | 12 | 398 | 48.79 |
| Keeps Interpersonal Relations Pleasant | 9 | 3,677 | 45.47 | 8 | 454 | 44.47 |
| Develops Procedural Plan | 10 | 3,644 | 45.07 | 7 | 497 | 44.15 |
| Seeks Relevant Information | 11 | 3,059 | 37.83 | 11 | 401 | 42.26 |
| Expresses Group Feelings | 12 | 2,825 | 34.94 | 13 | 268 | 41.94 |
| Gives Minority a Chance to be Heard | 13 | 2,602 | 32.18 | 5 | 522 | 28.24 |
| Arbitrates Disputes/To Settle or Decide Disagreements | 14 | 2,067 | 25.56 | 14 | 253 | 26.66 |

*Note*. Lowry (1972) *N* = 622; Palmer (2012) *N* = 73 student-athletes.

In Table 11 the sums for maintenance and task functions are shown as reported by the student-athletes. There are differences in selection between maintenance and task functions with the Lowry (1972) sample as compared to the Palmer (2012) sample.

Table 11

*Ranks of Maintenance and Task Leadership Functions to be Performed by the Coach as Designated by Women Student-Athletes from Various Sports in Texas Colleges versus Student-Athletes on Winning and Losing Women's NCAA Division I Basketball Teams*

| Maintenance Leadership Functions | Rank | Lowry (1972) (*n*=8,086) | % *f* | Rank | Palmer (2012) (*n* = 949) | % *f* |
|---|---|---|---|---|---|---|
| Attempts to Keep Communication open Channels Open | 2 | 4,780 | 59.11 | 1 | 672 | 70.81 |
| Provides Encouragement | 1 | 6,141 | 75.95 | 2 | 612 | 64.49 |
| Gives Minority a Chance to be Heard | 6 | 2,602 | 32.18 | 3 | 522 | 55.01 |
| Keeps Interpersonal Relations Pleasant | 4 | 3,677 | 45.47 | 4 | 454 | 47.84 |
| Increases Interdependence Among Members | 3 | 4,039 | 49.95 | 5 | 398 | 41.94 |
| Expresses Group Feelings | 5 | 2,825 | 34.94 | 6 | 268 | 28.24 |
| To Settle or Decide Disagreements | 7 | 2,067 | 24.56 | 7 | 253 | 26.66 |
| Task Leadership Functions | | | | | | |
| Keeps Members' Attention on Goals | 3 | 4,774 | 59.04 | 1 | 662 | 69.16 |
| Evaluates Progress Towards Goals | 2 | 5,089 | 62.94 | 2 | 535 | 56.64 |
| Evaluates Quality of Work Done | 1 | 5,282 | 65.32 | 3 | 520 | 54.79 |
| Develops a Procedural Plan | 6 | 3,644 | 45.07 | 4 | 497 | 52.37 |
| Provides Needed Information | 4 | 4,321 | 53.44 | 6 | 419 | 44.15 |
| Seeks Relevant Information | 7 | 3,059 | 37.83 | 7 | 401 | 42.26 |
| Initiates Action(s) | 5 | 4,302 | 53.20 | 5 | 422 | 44.47 |

*Note*. Lowry (1972) *N* = 622; Palmer (2012) *N* = 73 student-athletes.

## Maintenance Functions

The players from the 1972 sample ranked the coach maintenance leadership function *provides encouragement* first, *attempts to keep communication channels open* second, *increases interdependence among members* as third, *evaluates progress towards*

*goals* as fourth, *expresses group feelings* as fifth, and listed *gives minority a chance to be heard* as sixth. Female student-athletes, in the Palmer (2012) study, ranked *attempts to keep communication channels open* as first, *provides encouragement* as second, *gives minority a chance to be heard* as third, *increases interdependence among members* as fifth and *expresses group feelings* as sixth. While *keeping communication channels open* was the top task in both studies. Palmer (2012) found there was almost a 12% increase in the number of times it was selected. Interestingly, Palmer (2012) notes that g*ives minorities a chance to be heard* showed an increase of more than 23% from the Lowry (1972) study. Both samples ranked *keeps interpersonal relations pleasant* as fourth and *to settle or decide disagreements* as seventh.

**Task Functions**

The student-athletes from Lowry (1972) and Palmer (2012) studies selected the same top three coach task leadership functions: 1) *keeps members attention on goals*, 2) *evaluates progress towards goals*, and 3) *evaluates quality of work done*. Both samples showed the same least ranked task leadership functions: *seeks relevant information* and *initiates action*. The first and third task leadership functions were inverted between the Lowry (1972) and Palmer (2012) study, i.e., *keeps members attention on goals* was the third most chosen task in the Lowry (1972) study, but it was selected most often in the Palmer (2012) study.

# CHAPTER V

# SUMMARY, DISCUSSION, IMPLICATIONS, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE STUDIES

The present investigation considered female student-athletes' perceptions of healthy coaching behaviors or functions and their perceptions of team functionality and whether those perceptions were common to both winning and losing teams. Chapter I set the stage by providing the rationale, purpose, and potential implications of the study. A comprehensive review of the literature in Chapter II surveyed research on team cohesion and team functionality, and theoretical constructs, and their implications. Research methodology was described in Chapter III. The results were depicted in Chapter IV. Chapter V provides (a) a summary; (b) discussion of the research results; (c) implications for theory, research, and sport practice; (d) conclusions; and (e) suggestions for potential future research.

## Summary

The purpose of the study was to investigate the direct impact of team cohesiveness and student-athletes' perceptions of coaching behavior/leadership functions on the welfare of winning and losing teams in Division I Women's Basketball. Since team cohesion has been linked to important measures regarding performance just as teams' perceptions of effective coaching behaviors can influence success in competition,

it was important to investigate perceptions of women student-athletes of both winning and losing teams.

Female student-athletes in the collegiate setting were excellent participants for this investigation. These student-athletes represented the “Millennial” population, ages 18-29, otherwise known as Generation Y. From this population one typically finds that participants have high expectations of self and others, and typically are goal-oriented individuals. Research shows that this generation: 1) is constantly in connection with technology, 2) are harsh critics of others their age, 3) tend to be free-spirited, and 4) are accustomed to constant supervision while being told what to do with every minute of their day (Lackey, Kamena, & Lackey, 2009). Their initial response is to be receptive to advice from superiors, such as coaches, whom they perceive as experienced, caring, and knowledgeable, “a source of truth”. Therefore, a team of Millennials who perceive their coach as one who will meet their needs have a high likelihood of personal and team success. However, one challenge with this generation is that they are not easily fooled; therefore, any investigation must be seen as worthwhile or beneficial in some way to the participants or their team for them to fully participate. The investigator, known and introduced to the participants as a former coach, can absolutely state that she observed “buy-in” with each student-athlete and was impressed with each participant’s individual interest in understanding the impact of team cohesiveness and athlete satisfaction on team success. One could consider that the investigator’s background in sport may have

supported student-athlete participant “buy-in”. There were only five student-athletes who qualified for the study but did not participate for various reasons.

Lowry’s (1972) study was designed by a peer-reviewed jury to explore leadership functions to be performed by the coach as perceived by the player. It has since been concluded by current researchers such as Crust and Lawrence (2006), Beck (2004), Ng, Ang, and Chan (2008) that the Trait approach can contain certain inconsistencies and inadequacies. From Lowry’s (1972) earlier research involving Behavioral Trait Theory, one can deduce the potential for an oversimplification of singular appropriate leader behaviors (Crust & Lawrence, 2006), especially when attached to the perceptions of “subordinates” influenced by their environment and situational experiences (Beck, 2004). The perceptions of student-athletes on their leader’s effectiveness may not actually reflect reality as shown in their win/loss records (Lord, De Vader, & Alliger, 1986). Influence from situational variables is largely discounted in behavioral trait theories (Ng, K.-Y., Ang, S., & Chan, K.-Y., 2008). What this means is that there may be more variables than inherited behavioral traits to consider regarding influence when investigating cohesiveness and coaching leadership functions.

One instrument used for this study was the Leadership Functions Instrument (LFI), created by Lowry (1972) and used as a pencil and paper survey. It proved to be the most challenging of the survey instruments to implement. The student-athletes exhibited a thoughtful and deliberate willingness to be honest with their answers, but showed a lack of patience and reduced attention with this instrument. One could speculate that this may

have been attributed to the repetitiveness of the actual paired comparison instrument. There is also the possibility of an introduction of transitivity of preference (Regenwetter, Dana, & Davis-Stober, January 2011), meaning that with this instrument and its repetition, there may have been an unexpected creation of indifference for the coach behaviors or function choices made by the student-athletes. This event alone suggests that quantitative measurement of psychological phenomenon, such as behavior/trait or function, determined by perception, is a challenging venture for investigation.

Thurstone's (1927) work, emphasized that choice should be viewed as problematic when accounting for obvious variation in selection results. Rank judgments are subjective, but Maydeau-Olivares and Bockenholt (2005) note that with more comprehensive factor analysis models, choice alternatives may provide for a richer source of information about the effects of individual differences and perceived similarity relationships. This may imply that by including binary or background information about the respondants or participants, where latent utilities or "desiredness" are included, (Kahneman, 2003) all information correlated can be integrated. Maydeau-Olivares and Bockenholt (2005) call this an "unrestricted Thurstonian model", where background information about the participants and/or the choice alternatives that they may provide allow for more factors to be made available for analysis.

Despite the repetitive nature of the paired comparison instrument, student-athletes were able to provide rich data regarding task and maintenance coach leadership functions. As stated previously in Chapter III, the paired comparison instrument can

produce preference behavior to its most basic, easily grasped element- a choice between two objects (Garner & Englehard, 1997).

The Lencioni Team Assessment (LTA) was adapted from a diagnostic tool used for helping evaluate how members of a cohesive team behave. The Lencioni (2004) instrument was utilized with this study to assess team cohesion and functionality. It addressed five aspects of dysfunctional teams and juxtaposed them against behaviors found on high-functioning teams. The five functions assessed were trust, healthy conflict, commitment, accountability, and focus on results.

The LTA not only showed whether team cohesion existed, it illustrated that team members who perceive a leader that values anything other than results may influence the respondents' perceptions of those results. This is demonstrated where more than 50% of student-athletes felt that sometimes *failure to attain team goals significantly affects behavior* and one-third of those athletes said that it usually did. Lencioni (2002) also implied that a team's success may not be attributed to the mastery of complex theory, but rather an espousal of "common sense" with uncommon levels of self-control and perseverance.

## Discussion of Findings

The demographic representation of a majority of student-athletes in this study being Black (58.9%) supports further investigation of the influence of race in women's basketball student-athletes in NCAA Div I basketball teams. Table 10 shows a significant shift in the importance of the minority perception of influence between the Lowry (1972)

and Palmer (2012) studies, spaced forty years apart. Even though the majority of student-athletes of the winning or losing teams are black, they may still see themselves as a minority at the institution where they participate. The shift of *gives minority a chance to be heard* might be a racial factor, and noted by the difference between the Lowry study (1972) where this function was ranked thirteenth, and the Palmer study (2012) where it was ranked fifth among student-athletes. The interesting question is, "Was this function of leadership chosen because there were more black student-athletes (58.9%) or because these student-athletes were more willing to voice an opinion in this study than in the Lowry (1972) study?" The investigator was unable to conclude, based on this study alone, the effects of the demographic characteristics and those variable influences on team functionality based solely on the percentage of winning and losing. More expanded results are needed to show the possibility for influence between demographics, team cohesion, and coach leadership functions. The data suggest that these findings and analyses may be attributed to certain demographic variables and their relationships among all variables associated with the present study.

Another interesting finding was related to team functionality. The data suggested that losing teams have more trust issues than winning teams. This is an interesting finding, but one is reminded of a quote by Ulysses S. Grant, Civil War General and former President, "The friend in my adversity I shall always cherish most. I can better trust those who helped to relieve the gloom of my dark hours than those who are so ready to enjoy with me the sunshine of my prosperity." (Curtis, 2002, p. 90) Perhaps the

challenges of competition and sense of shared adversity between coaches and players on winning and losing teams helped produce these findings, but that should be saved for a future study. The findings for this study answered each of the specific research questions.

## Coaching Leadership Functions

### Research Question One

*1. What are the perceptions of the female student-athletes on coaching behaviors of winning NCAA Div I basketball teams?*

The frequencies and percentages of the ranks of leadership functions to be performed by the coach as designated by student athletes from winning teams are displayed in Table 3. The student-athletes perceived the coaches' primary behaviors/functions as *attempting to keep communication channels open* (70.41%), *providing encouragement* (70.22%) and *keeping members' attention on goals* (68.44%).

Winning teams see the coaches' primary function as telling the student-athletes that they are good and progressing toward reaching goals. This aligns with Lillie's (1980) study where she found that coaches of winning teams appeared to take an interest in each player and were more involved in practice sessions and games. These tasks are shown as maintenance tasks under the Lowry (1972) instrument. Successful coaches are perceived by their student-athletes as being consistently more personally involved with their teams than unsuccessful coaches.

**Research Question Two**

*2. What are the perceptions of the female student-athletes on coaching behaviors of losing NCAA Div I basketball teams?*

The frequencies and percentages of the ranks of leadership functions to be performed by the coach as designated by student athletes from losing teams are displayed in Table 4. The top two leadership functions are split equally between the maintenance and task functions of *attempts to keep communication open* and *keeps members' attention on goals* (71.27%). This would indicate that based on Lillie's (1980) findings, the student-athletes on losing teams saw little difference between the coach in practice and the coach in the game. Experience teaches that coaches in the pre-season set goals for the team and its players, they focus on those goals, and the communication necessary to keep them at the forefront of what the players do. During a game, however, the emphasis shifts from focusing on goals to keeping players' spirits up, telling them what they are doing right, and sharing belief in their abilities. The third most important leadership function was *provides encouragement* (59.95%). The results suggest that student-athletes on losing teams did not perceive their coaches as being concerned as much with this maintenance function that builds team cohesion.

**Research Question Three**

*3. Are the perceptions of the female student-athletes on coaching behaviors of winning NCAA Div I basketball teams the same as the perceptions of the female student-athletes of losing NCAA Div I basketball teams?*

In general the findings suggest that there is little to no measureable difference with respect to team functionality based on the percentage of wins to losses. The frequencies and percentages of the ranks of leadership functions to be performed by the coach as designated by student athletes from winning and losing teams are displayed in Table 5. The three highest percentages for both winning and losing teams were for *attempts to keep communication channels open* (70.81%), *keeps members' attention on goals* (69.76%) and *provides encouragement* (65.44%). *Expresses group feelings* (28.24%) and *to settle or decide disagreements* (26.66%) were the two lowest percentages for both winning and losing teams. Student-athletes of both winning and losing teams rated these maintenance leadership functions almost identically. This suggests that the student-athletes did not perceive the coaches' leadership function of expressing how the group feels about a situation or settling arguments as essential behaviors. Both groups chose *attempts to keep communication channels open* more often as the most highly-rated coaching leadership function when compared to the other thirteen behaviors. This may be ascribed to the "Millenial" generations' expectation for immediate, meaningful feedback and positive reinforcement.

Losing teams rated *keeps members' attention on goals* just as highly as *attempts to keep communication channels open*, rating the task functions as highly as the maintenance functions. Winning teams most frequently chose the maintenance leadership functions *attempts to keep communication channels open* and *provides encouragement* as

their top two coach leadership functions. The exception was the degree of importance ascribed to *provides encouragement*.

In summary, players from both winning and losing teams see different coaching leadership functions and ranks of those functions in their coaches. It is also interesting to note that student-athletes from both winning and losing teams believed that the first responsibility by the coach of a task behavior was to *keep members' attention to goal* and second to *evaluate progress towards the goal*. There was a difference shown in the ordering of ranks of leadership functions for losing teams, as those student-athletes selected *develops a procedural plan* as a more important coach task function than the winning team's choice of *evaluates quality of work*. This may be attributable to differences in a broad range of things, from student-athletes' prior athletic experiences, to their level of "follower readiness" (Hersey, Blanchard, & Johnson, 2001), to the coaches' ability to adopt appropriate leadership styles based on his/her perceptions of team readiness.

## Team Cohesiveness

### Research Question One

*1. What are the perceptions of the selected female student-athletes on team cohesiveness of winning NCAA Div I basketball teams?*

The overall scores derived from statement items for cohesive team behavior and functionality in winning teams based on percentage win/loss are displayed in Table 6.

**Trust.** Winning teams seem to show an unwillingness to place themselves in a position of emotional or psychological vulnerability. This is shown by the high number of student-athletes who rarely *openly admit their weaknesses and mistakes* and rarely *thoughtfully apologize for actions that could damage the team*. Lencioni (2004) states an unwillingness to be vulnerable in a group may present an absence of trust. Winning teams focus on the behaviors that produce results because they see themselves in organizations whose business is winning. They will engage in behaviors that promote the team goals, will withdraw from behaviors that show weakness or vulnerability, and they don't want to be seen as weak or vulnerable when they are working on a team whose job it is to win. The data suggest the players' perception of cohesiveness is derived from performing a set of behaviors calculated to produce a winning record.

**Healthy conflict.** On winning teams, the focus is on the behaviors that produce results. Less than 10% of the time, student-athletes on winning teams usually hold passionate discussions of issues. This may be because they don't have to; they're winning. Over half of the student-athletes reported that sometimes *team members hold passionate, authentic discussion of issues,* and that sometimes *team meetings are compelling and not boring*. Being able to argue about plans, tactics, principles, and ideas without attacking people shows an organization focused on improvement (Lencioni, 2002). It is interesting to note that winning teams may or may not put all issues on the table for discussion or resolution, as shown in Table 7. This may be because winning removes some of the pressure of resolving issues and problem solving.

**Commitment.** Slightly over half of student-athletes reported that team members sometimes *know what their peers are working on to contribute to the team*. Less than fifty percent reported that team members sometimes *leave meetings knowing their peers are committed to the team's decision.* Experience dictates that most of the decisions are made by the coach, and the commitment tends to be non-negotiable, since most NCAA Division I student-athletes are on scholarship. A significant number of student-athletes reported that sometimes *team members end discussions with clear goals and action plans*. This could be attributable to the perception that the coach is the one who sets the goals and plans (see Table 3).

**Accountability.** Winning teams hold team mates accountable for shouldering their part of the load (Lencioni, 2002). The most statistically significant finding was that 64.1% of the time, team members will sometimes *challenge one another about their plans and approaches*, especially if it affects performance. This may indicate that more often than not, they will call one another out if a behavior is unproductive (doesn't lead to winning). Almost half are *deeply concerned about the prospect of letting down their peers*. They appear to crave genuine respect from their fellow team mates (McGregor, 1960), and want to be seen as productive members of the team.

**Focus on results.** A majority of team members of winning teams will usually *promote others' success at their own* expense, while almost half state that sometimes *failure to attain team goals significantly affects behavior*. A large percentage of players on winning teams seem to be more concerned with their own personal achievements, as

they rarely *willingly make personal sacrifices* for the team. How much more productive could a winning team be if that number were to change?

**Research Question Two**

*2. What are the perceptions of the female student-athletes on team cohesiveness of losing NCAA Div I basketball teams?*

The overall scores derived from statement items for cohesive team behavior and functionality in losing teams are displayed in Table 8.

**Trust.** There sometimes appears to be a slightly lower degree of trust on losing teams. This is shown by a willingness among the female student-athletes to *openly admit their weaknesses and their mistakes* (11.8%). Only 14.7% of the time do they usually *apologize for actions that could possibly damage the team*. Losing teams are less comfortable discussing each others' personal lives, perhaps because they do not trust each other with sensitive information. This suggests that on losing teams, the student-athletes are "able but insecure or unwilling" (Hersey, Blanchard, & Johnson, 2001) to share their vulnerabilities about themselves with their team mates; and therefore, aren't even honest with themselves. It is difficult to build a foundation of trust if one isn't willing to have courage enough to discuss what keeps the team from performing successfully.

**Healthy conflict.** Losing teams appeared willing to engage in healthy conflict. More than three-fourths of respondents said they sometimes *have passionate authentic discussion of issues.* There may be doubts as to the efficacy of the discussions as far as

providing solutions to problems, if the win/loss record indicates the level of the team's functionality. A little more than half stated that sometimes *team meetings were compelling and not boring,* especially since 44.1% of student-athletes reported that sometimes *all issues may be put on the table to be resolved*. This would indicate an unhealthy brand of conflict where there is much discussion, but little resolution.

**Commitment.** Losing teams appear to be sometimes less informed about *what their peers are working on to contribute to the team.* When they leave their meetings, they're not convinced that *their peers are committed to the team's decision*. These student-athletes are appearing to operate in a fog of uncertainty, influencing the overall welfare of the team. If it were a military operation, it would end in defeat and disaster, because they wouldn't know what the units on their left and right were doing, or even if they were following the same plan to either attack or defend. The perception appears to be that whatever action the team takes will fail due to the lack of commitment to the team plan.

**Accountability.** Losing teams appear very focused on holding team members accountable. A large majority of teams' members sometimes *challenge one another about their plans and approaches*. This indicates that the coach is holding team members accountable for their actions, and the players are following his/her lead (Lencioni, 2005). A large percentage (61.8%) of the student-athletes sometimes *expose one another's deficiencies or unproductive behaviors.* It is difficult to tell if this is to improve team

performance, or find a scapegoat for poor performance. This survey instrument was not designed to make that determination.

**Focus on results.** More than 60% of the student-athletes reported that sometimes *failure to attain team goals significantly affects behavior.* More than half of the players sometimes *promote others' success at their own expense* and slightly more than half appear to be sometimes more *willing to make personal sacrifices for the good of the team.* All these findings are indicators that the teams perceive that their "heart" is in the right place, if nothing else is.

The responses of the losing teams indicated they usually or sometimes had a low degree of trust among members, but a willingness to sacrifice individual achievement and recognition for team success. According to Lencioni (2004) this gives the perception of a team focused on improvement and willing to take emotional risks necessary to achieve that success.

**Research Question Three**

*3. Are the perceptions of the female student-athletes on team cohesiveness of winning NCAA Div I basketball teams the same as the perceptions of female student-athletes of losing NCAA Div I basketball teams?*

Based on the Five Functionalities of a team and those behaviors within each function, there are differences in perceptions on team cohesiveness between winning and losing teams.

**Trust .** There were slight differences in the findings that suggest that losing teams have more trust issues than winning teams. For example, winning team members were more apologetic for their *actions that could possibly damage the team*. They were also more likely to be *comfortable discussing each others' personal lives* (23.1%) than their peers on losing teams (20.6%). The only area where team members on losing teams were more trusting is where they usually *openly admit their weaknesses and their mistakes* (11.8%) versus 7.7% of winning teams. This could be attributed to winning team's student-athletes who see admitting mistakes as possible signs of weakness.

**Healthy conflict.** Student-athletes on losing teams appeared more willing to engage in what they perceived as healthy conflict. Losing teams also felt that they could put *all issues on the table to be resolved* (44.1%) versus 33.3% for winning teams. Perhaps the winning teams' members did not feel the need to *hold authentic discussion of issues* as often because there may have been fewer issues to discuss.

**Commitment.** Members of losing teams usually *leave meetings knowing their peers are committed to the team's decision (14.7%)* with lower frequency than do their counterparts on winning teams (25.7%). Team members on winning teams sometimes *know what their peers are working on to contribute to the good of the team* (56.4%) more often than losing teams (47.1%). One could deduce that members of winning teams have a better situational awareness of their team members' commitments to work on weaknesses and to stay committed to the coaches plan. There was not much difference

between winning and losing teams *ending discussions with clear goals and action plans* because of the perception that those were the coaches' functions.

**Accountability.** On losing teams there is a greater tendency to sometimes *expose one another's deficiencies or unproductive behaviors* (61.8%) than on winning teams (38.5%). In contrast members of winning teams usually *expose one another's deficiencies or unproductive behaviors* (35.9%) more than twice as often as members of losing teams (14.7%). Losing teams are sometimes *more deeply concerned about the prospect of letting down their peers* (58.8%) than their counterparts on winning teams (48.7%). This could indicate that under the accountability function, team members are holding teammates to a high standard and questioning their approaches in order to improve the organization (Lencioni, 2002). Winning teams are reporting *exposing one anothers' deficiencies or unproductive behaviors* and being *deeply concerned about the prospect of letting down their peers* as occurring usually almost twice as often as losing teams. Losing teams are reporting the same behaviors as occurring sometimes with far less frequency.

**Focus on results.** Winning teams usually practiced the behaviors that focused on results twice as often as did losing teams. Members of losing teams were less willing to usually *make personal sacrifices for the good of the team* (11.8%) than on winning teams (23.1%). On losing teams, sometimes *making personal sacrifices for the good of the team* (55.8%) was reported more frequently than it was on winning teams (35.9%). Also, on losing teams, team members usually *promote others success at their own expense* only

14.7% of the time where winning teams usually reported the behavior 41% of the time. Losing teams were less significantly affected by *failure to attain team goals* (23.5%) than were winning teams (43.6%). This was reported more frequently as a sometimes behavior on losing teams (64.7%) than on winning teams (46.2%). This would indicate that winning teams are more focused on collective results than losing teams. This data suggest that winning teams see themselves as more functional because of their focus on results. They are at the highest point in Lencioni's (2001) hierarchical progression of team development.

## Implications

The previous two discussions of the coaching functions and team cohesiveness addressed the results of the study, offered possible interpretations, and provided linkages with prior research. This section provides implications that appear justified based upon those findings and the interpretations and projections of those findings. The researcher did not investigate motives for performing certain accountability actions such as *challenging one another about plans and approaches*, or *exposing one anothers' deficiencies or unproductive behaviors.* Another limitation was that she did not explore the cause in the shift from the Lowry (1972) study to the present study regarding *gives minorities a chance to be heard*.

This study found that winning and losing teams perceived themselves differently, and had differing perceptions of the importance of certain coaching behaviors. Winning teams perceived that their coaches were more focused on maintenance leadership

functions, while losing teams perceived that their coaches were split more evenly between maintenance and task leadership functions. This would imply that coaches need to focus on interpersonal skills as much as organizational skills. McGregor's (1960) Theory X and Theory Y assumptions are reflective of the coaches' progression from an autocratic, low follower readiness leadership style towards a democratic, high follower readiness leadership style (Hersey, Blanchard, & Johnson, 2001; Lillie, 1980; Lippit & White, 1953).

The current generation of student-athletes belong to the Millenial or Generation Y group. Coaches need to study the traits of this group to find out how to best motivate them and turn them into a successful, cohesive team, especially as it relates to dealing with their diversity, their focus on tasks, and their need for constant supervision, praise and reinforcement. Coaches must also use a variety of leadership styles to match the dispositions of their athletes.

The demographics also show that the student-athletes in this study weighted team reputation and scholarship amount equally in choosing where to play, followed by university reputation. For the schools in this study, the coach's reputation had the least bearing on where a student attended college. Coaches should take steps to ensure that recruitment of athletes to their universities focus on scholarship amount and building the team's reputation as a cohesive group focused on winning. Coaches should focus their recruiting efforts to capitalize on what appeals most directly to prospective student-athletes.

In collegiate athletic programs, coaches and athletes have to closely work together to achieve common goals. While coaches are constantly making evaluations about their athletes, student-athletes are also formulating assessments about their coaches' personalities and behaviors which could offer important insights to improve the coach-student-athlete relationship (Cratty, 1983). Coaches, coach educators, and administrators of sport programs influence team success. Student-athletes perceptions' of them as administrators can have an effect on successful outcomes. Therefore, it is important for all involved in team membership to focus on the actions that build and support a continuing perception of a cohesive, successful team.

Although evidence was shown, through the works of many experts (Dixon, et.al, 2006; Sage, 1988; Bortoli, Robozza, & Giabardo, 1995), that team cohesion and athlete satisfaction influence team success, it is vital that future research addresses specific populations (such as sports). This future research is necessary to produce information regarding perceptions and successful participation with the desired end state of fostering rewarding outcomes. Results of this study may offer insight into how perception may influence coaches and student-athletes and in some ways be evidence for individual contributions toward team success. This study may allow for an improved understanding of team cohesion and functionality among those charged with the development of stronger coaches, stronger coaching pedagogy programs, and ultimately, more resilient and successful teams. This understanding, coupled with thoughtful reflection of the

challenges of generational differences and individual perception, may well aid in the creation of a healthier team environment.

## Conclusions

Based on the findings of the present study, these conclusions are warranted regarding women basketball players at Division I schools.

1. Winning teams perceived coach leadership functions differently from losing teams. They tended to focus more on maintenance behaviors than task behaviors. Losing team's coaching leadership behaviors/functions were evenly split between maintenance and task functions.
2. Teams' perceptions of their functionality have an impact on their win/loss record. Players on winning teams perceived their group as being cohesive with respect to how often they chose items that were aligned with actions and attitudes of functional teams. Members of winning teams indicated that their focus was on results, whereas members of losing teams tended to focus more on relationships, rather than results.

## Recommendations for Future Research

The following are recommendations for further research in team cohesion and student-athlete perception:

1. Replicate the study with male student-athletes in NCAA Div I institutions to determine if there are any gender related trends or differences.

2. Replicate the study with both male and female NCAA Div II and III institutions along with NAIA/Private non-religious, religious institutions to determine trends or differences in task and maintenance leadership coaching functions.
3. Assess the influence of generational expectations of Women's and Men's Basketball team members on team cohesiveness and functionality in NCAA Division I, II, III, NAIA, Private non-religious, and religious colleges.
4. Determine the psychological indicators that may influence women and men athletes to choose team membership or institutional selection.
5. Replicate the study with athletic programs that have a documented three to five year winning/losing record.
6. Replicate the study with a
7. national randomized sampling of Women's NCAA Div I basketball teams.

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# APPENDIX A

## Demographic Questionnaire

Demographic Questionnaire

1. Age
    - 17 ~ 19
    - 20 ~ 21
    - 21 ~ 22
    - 23 and over

2. Please specify your race.
    - American Indian or Alaska Native
    - Asian
    - Black or African American
    - Native Hawaiian or Other Pacific Islander
    - Hispanic or Latino(a)
    - White
    - Other

3. What is your classification?
    - Sophomore
    - Junior
    - Senior

4. Are you a transfer student?
    - Yes
    - No

5. Number of years participated in competitive basketball including high school, summer leagues, and AAU.
    - 1 ~ 4
    - 4 ~ 8
    - 8 or more

6. Your home town is classified as:
    - Urban
    - Rural

7. Are you currently receiving financial aid? Check all that are applicable.
    - Athletic Scholarship(s)
    - Non-Athletic Scholarship(s)
    - No Financial aid

8. I participate in non-athletic, on-campus student organizations.
    - Yes
    - No

9. What influenced my signing with this university: Check all that are applicable
    - Team reputation
    - Coach(s) reputation
    - University's reputation
    - Scholarship amount

# APPENDIX B

## Coach Leadership Functions Instrument

Coach Leadership Functions Instrument

**Directions:** Circle the one phrase in EACH pair that most nearly answers:
*"Which action by a coach contributes most to the overall welfare of the team?"*
Please make a choice in each pair. Be sure to double check that you answered each pair.

The following 14 functions summarize a phrase that will be used throughout the questionnaire:

Evaluates progress - Evaluates progress towards goals

Communicates - Attempts to keep communication channels open

Goal oriented - Keeps members' attention on goals

Promotes interdependence - Increases interdependence among members

Informs - Provides needed information

Professional - Keeps interpersonal relations pleasant

Evaluates quality - Evaluates quality of work done

Arbitrates - To settle or decide disagreements

Initiates action - Initiates action

Emotive - Expresses group feelings

Stays informed - Seeks relevant information

Listens - Gives minority a chance to be heard

Plans - Develops procedural plan

Encourages - Provides encouragement

| | | |
|---|---|---|
| Encourages | ---- | Evaluates quality |
| Evaluates progress | ---- | Arbitrates |
| Communicates | ---- | Initiates action |
| Goal oriented | ---- | Emotive |
| Promotes interdependence | ---- | Stays informed |
| Informs | ---- | Listens |
| Professional | ---- | Plans |
| Evaluates quality | ---- | Arbitrates |
| Encourages | ---- | Initiates Action |
| Evaluates progress | ---- | Emotive |
| Communicates | ---- | Stays informed |
| Goal oriented | ---- | Listens |
| Promotes interdependence | ---- | Plans |
| Informs | ---- | Professional |
| Initiates action | ---- | Evaluates quality |
| Arbitrates | ---- | Emotive |
| Encourages | ---- | Stays informed |
| Communicates | ---- | Goal oriented |
| Evaluates quality | ---- | Listens |
| Stays informed | ---- | Plans |
| Emotive | ---- | Professional |
| Initiates action | ---- | Informs |
| Arbitrates | ---- | Promotes interdependence |
| Encourages | ---- | Goal oriented |
| Evaluates progress | ---- | Communicates |
| Plans | ---- | Evaluates quality |
| Listens | ---- | Professional |
| Stays informed | ---- | Informs |
| Emotive | ---- | Promotes interdependence |
| Initiates action | ---- | Goal oriented |
| Arbitrates | ---- | Communicates |
| Encourages | ---- | Evaluates progress |
| Evaluates quality | ---- | Professional |
| Plans | ---- | Informs |
| Listens | ---- | Promotes interdependence |
| Stays informed | ---- | Goal oriented |
| Emotive | ---- | Communicates |
| Initiates action | ---- | Evaluates progress |
| Arbitrates | ---- | Encourages |
| Informs | ---- | Evaluates quality |

| | | |
|---|---|---|
| Professional | ---- | Promotes interdependence |
| Plans | ---- | Goal oriented |
| Listens | ---- | Communicates |
| Stays informed | ---- | Evaluates progress |
| Emotive | ---- | Encourages |
| Initiates action | ---- | Arbitrates |
| Evaluates progress | ---- | Listens |
| Communicates | ---- | Plans |
| Goal oriented | ---- | Professional |
| Promotes interdependence | ---- | Informs |
| Evaluates quality | ---- | Emotive |
| Initiates action | ---- | Stays informed |
| Arbitrates | ---- | Listens |
| Encourages | ---- | Plans |
| Evaluates progress | ---- | Professional |
| Communicates | ---- | Informs |
| Goal oriented | ---- | Promotes interdependence |
| Stays informed | ---- | Evaluates quality |
| Emotive | ---- | Listens |
| Initiates action | ---- | Plans |
| Arbitrates | ---- | Professional |
| Encourages | ---- | Informs |
| Evaluates progress | ---- | Promotes interdependence |
| Evaluates quality | ---- | Promotes interdependence |
| Informs | ---- | Goal oriented |
| Professional | ---- | Communicates |
| Plans | ---- | Evaluates progress |
| Listens | ---- | Encourages |
| Stays informed | ---- | Arbitrates |
| Emotive | ---- | Initiates action |
| Goal oriented | ---- | Evaluates quality |
| Promotes interdependence | ---- | Communicates |
| Informs | ---- | Evaluates progress |
| Professional | ---- | Encourages |
| Plans | ---- | Arbitrates |
| Listens | ---- | Initiates action |
| Stays informed | ---- | Emotive |
| Evaluates quality | ---- | Communicates |
| Goal oriented | ---- | Evaluates progress |
| Promotes interdependence | ---- | Encourages |

| | | |
|---|---|---|
| Informs | ---- | Arbitrates |
| Professional | ---- | Initiates action |
| Plans | ---- | Emotive |
| Listens | ---- | Stays informed |
| Evaluates progress | ---- | Evaluates quality |
| Communicates | ---- | Encourages |
| Goal oriented | ---- | Arbitrates |
| Promotes interdependence | ---- | Initiates action |
| Informs | ---- | Emotive |
| Professional | ---- | Stays informed |
| Plans | ---- | Listens |

# APPENDIX C

## Lencioni Team Assessment Questionnaire

Lencioni Team Assessment Questionnaire

**Instructions**: Use the scale below to indicate how each statement applies to your team. It is important to evaluate the statements honestly and without over-thinking your answers. Score your answers using the following scale:

U = Usually
S = Sometimes

R = Rarely

| | | | |
|---|---|---|---|
| | | | 1. Team members are passionate and unguarded in their discussion of issues. |
| | | | 2. Team members call out one another's deficiencies or unproductive behaviors. |
| | | | 3. Team members know what their peers are working on and how they contribute to the collective good of the team. |
| | | | 4. Team members quickly and genuinely apologize to one another when they say or do something inappropriate or possibly damaging to the team. |
| | | | 5. Team members willingly make sacrifices for the good of the team (such as time, workload, interpersonal relationships). |
| | | | 6. Team members openly admit their weaknesses and mistakes. |
| | | | 7. Team meetings are compelling, and not boring. |
| | | | 8. Team members leave meetings confident that their peers are completely committed to the decisions that were agreed on, even if there was initial disagreement. |
| | | | 9. Morale is significantly affected by the failure to achieve team goals. |
| | | | 10. During team meetings, the most important – and difficult – issues are put on the table to be resolved. |
| | | | 11. Team members are deeply concerned about the prospect of letting down their peers. |
| | | | 12. Team members know about one another's personal lives and are comfortable discussing them. |
| | | | 13. Team members end discussions with clear and specific resolutions and calls to action. |
| | | | 14. Team members challenge one another about their plans and approaches. |
| | | | 15. Team members are slow to seek credit for their own contributions, but quick to point out those of others. |

# APPENDIX D

## Script for Test Administrator

Script for Test Administrator

You, the participant, are very instrumental in intercollegiate athletics, so I need your input. Before beginning we must review together the consent to participate form.

Thank you all for participating in this study and helping me today. For my dissertation, I am gathering information related to intercollegiate team sports. I need for you to answer all the questions as truthfully and as accurately as you can. All information is confidential, and there are no provisions for giving any identifying information. Please turn off all electronic devices now. Once we begin, please do not talk.

I will ask for 3 different sets of information. There are two short survey instruments, and a questionnaire about demographics. All of surveys and questionnaires are untimed. I will give you all three instruments and their directions at one time. As soon as you finish with one set of questions, please move on to the next. Answer every question. If you need to take a break, close your booklet and turn it face down. When you return, please turn it over and resume work. I cannot help you answer any test questions. I can only help you with questions about the directions, or with the definitions. You have all the time you need today to complete the questionnaires but it should take no more than 20 minutes finish. After you finish a section, you may check over all your answers to ensure you have answered all the questions. Be sure to mark only one answer on your answer document for each question. If you do not know the answer to a question, choose the answer that you think might best summarize your perceptions and/or experiences.

Open your envelope, take out the packet, and look at the first set of questions. I will ask you to give me some background information about yourself in a demographics questionnaire. These questions deal with your experiences in sports growing up, your socioeconomic background, your family setting, and your educational setting. Please check to ensure you have answered each question before moving to the next instrument.

Second, you will find the "Coach Leadership Functions Instrument." Circle the one phrase in EACH pair that most nearly answers, "Which action by a coach contributes most to the overall welfare of the team?" This could be any coach you've had, present or past. Check to ensure you have answered each pair before moving to the next survey.

The third and last instrument is called the "Lencioni Team Assessment Questionnaire". In this survey, the term "Team members" can be defined as the athletes on your team, not coaches, trainers, or managers.

While you work on the survey instruments, I will be sitting in the back of the room if you need me. Stop when you come to the last page. When you have finished, return the two survey instruments and your questionnaire to the envelope provided. I will collect your answer documents and questionnaire packet. Please leave quietly and do not talk to or disturb others who are still working. Are there any questions?

If there are no more questions, then turn to the beginning of the demographic section and begin.

# APPENDIX E

## Letters to Coaches

1. Invitation Letter for Participation to Coaches
2. Consent or Non-consent Participation Letter to Be Received from Coaches

Invitation Letter for Participation to Coaches

*University Letter Head to be inserted here*

Date:

Dear Coach _____,

My name is Beth Palmer, and I am a candidate for a PhD in Sport Management at Texas Woman's University in Denton, TX. I am writing to ask for your help in completing a survey instrument for the research phase of my dissertation.

Athletes have changed markedly in the years since we competed, both physically, mentally, and psychologically. Our "millennial" athletes think differently, act and react differently, and see themselves and their relationships to the world, each other, and their coaches differently.

These surveys can provide valuable insights about your current team and its players, and their expectations of the coaching staff and each other as parts of a bigger whole.

I will come to your campus and personally administer each survey instrument to your team, and it will take no more than 20 minutes. I'll share the results with you as soon as I have analyzed the data, and you will be able to use the instrument and script for future teams, should you wish.

Please print the attached consent form on your school leader head and return to me by either email or fax. Your student-athletes involvement in this research study is completely voluntary, and you may discontinue your participation in the study at any time without penalty.

Thank you for your support and help.

Sincerely,

Mary E. Palmer, M.Ed., MBA
Texas Woman's University, Denton, TX
mpalmer@twu.edu
Work: (940)898-2585
Cell: (940)390-3756
Fax: (940)898-2581

*University Letter Head to be inserted here*

*Date:*

Dear Mrs. Palmer,

I have received your invitation to participate in the study. Based upon formal consent to provide the opportunity to student-athletes to participate or not participate I have indicated below either my consent or rejection for participation in the study below.

My proposal to participate dictates that I will inform my student-athletes of the proposed date and time of your arrival and that their participation will be anonymous and voluntary.

I and my coaches also understand that the researcher will ensure that individual participation cannot be identified and confidentiality will be protected to the extent possible that is allowed by law.

I understand that it will take no more than 20 minutes, and that the researcher will share the findings with me and my staff if we choose to participate.

Sincerely,

_____

Please check and initial:

☐ Consent to participate

☐ Do not consent to participate

APPENDIX F

Approval Letter From the Institutional Review Board

TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

**Institutional Review Board**
Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378 FAX 940-898-4416
e-mail: IRB@twu.edu

February 13, 2012

Ms. Mary E. Palmer
Department of Kinesiology

Dear Ms. Palmer:

*Re: The Direct Impact of Team Cohesiveness and Athletes' Perception of Coaching Leadership Functions on Team Success in Division I Women's Basketball (Protocol #: 16945)*

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and was determined to be exempt from further review.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. Because a signed consent form is not required for exempt studies, the filing of signatures of participants with the TWU IRB is not necessary.

Any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any unanticipated incidents. If you have any questions, please contact the TWU IRB.

Sincerely,

Kathy DeOrnellas, PhD

Dr. Kathy DeOrnellas, Chair
Institutional Review Board - Denton

cc. Dr. Charlotte Sanborn, Department of Kinesiology
Dr. Bettye Myers, Department of Kinesiology
Graduate School

APPENDIX G

Consent to Participate In Research

TEXAS WOMAN'S UNVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

Title: The Direct Impact of Team Cohesiveness and Athletes' Perception of Coaching Leadership Functions on Team Success in Division I Women's Basketball

Investigator: Mary E. Palmer, M.Ed, MBA.....mpalmer@twu.edu 940/898-2585
Advisor: Bettye Myers, Ph.D.....bmyers@twu.edu 940/898-2577

Explanation and Purpose of the Research

You are being invited by your coach to participate in a research study for Mrs. Palmer's dissertation at Texas Woman's University. The purpose of the study is to investigate the direct impact of team cohesiveness and student-athletes' perception of coaching behavior/leadership functions on the welfare of winning and losing teams in Division I Women's Basketball.

Description of Procedures

The research involves completing a demographic questionnaire and two survey instruments to collect participant's information and research data. The investigator will first explain the research by following an outlined script giving direction for completion of instruments and providing opportunities for clarification of terms and procedures. The survey will take approximately 20 minutes to complete.

Potential Risks

The risk of coercion: There is the possibility that the coach, while arranging the time and location of the collection site and assisting to recruit participants, may unknowingly add pressure on the participants causing them to be concerned about the study results and their affect on them as student-athletes. Participants will be reminded that participating in this research will not affect their student-athlete standing or anything else at the university before test instruments are issued.

The risk of loss of anonymity: Since participants for this research project have been selected from a small group of people, all of whom are known to each other, and the instrument completion occurs within the same room or location there is the potential for some data to be identifiable to other people. The researcher will mention that involvement in the study is completely voluntary, and that the participant is free to withdraw from the research project at any time and that this withdrawal will not affect the participants' academic status, and/or access to, or continuation of, services provided by the University.

The risk of loss of confidentiality: Confidentiality will be protected to the extent that is allowed by law. The confidentiality of identifiable data and computer files will be protected by the researcher and stored in a computer that only the investigator can access by a confidential user name and password. All paper documents will be stored in a locked cabinet in the researcher's

_____
Participant Initials

office. The data and computer files and paper documents will be shredded within three years of the completion of the study. It is anticipated that the results of this study will be published in the investigator's dissertation as well as in other research publications. However, no names or other identifying information will be included in any publication.

The researcher will try to prevent any problem that could happen because of this research. You should let the researcher know at once if there is a problem and they will help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

Participation and Benefits

Your involvement in this research study is completely voluntary, and you may discontinue your participation in the study at any time without explanation and without penalty. Your signature indicates your willingness to participate in the study.

Questions Regarding the Study

You will be given a copy of this signed and dated consent form to keep. If you have any questions about the research study you should ask the researchers; their phone numbers are at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Texas Woman's University Office of Research and Sponsored Programs at 940-898-3378 or via e-mail at IRB@twu.edu.

_____ _____

Signature of Participant Date