

AN EXAMINATION OF PREFERRED COACHING BEHAVIORS AS PREDICTED  
BY ATHLETE GENDER, RACE, AND PLAYING TIME

by

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(Under the Direction of Linda Arthur)

ABSTRACT

The Multidimensional Model for Sport Leadership (MML) (Chelladurai, 1980) states that athlete performance and satisfaction are functions of the congruency between the preferred leadership of student-athletes, the required behavior of the coach as dictated by the situation, and the actual behavior of the coach. The model was developed nearly 30 years ago and while research outside of sport has indicated that leadership preferences have changed with generations, the MML is still the most widely accepted model for sport leadership. As such, research in sport should examine how appropriate the model is to today's athletic culture. Gender, one member characteristic, has been researched considerably, with conflicting results, while race has been largely ignored with preferential leadership. Therefore, the purpose of this study was to determine what extent the preferred coaching behaviors reported by student athletes vary based on race, gender, and playing time and measure the congruency of those preferences with the actual coaching behaviors reported by coaches. NCAA Division-I student-athletes (n = 140) and head coaches (n = 14) in Baseball, Men's and Women's Basketball, Men's and Women's Soccer, Softball, and Volleyball were surveyed using the Revised Leadership Scale for Sport (RLSS). Using multiple regression analysis, the author attempted to predict what coaching behaviors student-athletes preferred based on student-athlete gender, race, and

playing time. None of the regression models were significant, indicating a lack of variance between the predictor groups. Also, the current data revealed that student-athletes reported a significantly higher means in the Democratic Behavior and Situational Consideration subscales than head coaches, indicating a degree of incompatibility between student-athlete preference and actual coaching behaviors. A revision of the RLSS might yield more significant and meaningful results, as two of the subscales displayed low levels of internal consistency.

**INDEX WORDS:** Coaching, Leadership, Sport, Revised Leadership Scale for Sport, Multidimensional Model for Sport Leadership

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## DEDICATION

In recognition for their unwavering support and encouragement, I would like to dedicate this dissertation to my family - my mother and stepfather, Becke and Gary Guy; my father, Butch Burdette; and my brother, Travis Burdette. I love all of you.

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## CHAPTER I

### INTRODUCTION

The importance of leadership on the outcomes for any formal organization, it is a topic that has been researched considerably, both inside and outside of the athletic context. According to Northouse (2003), goal attainment is one of the four components of leadership. He contends that much of the leader's focus should be on facilitating the movement to the goals of the organization. Therefore, the importance of quality leadership cannot be underestimated.

Leadership research began to expound in the second half of the 20<sup>th</sup> century. Models of leadership were developed and tested. Outside of sport, there has been research on the generational differences between today's generation and those 30-40 years ago. Arsenault (2004) validates the generational differences and the implications for leaders. He reports that each of four distinct generations-Veteran, Baby Boomer, Generation X, and Nexter-had/has its own preferred leadership style. Yu and Miller (2005) agree that leaders must be able to adapt to multiple types of workers. The premise in these empirical studies suggests that appropriate leadership for older generations might be misguided for today's subordinates. Therefore, it seems reasonable to assume the preferential leadership of athletes from coaches has also changed with the generations. With the findings of this study, widely accepted sport leadership practices may be tested and, if appropriate, adjusted to better fit with the athletes from the current generation.

Based on Fielder's Contingency Model of Leadership, Chelladurai (1980) developed a Multidimensional Model of Sport Leadership (MML). In this model, there are three antecedents to leader behavior: situational characteristics, leader characteristics,

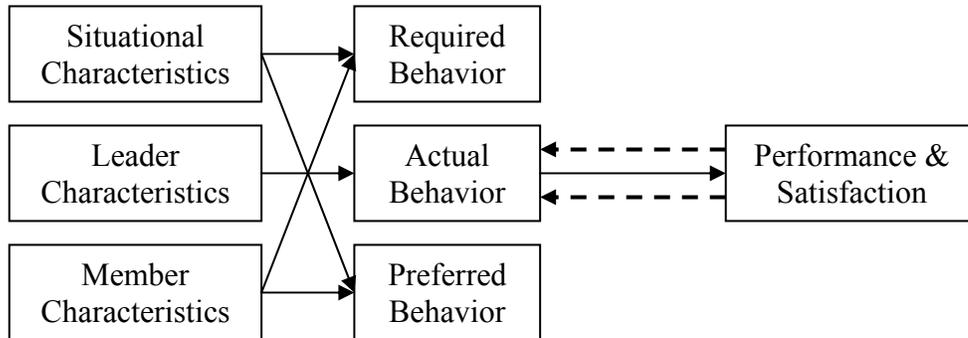
and member characteristics. Member characteristics (gender, age, and playing time in the current study), in particular, may lead to preferred leadership. These antecedents produce three types of behavior: required behavior, actual behavior, and preferred behavior. The outcome of the MML is such that if the three types of behaviors are congruent, performance and satisfaction will increase (Chelladurai, 1980). For example, recreational league coaches may exhibit more relationship-oriented behaviors than a professional coach because the situation and member preference dictates that personal development may supersede winning. A professional athlete might prefer more task-oriented coaching behaviors that lead to winning, rather than those behaviors that foster relationships. That professional coach exhibits different leadership behaviors than the recreation coach, according to the MML. Figure 1 illustrates the MML.

To assess the preferred coaching behaviors, Chelladurai and Saleh (1980) developed an instrument to measure leader behavior in sport. The Leadership Scale for Sport (LSS) was designed to measure 1) the student athletes' preference for leader behavior by the coach, 2) the coach's actual leadership behavior as perceived by the student athlete, and/or 3) the actual leadership behavior as self-reported by the coach. The scale evaluates the scores for five leadership dimensions: Democratic Behavior, Positive Feedback, Training and Instruction, Social Support, and Autocratic Behavior. Based on inconsistency between the LSS and the Multidimensional Model of Sport Leadership, Zhang and Jensen (1997) revised that instrument. The authors added two additional dimensions, Group Maintenance and Situational Characteristics. Group maintenance was defined by the researchers as behaviors that add to group cohesion and building relationships between members of the team, including the coaching staff. It was added to

the LSS because the original instrument lacked a measure of group dynamics, which previous leadership literature suggests is a major function of leadership (Carron & Hausenblas, 1998; Northouse, 2003).

Figure 1

Multidimensional Model for Sport Leadership



Chelladurai, P. (1980). Leadership in sports organizations. *Canadian Journal of Applied Sports Science*, 5(4), 226-231.

Situational Characteristics were suggested as behaviors such as goal setting and considering factors such as time, the environment, the team, and the game. It was added to the LSS because the LSS failed to consider contingent leadership, which is represented in the Multidimensional Model for Sport Leadership (Zhang and Jensen, 1997). However, Group Maintenance was found to emerge in other factors such as Social Support. Therefore, in the final revision, only Situational Characteristics remained, giving the Revised Leadership Scale for Sport (RLSS) a total of six dimensions. Much research in coaching and leadership behavior has used both the LSS and the RLSS to measure preferential leadership.

### Background of the Study

One area in the preferential leadership research that has had consistent results is the type of sport played and its influence on the student athletes' preferred coaching

behavior. Athletes who play team sports such as basketball, volleyball, or football prefer a more autocratic coach than an athlete who plays an individual sport such as tennis or golf (Beam, Serwatka, & Wilson, 2004; Weinberg & Gould, 2007). Moreover, Riemer and Chelladurai (1995) found that athletes whose tasks are varied from their teammates (offensive versus defensive players in football) prefer different coaching behaviors. Other findings about situational or member variables such as gender, race, and playing time are not as consistent in the research literature.

Numerous researchers have shown that male athletes prefer instruction behaviors and autocratic decision making while female athletes desire coaches who exhibit democratic and participatory leadership (Beam, Serwatka, & Wilson, 2004; Chelladurai & Arnott, 1985; Lam, et al. 2007; Martin et al. 2001; Riemer & Toon, 2001; Sherman, Fuller, & Speed, 2000; Turman, 2003; Weinberg & Gould, 2007). However, the research is conflicted regarding the significance of the differences.

Sherman, Fuller, and Speed (2000) found that male athletes scored slightly higher on autocratic behavior on the LSS. However, the difference was not significant and both male and female athletes ranked preferred leader behavior the same way – Positive Feedback, Training and Instruction, Democratic Behavior, Social Support, and lastly Autocratic Behavior. The authors also suggested that athlete gender does not influence preferred coaching behavior in dual gender sports, such as basketball. Riemer and Toon found differences, although again insignificant, between male and female preferred coaching behaviors (2001). Their findings suggest that the coach's gender may influence preferred behavior more than the athlete's gender. Andrew (2004) concurred based on the findings that athlete gender was not a factor in determining preferred leadership.

In independent studies, Barnes (2003) and Kravig (2003) examined coaching behavior preferences of NCAA Division I athletes and interscholastic athletes, respectively. Both researchers report that although preferred leadership varied as a function of gender and type of sport, overall the preferences from athletes were similar. Given the results of studies on gender and preferential coaching behaviors, how coaches should vary their coaching strategies based on this member characteristic is debatable.

One aspect of gender and preferred leadership that researchers have largely ignored is the relationship of the coach's gender and the athlete's preferred leadership. Some researchers have found differences, while others claim there is no difference between males and female regarding effective coaching behaviors. Millard (1996) found that male coaches gave more technical instruction and less general encouragement than their female counterparts. However, Côté and Sedgwick examined the behaviors of expert rowing coaches. They found no differences based on the gender of the coach.

Another leader characteristic that researchers have overlooked is the race of the coach and its affect on the preferred leadership of athletes. There has been no research found examining the relationship between the two variables.

Similar to gender, the degree to which the skill level influences preferred coaching behaviors varies with each study. Riemer and Toon (2001) found that athletes of lesser ability preferred more positive feedback than athletes with more ability. The researchers suggested that higher skilled athletes had more mastery of the skill and, therefore, needed less positive feedback. However, lesser skilled athletes (Division II versus Division I) needed more positive feedback for motivation and the reduction of stress. Beam, Serwatka, and Wilson (2004) found no differences between NCAA

Division I and Division II athletes regarding preferred coaching behavior. Martin et al. (1999) suggest that coaches of younger athletes might focus on creating a positive atmosphere and developing relationships. In other words, lower level athletes prefer a relationship-oriented coach. Conversely, coaches in higher levels of competition, collegiate coaches, for example, may exhibit more task-oriented behaviors based on the preference of the athletes. Anshel (2003) illustrates these differences by stating that as competition level increases, task-oriented behaviors increase while the relationship-oriented behaviors decrease.

One aspect of preferred leadership regarding skill level is the possible differences in starters versus reserve players. Turman (2006) explored the relationship between coach's power and athlete playing status and satisfaction. However, the topic of preferred coaching behavior as influenced by playing time has largely been ignored.

Limited research has been found on the coaching behavior preferences of different racial and/or ethnic groups. Jackson (2002) found that there was no relationship between coaching behavior preference and race. Given that coaches generally interact daily with athletes of different races or ethnicities, the current study will provide valuable insight to the preferences of these under-researched populations.

Based on the Multidimensional Model of Sport Leadership, if preferred leadership and actual leadership are congruent, performance and satisfaction of the group will increase (Chelladurai, 1980). Jacob (2006) surveyed National Collegiate Athletic Association (NCAA) Division I coaches and found that perceived social support was a predictor of winning success. Although performance has been measured (Jacob, 2006, Rowe, 2003), satisfaction is a much more measurable variable because performance is

difficult to define. For example, win/loss percentage, graduation rate, or team improvement could all be interpreted as some level of successful coaching. Therefore, it seems more reasonable to assess member satisfaction and according to Andrew (2004), satisfaction is a more solid measurement than performance. Andrew hypothesized that satisfaction would increase as the congruency between preferred and perceived leadership behaviors increased. He found that only autocratic behavior congruency increased athlete satisfaction, which is perplexing because of the relatively low amount of reported preferred autocratic behavior in previous research. Wang (2006) measured the satisfaction of collegiate Taiwanese Tae Kwon Do athletes based on their coaches' behaviors using the LSS. All coaching behaviors, except autocratic, have strong positive correlations with satisfaction. Similarly, Altahayneh (2003) found that athletes who perceived their coaches to provide significant training and instruction, social support, feedback, and democratic behavior were more satisfied and less burned out.

#### Statement of the Problem

Outside of sport, there has been a shift of preferred leadership behaviors across multiple generations. However, in sport, models of leadership, specifically the Multidimensional Model for Sport Leadership, developed almost 30 years ago are still widely used. From the literature, researchers have accepted the multi-dimensional model of leadership; different situations will dictate certain coaching or leadership behaviors. It is known that the type of sport played impacts the preferred coaching behaviors reported by the student athletes. Athletes who participate in individual sports prefer different coaching behaviors from athletes who participate in team sports. Some research suggests that the characteristics of the group members, such as gender, race, and ability might

establish different leadership preferences. However, the extent to which member characteristics influence preferred leadership in sport is unclear. The contradiction between in-sport and out-of-sport research regarding preferred leadership would indicate a gap in the research.

Research is conflicted, when examining preferential leadership related to member characteristics such as gender, race, and ability. Some researchers report group differences based on these variables, while other researchers claim no differences exist. One must wonder to what extent the member and leader characteristics influence preferred and actual leadership. There are several gaps in the research such as how the member characteristics impact the student athletes' preferred coaching behaviors, as well as the congruency between actual leadership exhibited by coaches and the preferred leadership reported by athletes. Therefore, the purpose of this study is to determine what extent the preferred coaching behaviors reported by student athletes vary based on race, gender, and playing time and measure the congruency of those preferences with the actual coaching behaviors reported by coaches.

#### Research Questions

The overarching research question is: to what extent do member characteristics of student athletes predict the preferred leadership from coaches? Specifically, the following questions will also be explored:

1. How much variance in Democratic Behavior can be explained by gender, race, and playing time?
2. How much variance in Positive Feedback can be explained by gender, race, and playing time?

3. How much variance in Training and Instruction can be explained by gender, race, and playing time?
4. How much variance in Situational Consideration can be explained by gender, race, and playing time?
5. How much variance in Social Support can be explained by gender, race, and playing time?
6. How much variance in Autocratic Behavior can be explained by gender, race, and playing time?
7. To what extent is the preferred leadership reported by student athletes congruent with the actual leadership behaviors as self-reported by coaches?

#### Research Procedures

The present study used quantitative methodology by using a survey to test aspects of existing theories in sport leadership. The instrument was delivered via the World Wide Web in order to access a large number of subjects. Demographic information was also collected from the participants.

The population for this study was all Division-I athletes that participate in soccer, basketball, baseball, softball, and volleyball. Both men and women head coaches who lead in those particular sports was a second population for the present research. The participants for this study were conveniently sampled from NCAA Division-I schools from across the United States.

The initial section of the instrument gathered demographic data on the athletes and head coaches such as gender, race, sport played/coached, and how often they play in

competitions. Two of the three versions of the Revised Leadership Scale for Sport (RLSS) were utilized in the present study. The first measured the athletes' preferred coaching behaviors while the second measured the actual leadership behaviors exhibited as self-reported by the coaches (Zhang and Jensen, 1997).

Multiple Regression analysis was conducted to predict the scores for each subscale on the Revised Leadership Scale for Sport. Based on the scores, the preferred leadership of student athletes might have been reasonably predicted based on gender, race, and playing time. A total of six regressions were calculated based on the six dimensions of sport leadership outlined in the RLSS. Also, the congruency between the preferred leadership behaviors reported by athletes and the self-reported behaviors reported by coaches was examined.

#### *Significance of the Study*

There has been conflicting research about the significance of member characteristics and preferential leadership. The present study will give further insight into the model to in fact, determine if preferred coaching behaviors can be predicted by specific member characteristics.

There is a practical significance to the present study. According to existing theories, member characteristics of the student athletes influence their preferred coaching behaviors. If the preferred behavior matches the actual behavior, member satisfaction increases (Chelladurai, 1980). Therefore, if coaches understand what leadership their teams prefer, they could adapt their coaching behaviors in order to increase their athletes' satisfaction and possibly, performance.

### *Delimitations*

The present study is delimited to the following:

1. The samples are convenient rather than random.
2. The samples are taken from men's and women's soccer, men's and women's basketball, baseball, softball, and men's and women's volleyball.
3. Each athlete and coach is a member of a NCAA Division-I educational institution.

### *Limitations*

The present study has the following limitations:

1. The use of the internet may cause technological problems.
2. The response rate may be low.
3. The RLSS subscale, Autocratic Behavior, has relatively low internal reliability.

### *Assumptions*

The present study assumes the following:

1. Each respondent will answer the instrument truthfully.
2. The responses by each coach reflect the actual behaviors exhibited.

### *Operational Definitions*

The following are definitions for the present study:

1. Playing time
  - a. Participants will be placed into two categories. The first will be athletes who play  $\geq 50\%$  of contests and will be categorized as High-Moderate Playing Time (HMPT). The second will be athletes who play  $< 50\%$  of contests and will be categorized as Moderate-Low Playing Time (MLPT).

2. Leader

- a. In the present study, the leader is synonymous with the coach.

3. Member

- a. In the present study, the member is synonymous with the athlete.

### Summary

The Multidimensional Model for Sport Leadership is the most widely accepted conceptual framework for coaching behaviors. From this model, the Leadership Scale for Sport was developed to measure the preferred leadership of student-athletes. That scale was revised, adding one subscale, Situational Consideration. The Revised Leadership Scale for Sport was used in this project. The present study attempted to predict the preferred coaching behaviors of student athletes based on race, gender, and playing time using Multiple Regression analysis. Also, the present study examined the congruency between the preferred coaching behaviors reported by athletes and the actual leadership behaviors as reported by the coaches. Also, the coaches will have a greater understanding of leadership behaviors desired by their student athletes', thereby possibly increasing the satisfaction and performance of the team members.

## CHAPTER II

### REVIEW OF LITERATURE

#### Leadership Theories

##### *Trait Theory*

Early in the 20<sup>th</sup> Century, leadership research focused on the personality traits of quality leaders. Such individuals such as Abraham Lincoln, Mohandas Gandhi, and Napoleon were studied to identify the traits that each possessed. It was believed that if a leader held such qualities, the effectiveness of his leadership would be high. This theory was referred to as the “the great man” theory. Most, if not all, of this research was conducted in the military, social, or political arenas, where men were the predominate sex (Northouse, 2003).

In the mid-20<sup>th</sup> Century, researchers challenged the notion that only “great” people with special characteristics were effective leaders. Stogdill (1948) suggested that the effectiveness of leadership was an interaction between the leader and the situation. He found that there were no differences in the personality traits of leaders and the group members among various situations, and the quality of leadership was dependent on the connection between the leader and the members rather than the characteristics of those in charge. Stogdill conducted two reviews of leadership studies (1948, 1974). In his first, he found that leaders did possess clear traits such as intelligence, alertness, insight, responsibility, initiative, persistence, self-confidence, and sociability. However, it was not these traits alone that defined effective leadership. Rather, it was the manner in which the leader qualities fit the function of the organization. Thus, according to Stogdill’s first review, the leader effectiveness is principally based on the situational factors rather than

the leader's qualities. In his second survey, Stogdill similarly found traits of effective leaders. These traits included drive for task completion, persistence in goal attainment, creativity in problem solving, initiative in social situations, self-confidence, responsibility for actions, ability to handle interpersonal stress, ability to tolerate frustration, influence over others, capacity to structure social interactions systems to a purpose. However, he adjusted his findings from his first review to suggest that both personality traits and situational characteristics are both crucial to leadership (as cited in Northouse, 2003).

Recently, the Trait Theory has regained popularity (Bass, 1990, Kirkpatrick & Locke, 1991, Northouse, 2003). Although it is generally accepted that leader traits alone are not solely responsible for the leadership effectiveness, the personal qualities of the leader are significant in the overall equation of leadership (Northouse, 2003).

There are strengths to the trait theory of leadership. Leaders are thought to be unique individuals with special skills and traits. This theory is consistent with that perception. Also, trait theory has been researched extensively for a century and some researchers still believe that it is the best philosophy on leadership. This gives Trait Theory an abundance of credence. Regardless of whether the leader characteristics alone are responsible for effective leadership, the research that has been done on Trait Theory has given insight on how the leader is involved in the leadership practice. Lastly, a practical strength of trait theory is research has identified certain characteristics that potential leaders can develop which are intelligence, self-confidence, and integrity (Northouse, 2003).

Although several traits have been identified, researchers have failed to develop a consistent, comprehensive list of traits. This ambiguous list is a criticism of the Trait

Theory. Stogdill (1948) illustrated a second weakness of this philosophy, which is it is unrealistic to separate the leader characteristics from the situations in which the leaders exist. Another weakness is the subjectivity of trait theory. What trait is most important for leaders? Who or what decides which is most important? A final criticism of trait theory is the training of future leaders. Traits are difficult to teach and if trait theory is correct, it is virtually impossible to improve leadership skills (Northouse, 2003).

Although there are weaknesses that limit the application of Trait Theory to leadership, it has certainly withstood decades of research and that alone gives credibility to the theory. Therefore, Trait Theory is certainly a significant leadership philosophy.

### *Behavioral Theory*

Contrary to the Trait approach to defining leadership, researchers began to focus on the behaviors of the leaders during the mid-20<sup>th</sup> century. The Behavior Theory emphasizes the actions of leaders with their subordinates. Most researchers categorize behaviors in two forms: task behaviors and relationship behaviors. Task behaviors are designed to facilitate the achievement of organizational goals while relationship behaviors attempt to build the human capital in the organization. In other words, relationship behaviors make subordinates feel comfortable in the situation. The Behavior Theory attempts to explain how these two types of behaviors assist members to attain the group goals (Northouse, 2003).

Based on Stogdill's work in the late 1940s, a group at Ohio State University investigated the behavior or style approach. The researchers asked subordinates, in a variety of fields including military, education, and industry, to describe the behaviors of their leaders. Two general behaviors that were classified were initiating structure and

consideration. The structure initiation behaviors are such actions as scheduling, organizing, and defining organizational roles. In other words, initiating structure is consistent with task behaviors. Conversely, consideration can be described as developing trust, morale, and motivation. In other words, consideration can be otherwise known as relationship behaviors. The researchers concluded that leaders exhibit both sets of behaviors. However, the two types of behaviors have no relationship nor are they correlated in any way. Research after the Ohio State studies sought to examine which behaviors were more effective in certain situations (as cited in Northouse, 2003).

Around the same period, researchers at the University of Michigan investigated the leader's behavior on the outcomes of small groups. The researchers again identified two types of leader behaviors. The first, employee orientation, was defined as emphasizing the human relationships within an organization. Employee orientation is very similar in characteristics to the Ohio State behavior consideration. The other behavior classified by the researchers at the university of Michigan was called production orientation. Production orientation was described as behaviors that stressed the technical aspects of work associated with task achievement. This behavior is closely associated with initiating structure, as defined in the Ohio State studies (Northouse, 2003).

One strength of the Behavior Theory is that it expanded previous leadership to not only examine the qualities of the leader, but also how the leader acts towards group members. Thus, it incorporated another aspect of leadership to be studied and comprehended. This leads to another strength of the Behavior Theory. It allows the leader to reflect, assess, and self-analyze his/her behaviors to see where on the continuums each fits (Northouse, 2003).

One criticism is that researchers have not linked the leader behaviors to organizational outcomes. The only link that has been consistently established between behavior and outcomes is leaders who focus on relationship behaviors, consideration, or employee orientation have higher levels of subordinate satisfaction (Yukl, 1994). Another weakness of this theory is no behavior that works universally for all situations. Leaders must analyze individual situations and behave in a manner that best fits the particular situation.

### *Situational Theory*

Hersey and Blanchard (1969) developed a widely accepted leadership philosophy called the Situational Theory of leadership. The principle in this theory is that different contexts will require different styles of leadership. Therefore, the leader must be able to exhibit multiple styles depending on the required functions. The two types of behaviors stressed in the Behavior of Style theory, task and relationship behaviors, are also present in Situational leadership, but there is an added dimension of the subordinate. As Northouse (2003) describes:

Situational leadership stresses that leadership is composed of both a directive and a supportive dimension, and each has to be applied appropriately in a given situation. To determine what is needed in a particular situation, a leader must evaluate her or his employees and assess how competent and committed they are to perform a given task. Based on the assumption that employees' skills and motivation vary over time, situational leadership suggests that leaders should change the degree to which they are directive or supportive to meet the changing needs of subordinates (p. 87).

This theory contends that effective leaders are those that can gauge the competence and commitment of the group members and adjust the supportive and directive behaviors appropriately. Blanchard (1985) and Blanchard et al. (1985) refined the dynamics between the leadership styles and the development of the group members.

Leadership styles include directive and supportive behaviors. Directive behaviors coincide with previous terms such as task behaviors and production orientation. These behaviors facilitate task achievement and goal attainment. Supportive behaviors are those that build group morale, camaraderie, and member relationships. They show emotional support and develop social relations. Furthermore, the leadership styles can be subdivided into four categories, high directive/high supportive (Coaching), low directive/high supportive (Supporting), high directive/low supportive (Directive), and low directive/low supportive (Delegating) (Blanchard, 1985; Blanchard et al, 1985; as cited in Northouse, 2003).

The developmental level of the subordinates determines which leadership style should be employed. The level of development refers to the level of competence and commitment of the group members (Blanchard et al., 1985). In other words, an employee with a high level of development is confident in his/her work and he/she knows how to complete the task. Conversely, if an employee is not confident and has little knowledge of the task, he/she is identified with a low level of development (Northouse, 2003).

A general strength of this approach is that the Situational Theory is one of the more widely accepted philosophies in leadership research. It is commonly used to train management and future leaders in industry. One reason it is so commonly used is the model is easy to understand and is easy to implement, which is another strength. Leaders

can easily assess situations and apply the leadership style that is most appropriate. Lastly, it emphasizes that leaders might be required to treat employees and/or situations differently (Northouse, 2003).

The Situational Theory does have limitations, however. There is relatively limited research that validates the assumptions in situational leadership. Therefore, is it really a valid approach? Also, the description of the developmental levels is unclear among the different revisions of the situational model. Another weakness of this approach is that it fails to consider the member characteristics in the model (age, sex, education level, etc.). Finally, it fails to consider differences between one-to-one leadership and group leadership. Despite these limitations, the situational approach is widely used to train leaders (Northouse, 2003).

#### *Leader-Member Exchange Theory*

Contrary to other leadership philosophies, the Leader-Member Exchange Theory (LMX) focuses specifically on the relationships that are formed between leaders and each subordinate. Based on these relationships, subordinates are classified into one of two groups: in-groups or out-groups. In-group members are those that perform duties that extend beyond their formal roles. Whether it is a result of, or the reason for the special exchange between members and leaders, later studies of the LMX suggests that positive exchanges increase organizational outcomes (Graen & Uhl-Bien, 1995). The second group, out-group, are the members of the unit that perform duties assigned to their formal roles and nothing more. In this model, the exchanges between the out-group and leaders are less productive than those between the in-group and the leaders of the unit (Northouse, 2003).

The ultimate goal of the LMX is to create exchanges between the leaders and all members to create more in-group subordinates. Graen and Uhl-Bien (1991) suggested there are three phases to creating relationships: stranger phase, acquaintance phase, and the mature partnership phase. Figure 1 illustrates the phases of leadership making.

Figure 2

Phases in Leadership Making

	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>
	Stranger	Acquaintance	Mature Partnership
<b>Roles</b>	Scripted	Tested	Negotiated
<b>Influences</b>	One way	Mixed	Reciprocal
<b>Exchanges</b>	Low quality	Medium quality	High quality
<b>Interests</b>	Self	Self/other	Group

Time ⇒

Graen, G. B. & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level, multi-domain perspective. *Leadership Quarterly*, 6(2), 219-247.

According to Northouse (2003), “leaders should look for ways to build trust and respect with all of their subordinates, thus making the entire work unit an in-group” (p. 154).

The first positive aspect to the LMX is research has associated this theory to positive organizational outcomes (Graen & Uhl-Bien, 1995). If one function of leadership is to facilitate organizational outcomes, LMX satisfies that function of leadership.

Secondly, the LMX looks to a reality of formal organizations. Not every member will contribute to the organization equally. The LMX acknowledges that there are different groups within a unit and that leaders interact differently with in-groups and out-groups.

This leads to one criticism of the LMX. Some argue that because there are different groups, the LMX could lead to discrimination within the organization. However, as long as the leader does not limit opportunity for the out-group members to become in-

group members, discrimination will not exist. A second, more valid argument against the LMX is its lack of explanation of how to develop the high exchanges between leaders and members.

Much of the research on the LMX has been done outside of the sport setting. However, the nature of leader-member exchanges in athletics lends itself to testing the model in sport. Case (1998) examined the application of the LMX to sport. He hypothesized that starters would have higher exchanges with coaches than non-starters. Using the Leader Member Exchange Scale, he found that starters did, in fact, have higher levels of exchanges than non-starters. Therefore, the results from Case support the application of the LMX in sport.

#### *Fiedler's Contingency Theory*

Fiedler (1967) developed the most widely accepted contingency theory model of leadership. It contends that group performance increases when the leadership style is properly matched with the organization context. Therefore, the Contingency Theory is concerned with leadership styles and organization situations. There are two leadership styles in this model, task motivated and relationship motivated. Similar to previous models, task motivated behaviors are those that are focused on goal attainment while relationship motivated behaviors are focused on developing and maintaining relationships within the unit. To measure styles, Fiedler developed the Least Preferred Coworker (LPC) where high scores reflected relationship orientation and low scores reflected task orientation.

The situational variables within Fiedler's model are leader-member relations, task structure, and position power. Leader-member relations refer to the organization

atmosphere. Task structure refers to the clarity of the tasks. High structured tasks give more control to the leader while low structured tasks diminish the control of the leader. The final situational characteristic is position power. It is described as the legitimate power a leaders has over subordinates.

According to the model, leaders that score low on the LPC are most appropriate for both favorable and unfavorable situations. Leaders with high LPC scores are best suited for moderately favorable conditions. By considering the organization climate, the Contingency Theory can predict which leader will be most successful. It should be noted, however, that this model does not assume that all leaders will be successful in all situations.

A favorable aspect of the Contingency Theory it has been tested numerous times and found to be valid by researchers (Mitchell et al., 1970; Northouse, 2003). It also does not posit, contrary to many theories, that one leadership style is superior. Another significant strength of this philosophy is that it is predictive so that probable outcomes can be calculated before leaders are put in place.

Some researchers are skeptical of the LPC. By some accounts, the instrument is confusing to administer and analyze and some even question the validity of the LPC. Also, this model fails to answer what organizations should do if the leadership style does not fit with the organization. Because it does not encourage teaching leaders to adjust, a mismatch becomes a weakness of the model (Northouse, 2003).

### *Transformational Leadership*

Based on Burns' work on leadership (as cited in Northouse, 2003' Owens, 2004), Transformational Leadership has gained considerable popularity in recent years. It is

defined as a theory of leadership whereby one individual, the leader, influences and engages others in the organization to make change. With this definition, the leader empowers the followers to also be responsible for organizational change. Therefore, the leader and the follower are linked with shared responsibility (Northouse, 2003). This contrasts most other leadership philosophies that are based on transactions between the leader and the followers. Owens (2004) states:

In the most commonly used type of leadership, the relationship between leader and followers is based on quid pro quo transactions between them.

Transactional...leaders can and do offer jobs, security, tenure, favorable ratings, and more in exchange for the support, cooperation, and compliance of followers.

In contrast “the transformational leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower...” (p. 269).

Northouse (2003) describes the process of Transformational Leadership. The first step is that leaders empower followers by increasing the organization interest over the individual. This is interesting because the nature of Transformational Leadership is such that the needs of the follower are of paramount interest to the leader. Because the needs of the follower are so significant, the follower becomes more committed to the organization. The next step is that transformational leaders become strong role models for their followers. Because their values, ideas, morals, etc. are so strong and influential, the followers attempt to imitate the leaders, thus cultivating future transformational leaders. Next, the leader focuses the organization on the vision and goals of the organization. The organization remains discipline and as a result, the outcomes and productivity increase.

The transformational leaders also act as change agents and social architects, influencing group culture and norms (Northouse, 2003).

One of the best applications of Transformational Leadership is in the book, *Good to Great*, Collins (2001) reviewed the leadership practices of companies that had exceptional productivity. His findings closely resemble Northouse's description of Transformational Leadership as well as Owen's description of moral leadership. Owen (2004) states that the mutual stake that transformational leaders evoke a higher level of leadership, moral leadership. Moral leadership is consists of three issues. 1) genuine sharing of mutual needs, 2) the ability for followers to complete initiatives by making informed choices, and 3) the authentic commitments of both leaders and followers due to constant evaluations of stakeholder needs ( Owens, 2004). Collins (2001) describes a similar level of leader, which he titles, the Level 5 Leader. A Level 5 Leader is one who exhibits "extreme personally humility with intense professional will" (p. 21). In other words, Level 5 Leaders put the needs of the organization and its members before himself/herself. Level 5 leaders are one of the cornerstone characteristics of companies that are truly great. Organizations that have this type of leader are more likely to have outstanding culture and productivity.

There are several strengths to Transformational Leadership, according to Northouse. First, the extensive research done on this type of leadership suggests that it is a valid and highly effective method of leadership. The nature of Transformational Leadership is another strength. Transformational leaders are charismatic figures to which followers are drawn. Also, Transformational Leadership is a process that involves both the leader and the followers. The needs, values, and beliefs of all organization members,

both leaders and followers, are significant in Transformational Leadership. This is another strength because when all have stake in the organizational outcomes, productivity increases (2003).

However, conceptually, Transformational Leadership is hard to define. Therefore, the parameters for this leadership style are unclear. Because of the lack of clarity, Transformational Leadership is difficult to measure. The charisma of transformational leaders is certainly a strength, but it can be viewed as a criticism as well. The charisma of such leaders might suggest that Transformational Leadership is a trait theory. If it is indeed a predisposition or personality trait, it may be difficult to teach a leader to be charismatic (Northouse, 2003).

### Demographic Variables and Leadership

#### *Gender and Leadership*

In the past 30 years, women have gained opportunities to be leaders in the business world. With these changes, research on gender issues and leadership has been prevalent. Moreover, research has investigated how males and females differ, if at all, in their leadership styles. The research is conflicting, with some conclusions reporting significant gender differences, while others claim little differences exist between male and female leaders.

Rosener (1990, as cited in Owens, 2004) examined the leadership styles of female and male executives. She found that men use more autocratic styles of leadership, focusing on hierarchal structure, personal authority, and power. Women, on the other hand, used a nurturing and personal style of leadership. She reported that women use shared decision-making, were interested and concerned with the personal feelings of

others, and empowering organizational members. A meta-analysis cited by Northouse (2003) revealed only one difference between men and women regarding leadership styles. It supports the conclusions of Rosener by revealing that women use a democratic style while men use an autocratic style. The descriptions of Rosener resemble a transformational leader, and the Level 5 Leader described by Collins in *Good to Great*. In a qualitative analysis, Stanford, Oates, and Flores (1995) examined if women differed from men in leadership style. They concluded that women, based on keywords in their responses, women overwhelmingly displayed characteristics of transformational leadership. Schyns and Sanders (2005) attempted to substantiate these conclusions by investigating gender differences in the relationship between Transformational Leadership and self-efficacy. Regarding gender and Transformational leadership, the researchers hypothesized that women would be rated higher in Transformational Leadership than men. Sampling 58 supervisors and 112 workers in the health professions in Germany, they found that men rated themselves significantly higher on Transformational Leadership than women. However, these ratings were self-reported, which makes these findings questionable, yet interesting.

Other research claims that there are little, if any, differences between the leadership styles of men and women. Matviuk (2007) explored leadership prototypes in Columbia. Comparing men and women in five subscales, Challenging the process, Inspiring a shared vision, Enabling others to act, Modeling the way, and Encouraging the heart (all comparable behaviors to Transformational Leadership), the means for each were slightly higher for males. However, a MANOVA was calculated to statistically compare the subscales and it was concluded that there were no significant differences

between men and women in the five subscales. Schyns and Sanders (2005), along with examining the self-reports of male and female leaders, investigated how followers rated their leaders. Although the reports for women were slightly higher than men regarding Transformational Leadership, the differences were not significant, thus supporting the notion that men and women behave similarly in leadership positions.

There are gender biases regarding leadership, possibly stemming from preconceived notions about how male and female leaders should behave. Research suggests that group functions can vary based on the sex compatibility between leaders and followers. Northouse (2003) explains sex similarity and the implications for leadership. He states:

In contingency theory, for example, the preferred leadership style in a particular situation could be affected by the leader's sex and the sex composition of a group, which in turn could affect how positive the leader-member relations were. In path-goal theory, the sex of the leader and the subordinates could affect the degree to which directive leader behavior was seen as effective, even if the task were ambiguous. In leader-member exchange (LMX) theory, the sex of the vertical dyad members could affect the likelihood of forming an in-group relationship and the particular benefits given by the leader, even if the subordinate's performance were outstanding (p. 282).

Vecchio and Brazil (2007) investigated sex-similarity and levels of leader-member exchanges, participation in decision-making, performance appraisal, and cohesion. Sex-similarity was a significant factor for leader-member exchanges, and cohesion was marginally higher in groups with same sex leaders and followers. Wolfram, Mohr, and

Schyns (2007) focused on sex similarity between leaders and followers. They hypothesized that the gender constellation (leader and follower being the same gender) would affect the professional respect given to the leader. The authors found a significant effect between gender constellation and professional respect. For example, female leaders receive the least amount of professional respect if they have male followers, while male leaders with female followers receive high levels of professional respect. They also hypothesized that role discrepancy (females that behave autocratically and males that behave democratically) and gender would be a significant effect. Their hypothesis was confirmed. Democratic males were rated higher than autocratic females. This may confirm the gender role beliefs and biases that come with gender and leadership.

However, Duehr and Bono (2006) found that gender stereotypes are fading regarding leadership. Callahan, Hasler, and Tolson (2005) also suggest that traditional behaviors associated with certain genders are beginning to be blurred. They investigated that emotion-expressiveness in business executives. According to the research cited in their study, women are better at expressing emotions. However, their findings indicate that men executives express more emotion than women executives. They report several possible reasons for the conflicting results. Leadership has long been associated with masculine behavior and as such, women are more likely to respond based on traditional roles requirements. The samples were asked to self-report, which might be another reason for their results. Also, “[a] third possibility is that men self-reporting slightly higher emotional expressiveness due to the changing culture which is just beginning to accept ‘feminine’ traits such as expressiveness” (as cited in Callahan et al., 2005).

Gender and leadership has been investigated in previous research, but according to Warig (2003), race and the interaction of gender and race are rarely studied. Warig explored the experiences of African-American women who were college presidents. She cites very few pieces of literature regarding race, all of which focused on specific populations, African-American female college presidents. Littrell and Nkomo (2005) was the only other literature found examining gender, race, and preferred leadership in South African MBA students. The authors hypothesize significant differences will occur between males and females, as well as whites and blacks, on preferred leadership behavior. Their results confirm the research hypotheses, however, the authors hesitate to give any concrete behaviors that leaders should exhibit. The reason for the hesitation might be because of the cultural context of the project. South Africa has a history of racial and gender discrimination, which may lead to a conclusion that the context might be highly influential for preferred leadership. Therefore, research should be conducted to examine differences in racial and ethnic groups regarding leadership.

### Sport Leadership

In the last thirty years, athletics has become an integral part of American culture. Within the athletic realm the overwhelming leader is the coach. The coach serves many roles such as parent, friend, disciplinarian, strategist, etc., as well as the group leader. To apply leadership to sport, Chelladurai (1980) developed a Multidimensional Model of Sport Leadership based on Fiedler's Contingency Theory. In this model, there are three antecedents to leader behavior: situational characteristics, leader characteristics, and member characteristics. Based on these three antecedents, the leader behavior falls within three frameworks: required behavior, actual behavior, and preferred behavior. Team

performance and satisfaction are a result of the interaction between the antecedents and leader behaviors.

Actual leader behavior is the actions that the coach performs. Factors that influence actual leader behavior can range from situational characteristics to group preference (Weinberg & Gould, 2007). For example, a Recreational League coach might exhibit more relationship-oriented behavior because the group prefers and the situation dictates that personal development rather than winning. Conversely, a college or professional coach would exhibit more task-oriented behaviors because, generally, as the level of competition increases, the outcomes become more important.

Each member of a group will have unique characteristics and thus will prefer different coaching behaviors. Variables such as gender, ability, cultural background, and type of sport may influence preferred leader behavior. The remainder of the literature review will focus on the preferred coaching behaviors regarding these variables.

To measure sport leadership, Chelladurai & Riemer (1998) developed that Leadership Scale for Sports (LSS) to examine preferences and perceptions of coaching behaviors. The LSS has five subscales: Training and Instructional behaviors, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback. Zhang and Jensen (1997) revised the LSS, to include an additional subscale, Situational Consideration.

#### *Coaching Behavior and Gender*

Research has shown that male athletes prefer instruction behaviors and autocratic decision making. Females desire coaches who exhibit democratic and participatory leadership (Beam, Serwatka, & Wilson, 2004; Lam, et al., 2007; Martin et al., 1999; Riemer & Toon, 2001; Sherman, Fuller, & Speed, 2000; Turman, 2003; Weinberg &

Gould, 2007). These findings suggest that coaches may need to adapt the leader behaviors based on the group being coached. Males, according to previous studies, prefer more autocratic decision-making while having the technical instruction from coaches. Females prefer a more democratic approach with a desire for high levels of positive feedback.

Some research has found no differences in coaching behavior preferences between male and female athletes. Sherman, Fuller, and Speed (2000) found that male athletes preferred slightly higher on autocratic behavior. However, the difference was not significant and that both males and females ranked preferred leader behavior the same way. The authors also suggested that gender does not influence preferred coaching behavior in dual gender sports (i.e. basketball). Riemer and Toon also found differences, although insignificant, between the preferred coaching behaviors of male and female student-athletes (2001). Their findings suggest that the coach's gender may influence preferred behavior more than the athlete's gender.

Investigating coaching behaviors and gender, some research reports find differences between men and women coaches. Myers, Vargas-Tonsing, and Feltz (2003) examined the coaching efficacy of intercollegiate coaches. They report that social support was a stronger influence for coaching efficacy for female coaches compared to male coaches. Rowe (2003) examined the leadership styles and success of women's collegiate basketball coaches. Self-reporting on the Leadership Scale for Sport, male coaches scored higher than female coaches on three subscales, Democratic Behavior, Training and Instruction, and Social Support. Also, male coaches had higher success outcomes (winning percentage, RPI ranking, grade point average, and graduation rates). Frankl and

Babbitt (1998) explored the gender bias in sport by examining the perceptions of hypothetical male and female coaches. Sampling 112 male and 104 female high school track athletes, they hypothesized that a hypothetical female coach would experience higher levels of gender bias compared to a male hypothetical coach. Their results suggest an interaction between the athlete's gender and the gender of the coach, which may influence the preferred leadership of the athlete. Jambor and Zhang (1997), using the Revised Leadership Scale for Sport, investigated the differences between male and female coaches. They found that only one significant difference, female coaches scored higher on the Social Support subscale than male coaches. While investigating the behaviors of effective rowing coaches, Côté and Sedgwick found no gender differences in effective coaching behaviors (2003). When attempting to find a pattern regarding gender and coaching, it is difficult. General guidelines may be followed but those guidelines certainly may not be applied to every sport team.

#### *Coaching Behavior and Race*

Jackson (2002) found that there was no relationship between coaching behavior preference and race. There is limited research, however, on the coaching behavior preferences of individuals with diverse backgrounds. Research should be conducted in the athletic realm regarding preferred coaching behaviors because the participation in athletics is extremely diverse. Findings may bridge a cultural gap between individuals from diverse backgrounds.

#### *Coaching Behavior and Ability*

Another variable on preferred leader behavior that research is conflicted is age, maturity, or competition level. Riemer and Toon (2001) found that athletes of lesser

ability preferred more positive feedback than athletes with more ability. The researchers suggested that higher skilled athletes had more mastery of the skill and therefore needed less positive feedback. These athletes would be focusing on game strategy and other issues relating to performance. However, lesser skilled athletes (Division II versus Division I) needed more positive feedback for motivation and reduction of stress.

Beam, Serwatka, and Wilson (2004) found no differences between NCAA Division I and Division II athletes regarding preferred coaching behavior. Two studies examined the coaching behavior preferences of NCAA Division I athletes (Barnes, 2003) and interscholastic athletes (Kravig, 2003). Both studies examined the function of gender and the type of sport on preferred behaviors. Although differences in preference were found, both researchers report that overwhelming similarities among between the preferences of male and female athletes. Andrew (2004) supports previous findings, stating no differences in preferred leadership were found between players with different playing status (starter versus non-starter) or playing level (NCAA Division I, II, and III). In examining the Leader-Member Exchange Theory (LMX) in the sport context, Case (1998) sought to measure the leader-member exchanges between coaches and starters and non-starters. Confirming the author's hypothesis, starters scored significantly higher on the scale, indicating that starters develop "in-group" relationships with coaches while reserves develop "out-group" relationships.

Each competition level breeds a given atmosphere. Middle school athletics is centered on having fun, developing relationships, and learning new skills. As competition level is increased to high school, the goals shift somewhat towards more competitiveness. Winning becomes more of a goal, as well as a certain level of skill proficiency.

Collegiate athletics progresses towards greater levels of mastery as well as victory as a main focus. Within each level, athletes, it can be assumed, will prefer different coaching behaviors. Martin et al. (1999) suggest that coaches at younger levels should focus on creating a positive atmosphere and developing relationships. In other words, lower level athletes prefer a relationship-oriented coach. Conversely, coaches in higher levels of competition, collegiate coaches, for example should exhibit more task-oriented behaviors based on the preference of the athletes. Anshel (2003) illustrates these differences in competition level and preference for task-oriented or relationship-oriented behaviors.

#### Summary

Leadership has been a widely researched phenomenon because of the complexity of organizations. There are common threads within most of the models, specifically the two types of behaviors exhibited by leaders. Although the terms differ slightly task-focused behaviors and relationship-focused behaviors are present in many of the models for leadership. As research has continued to build, it has been accepted that the effectiveness of leadership is a complex relationship of leaders, members, and organizational situations.

## CHAPTER III

### METHODOLOGY

Leadership has been studied throughout the 20<sup>th</sup> Century and in the past thirty years sport leadership has grown as a research topic. The most widely accepted sport leadership model is the Multidimensional Model for Sport Leadership (MML). The MML states that there are three antecedents to leader behavior: situational characteristics, leader characteristics, and member characteristics. The interaction of these antecedents presents three types of leader behavior: required, actual, and preferred. The MML contends that satisfaction and performance will increase as the congruency between the three types of leader behavior increase. Research presents conflicting results when examining the preferential coaching behaviors of student-athletes based on member characteristics such as gender, race, and playing time. Therefore, the purpose of this study is to determine what extent the preferred coaching behaviors reported by student-athletes vary based on race, gender, and playing time and measure the congruency of those preferences with the actual coaching behaviors as reported by coaches.

#### Research Questions

The overarching research question is: to what extent do member characteristics of student-athletes predict the preferred leadership from coaches? Specifically, the following questions were also explored:

1. How much variance in Democratic Behavior can be explained by gender, race, and playing time?
2. How much variance in Positive Feedback can be explained by gender, race, and playing time?

3. How much variance in Training and Instruction can be explained by gender, race, and playing time?
4. How much variance in Situational Consideration can be explained by gender, race, and playing time?
5. How much variance in Social Support can be explained by gender, race, and playing time?
6. How much variance in Autocratic Behavior can be explained by gender, race, and playing time?
7. To what extent is the preferred leadership reported by student-athletes congruent with the actual leadership behaviors as self-reported by coaches?

### Research Procedures

#### *Design*

The present study used quantitative methodology by using a survey. Survey research is a systematic method to collect information on many cases in order to understand causal relationships between variables (De Vaus, 2004). The survey was used to test existing theories in sport leadership. The instrument was delivered via the World Wide Web in order to access a large number of subjects. Demographic information was also collected from the participants. There are several positives to conducting web-based research. One advantage is the elimination of geographical limitations (Smith and Leigh, 1997; Birnbaum, 2004). Via mutual contacts at various universities, the present researcher gained access to participants in all regions of the country without having to travel to physically survey participants. Smith and Leigh (1997) suggest that researchers

who implement Internet surveys can easily gain access to special population subjects. This is an advantage to the present study because of the selected characteristics gender, race, and playing time. A third advantage to web-based research is the anonymity for the participants (Smith and Leigh, 1997; Birnbaum, 2004). Meyerson and Tryon (2003) found that research conducted via the World Wide Web was reliable and valid. Overall the advantages to research conducted over the World Wide Web are cost effectiveness, subject anonymity, large sample sizes, and efficiency (Smith and Leigh, 1997; Meyerson and Tryon, 2003; Birnbaum, 2004).

There are, however, concerns with conducting web-based research. These include multiple submissions by participants and response rates being lower than in-person instrumentation. One strategy to control for multiple submissions by participants is to give each subject a unique password (Smith and Leigh, 1997; Birnbaum, 2004). Although strategies will be implemented, Birnbaum (2004) claims that unless participants have a reason to submit their responses more than once (monetary reasons, prizes, etc.), multiple responses will be minimal. The researcher did not expect multiple submissions from subjects and therefore, did little to control for them. To increase response rate, correspondence via e-mail was sent before the completion of the instrument. Also, follow-up e-mails were sent to the subjects. These strategies have been shown to increase response rates in web-based research (as cited in Andrew, 2004).

### *Participants*

The population for this study was all Division-I athletes that participate in soccer, basketball, baseball, softball, and volleyball. Both men and women head coaches who lead in those particular sports were a second population for the present research.

The participants for this study were conveniently sampled from NCAA Division-I schools from across the United States. A total of 15 schools were selected based on the researchers' personal contact within each institution's athletic personnel. The institutions include six universities from the southeast, seven universities from the Midwest, one university from the southern region of the United States, and one university from the western United States. One sample consisted of student-athletes who compete in men's and women's basketball, men's and women's soccer, baseball, softball, and volleyball. This sample's expected total was approximately 1,000 athletes. The second sample was Division-I coaches of those same sports and was expected to total approximately 45 subjects. Convenience samples were taken in order to have participants with proportionate gender, race, and playing times.

#### *Instrumentation*

The initial section of the instrument gathered demographic data on the athlete such as gender, race, sport played, and how often they play in competitions. Much of the same demographic data was collected on the coaches.

Two of the three versions of the Revised Leadership Scale for Sport (RLSS) were utilized in the present study. The first measured the athletes' preferred coaching behaviors while the second measured the actual leadership behaviors exhibited as self-reported by the coaches (Zhang and Jensen, 1997). The RLSS has a total of 60 items, measuring six subscales. The instrument is scored on a 5-point Likert scale. The responses are as follows: always – 100% of the time, often – 75% of the time, occasionally – 50% of the time, seldom – 25% of the time, and never – 0% of the time. The responses will be coded as: always = 5, often = 4, occasionally = 3, seldom = 2, and

never = 1. Both versions of the RLSS allowed the results of the study to fit within the MML framework in order to test the theory. Internal consistency was established for the revised version by Cronbach's alpha. Coefficients were significantly greater than .70 in all dimensions, with the exception of Autocratic Behavior. The highest coefficient for Autocratic Behavior was .59 (Zhang and Jensen, 1997). However, the authors report that the internal consistency was improved and thus, the Autocratic Behavior was acceptable.

In revising the LSS, the researchers established content validity by paneling sport leadership experts and sampling 661 athletes and 206 coaches. Construct validity was determined using Factor Analysis. Factor loadings for each item are equal or greater than .40. From the data collected, 60 of the 280 new items were retained (Zhang and Jensen, 1997).

The first dimension measured in the RLSS is Democratic Behavior, and is concerned with decision-making. Coaches with high scores in Democratic Behavior allow athletes to be involved in the development of goals, practice methods, and game strategies. Coaches that score high in the dimension Positive Feedback exhibit constant praise and reward for quality performance. Positive Feedback generally is limited to the athletic context. Training and Instruction is the third subscale in the RLSS. Coaches that score high in Training and Instruction exhibit such behaviors as improving performance by giving technical instruction, teaching skills and techniques, and schooling athletes on effective game strategies. Situational Consideration is the added dimension by Zhang and Jensen (1997) and is described as considering situation factors, differentiating coaching methods and styles at different stages, and properly assigning players to the proper position. Social Support is described as showing concern for the wellbeing of athletes.

Coaches in this dimension are concerned with establishing relationships with athletes and Social Support generally extends beyond the athletic context. Finally, Autocratic Behavior is also a decision-making dimension where the coach is the primary decision maker. The coach emphasizes personal authority and the input of the athletes is generally not invited. The subscales are listed in Table 1.

A pilot test was conducted to ensure the viability of the research procedure and the functionality of the online instrument. Two baseball players and one baseball coach at a university in South Georgia were asked to complete the RLSS. The participants for the pilot study had three days to complete the instrument. This stage guaranteed the process of completing all facets of the survey could be done without problems. Once the researchers obtained approval from the Institutional Review Board, an introductory electronic mailing was sent to the coach explaining the purpose of the study and instructions for completion of the survey. Once appropriate permission was obtained from the coach, the student athlete gained access to the instrument. The completion of the instrument implied the participant's consent to use the results in the study. Follow-up e-mails were sent to the coach and players seven days after the initial contact to follow-up ensure that completion of the surveys occurred.

#### *Data Analysis*

Multiple Regression analysis was conducted to predict the scores for each subscale on the Revised Leadership Scale for Sport. Based on the variance between different groups, it was expected that the preferred leadership of student-athletes could be reasonably expected based on the athlete gender, race, and playing time. A total of six regressions were calculated based on the six dimensions of sport leadership outlined in

the RLSS. An independent t-test was also conducted to examine the congruency between the preferred leadership behaviors reported by athletes and the self-reported behaviors by coaches. One limitation to Multiple Regression is shrinkage, or the ability to generalize the results to external populations (Thomas & Nelson, 1996, p. 134). In order to counter shrinkage, the researcher, given enough data, attempted to cross validate the model. However, sufficient data was not collected to perform cross validation. Data was analyzed with the Statistical Package for Social Sciences version 14.0. Because of the relatively large sample size, approximately 1,100 participants, expected in the study, the alpha level was set at .01.

### Summary

The Multidimensional Model for Sport Leadership contends that the athlete characteristics (gender, race, ability, etc.) influence the preferred leadership behaviors of student athletes. To measure the preferred leadership, the present study used a quantitative methodology using a survey, the Revised Leadership Scale for Sport. Multiple regression analysis was used to predict scores for each subscale: Democratic Behavior, Positive Feedback, Training and Instruction, Situational Consideration, Social Support, and Autocratic Behavior. From these scores the preferred leadership of student-athletes can be expected from coaches. A secondary purpose of the study was to examine the congruency between the preferred behaviors reported by student-athletes and the actual behaviors as self-reported by coaches. Therefore, an independent t-test was used to observe the differences in the means between the two groups.

Table 1

Six subscales for the Revised Leadership Scale for Sport

<b>Dimensions</b>	<b>Type of Behavior</b>	<b>Description</b>
Democratic Behavior	Decision-making behaviors	Allows athletes to be involved in the development of goals, practice methods, and game strategies
Positive Feedback	Motivational behaviors	Consistently praise and reward for good performance – this dimension is limited to athletic context
Training and Instruction	Instructional behaviors	High scores in this subscale illustrate attempting to improve performance by giving technical instruction, skills and techniques, and strategies
Situational Consideration	Situational behaviors	Coaching aimed at considering situation factors, differentiating coaching methods at different stages, and assigning athletes to the proper position
Social Support	Motivational behaviors	Shows concern for athletes wellbeing and establish relationships with athletes – typically extend beyond athletic context
Autocratic Behavior	Decision-making behaviors	The coach emphasizes independent decision-making and personal authority – athlete input is not invited

Zhang and Jensen, 1997; as cited in Weinberg and Gould, 2007, pg. 21

## CHAPTER IV

### RESULTS

The purpose of this chapter is to report the findings from the research project. The chapter will be divided into the following sections: (A) Research Questions; (B) Demographics of the Participants; (C) Instrument Reliabilities, (D) Scale Descriptives, (E) Regression Analysis; (F) Discriminant Analysis; and (G) Congruency Analysis Between Athlete Preferences and Actual Coaches' Behaviors.

#### Research Questions

The focus of the present study was to determine the extent preferred coaching behaviors reported by student athletes varied based on race, gender, and playing time, and measure the congruency of those preferences with the actual coaching behaviors as reported by coaches. The researcher investigated Division-I athletes and head coaches and using Multiple Regression analysis, attempted to predict the coaching behavior preferences for student-athletes. The overarching research question is: to what extent do member characteristics of student-athletes predict the preferred leadership from coaches? Specifically, the following questions were also explored:

1. How much variance in Democratic Behavior can be explained by gender, race, and playing time?
2. How much variance in Positive Feedback can be explained by gender, race, and playing time?
3. How much variance in Training and Instruction can be explained by gender, race, and playing time?

4. How much variance in Situational Consideration can be explained by gender, race, and playing time?
5. How much variance in Social Support can be explained by gender, race, and playing time?
6. How much variance in Autocratic Behavior can be explained by gender, race, and playing time?

A pilot study was conducted prior to gathering actual data. One coach and two student-athletes were surveyed using the online instrument. All three of the participants in the pilot study reported no problems with the online methodology. Therefore, the online instrument was used to collect data. The data collected in the pilot study was not used in the final data. An email was sent to the head coaches of NCAA Division-I schools across the country for baseball, men's basketball, women's basketball, men's soccer, women's soccer, softball, and volleyball. The head coaches were to forward the information about the study, along with the link to the website, so the athletes could participate. The initial response rate was poor and follow-up correspondences were sent back to the head coaches as well as the CHAMPS/Life Skills Coordinators for each school. Along with the online instrument, the researcher, if given access, also surveyed athletes and coaches in person in order to increase the participation rate. Although, research (Lusk, Delcios, Burau, Drawhorn, & Aday, 2007) suggests that the demographics for the respondents may differ, previous studies also suggest that the results for web-based versus in-person data collection yield paralleled outcomes (Birnbaum, 2004; Gosling, Vazire, Srivastava, & John, 2004).

## Demographics of the Participants

The overall participation rate for the study was approximately 11%. NCAA Division-I athletes (n=140) in the above mentioned sports comprised the first sample. There were 18 participants who answered the demographic section of the questionnaire but did not answer the RLSS portion of the instrument. Among the 140 viable data, there were several that skipped one or two questions. To complete these participants' data, the researcher inserted the mean score for that particular question. The researcher surveyed 76 (54.3%) male athletes and 64 (45.7%) female athletes. According to the NCAA gender participation rates for student-athletes during the 2005-2006 year, 48.6% of student-athletes in the sports in the present study were male, and 51.4% were female. However, during that year, there were only 402 male NCAA Division-I Volleyball players while there were 4,496 female Division-I Volleyball players. This disparity skews the data in the current study to seem less representative of the population. If Volleyball were removed from the population, 53.8% of student-athletes during 2005-2006 were male, and 46.2% were female (NCAA, May 2007). Therefore, the sample in the present study is closely representative of the population being investigated. Of the 140 total athletes sampled, 111 (79.3%) were white and 29 (20.7%) were minority. During the 2005-2006 year, 70.4% of the athletes that played sports in this study were white, while 29.6% were minority (NCAA, April 2007). This, again, indicates a representative sample. Sixty-two (44.3%) participants reported playing at least 50% of competitions, while 78 (55.7%) reported playing less than 50% of competitions.

The second sample consisted of data from 14 coaches. One coach did not answer any of the RLSS questions and was therefore removed from data analysis. Eight of the

participants (57.1%) were male and six (42.9%) were female. The 2003-2004 Gender Equity report from the NCAA reported that males accounted for 66.1% of Division-I coaches in Baseball, Basketball, Soccer, Softball, and Volleyball, while females were 33.9% of Division-I coaches in those same sports. White head coaches (n=12) consisted of 85.7% while minority head coaches (n=2) consisted of 14.3% of the coaching sample. According to the 2005-2006 Athletic Personnel Demographic report, 87.9% of all Division-I coaches for men's teams are white, while 12.1% minority coaches. For women's teams 87.7% of all Division-I coaches are white and 12.3% are minority. This would indicate that the sample, although small is also representative of the populations being studied. Six coaches (42.9%) had between 0-5 years of head coaching experience. The sample consisted of four coaches (28.6%) who have been head coaches between 6-10 years. Three coaches (21.4%) in the sample had between 11-15 years head coaching experience, while one coach (7.1%) had over 20 years head coaching experience. At least one coach from each sport was represented in the sample: Baseball (n=2, 14.3%), Men's Basketball (n=2, 14.3%), Women's Basketball (n=4, 28.6%), Men's Soccer (n=2, 14.3%), Women's Soccer (n=2, 14.3%), Softball (n=1, 7.1%), and Volleyball (n=1, 7.1%).

#### Instrument Reliabilities

Internal consistencies were calculated from the athlete data for each of the subscales in the Revised Leadership Scale for Sport (RLSS). Using Cronbach's Alpha for the athlete responses, four of the six subscales (Democratic Behavior,  $\alpha = .80$ ; Positive Feedback,  $\alpha = .88$ ; Training and Instruction,  $\alpha = .79$ ; and Social Support,  $\alpha = .75$ ) exhibited acceptable levels of internal consistency. Situational Consideration displayed

poor internal consistency ( $\alpha = .69$ ) and Autocratic Behavior displayed the worst internal consistency with an alpha level of .52. Table 1 describes the internal consistencies for the RLSS.

Table 2.

Internal consistencies for the RLSS (n = 140)

Subscale	Cronbach's Alpha
Democratic Behavior	.80
Positive Feedback	.88
Training and Instruction	.79
Social Support	.75
Situational Consideration	.69
Autocratic Behavior	.52

#### Scale Descriptives

The responses from the athletes were normally distributed. Skewness for the athletes ranged from -.50 to .37. Kurtosis for the same sample ranged from -.67 to .61. Table 3 illustrates the descriptive for each subscale. Tables 4a, 4b, and 4c describe the means of the athletes' responses by the predictor variables gender, race, and playing time respectively.

Table 3

Descriptive statistics for athletes' responses

	N	Mean	SD	Skewness	Kurtosis
Democratic Behavior	140	38.63	5.85	.28	.61
Positive Feedback	140	44.82	6.98	.01	-.67
Training & Instruction	140	41.51	4.51	-.50	.09
Situational Consideration	140	41.48	3.97	-.29	-.09
Social Support	140	28.12	4.24	-.29	-.38
Autocratic Behavior	140	21.76	3.44	.37	.14

Table 4a

Means for athlete responses by gender

	Male	SD	Female	SD
Democratic Behavior	37.69	5.38	39.75	6.22
Positive Feedback	43.87	6.93	45.94	6.92
Training & Instruction	41.38	4.51	41.65	4.54
Situational Consideration	41.16	4.22	41.85	3.66
Social Support	28.18	4.28	28.05	4.23
Autocratic Behavior	22.03	3.32	21.45	3.57

Table 4b

Means for athlete responses by race

	White	SD	Minority	SD
Democratic Behavior	38.62	6.20	38.65	4.35
Positive Feedback	44.83	6.85	44.82	7.56
Training & Instruction	41.61	4.41	41.11	4.96
Situational Consideration	41.38	4.06	41.86	3.66
Social Support	27.81	4.24	29.31	4.12
Autocratic Behavior	21.73	3.54	21.89	3.09

Table 4c

Means for athlete responses by playing time

	$\geq 50\%$	SD	$< 50\%$	SD
Democratic Behavior	37.63	5.67	39.42	5.91
Positive Feedback	44.08	7.09	45.42	6.88
Training & Instruction	41.40	4.49	41.59	4.55
Situational Consideration	41.45	4.14	41.50	3.86
Social Support	28.19	4.56	28.06	4.00
Autocratic Behavior	21.63	3.35	21.87	3.52

The responses from the coaches were also normally distributed. Skewness for the coaches ranged from -.33 to .57. Kurtosis for the coaching sample, again, was normally distributed, ranging from -.94 to -.05. Table 5 illustrates the descriptive statistics for the coaches' responses.

Table 5

Descriptive statistics for coaches' responses

	N	Mean	SD	Skewness	Kurtosis
Democratic Behavior	14	31.21	4.51	-.17	-.58
Positive Feedback	14	46.21	5.63	-.33	-.94
Training & Instruction	14	41.86	4.17	-.54	-.62
Situational Consideration	14	38.14	3.94	.18	-.68
Social Support	14	29.79	4.04	.57	-.52
Autocratic Behavior	14	21.85	2.90	-.22	-.05

### Regression Analysis

#### *Democratic Behavior*

The first research question attempted to answer how much variance in Democratic Behavior preference could be explained using gender, race, and playing time as predictor

variables. Using the enter method, none of the variables were significant predictors for Democratic Behavior preference ( $F = 2.25, p = .09$ ).

#### *Positive Feedback*

The second research question attempted to answer how much variance in Positive Feedback preference could be explained using gender, race, and playing time as predictor variables. Using the enter method, none of the variables were significant predictors for Positive Feedback ( $F = 1.29, p = .28$ ).

#### *Training and Instruction*

The third research question attempted to answer how much variance in Training and Instruction preference could be explained using gender, race, and playing time as predictor variables. Using the enter method, none of the variables were significant predictors for Training and Instruction ( $F = .14, p = .94$ ).

#### *Situational Consideration*

The fourth research question attempted to answer how much variance in Situational Consideration preference could be explained using gender, race, and playing time as predictor variables. Using the enter method, none of the variables were significant predictors for Situational Consideration ( $F = .51, p = .67$ ).

#### *Social Support*

The fifth research question attempted to answer how much variance in Social Support preference could be explained using gender, race, and playing time as predictor variables. Using the enter method, none of the variables were significant predictors for Social Support ( $F = 1.00, p = .40$ ).

### *Autocratic Behavior*

The sixth research question attempted to answer how much variance in Autocratic Behavior preference could be explained using gender, race, and playing time as predictor variables. Using the enter method, none of the variables were significant predictors for Autocratic Behavior ( $F = .44, p = .72$ ). Table 4 explains the regression analysis for all of the subscales.

### Discriminant Analysis

The predictor variables for the regression analysis in the present study were all nominal variables with only two groups (male/female, white/minority, and  $\geq 50\%$  playing time/ $< 50\%$  playing time). Because of the limited variability within each predictor variable, it was difficult to develop a model to predict preferential coaching behaviors. Therefore, the researcher used discriminant analysis to attempt to predict group classification based on the responses to the six scales. Separate analyses were done to predict gender, ethnicity, and playing time.

When classifying participant gender, the model was not significant ( $p = .17$ ). Overall, 55% of cross-validated grouped cases were correctly classified by gender.

The second discriminant analysis was conducted to classify participant race. The model was not significant ( $p = .41$ ). Overall, 50% of cross-validated grouped cases were correctly classified by race.

Lastly, discriminant analysis was conducted to classify participants into playing time groups. Again, the model was not significant ( $p = .56$ ). Overall, 52.1% of cross-validated cases were grouped correctly. Table 6 illustrates the prediction rates of the discriminant analyses.

Table 6

Discriminant analyses for athlete gender, race, and playing time (n = 140)

	Actual Prediction Rate	Sig.
Gender		.17
Male	53.9%	
Female	56.3%	
Race		.41
White	49.5%	
Minority	51.7%	
Playing time		.56
≥50%	50.0%	
<50%	53.8%	

*Note.*  $\alpha$  levels are significant at .01

#### Congruency Analysis Between Athlete Preferences and Coaches' Behaviors

The last research question for the present study was to examine the congruency of the coaching behavior preferences reported by student-athletes with the actual coaching behaviors self-reported by head coaches. When collecting data, the specific institution of each participant was not collected. Therefore, it was impossible to match the athlete responses with their coach's responses and perform the correlation analysis. However, to analyze how the actual coaching behaviors resemble the preferences of student-athletes, an independent t-test was performed to examine the means in each subscale between student-athletes and coaches.

Two of the six subscales indicated significant differences between student-athletes and coaches. Student-athletes means for Democratic Behavior were significantly higher than means from coaches in the same subscale ( $p < .001$ ). The effect size of 1.29 indicates that not only is the difference significant, but meaningful.

Student-athletes also scored significantly higher ( $p = .003$ ) in the Situational Consideration subscale than coaches, indicating that student-athletes prefer more situational consideration than coaches currently exhibit. This difference is also meaningful ( $ES = .86$ ).

No other significant differences were found in scores between student-athletes and coaches. Table 7 illustrates the results from the t-test and descriptive statistics for the responses from both coaches and student-athletes to the RLSS.

Table 7

T-test results and descriptive statistics for coach and student-athlete responses to RLSS (Coach:  $n = 14$ ; Athlete:  $n = 140$ )

	Means		SD		Sig.
	Coach	Athlete	Coach	Athlete	
Democratic Behavior	31.21	38.63	4.51	5.85	<.001
Positive Feedback	46.21	44.82	5.63	6.98	.47
Training and Instruction	41.86	41.51	4.17	4.51	.78
Situational Consideration	38.14	41.48	3.94	3.97	.003
Social Support	29.79	28.11	4.04	4.24	.16
Autocratic Behavior	21.85	21.76	2.90	3.44	.93

*Note.*  $\alpha$  levels are significant at .01

### Summary

The data collected in the present study was a representative sample of the population being studied. Gender and ethnicity participation rates were comparable between the current sample and recent NCAA athletes. Four of the six subscales in the RLSS showed acceptable levels of internal consistency. Autocratic Behavior and Situational Consideration both indicated low levels of reliability, Cronbach's Alpha

levels of .52 and .69 respectively. The responses in this research were normally distributed, showing both normal patterns in skewness and kurtosis. Given the normal distribution of data, none of the subscale scores could be predicted using the predictor variables gender, race, and playing time. Discriminant analyses were conducted to attempt to classify participants into groups based on their responses to the RLSS. None of the regression or discriminant models tested were significant. Lastly, the means between student-athletes and head coaches were compared and the results indicated that student-athletes scored significantly higher on two subscales, Democratic Behavior ( $p < .001$ ) and Situational Consideration ( $p = .003$ ).

## CHAPTER V

### DISCUSSION

#### Discussion

The present research attempted to predict the coaching behavior preferences of student-athletes based on athlete gender, race, and the amount of time the athlete competed in team competitions. Using the Revised Leadership Scale for Sport (RLSS), student-athletes (n = 140) and head coaches (n = 14) from baseball, men's and women's basketball, men's and women's soccer, softball, and volleyball were surveyed. Two versions of the instrument were used. The first, for the athletes, measured the preferences of the six subscales (Democratic Behavior, Positive Feedback, Training and Instruction, Situational Consideration, Social Support, and Autocratic Behavior) of the RLSS. The coaches completed the second version, which measured the self-reported actual behaviors of head coaches. By surveying the coaches, as well as the athletes, the scores for both samples was compared to measure the congruency of student-athlete preferences and actual coaching behaviors. Multiple regression analysis was conducted to predict the scores for student-athletes. As a follow-up to the regression analysis, discriminant analysis was also conducted to attempt to classify the participants based on their RLSS scores. The congruency was measured using a t-test. Alpha levels were significant at .01.

#### *Summary of findings*

The sample was representative for both gender and race for the populations being investigated. The responses from the participants were normally distributed, indicated by skewness and kurtosis calculations. None of the regression models were significant. None of the discriminant analyses were significant, correctly classifying gender and race

groups 55% and 50% respectively. The congruency analysis, designed to measure how closely the actual coaching behaviors resemble the preferences of student-athletes, indicated that two of the six subscales, Democratic Behavior ( $p < .001$ ) and Situational Consideration ( $p = .003$ ), were significantly different. Student-athletes reported preferring significantly higher levels of democratic behavior than coaches' exhibit. Also, student-athletes prefer higher levels of Situational Consideration than coaches currently exhibit. Both mean differences between student-athletes and coaches in both subscales were meaningful, with effect sizes higher than .86. Although this is a large effect size, these results should be analyzed with caution because of the relatively small samples, both student-athletes and coaches, participating in this study.

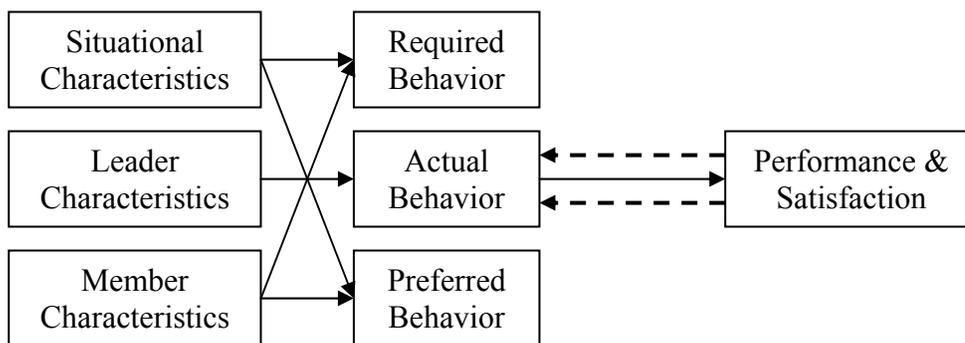
#### *Multidimensional Model for Sport Leadership*

The Multidimensional Model for Sport Leadership (Chelladurai, 1980) states three antecedents to sports leadership, situation characteristics, leader characteristics, and member characteristics. These antecedents influence three types of behaviors, required, actual, and preferred, respectively. If all three types of behaviors are congruent, satisfaction and performance will increase. If the required and actual behaviors are congruent but preferred behaviors are not aligned, satisfaction will decrease. If actual and preferred behaviors are harmonious and required behavior is incompatible, performance is likely to decrease. To revisit the MML, see Figure 3. The results of the current study contradict sport leadership studies that claim member characteristics lead to varying leadership preferences (Barnes, 2003; Beam et al., 2004; Jackson, 2005; Kravig, 2003; Lam et al., 2007; Martin et al., 1999; Riemer & Toon, 2001; Terry, 1984). Beam et al. (2004) investigated the preferred leadership of NCAA Division I and II athletes based on

gender, competition level, and task dependence and variability. They found significant differences between male and female preferences. Male athletes preferred significantly more autocratic behavior than female athletes. Females, on the other hand, scored significantly higher on the Situational Consideration and Training and Instruction subscales. Lam et al. (2007) supported the gender differences of preferred coaching behaviors.

Figure 3

Multidimensional Model for Sport Leadership



Chelladurai, P. (1980). Leadership in sports organizations. *Canadian Journal of Applied Sport Science*, 5(4), 226-231.

Investigating NCAA Basketball players, the researchers discovered that males scored significantly higher on autocratic behavior. Females preferred more positive feedback, situational consideration, and training and instruction. Jackson (2005) and Kravig (2003) found that gender was a determining factor in preferred leadership. Terry (1984) also supports this conclusion, finding that university male athletes prefer higher levels of autocratic behavior than university female athletes. Despite these differences, the author suggests that coaches should generally exhibit the same coaching behaviors, regardless of the gender of the athlete. Even comparing youth sport participants, Martin et al. (1999)

found that girls have higher preferences for democratic behaviors than boys. Riemer and Toon (2001) tested the MML using the Leadership Scale for Sport and found that female athletes desired more positive feedback than male athletes and males preferred more autocratic behavior. Therefore, there is considerable literature that asserts member characteristics, specifically gender, influence preferred coaching behaviors.

However, there is substantial research that conflicts these results. The data analysis of the current sample suggests that member characteristics, or student-athlete gender, race, and the amount of playing time, have no influence on the type of coaching behaviors they desire. These results are consistent with other research (Andrew, 2004; Sherman et al., 2000; Smith, 2001, Terry, 1984). Andrew (2004) found that, when looking at demographic variables, including gender and starting status, no significant differences were found regarding preferred coaching behaviors. He proposes a potential explanation of the advancement of women in sport as the reason for the lack of variance in preferred leadership between men and women. Smith (2001) reported high levels of congruency between male and female preferred leadership. Sherman et al. (2000) found that regardless of gender, athletes prefer strikingly similar coaching behaviors. Although Terry (1984) found differences between males and female, there were no differences found between subjects with different nationalities. Jackson (2002) found no relationship between ethnicity and an athlete's coaching preference. The results of the current research suggest that race does not influence preferred coaching behaviors. The limited research that claims race influences preferred leadership may lead to the conclusion that there may be virtually no racial distinction in sport.

The conflicting results among all of the studies examining the member characteristics of athletes and their effects on preferred coaching behaviors might suggest that the Revised Leadership Scale for Sport is sample specific. The leadership style that student-athletes prefer may not be generalized based on the gender and race of the student-athlete. Therefore, coaches may need to simply understand what behaviors will increase the satisfaction and performance of their specific team rather than adjust solely based on the gender and race of their athletes.

The current study also measured the congruency between the actual behavior of coaches and the preferred behaviors of student-athletes. The data indicates that the member characteristics are non-factors in preferential leadership. Therefore, the congruency analysis that should be conducted is between required behavior and actual behavior. The MML seems to be incorrect in asserting that preferred leadership is based on the student-athlete demographics. Therefore, the results of the current study suggest that member characteristics may be excluded from the model due to the lack of variance between gender groups, racial groups, and abilities/skill levels (Andrew, 2004; Sherman et al., 2000; Smith, 2001). The issue becomes how the preferred leadership behaviors fit within an adapted model. Do leader characteristics interact with member characteristics to lead to different preferences? Riemer and Toon (2001) contend that is the case. The authors conclude that the demographic information of the coach might influence preferred behavior more than the gender and race of the student-athlete.

The conflicting results of sport research regarding preferred leadership would support studies outside of sport. Such studies outside of sport contend that leadership preferences have changed over the last 30-40 years. Within sport, it seems that leaders

cannot use a cookie-cutter approach. Coaches, it may seem, should adapt to what their teams, as a whole, prefer rather than using one approach based on the demographic characteristics of the team.

#### *Revised Leadership Scale for Sport*

The results of the current study and the impact for the MML are made with a degree of skepticism. The model can only be thoroughly tested if the instrument designed specifically for the MML is valid and reliable. The current data does not support the complete legitimacy of the RLSS. In particular, two subscales, Autocratic Behavior and Situational Consideration, at least in the present study, have low reliability estimates.

Although some prior investigations report acceptable levels of internal consistency for all subscales in the RLSS (Andrew, 2004; Jambor & Zhang, 1997), the results for the subscales in this study are consistent with research that report low levels of Cronbach's alpha for the Autocratic Behavior subscale (Beam et al., 2004; Zhang et al., 1997). Autocratic Behavior ( $\alpha = .52$ ) showed the worst level of consistency in the present study. One possible reason for the lack of consistency is the questions in the subscale. For examples, three questions seem to ask for behaviors that may not measure Autocratic Behavior:

- 1) I prefer my coach to disregard athletes' fears and dissatisfactions
- 2) I prefer my coach to fail to explain his/her actions
- 3) I prefer my coach to keep aloof from the athletes.

All three of the above questions, which are listed in the Autocratic Behavior subscale, seem to measure behaviors that are not consistent with autocratic behavior, which is considered a decision-making behavior in the RLSS. For example, "I prefer my coach to

disregard athletes' fears and dissatisfactions," and "I prefer my coach to keep aloof from the athletes" seem to measure behaviors that are opposite of Social Support rather than Autocratic decision-making. Therefore, this subscale appears to lack reliability and may have content validity issues. Also, a principal components factor analysis revealed that Autocratic Behavior might have construct validity issues.

The results for the subscale of Situational Consideration in the present study indicate an alpha level of .69. This contradicts the results reported by Zhang et al. (1997) and Andrew (2004). Zhang (1997) reported an internal consistency of .84 on the Situational Consideration subscale. Andrew (2004) reported an alpha level of .91. Although the internal consistency for Situational Consideration is not as low as Autocratic Behavior, the conflicting results between previous research and the present study suggest that more research should be conducted to substantiate the internal reliability of the Situational Consideration subscale. A principal components factor analysis revealed that this subscale might have construct validity issues.

The last issue that suggests for possible revisions to the RLSS is anecdotal evidence that the language in the survey is confusing. Several times during the administration of the instrument, participants asked for the meaning of different questions. When this occurred, the primary researcher was forced to explain the question in order for the athlete to properly respond. How many other participants were confused by questions and would have answered them differently if understood correctly? The revision of the RLSS may increase the internal consistency of the Autocratic Behavior subscale, solidify the internal consistency for Situational Consideration, as well as clear up any confusing language in the instrument. The RLSS was designed to specifically test

the MML. If the instrument is flawed, the tests to measure the MML also become flawed. Therefore, these revisions may allow for more complete and convincing investigations of the MML.

### Implications

If the RLSS does in fact test the MML adequately, then there are implications for coaching behaviors and leadership. The MML contends that student-athlete demographics will give coaches an indication of the leadership behavior that the student-athlete prefers (Chelladurai, 1980). The results of the present study conflict with that model. The current research, along with recent investigations (Andrew, 2004; Sherman et al., 2000; Smith, 2001), suggests that there are no differences between different demographic groups. The data indicates that males and females generally prefer similar coaching behaviors and that different racial and ethnic groups generally prefer similar coaching behaviors. It also seems that from the current data, players with varying levels of playing time prefer comparable coaching behaviors. This is important because it allows the coaches to be consistent in the behaviors that they exhibit. No longer will a coach have to potentially adjust to every student-athlete on his/her team. The key, then, is to understand the coaching behaviors that lead to higher satisfaction and performance in his/her specific team.

Previous research reports that athletes in individual sports prefer democratic behavior than team sports (Beam et al., 2004; Terry, 1984). The present study would indicate that student-athletes in team sports may prefer high levels of democratic behavior, especially more democratic behavior than is displayed by coaches. Therefore,

coaches may want to allow athletes to have input into team functions such as team goals, selection of team captains, and even contribute to planning practices.

The MML proposes that the member characteristics, student-athlete characteristics, will determine what coaching behaviors are preferred. The results of the current study supports past research that the MML may be flawed. The student-athlete characteristics did not influence their preferred leadership behaviors. Therefore, the model should be reexamined to be more appropriate for future coaches. This implication is stated with caution because of the apparent lack of internal consistency in two of the subscales in the Revised Leadership Scale for Sport.

#### *Limitations of the Study*

Overall, the response rate for the present study was 11%. Initially, the researcher contacted individual coaches regarding the study and asked them to forward the survey to their athletes. The limitation to this method is the lack of interest by coaches. If the head coach did not forward the email and give the athlete the opportunity to participate in the study, upwards of 30 potential subjects were lost per team. Because of the limited response, shrinkage might have been a factor in the results.

To counteract the shrinkage phenomenon that occurs when multiple regression is used (Thomas & Nelson, 1996, p. 134), the researcher attempted to cross-validate the results to examine how the results could be generalized to the populations being investigated. Cross-validation was to be done by developing a regression model with part of the data, then testing that significance with the other segment of the data. However, because the response rate was lower than expected, cross-validation analysis could not be

performed. Moreover, the lack of significance in the regression models made the need for cross-validation irrelevant.

Although multiple schools were used in the study, the athletes' and coaches' institutions were not tracked. Therefore, correlation analysis could not be calculated for coaches and their teams. Therefore, the congruency analysis was simply a comparison of means between all athletes and all coaches. The results of the congruency analysis might be more meaningful if specific coaches were compared to their teams. By comparing specific athletes with their coaches, the results would be far more specific to the context of their teams. Coaches would then be able to apply the results to increase the satisfaction and performance of their team.

The low reliabilities for the two subscales suggest that the instrument might be flawed. The current study supports the results from previous research regarding Autocratic Behavior and its low level of internal reliability (Beam et al., 2004; Zhang, 1997). However, Situational Consideration conflicts with previous research. In the present study, Situational Consideration ( $\alpha = .69$ ) was not reliable. If the RLSS is in fact flawed, then the Multidimensional Model for Sport Leadership cannot be tested with acceptable reliability. Until the instrument is revised and all subscales are completely valid and reliable, the MML cannot be examined to see if it is applicable for today's athletic culture.

### Recommendations

If the RLSS is not flawed, and the present study does, in fact, test the model adequately, there are implications to coaching and leadership behaviors. Coaches do not need to adjust their leadership behaviors based on the demographic data of each

individual student-athlete. They can display consistent leadership qualities across the entire team. If the behaviors exhibited are congruent with the preferred leadership of student-athlete, satisfaction and performance will increase, according to the MML (Chelladurai, 1980).

There are several avenues that future research can be taken to further advance coaching and leadership research. The first study is a correlation study between head coaches and student-athletes on specific teams. The present study attempted to measure the congruency between student-athletes and head coaches by correlation analysis. The school from each participant was not tracked, which did not allow for correlations. Therefore, future research should correlate head coaches with their student-athletes. If this is done, the results could be applied to specific teams. This would allow the MML to be more thoroughly investigated, specifically the congruency and its effect on satisfaction and performance.

One assumption of the present study was that the behaviors reported by the head coaches were actually the leadership behaviors that they exhibit. Another future study is to examine how closely the reported behaviors resemble the actual behaviors. Researchers could observe and investigate the actual behaviors. This would allow further examination of the MML in order to test the outcomes of the MML.

There is limited research regarding the leader characteristics and its influence on preferred leadership. Another aspect that would allow further examination of the legitimacy of the MML is to examine how the coaches' characteristics influence the preferred leadership of student-athletes.

Lastly, there are some who question the importance of knowing what coaching behaviors are preferred by student-athletes. According to the MML, if preferred behavior and actual behavior are congruent, satisfaction increases. Andrew (2004) concluded that satisfaction and performance are positively correlated. Therefore, if coaches can exhibit the leadership behaviors their student-athletes desire, the student-athletes' may perform at a higher level. Future research should continue to test whether the outcomes of the MML, satisfaction and performance, have a positive relationship. Ultimately, coaching and athletes want an enjoyable experience and winning certainly is a factor. If the outcomes can be measured in relation to the different types of behaviors, it gives more application to real-world practitioners, coaches.

The subscales for Autocratic Behavior and Situational Consideration need to be revised to increase the internal reliabilities to acceptable levels. This would allow more thorough testing of the leadership models that were developed generations ago.

### Concluding Thoughts

Because so many studies have contradicting results, it can be reasonably surmised that leadership cannot be a set of canned behaviors for every situation. Coaches must understand that each player is individual in their preferences and those preferences may or may not coincide with others. Therefore, coaches must be able to adapt their leadership styles to many situations in hopes that being able to adapt increases organizational outcomes, whether they be wins, graduation rates, athlete satisfaction, etc. The key to coaching and leadership seems to be finding the behaviors that resonate with the particular group a coach is leading. When this is accomplished, all evidence suggests that the productivity of the organization, team, or group increases. This is the goal of all great

coaches and leaders, to do all in their power to aid their teams reach their greatest potential.

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## APPENDICES

## APPENDIX A

### REVISED LEADERSHIP SCALE FOR SPORT

Athlete Preference Version: I prefer my coach to...

Actual Coach Version: In coaching, I...

1. Coach to the level of the athletes.
2. Encourage close and informal relationships with the athletes.
3. Make complex things easier to understand and learn.
4. Put the suggestions made by the team members into operation.
5. Set goals that are compatible with the athletes' ability.
6. Disregard athletes' fears and dissatisfactions.
7. Ask for the opinion of the athletes on strategies or specific competition.
8. Clarify goals and the paths to reach goals for the athletes.
9. Encourage the athletes to make suggestions for ways to conduct practices.
10. Adapt coaching style to suit the situation.
11. Use alternative methods when the efforts of athletes are not working well in practice or in competition.
12. Pay special attention to correcting athletes' mistakes.
13. Let the athletes try their own way even if they make mistakes.
14. See the merits of athletes' ideas when different from the coach's.
15. Show "OK" or "Thumbs Up" gestures to athletes.
16. Remain sensitive to the needs of the athletes.
17. Stay interested in the personal well being of the athletes.
18. Pat an athlete after a good performance.

19. Explain to each athlete the techniques and tactics of the sport.
20. Congratulate an athlete after a good play.
21. Refuse to compromise on a point.
22. Use a variety of drills for a practice.
23. Stress mastery of greater skills.
24. Alter plans due to unforeseen events.
25. Let the athletes set their own goals.
26. Look out for the personal welfare of the athletes.
27. Use objective measurements for evaluation.
28. Plan for the team relatively independent of the athletes.
29. Tell an athlete when the athlete does a particularly good job.
30. To get approval from the athletes on important matters before going ahead.
31. Express appreciation when an athlete performs well.
32. Put the appropriate athletes in the lineup.
33. Encourage the athletes to confide in the coach.
34. Prescribe the methods to be followed.
35. Dislike suggestions and opinions from the athletes.
36. Conduct proper progressions in teaching fundamentals.
37. Supervise athletes' drills closely.
38. Clarify training priorities and work on them.
39. Possess good knowledge of the sport
40. Fail to explain his/her actions.
41. Encourage an athlete when the athlete makes a mistake in performance.

42. Praise the athletes' good performance after losing a competition.
43. Put an athlete into different positions depending on the needs of the situation.
44. Assign tasks according to each individual's ability and needs.
45. Recognize individual contributions to the success of each competitions.
46. Present ideas forcefully.
47. Let the athletes decide on players to be used in a competition.
48. Perform personal favors for the athletes.
49. Compliment an athlete from good performance in front of others.
50. Give the athletes freedom to determine the details of conducting a drill.
51. Get input from the athletes at daily team meetings.
52. Clap hands when an athlete does well.
53. Give credit when it is due
54. Help the athletes with their personal problems.
55. Ask for the opinion of athletes on important coaching matters.
56. Reward an athlete as long as the athlete tries hard.
57. Let the athletes share in decision-making and policy formation.
58. Visit with the parents/guardians of the athletes.
59. Keep aloof from the athletes.
60. Increase the complexity and demands if the athletes find the demands are too easy.

APPENDIX B  
IRB APPROVAL

Georgia Southern University Office of Research Services & Sponsored Programs <b>Institutional Review Board (IRB)</b>		
Phone: 912-681-0843		Veazey Hall 2021 P.O. Box 8005 Statesboro, GA 30460
Fax: 912-681-0719	IRB@GeorgiaSouthern.edu	

**To:** Glenn Parrish Burdette III  
P.O. Box 08076  
  
Linda Arthur  
P.O. Box 08131

**CC:** Charles E. Patterson  
Associate Vice President for Research

**From:** Office of Research Services and Sponsored Programs  
Administrative Support Office for Research Oversight Committees  
(IACUC/IBC/IRB)

**Date:** February 19, 2008

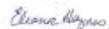
**Subject:** Status of Application for Approval to Utilize Human Subjects in Research

After a review of your proposed research project numbered: H08142 and titled "An Examination of Preferred Coaching Behaviors as Predicted by Athlete Gender, Race, and Playing Time", it appears that (1) the research subjects are at minimal risk, (2) appropriate safeguards are planned, and (3) the research activities involve only procedures which are allowable.

*Therefore, as authorized in the Federal Policy for the Protection of Human Subjects, I am pleased to notify you that the Institutional Review Board has approved your proposed research.*

**This IRB approval is in effect for one year from the date of this letter.** If at the end of that time, there have been no changes to the research protocol; you may request an extension of the approval period for an additional year. In the interim, please provide the IRB with any information concerning any significant adverse event, **whether or not it is believed to be related to the study**, within five working days of the event. In addition, if a change or modification of the approved methodology becomes necessary, you must notify the IRB Coordinator **prior** to initiating any such changes or modifications. At that time, an amended application for IRB approval may be submitted. Upon completion of your data collection, you are required to complete a *Research Study Termination* form to notify the IRB Coordinator, so your file may be closed.

Sincerely,



Eleanor Haynes  
Compliance Officer