

**An Examination of Coaching Leadership Style Preferences of  
Female Professional Basketball Players**

by

Chantel Ruth Tremitiere

A dissertation submitted to the Graduate Faculty of  
Auburn University  
in partial fulfillment of the  
requirements for the Degree of  
Doctor of Philosophy

Auburn, Alabama  
August 5, 2017

Keywords: leadership, coaching behaviors, WNBA, FIBA, basketball, coaching style preferences

Approved by

Dr. James Witte, Chair, Professor of Educational Foundations, Leadership and Technology  
Dr. Maria Witte, Professor of Educational Foundations, Leadership and Technology  
Dr. Leslie Cordie, Assistant Professor of Educational Foundations, Leadership and Technology  
Dr. David DiRamio, Associate Professor of Educational Foundations, Leadership and Technology

## DEDICATION

This dissertation is dedicated to my mom, Dr. Barbara Anne Tremitiere, who died April 17, 2017. Your unconditional love and respect was the driving force my whole life. You allowed me to be me. You allowed me to fail on my own, succeed on my own, and become my own person. Everything I have accomplished so far in my life has been an attempt to make you proud. It hurts every single day to know you are not here with me and that you could not see this moment, but I know you are watching from above as you lay restfully in Heaven. We talked about this moment ever since I first told you I was going back to school for my MBA. You told me you wanted to see me get my doctorate, and I promised you that I would. It has been a long, hard road but I finally did it. I finally fulfilled my promise to you. There was nothing in the world that could have stopped me from doing that. I hope you are proud. I look forward to the day I get to read this to you and we can discuss everything in it. You will always be THE Dr. Tremitiere. May you eternally rest in peace. I love you mamma.

## ABSTRACT

In athletics, every athlete on any team prefers different behaviors from their coach. Previous research has not been able to articulate player preferences regarding their preferred coaching behaviors and if their coaches are meeting those behaviors. This study examined the coaching leadership style preferences of female professional basketball players. Based on the Multidimensional Model of Leadership (MML) conceptual framework, which suggests that the outcome of a team is based on how leader behavior is correlated to athlete preferred leader behaviors, this study examined coaching leadership style preferences of two player groups (current, retired), and explored the relationship of five independent variables among the players. In order to examine this question, current and retired female professional basketball players athletes from the Women's National Basketball Association (WNBA) and International Basketball Federation (FIBA) were surveyed using the Leadership Scale for Sport (Chelladurai & Saleh, 1980).

A quantitative research design was used to address three research questions. The Leadership Scale for Sport (Chelladurai & Saleh, 1980) was administered to 234 female professional basketball players from the Women's National Basketball Association (WNBA) and the International Basketball Federation (FIBA). A statistical analysis of the interaction between the athletes and their coaches was used to determine if leadership behavior needs to be adjusted when coaching female professional basketball players.

Survey data was analyzed through MANOVA and descriptive analysis. After reviewing prior research, results are expected to show that athletes prefer coaches who include players in decision making, focus on improving skills, and cultivate a positive coach-athlete relationship.

Two hundred thirty-four female professional basketball players responded to the survey. Results revealed that athletes preferred a coach who works on improving their skills and building a relationship with them. Specifically, players in this study prefer a Training and Instruction Leadership Style coach, regardless of demographic information.

The study also showed that the athletes prefer a coach who includes the team when making decisions. There was no relationship between coaching leadership style preferences and ethnicity of the athletes.

This study seemed to offer concrete evidence on coaching leadership style preferences of female professional basketball players and how trait, behavioral and situational leadership theories can define the coaches' role. However, future studies can examine the impact that a coach's style can have on the behavior of athlete as well as analyze the relationship between preferred and actual behavior exhibited by coaches in professional women's basketball.

## ACKNOWLEDGMENTS

There are several people and groups of people who have provided a significant amount of influence in my life which has led to the completion of this dissertation and two-year journey.

I first want to thank every women's basketball player, at every level, who I have ever played with or against. The lessons I have learned from each of you and from the game is something that will always be cherished. To each of the pioneers of the WNBA, thank you. We will always be the first. That mindset helped me approach this study outside of any box that was ever created. It allowed me to create my own box and to take risks and accept challenges that I hadn't before had the courage to do. If it were not for the WNBA, I would not have had the kind of opportunities that some can only dream of having their whole lives. The league has provided so many women with life changing opportunities. Thank you, Renee Brown, for giving a kid from York Pennsylvania the opportunity to be that "one last player" invited to the draft camp. Thank you Mary Murphy and Heidi VanDerveer for taking a chance with that 18<sup>th</sup> pick. That opportunity changed my life.

I want to acknowledge Auburn Women's Basketball Coach Terri Williams-Flournoy. You were the reason all of this was possible. Your belief in me as a coach after nearly two decades away from the game, allowed me to not only come back to the school I love to coach the game I love, but also to seek my graduate degrees. I will be forever indebted to you. You are and will continue to be one of my favorite people on the planet, especially when we get to clown around.

I want to say “what a ride” to my committee. Dr. Cordie, thank you for making me laugh. Dr. DiRamio, thank you for making me think. And to my reader Dr. Butler, the appreciation and respect I have for you will take words that have not yet been added to any dictionary. Thank you for helping me through from the beginning. To Dr.’s James and Maria Witte, you two are probably two of the most amazing professors I have ever had the chance to work with. It was so inspiring to learn from you and work under your guidance and leadership.

Thank you Je, I wouldn’t have any room for my dissertation if I thanked you for the past twenty years. You encouraged me to continue to work hard. Thank you for being the friend you are in this crazy universe. You have done it all. I look forward to our first work. Jalana, we did it! Thank you for giving me a haven to work and always making sure I was doing what I was supposed to be doing when I was supposed to be doing it. Margo, you are the best teammate ever. Thank you for ALWAYS picking up your phone, and apologizing when you didn’t.

The Auburn Family is the best second family anyone could ever ask for and be blessed to have. You remind me constantly of the authenticity of the Auburn spirit. There are too many Auburn athletes to name, but just know you helped me as much as you thought I was helping you. You will forever be my “nephews” and “nieces”, even when I am old(er).

To #Cancer, I thank you for picking a fight with me because you forced me to prove to myself that I can beat anything I put my mind to beating. You proved to me that nothing can stop me from achieving what I want in life. You were a formidable opponent, and there were times when you tried to knock me to the canvas, but there was no way I was going down for the count. As I said and maintained from the very beginning, #YouPickedtheWrongOne.

Last, but certainly not least, I want to acknowledge everyone who believed I could do it...and everyone who believed I couldn’t. This is for you.

## TABLE OF CONTENTS

Dedication.....	ii
Abstract.....	iii
Acknowledgments.....	v
List of Tables.....	xii
List of figures.....	xiii
CHAPTER 1: INTRODUCTION.....	1
Overview.....	1
Statement of the Research Problem.....	4
Purpose of the Study.....	4
Research Questions.....	5
Significance of the Study.....	5
Limitations and Assumptions.....	6
Limitations.....	6
Assumptions.....	6
Definition of Terms.....	6
Organization of Study.....	8
CHAPTER II: REVIEW OF LITERATURE.....	9

Introduction.....	9
Purpose of the Study.....	9
Research Questions.....	10
Origins of Leadership.....	10
Leadership Theories.....	13
Great Man Theory.....	13
Trait Theory.....	14
Contingency Theory.....	16
Path-Goal Theory.....	17
Situational Theory.....	17
Situational Style Leadership Styles Framework.....	18
Directing Approach.....	19
Coaching Approach.....	19
Delegating Approach.....	20
Supporting Approach.....	20
The Motivational Model of the Coach-Athlete Relationship.....	20
Multidimensional Model of Leadership.....	21
Required Behavior.....	24
Actual Behavior.....	24
Preferred Behavior.....	25



Sports Leadership .....	27
Leadership Scale for Sports .....	30
Theoretical Background .....	30
Reliability of LSS (Athlete Preference Version) .....	39
Validity of LSS.....	41
Strategic Leadership .....	44
Leadership Qualities Women Prefer.....	46
Focused on leading.....	46
Inspirational and look to the big picture.....	47
Taking fast, decisive action .....	47
Demonstration of both hard and soft leadership skills .....	47
Balance emotional labor .....	47
Responsibility of Coaches .....	48
Content knowledge.....	48
Communication .....	49
Motivation .....	49
Goal setting.....	49
Mentor .....	50
Preferred Coaching Styles of Female Athletes.....	50
The Emergence of Professional Women’s Basketball.....	54

Benefits of Female Participation in Professional Athletics .....	56
Chapter Summary .....	58
CHAPTER III: METHODS.....	59
Introduction.....	59
Purpose of Study.....	59
Research Questions.....	60
Design of Study .....	60
Independent Variables .....	61
Protection of Human Participants.....	63
Population Sample Selection .....	63
Leadership Research Methodologies .....	65
Instrument Development .....	66
Limitations .....	67
Data Collection and Coding.....	68
Chapter Summary .....	70
CHAPTER IV: RESULTS.....	72
Overview.....	72
Purpose of Study.....	72
Research Questions.....	72
Demographic Results.....	73

Reliability .....	75
Discussion of Findings .....	76
Chapter Summary .....	85
<b>CHAPTER V: SUMMARY, DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH.....</b>	<b>87</b>
Introduction.....	87
Purpose of Study.....	87
Research Questions.....	88
Summary.....	88
Findings of the Survey.....	89
Conclusions.....	90
Implications .....	93
Speed of Change.....	94
Increasing Player Diversity .....	95
Era of Individualization .....	96
Limitations.....	96
Recommendations for Further Research .....	97
Appendix A: Institution Information Letter.....	117
Appendix B: WNBPA Approval of Research Project.....	120
Appendix C: Instrument.....	122

## LIST OF TABLES

Table 1 Leadership Scale for Sports Dimensions.....	32
Table 2 Items for Training and Instruction Coaching Behavior Preference.....	35
Table 3 Items for Democratic Coaching Behavior Preference (#14-22).....	36
Table 4 Items for Autocratic Coaching Behavior Preference (#23-27).....	37
Table 5 Items for Social Support Behavior Preference (#28-35).....	38
Table 6 Items for Positive Feedback Behavior Preference (#36-40).....	39
Table 7 Demographic Characteristics of Participants.....	75
Table 8 Reliability of Coaching Leadership Style Preferences.....	76
Table 9 Coaching Leadership Style Preferences – Descriptive Statistics.....	78
Table 10 In Between Test Subjects Effect.....	79
Table 11 Descriptive Statistics of Leadership Style Preferences.....	80
Table 12 Coaching Leadership Style Preferences Based on Playing Experience.....	81
Table 13 Tests of Between Subject Effects.....	82
Table 14 Years of Playing Experience Descriptive Statistics.....	83
Table 15 Descriptive Statistics of Ethnicity.....	84

## LIST OF FIGURES

Figure 1: Prevailing Leadership Theory Summary.....	16
Figure 2: Model of the situational leadership style framework .....	19
Figure 3: Model of Coach-Athlete Relationship.....	21
Figure 4: Multidimensional Model of Leadership.....	24
Figure 5: WNBA Teams (2017) .....	56

## CHAPTER 1: INTRODUCTION

### Overview

Numerous tensions exist as a part of the coaching process. Some of these tensions include team atmosphere, roles and communication, training environment, nutrition, injuries, and goals and expectations (Woodman & Hardy, 2001). A coach's response to these pressures is a fundamental determinant of a team's fate. In today's highly competitive, socially demanding, and ever-changing professional sports environment, expectations of coaches' have increased. This paradox becomes a critical lens to understanding and assisting these coaches. Sports plays an immense and important role in the lives of many people, specifically athletes. The coaches who direct the lives of these athletes have a substantial impact on them. In athletics, it is important for coaches to be able to motivate their players. Coaches may use different tactics and motivational techniques to encourage athletes (Martin, Rocca, Cayanus, & Weber, 2009). Effective coaching style is related to winning (Jacob, 2006). Coaching style can impact athletes' attitude and performance (Blanchard, Amiot, Perreault, Vallerand, & Provencher, 2009). Each athlete may prefer or respond better to a particular coaching leadership style. While not all players have the same preferences, considering the athlete's preferred coaching style is imperative to enhancing the coach's ability to increase the productivity and success of his or her team (Horn, Bloom, Berglund, & Packard, 2011).

When the coach speaks, the athlete listens. When the coach says "jump," the athlete asks "how high?" For many years, this type of coach-athlete relationship has been the norm in sports. In the past, this authoritarian coaching style with yielding behavior expected from athletes was

considered a rite of passage for athletes. Coaches justified their use of this leadership style by explaining their attempt to build character in their athletes (Rocca, Martin, & Toale, 1998). Coaches often believed that if an athlete was able to learn to work under these harsh conditions and learn from the experience intended, the athlete would improve their performance (Rocca, Martin, & Toale, 1998). However, times have changed, and the wants and needs of athletes have changed as well.

There is a difference between an effective coach or leader and a successful one. The situational context, characteristics of the coach, and the athletes all dictate appropriate leadership behavior. To achieve improvement in athletic performance, many times it becomes necessary for a coach to lead in a way to which the athlete is receptive. Leadership, as a process, shapes the goals of a team, motivates behavior toward the achievement of those goals, and helps define team culture. It is primarily a process of someone influencing others to perform to their greatest potential (Barrow, 1977). Successful teams demand the total commitment of every individual performing at their optimal level to ensure the best performance of the team. The role of a coach is to motivate, encourage and influence their team members to commit to the goal of winning. Positive leadership establishes a foundation of trust, leads to greater commitment, and contributes to accountability (Kets de Vries, 2005), all factors which translate into better results for a sports team. Understanding the role that effective coaching leadership plays in the development of individual and team performance is still a valuable area of study (De Backer et al., 2011). It is vital that research continues to investigate factors that strengthen the possibility of winning because a win/loss record is the sole determiner of team success by society (Feltz & Lirgg, 2001).

Leadership is a theory which allows for both horizontal and vertical applications to human behavior. The understanding of leadership means it is necessary to transcend the superficial and historical perspective which tends to define success by the number of wins. In some sports organizations with limited resources, success might be defined in terms of preserving their status (i.e. skirting relegation to a lower division). Leaders typically have two functions: (1) to ensure the demands of the organization are satisfied by the group effectively meeting its targets, and (2) to assure the needs of group members are satisfied (Weinberg & Gould, 2003). It is not only important that a leader can execute the vision and goals of the organization, but that the qualities of the leader and group (players) are not incongruent.

Athletic programs dedicate themselves to teamwork, character building, growth and the development of certain standards (Sage, 1998). Those standards to which a program is committed are ones the student-athletes collectively work with the coaching staff to create. In any team, ownership or involvement in the formation of standards or policies are crucial components in obtaining buy-in from the athletes. The leadership style of coaches shape the environment in which athletes carry out responsibilities, affect communication skills as well as meet the basic psychological needs of the athletes (Sari, Soyer, & Yigiter, 2012). Efficient leadership and coaching have the potential to go beyond the sports environment and affect other aspects of the lives of athletes; therefore, coaches try to create conditions that maximize opportunities and talents of their athletes (Nizam, Zareha, Vincent, & Nagoor, 2016). Optimizing interpersonal relationships among athletes and their coaches can maximize collective performance (Freishlag, 1985). This process starts with effective leadership of the coach.



## **Statement of the Research Problem**

Extensive research has been conducted on leadership behavior since the 1950's. Early research has shown that leadership behavior is a crucial factor in successfully developing team cohesion, which results in greater team satisfaction and more positive team outcomes (Light Shields, Gardner, Light Bredemeier, & Bostro, 1997). However, little is known about whether this same factor has any impact on physical activity groups (Caperchione, Mummery, & Duncan, 2011). There is a lack of research which identifies optimal coaching behaviors and factors that influence the effectiveness of specific behaviors. Current research in this field of leadership has investigated numerous levels of sports, but very little research has dealt with professional athletes. There is even less research and literature on the coaching leadership style preferences of female professional athletes. Additionally, while a wealth of literature relates to the fundamental aspects of coaching styles, literature examining the coaching style preferences of professional women's basketball players is lacking. Given that the current literature base suggests that female participation in professional sports is at an all-time high (Acosta & Carpenter, 2012), it is important to examine the coaching style preferences of professional female athletes.

## **Purpose of the Study**

The purpose of this study was to examine coaching leadership style preferences of professional female basketball players. Previous studies involving coaching leadership style preferences of female athletes included only high school and collegiate athletes within their sample (Riemer & Toon, 2001; Vealey, Armstrong, Comar, & Greenleaf, 1998). Previous studies involving coaching leadership behaviors in professional sports included only male athletes within their sample (Høigaard, Jones, & Peters, 2008; Ramzaninezhad & Keshtan, 2009).

Attempting to attribute the findings of male athletes to female athletes is simply not appropriate (Chelladurai, Imamura, & Yamaguchi, 1987; Garland & Barry, 1990; Weiss & Friedrichs, 1986).

### **Research Questions**

The following research questions were used in this study:

1. What is the difference between coaching leadership style preference of current and retired female professional basketball players?
2. What is the relationship between total number of years of professional playing experience and coaching leadership style preference of female professional basketball players?
3. What is the relationship between ethnicity and coaching leadership style preference of female professional basketball players?

### **Significance of the Study**

Research has shown that female athletes prefer diverse types of leadership behaviors from their coaches (Serpa, 1999). Female athletes prefer a democratic style of leadership, while male athletes have shown a preference for autocratic styles of leadership (Bekiari, 2014). The significance of this study should be of interest to the various elements that comprise both women's collegiate and professional basketball. Specifically, the results of this study should provide current and future coaches and coaching staffs with information about preferred coaching behavior within a professional team environment. Also, since this study addressed preferred coaching behavior within a professional women's basketball setting, the results should add to the body of knowledge in the field of organizational behavior, particularly as it applies to women's sports. Many women's basketball coaches transition from the collegiate to professional coaching arena. The results of this study should aid coaches with their decisions about their behaviors at both the collegiate and professional level as it relates to their players' preferences

and ultimate success. Sports leadership can also be translated to the workplace. The result of this study may aid business leaders in building winning teams in the workplace by maximizing the strengths of their female employees (Martin, 1993).

### **Limitations and Assumptions**

#### **Limitations**

1. The participants of this study were only current or retired professional female basketball players.
2. The data were self-reported, so timeframe of the recollection can affect the accuracy of the recall.
3. The responses from current players were collected solely during the first month of the WNBA season (May).

#### **Assumptions**

1. Survey respondents answered each survey question honestly.
2. All the participants in this study came from the Women's National Basketball Association (WNBA) and/or the International Basketball Federation (FIBA).
3. All the participants in this study are either current or retired professional basketball players.

### **Definition of Terms**

**Autocratic Behavior:** Autocratic behavior is defined as the coaching behavior that involves independence in decision-making and stresses personal authority (Jambor & Zhang, 1997).

**Contingency Theory:** There is no best style of leadership. Instead, a leader's effectiveness is based on the situation resulting from two factors – leadership style and situational favorableness (Fiedler, 1978).

**Democratic Behavior:** Democratic behavior is defined as the coaching behaviors aimed at allowing the athlete to have input in practice and game strategies (Jambor & Zhang, 1997).

**Directing Approach:** The act of supervising or leading workers to accomplish the goals of the organization.

**Great Man Theory:** The Great Man theory assumes that the traits of leadership are intrinsic, meaning that great leaders are born (Carlyle, 1895).

**Leadership:** The process of influencing actions of individuals and organized groups in view of specific goals in such a way as to ensure the attainment of these goals (Barrow, 1977).

**Leadership Theory:** The question of what kind of leadership style is best for what situation.

**Positive Feedback Behavior:** Positive Feedback Behavior is defined as coaching behavior which reinforces an athlete by recognizing and rewarding good performance as measured by the Leadership Scale for Sports (Chelladurai & Saleh, 1980).

**Professional Athlete:** A person who is paid to play a sport.

**Situational Consideration Behavior:** Situational consideration behavior sets up individual goals and clarifies ways to reach goals. It differentiates coaching methods at different maturity stages and skill levels (Jambor & Zhang, 1997).

**Social Support Behavior:** Social support behavior is defined as behavior that helps athletes with personal problems and makes sports part of the enjoyment of an athlete's life (Jambor & Zhang, 1997).

**Training and Instruction Behavior:** Training and instruction behavior is defined as evaluating the performance of the athletes, planning training practices, and having the knowledge and being responsible (Jambor & Zhang, 1997).

### **Organization of Study**

Chapter I introduces the background and statement of the problem, research questions, limitations, and assumptions and the significance of the study. Chapter II includes a review of the related literature concerning leadership theories, the Multidimensional Model of Leadership, and women in professional basketball. Chapter III reports the procedures utilized in this study, including the population and sample; instrumentation; the data collection; and the data analysis. The findings of the study are presented in Chapter IV. Lastly, Chapter V reveals a summary of the research study, conclusions, implications and recommendations for further practice and research.

## CHAPTER II: REVIEW OF LITERATURE

### **Introduction**

This study investigated several factors related to female professional basketball players' preferences in coaching leadership style. The key factors examined in this study were the ethnicity of the athlete, professional leagues played in, and number of years played professionally. The following literature review consists of four major sections. First, the origins of leadership and a background on leadership models from the business world are provided to give a context for the development of leadership models in sports. Then, literature related to the framework of sports leadership measurement tool and a particular model which drives sports leadership are discussed. A summary of literature related to the assessment of athletes' preferred leadership behavior follows. A discussion of coaching responsibilities concludes the literature review. The terms leader and coach can be used interchangeably throughout this chapter.

### **Purpose of the Study**

The purpose of this study was to examine coaching leadership style preferences of professional female basketball players. Previous studies involving coaching leadership style preferences of female athletes included only high school and collegiate athletes within their sample (Riemer & Toon, 2001; Vealey et al., 1998). Previous studies involving coaching leadership behaviors in professional sports included only male athletes within their sample (Høigaard et al., 2008; Ramzaninezhad & Keshtan, 2009). Attempting to attribute the findings of

male athletes to female athletes is simply not appropriate (Chelladurai et al., 1987; Garland & Barry, 1990; Weiss & Friedrichs, 1986).

### **Research Questions**

The following research questions were used in this study:

1. What is the difference between coaching leadership style preference of current and retired female professional basketball players?
2. What is the relationship between total number of years of professional playing experience and coaching leadership style preference of female professional basketball players?
3. What is the relationship between ethnicity and coaching leadership style preference of female professional basketball players?

### **Origins of Leadership**

James McGregor Burns indicated that leadership is one of the most pragmatic but least understood phenomena on the planet (Sorenson, 2000). Examples of individuals who take charge of a group and lead it, often against the odds, to safety, victory, or prosperity have consumed history books. Examples are military leaders like Alexander the Great, Nelson, and Patton; political leaders like Roosevelt, and Mandela, revolutionaries like Gandhi and Rosa Luxembourg; business leaders like Gates, Jobs, and Branson, and religious leaders like Jesus and Buddha.

Leadership is a phenomenon focused on vision, trial, teamwork, process, and end product (Bryman, 2011). There is such a fascination with leadership as it is one of the most comprehensively studied topics in organizational psychology. It is defined as a process of someone influencing others to perform to their greatest potential (Barrow, 1977). This definition is relevant because it stresses the vision of a leader while also highlighting the significant

interaction between the leader and group members. Effective leadership will embed an understanding of motivation and is likely to minimize any loss of productivity through the development of both task and group cohesion, allowing an organization to operate at, or close to its potential. Carron and Chelladurai (1981) found that cohesion was reliant upon player and coach relationships. A general theme of effective leadership is the positive impact individuals can have on group dynamics relating to team goals and performance (Loehr, 2005). When power no longer guarantees the success of a group, leadership becomes essential. Leadership is contingent upon numerous variables such as leadership style, personality traits, communication conflict resolution skills, and the ability to motivate the team (Turner & Müller, 2005). One might consider how much is known about Alexander the Great or Julius Caesar's victories, but so little about Spartacus, and almost nothing about the hundreds of other slave revolts that regularly shook slave societies throughout antiquity (Grint, 2005). Leaders wrote history books.

It is laudable to think logically about the origins of leadership to understand how societies and groups form. The most fundamental human relationship is with two individuals. Because of perceived differences, one may defer to the other in various areas such as competence and personality, among others. It is logical to think that whenever a group of people comes together, a leader-follower relationship naturally develops. Often, one person takes the lead and assumes a leadership role. But in many situations, an individual may lead in some areas and not in others (Horne, 2013). When that person exerts his or her leadership, and once the respect occurs, there is a hierarchy or an establishment of levels. If one person defers, her or she immediately gives up their independence. Early in the relationship, both people may agree on nearly everything and neither will dominate or lead. This ideology set the stage for the forming of many organizations and states (Horne, 2013).



Psychological research on leadership contributes a great deal to our understanding of leadership in groups. Early research concentrated on how personality relates to leadership, the trait approach, resulting in a list of needs, traits, and motives that reliably distinguish leaders from followers like power, intelligence, ambition, and extraversion. Bass (2008) contains nearly 7,500 references to original articles on leadership. In later research, the emphasis moved toward studying leader functions and styles in the light of task demands and the needs of followers, the situational or state approach (Bass & Stogdill, 1990).

Researchers have often described leadership as a quantitative trait. Everyone is capable of leading to some degree, but there are clear individual differences in the inclination to lead. Some researchers have argued that leadership is primarily a function of the situation and that anyone could lead under the right conditions (Bass & Stogdill, 1990). By viewing leadership as a social influence, an analysis is consistent with either trait or state explanations of leadership. Future literature must decide which of them provides a better account of what defines leadership.

Literature also suggests that people who are quicker to recognize a situation as a problem that requires leadership, emerge as leaders more often and that they must convince people that following them is the best option. From this, researchers conclude that leadership correlates with intelligence because it helps in identifying problems as well as in coordinating actions of multiple followers. Consistent with this, there are 58 studies reported in the Bass and Stogdill (1990) study on leadership and intelligence, and the majority (48) finds a positive relationship between leadership and the score on a standard IQ test. The average correlation coefficient across the studies is  $+ .28$ . In an archive study of the personalities of United States presidents, Simonton (1994) found evidence for above average intellectual abilities among many former presidents. Finally, in a meta-analytic study, intelligence was identified as the trait that followers

most consistently linked with leadership (Lord, De Vader, & Alliger, 1986).

In search of understanding the secret behind effective leadership, history has created and revealed leadership theories that researchers and theorists have studied and scrutinized for many years. These theories address the question of what kind of leadership style is best for what situation. Early research into leadership effectiveness was conducted outside of sports settings. Because these organizational leadership theories, including the contingency theory (Fiedler, 1967), the situational theory (Hersey & Blanchard, 1977), and the path-goal theory (House, 1971), serve as the foundation for the sports leadership theories, a summary follows.

### **Leadership Theories**

Leadership theories have been the source of studies for numerous decades. Many of the theories, including the Multidimensional Model of Leadership, were modeled from organizational leadership theories such as the Great Man theory (Carlyle, 1895), Trait theory (Carlyle, 1895), Contingency theory (Fiedler, 1978), the Path-Goal theory (House, 1971), and Situational theory (Hersey, Blanchard, & Natemeyer, 1979). These organizational leadership theories serve as the foundation for sports leadership theories.

#### **Great Man Theory**

The Great Man theory evolved around the mid 19th century and assumed that traits of leadership are intrinsic (Carlyle, 1895). Even though no one could scientifically identify, with any certainty, which human characteristics or a combination of, were responsible for classifying great leaders, researchers recognized that just as the name suggests; only a man could possess the characteristic of a great leader. This theory, popularized by nineteenth-century historian Thomas Carlyle, suggests that history can be largely explained by the impact of "great men", or heroes:

highly influential individuals who, due to either their personal charisma, intelligence, wisdom, or Machiavellianism, utilized their power in a way that had a decisive historical impact.

Furthermore, the belief was that great leaders would rise when confronted with the appropriate situation. The Great Man theory transpired from the study of powerful heroes. Carlyle compared a wide array of heroes and focused on the influence great men had on historical events such as Mohammad, Shakespeare, Luther, Rousseau, and Napoleon. Research on leadership conducted in the nineteenth and early part of the twentieth century focused primarily on the people who were established and successful leaders. These people were mostly aristocrats because very few people in lower classes had the opportunity to lead, which is the reason why the belief that leadership is related to the upper class (Bass & Stogdill, 1990).

In 1860, noted philosopher, sociologist, biologist and political theorist of the Victorian era, Herbert Spencer countered that the Great Man Theory was childish, primitive and unscientific (Spencer, 1892). Spencer affirmed that the heroes studied by Carlyle were the products of their societies, and their actions would have been impossible without the social conditions built before their lifetime. His counter-argument remained influential throughout the 20th century.

### **Trait Theory**

The Trait Theory, which is similar in some ways to the Great Man theory, assumes that people inherit certain traits and qualities that will make them excel in leadership roles. That is, certain qualities such as intelligence, creativity, sense of responsibility, and other values allows someone to serve as a good leader. The trait theory of leadership focused on analyzing mental, physical and social characteristics to gain more understanding of what is the characteristic or the combination of characteristics that are common among leaders. In fact, American psychologist

Gordon Allport, identified nearly 18,000 personality-relevant terms (Matthews, Deary, & Whiteman, 2003).

This 19th-century theory reveals that history can be defined by the impact of heroes and great men. These highly influential individuals, by intelligence, wisdom, charisma, or political skill, employed their power in a way that had a significant historical impact. Plato's Republic asked "What qualities distinguish an individual as a leader?" and the Trait Theory responded as it being the distinguished personal characteristics of a leader (Daft, 2014). Trait theories often identify shared personality or behavioral characteristics in leaders. Traits like self-confidence, extraversion, and courage are all traits which could potentially be linked to great leaders. Innate mental, physical and psychological traits, were required for outstanding direction, and any individual who portrayed them could be considered a potential leader. Researchers first made the assumption that leaders are born through the Great Man approach (Carlyle, 1895). This research emerged as one of the earliest types of investigations into the nature of effective leadership. According to Carlyle, the ability to lead was something that people were born with instead of something that could be developed. His ideas inspired early research on leadership, which almost entirely focused on inheritable traits.

The major criticism of the trait theory is its failure to account for situational and environmental factors that influence the development of a successful leader. Recent research, based on identical and fraternal twins, was able to estimate the heritability of leadership emergence at 30% (Carroll & O'Connor, 2013), meaning that 70% is accounted for by situational factors (e.g., exposure to leader role models) during one's career. Nevertheless, numerous organizations continue to use personality assessment as part of their selection procedures for managerial or leadership roles.

Prevailing Theory		Prevailing Period	Summary of Theory
Great Man Theory		Pre 1950	Leaders are born with certain characteristics which predispose them to leadership positions
Theory of traditional leadership	Trait theory	1910 to World War II	Emphasised <ul style="list-style-type: none"> <li>• personality traits, characteristics and attributions, eg Trustworthiness, assertiveness, warmth, etc.</li> <li>• task related traits including flexibility, passion, locus of control etc.[2]</li> </ul>
	Behaviour theory	World War II to 1960s	More concerned with the behaviour style of the leader. It measures <ul style="list-style-type: none"> <li>• concern for task against</li> <li>• concern for people. [1]</li> </ul>
	Situation theory	1960s to 1980s	There is no fixed, unchangeable and best leadership style. It depends on situational forces including <ul style="list-style-type: none"> <li>• relation of leader to followers</li> <li>• structure of the task</li> <li>• position of power.[1]</li> </ul>
Transformed Leadership Period		1980's to present	Responds to new form of society, e.g. charismatic, transformational leadership style

Figure 1 Prevailing Leadership Theory Summary

### Contingency Theory

One theory which studies leadership in business is the contingency theory. The Contingency Model was created in the mid-1960s by Fiedler, business and management psychologist who studied the personality and characteristics of leaders. Fiedler (1978) suggested that there is no best style of leadership. Instead, a leader's effectiveness is based on the situation resulting from two factors – "leadership style" and "situational favorableness." The concept in the interpretation of this theory is the leader's situational control and influence. As it changes, a corresponding shift in the leader's behavior and performance occurs. Researched findings credit Fiedler's contingency theory as the first to specify how situational factors interact with leader traits and behavior to influence leadership effectiveness. This theory suggests high interest in the situation determines the effectiveness of task- and person-oriented leader behavior.

There are two major criticisms in Fiedler's contingency theory. One is its validity in situations when the task is not well defined and there has been no clear choice in a leader. The

other criticism, according to Fiedler himself, is that the score is only valid for closely supervised groups, and does not apply to open groups such as teams.

### **Path-Goal Theory**

The Path-Goal Theory stipulates that a leader's behavior is important for good performance as a function of its impact on subordinates' perceptions of paths to goals and the desirability of those goals. When leader behavior clarifies these goals, or makes them more attractive the satisfaction, performance, and the leader acceptance is expected to increase. The specific relationship between leader behavior and these criteria will depend upon the personality of the subordinate and the existing task environment.

Clearly stated goals increase team performance, satisfaction, performance, and acceptance of the leader (House, 1971). The relationship between leader behavior and these criteria depends on the personality of the team members and the existing task environment. Its primary concern is how the leader influences the teams' perceptions of their goals and paths to goal attainment. The Path-Goal Theory suggests that a leader's behavior is motivating to the degree that the behavior increases team goal attainment and clarifies the paths to these goals (House, 1996).

### **Situational Theory**

Hershey and Blanchard developed a leadership theory in the late 1960s, called "the life-cycle theory of leadership" (Blanchard, Zigarmi, & Zigarmi, 1985), which has garnered praise from management development specialists. The model, which is called the situational leadership theory, focuses on how a leader fits into his or her leadership style. Perhaps the most widely used leadership approach in business today (Kokemuller, 2015), the theory states that there is no single most effective style of leadership and leaders must adapt to the abilities and maturity level

of the individuals they lead. Effective leaders can change their leadership style according to the needs of their followers.

The theory separates leadership behaviors into two categories: relationship behavior, which is the development and maintenance of the personal or emotional connection between the leader and follower, and task behavior, which is the communication and management of the goals that the group must attain. Low maturity workers need a high level of task-oriented supervision and a low level of relationship-oriented supervision. Intermediate maturity workers require medium task-orientation and high relationship oriented supervision. High maturity workers classify as those requiring a low level of both task and relationship control. (Norris & Vecchio, 1992).

### **Situational Style Leadership Styles Framework**

The fundamental principle of situational leadership is that there is no one best style of leadership. Researchers determined that leadership behaviors are appropriate at different times and successful leaders are those who can adapt their style to a given situation. Situational leadership offers four different styles of leadership which allow the leader to assess each members' strengths and weaknesses before determining the best course of action for the task at hand. These leadership styles are the directing approach, the coaching approach, the supporting approach, and the delegating approach (Blanchard et al., 1985). This approach has proven successful when each member of a team works differently and requires a different type of attention from a leader. However, like all other leadership approaches, there are pros and cons to each approach (see Figure 2).

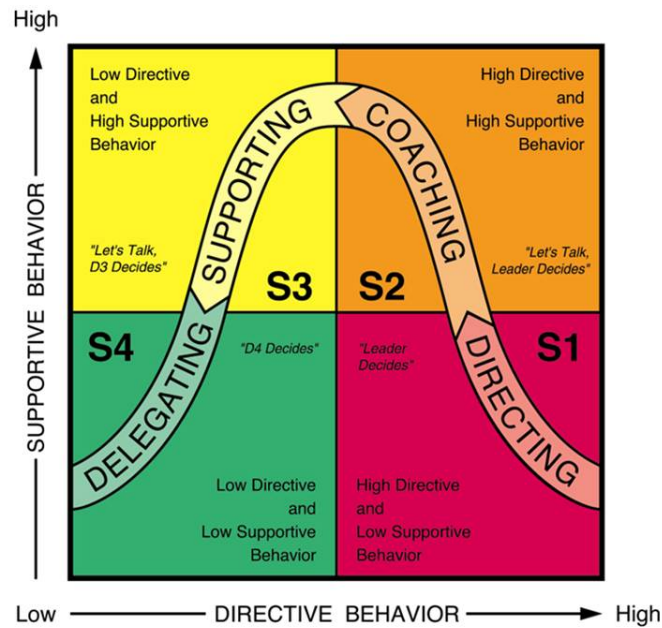


Figure 2. Model of the situational leadership style framework

### Directing Approach

The directing leader clearly provides specific instructions, defines the roles and tasks of the follower, and closely supervises task completion and is the process many people relate to managing (Lockwood-Rayermann, 2003). Furthermore, it is a process of influencing people's behavior through communication, motivation, group dynamics, and discipline. The directing leadership style is most effective when the followers are relatively inexperienced and need to be instructed in how to accomplish tasks.

### Coaching Approach

Coaching is a type of situational leadership style that involves a great deal of hands-on involvement in an employee's work process. It works best when the employee displays weaknesses that need improvement and the leader helps to transform that weakness into a personal strength. For coaching to be effective however, the employee must acknowledge the weakness and indicate a desire to improve (Turner & Müller, 2005).



## **Delegating Approach**

The delegating style is a style in which leaders are less hands-on and instead, allow group members to make decisions (Oshagbemi & Ocholi, 2006). The manager can provide guidance, but only when needed, and serves in more of a consulting capacity. This style is most effective with an experienced staff that can work independently. Employees who have the confidence to make decisions and can successfully analyze situations, typically flourish under this style.

## **Supporting Approach**

Supportive leadership is a naturally organic and emotionally sensitive style where the leader plays more of a motivational role. This method is often referred to as a selling style because the manager attempts to persuade the employees that they can perform the job (House, 1971, 1996). Although delegation is a crucial component of supportive leadership, managers do not simply assign tasks. Instead, leaders encourage their employees. Each leadership style is useful in certain circumstances, but organizations must adopt a culture that encourages such styles for them to be effective. While various models of these leadership models are important in the research of sport leadership, specific sport leadership theories were created separately because researchers found the models created to study leadership in business did not accurately measure leadership in sport.

## **The Motivational Model of the Coach-Athlete Relationship**

The Mageau and Vallerand (2003) Motivational Model of the Coach-Athlete Relationship is an athletic-based leadership theory. Three factors influence how a coach might utilize supportive behaviors with his/her team (see Figure 3). Some of the factors might include the coach's attitude toward their coaching profession, the sport environment, which can include

the amount of pressure there is present to win, and the coach's understanding overall climate of the team (Horn et al., 2011).

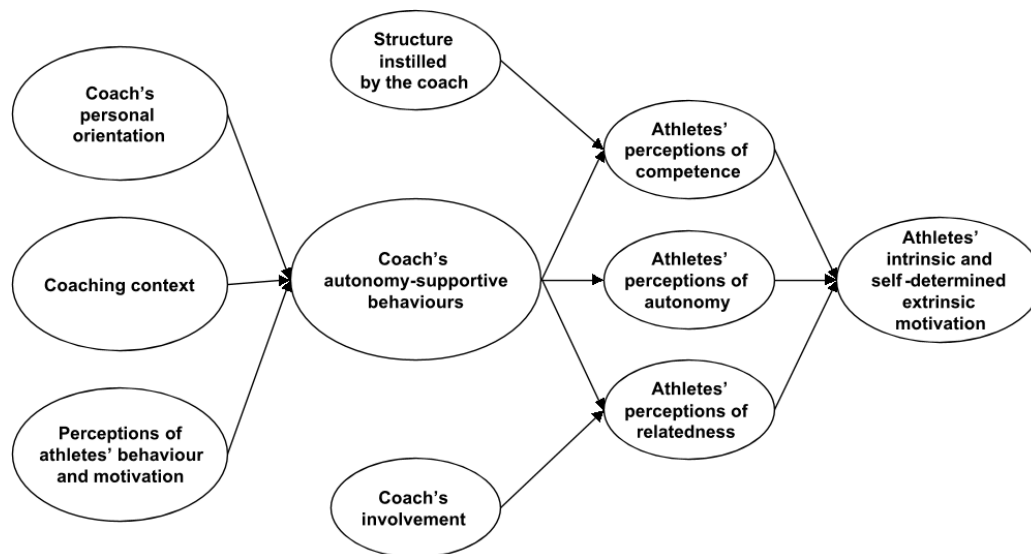


Figure 3. Model of Coach-Athlete Relationship

Mageau and Vallerand (2003) maintained that athletes hold various perceptions that will determine their level of motivation to succeed in a sport; competence of participation, autonomy to practice their sport, and relatedness. Mageau and Vallerand (2003) indicated that the coach must use supportive leadership behaviors to foster this perception of autonomy in the athletes so that both intrinsic and extrinsic motivation is cultivated. The primary methods to develop this support of autonomy might include providing a structured setting of standards and protocols and showing care for athletes not only in the sporting setting but in academics and social settings as well (Horn et al., 2011).

### **Multidimensional Model of Leadership**

Effective leadership can help an organization advance in new directions and promote change toward anticipated goals, and leaders can significantly influence the thoughts, behaviors,

and feelings of others in that organizational setting (Bennis & Nanus, 1985). Not only does this leadership concept apply to business, but it is also relevant in sport. Researchers have attempted to apply leadership models to sports to develop an understanding of effective sport leadership.

Eventually such research began to permeate sports. For example, Penman, Hastad, and Cords (1974) found that more successful coaches, in comparison to less successful coaches, exhibit more authoritarianism. Research that followed took similar approaches to investigate the relationship between effective leadership and traits or behaviors such as decision-making style and creativity. Some theorists Tutko, Lyon, and Ogilvie (1969) even forwarded coaching profiles that were supposed to be characteristic of successful coaches. Although Ogilvie and Tutko considered traits such as authoritarianism, independent thinking, tough-mindedness, realism and emotional maturity as important characteristics, it is apparent that these theorists produced no evidence to support their profile (Weinberg & Gould, 2014).

Two of the main problems with the trait approach to studying leadership is that traits are not necessarily easy to measure (Bolden, Gosling, Marturano, & Dennison, 2003), and that over time, an almost limitless list of positive adjectives have been forwarded as important leadership traits. However, Bass and Stogdill (1990) summarized the contribution of trait approaches to the study of leadership by listing those traits and skills that have been found more frequently in related research. These traits and skills are not specific to sport and should not be considered as essential pre-requisites, but rather as potentially useful leadership characteristics. It is important to note that the absence of such traits does not necessarily preclude an individual from being a successful leader.

The Cognitive Behavioral Model of Leadership (CBML), which identified individual difference variables, situational factors and cognitive processes assumed to mediate interactions

between athletes and coaches was created by Smoll and Smith (1989). Their approach focused more on training and behavioral change for coaches in youth sport, and was less relevant to leadership behaviors of coaches in adult sport settings.

Based on Fielder's Contingency Model of Leadership, Packinthan Chelladurai (1978) developed the Multidimensional Model of Sport Leadership (MML) to determine if situational leadership theories were applicable to the sporting environment. Member characteristics may lead to specific preferred leadership behaviors. An established model of leadership in sports, the MML was originally the central component of a doctoral dissertation in management science. It represents a combination and understanding of the models of leadership found in mainstream literature. These pre-existing models tended to focus more on either the leader, the members, or the situation. However, as leadership is a concept that encompasses all three factors—the leader; the members; and the organizational context including goals, structures, and processes.

The subsequently revised MML (1999) concentrated on three aspects of coaching leadership: a) actual behavior, b) required behavior, and c) preferred behavior. Performance and satisfaction of the athlete are viewed as the products of the interaction of these three aspects of coaching leaderships. Athlete satisfaction is often used as a measure of leader effectiveness (Riemer & Chelladurai, 1995). According to the model, leadership behaviors are largely a function of leaders' personal attributes. The multidimensional model of leadership combines these facets and places uniform significance on each aspect. The outcome of the MML is such that if the three types of behaviors are congruent, performance and satisfaction will increase (Chelladurai & Saleh, 1980). It provides a theoretical framework for the study of sport leadership and advocates that coaching is a complex process in which a variety of factors work together to determine effectiveness (see Figure 4). Specifically, the way the coach, the athlete, and the

situation work together to achieve the desired result. Central to its belief is that team performance and the athlete’s individual level of satisfaction are involvedly dependent upon three states of leader behavior: required, preferred, and actual (Rierner & Chelladurai, 1995).

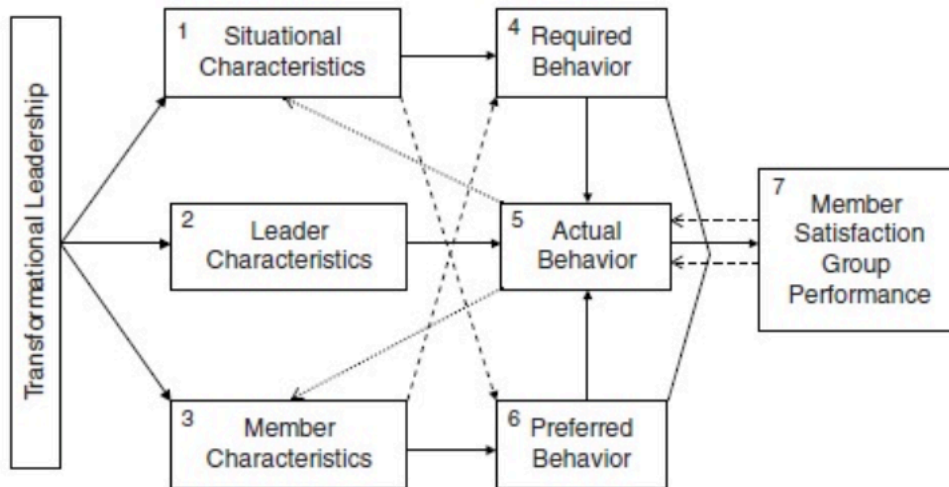


Figure 4. Multidimensional Model of Leadership

**Required Behavior**

The leader is required to exhibit certain behaviors per factors relating to the environment and institution, because the goals and objectives of the organization warrant specific behavior. A professional sports team may have the same unique goals as an educational institution. Secondly, the size and structure of the organization may control or constrain leader behavior. Thirdly, the degree of interdependence and variability of the tasks may determine effective leader behavior.

**Actual Behavior**

Actual leader behaviors are simply the behaviors the leader exhibits, such as initiating structure or consideration. The leader initiates structure by organizing and clarifying roles, and providing coaching and guidance (Horn, 2008). This behavior indicates a strong concern for task accomplishment and goal attainment. The leader’s personality, ability, and experience determine

whether they emphasize consideration or initiating structure in their leadership role. The preference of the group members and the requirements of the scope of the organizational system in which the leader exists are the two other sets of influences that affect actual leader behavior (Chelladurai, 1990; Chelladurai & Riemer, 1998).

### **Preferred Behavior**

Preferred leader behavior is that which is desired by the team members in each distinctive situation. Preferences affect actual leadership because leadership is interpersonal by nature (Piccolo, Greenbaum, Hartog, & Folger, 2010). The need for affiliation, cognitive structure, and competence in the task influence the members' preferences for coaching and guidance, social support, and feedback. For example, organizational expectations held jointly by both coach and athletes may socialize members into the same behavioral expectations in specific game context (Chelladurai, 1990; Chelladurai & Saleh, 1980).

One area in the preferential leadership research that has been examined is the type of sport played (individual or team) and its influence on the athletes' preferred coaching behavior. Athletes who play team sports such as basketball, football, or soccer prefer less democratic coaching than an athlete who plays an individual sport such as tennis or golf (Beam, 2001; Terry & Howe, 1984). Autocratic coaching leadership behaviors are not solely preferred by these athletes, simply preferred more than the other behaviors in the Leadership Scale for Sport. Terry and Howe (1984) found significant interactions between the task dependence of the sport and the preference of the athletes. The most preferred coaching leadership behavior among all athletes were instructional in nature, while athletes playing team sports preferred more autocratic coaching leadership behaviors and athletes in individual sports preferred more democratic coaching leadership behaviors.

Research is conflicted regarding the extent to which gender influences preferred leadership (female athletes were researched in this study). Researchers have shown gender differences regarding preferred leadership (Beam, Serwatka, & Wilson, 2004; Chelladurai & Arnott, 1985; Riemer & Toon, 2001; Terry & Howe, 1984) while Sherman, Fuller, and Speed (2000); report no significant gender differences. In fact, Sherman et al. (2000) found that 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 a dual gender sport such as basketball. Barnes (2003) examined coaching behavior preferences of NCAA Division I athletes and reported that, although preferred leadership varied as a function of gender and type of sport, overall the preferences from athletes were similar.

Similar to gender, the degree to which the skill level influences preferred coaching behaviors seems to vary. Riemer and Toon (2001) found that athletes of lesser ability preferred more positive feedback than higher skilled athletes who had more mastery of the skill. Hastie (1995) also found that elite athletes had less desire for positive feedback and lesser skilled athletes preferred more positive feedback. Chelladurai and Carron (1983) examined athletic maturity and preferred leadership, and revealed that as athletic maturity increased so did the preferences for social support from coaches. Also, the researchers found a curvilinear relationship between maturity and instructional behaviors. University athletes preferred more Training and Instruction than any other group. Conversely, Beam et al. (2004) found no differences between NCAA Division I and Division II athletes regarding preferred coaching behavior, indicating that athletes of varying abilities prefer similar coaching behaviors.

## Sports Leadership

Sports play an enormous and crucial role in the lives of many athletes. A coach's power of direction can have a significant impact on their athletes. Their role is a highly complex process in which they are asked to complete a variety of tasks such as practice preparations, game strategies, organizational tasks and mentoring their athletes. These tasks are in addition to a coach's obvious role of a fundamental skills teacher and tactician (Williams & Krane, 2015). Northouse (2011) considered leadership as a situation in which one person can influence others to pursue and achieve a common goal. He further explained that leadership cannot exist without this influence. Many things go into being a great coach including philosophy, tactics, communication, strategy, and knowledge (Chelladurai, Singer, Murphey, & Tennant, 1993). Great coaching is very objective but both successful and unsuccessful coaches have specific behaviors. Athletes have specific behaviors they prefer from their coaches. Meeting or exceeding the expectations and preferences is a vital part of coaching athletes. Figuring out what kind of behaviors athletes prefer will significantly help or hinder the development of the coach-athlete relationship. Coaches are in a highly visible position, and with social media becoming more and more an instrument of voice, they are continually exposed to real-time public evaluation and criticism.

A challenge for coaches has always been to find a leadership style that is conducive to team success. Despite considerable research on coaching styles, the answer to the following question remains obscure: Which style of coaching in sport is most effective for optimum team performance? Case (1998) suggested that although leader behavior is often discussed, it is one of the least understood aspects of coaching, which is ironic considering that the coach defines, supplies and delivers the sport experience for the athlete. Also, the type of leadership behavior



displayed by the head coach can have a significant effect on the performance and psychological well-being of their athletes (Horn, 2008).

Successful coaches do not achieve results themselves. They influence team outcomes through other people. There is a difference between an effective leader and a successful leader (Williams & Krane, 2015). A coach's successful leadership can change an athlete's behavior as a function of the coach's effort. The task may be completed and the coach's needs may be satisfied, but the players' needs are ignored. Effective leadership in coaching occurs when athletes perform in accordance with the coach's intentions while finding their own needs satisfied. However, the level of that impact is unknown, along with the preferences of what athletes want from coaches.

In sports psychology, the most commonly cited definition of leadership is the one by Barrow (1977). Leadership is defined as a process of influencing actions of individuals and organized groups in view of specific goals in such a way as to ensure the attainment of these goals. This definition proves very useful because it underlines various aspects of leadership. From among these aspects, those relevant to the sports setting are: decision-making, motivating group participants, giving feedback, establishing interpersonal relationships and managing a group or team (Weinberg & Gould, 2014).

Aside from numbers of wins or the improvement of performances during a team's competition, it is quite difficult to gauge how important coaching is to sports. The individual players' ambition, competitiveness, and work ethic are all critical factors when measuring the success of a team. The goals of the team will vary depending on the competitive level of the team and its definition of success. However, an effective coach is a person who is committed to bringing out the best in his or her players and pursuing the highest level of team excellence.

Coaching effectiveness, much like the said attributes, is just as important and equally as hard to quantify. There are questions about whether a coach is merely a manager who simply oversees one or more athletes, or if he or she is an integral part to their team's success. The question becomes whether coaches are actual leaders, what leadership styles do they practice, and are there certain attributes and characteristics which successful coaches possess? A substantial body of literature refers to coaches as leaders. Many researchers in sport settings use the terms 'coach' and 'leader' interchangeably reinforcing the presumption that coaches are leaders. Athletes have varied talents and each deserves respect for his/her uniqueness. Coaches need to adapt their leadership style to each athlete. The same training program does not suit everybody. Each athlete needs to be motivated differently.

Chelladurai's Multidimensional Model of Leadership (1978), which applies specifically to sport, recognizes the importance of leadership style: 1) actual leader behavior 2) leader behavior preferred by athlete and 3) required leader behavior. It is expected of the coach to try to ensure that there is congruency between the required, actual and preferred leadership behavior. The degree of comparison among these three components determines an athlete's satisfaction and performance. Chelladurai and Saleh (1980) proposed that if congruency existed between the leadership style of the coach and the preferred leadership style of the athlete that individual and group performance would be enhanced in a positive fashion. Satisfaction in the group or individual would be positive as well. Aside from numbers of wins or the improved performances during a team's competition, it is quite difficult to gauge how important coaching is to sports. The individual players' ambition, competitiveness, and work ethic are critical factors when measuring the success of a team. Coaching effectiveness, much like the said attributes, is just as important and equally as hard to quantify. There are questions about whether a coach is merely a

manager just overseeing one or more athletes, or is he/she integral to his teams' athletic success. What attributes or characteristics do successful coaches possess and what are some of their roles? Are coaches' leaders, and what leadership styles do they practice? Countless coaching styles have been recommended for success, fame, and fortune. Some coaches appear to be detached and indifferent, while others exude more caring, compassionate characteristics. Some coaches allow their team members to be independent, while others provide strict supervision. The list of factors is endless and no single approach has been proven to result in optimal success all the time (Weinberg & Gould, 2014). Sports environments provide persuasive evidence that the success of a coach is closely related to the characteristics of the situation in which a coach is found. Magazines, newspapers, social media and biographies prosper with stories of individuals who have been successful in leadership roles in one environment, only to relocate and fail miserably in another environment. Chelladurai and Riemer (1998) insist that leader effectiveness in sport is subject to situational characteristics of the leader, the institution, and the individual or team members involved. Furthermore, the effectiveness of the leader can and will differ depending on the characteristics of the leader, characteristics of the athletes, and control variables of the situation.

## **Leadership Scale for Sports**

### **Theoretical Background**

Leadership researchers employ a wide range of research methods, although the range of those methods is of rather recent origin since the field has largely been dominated by a single method of data collection – the self-completion/self-administered questionnaire. Much of the research associated with the MML has been conducted using the Leadership Scale for Sports

(LSS) developed by Chelladurai and Saleh (1980) to determine if certain leadership theories were applicable to the sports setting.

The LSS measures five leadership styles which include: training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback. It has been used in a variety of contexts to measure leadership in sport and the relationship between leadership and other variables. Chelladurai identified three main purposes for which the LSS has been used; to study athlete's preference for specific leader behavior and athletes' perceptions of their coaches' behavior, and to study coaches' perception of their own behavior (Chelladurai, 1990; Horne & Carron, 1985).

Taken together, these five dimensions provide conceptually distinct categories of overall coaching behavior and since they are measures with items like other leadership scales, they allow for comparison and extension of research findings in other fields beyond sport (Chelladurai & Saleh, 1980). The five behavior subscales of the LSS (see Table 1) have been classified along three dimensions: one direct task factor (i.e. training and instruction behavior), two decision style factors (i.e. autocratic and democratic behaviors), and two motivational factors (i.e. positive feedback and social support).

Table 1

*Leadership Scale for Sports Dimensions*

Dimensions	Type of Behavior	Description
Democratic Behavior	Decision-making behaviors	Allows athletes to be involved in the development of goals, practice methods, and game strategies
Autocratic Behavior	Decision-making behaviors	The coach emphasizes independent decision-making and personal authority – athlete input is not invited
Training and Instruction	Instructional behaviors	High scores in this subscale illustrate attempting to improve performance by giving technical instruction, skills and techniques, and strategies
Social Support	Motivational behaviors	Shows concern for athletes' well-being and establish relationships with athletes – typically extend beyond athletic context
Positive Feedback	Motivational behaviors	Consistently praise and reward for good performance – this dimension is limited to athletic context

One of the most popular and most used scales to measure coaching behavior is the Leadership Scale for Sports (LSS) (Chelladurai & Saleh, 1980). This instrument has been widely used and employed in sports leadership research for more than 30 years. Its reliability and validity have also been re-evaluated numerous times. The LSS has also been created because, at that time, there was no parallel instrument measuring coaching behaviors that would take into

account the specific character of the sports environment and be closely adapted to it (Chelladurai & Saleh, 1980). Thus, it makes it possible to establish the degree to which the coach puts emphasis on giving their players detailed and precise instructions and new techniques and strategies in the sport. It verifies whether the coach is oriented toward building relationships between the team members and to establish whether he or she pays attention to structure (the training and instruction dimension). The democratic and autocratic behaviors test the degree to which a coach is able to give the players opportunities to take part in making team and game decisions (Chelladurai, 1990). The LSS also measures the degree to which the coach places importance on a positive atmosphere in the team and to measure whether his or her behavior is relationship oriented with the players and a concern for their well-being (the social support dimension). When evaluating the positive feedback dimension, the LSS measures the degree to which the coach emphasizes the players' behaviors by identifying, acknowledging and rewarding their good performances.

There were two stages in the construction of the Leadership Scale for Sports. In the first stage (the development of the Multidimensional Model for Sport Leadership), Chelladurai and Saleh (1978) chose ninety-nine items from previously existing questionnaires studying leadership including: the Leadership Opinion Questionnaire, Leader Behavior Description Questionnaire, the Leader Behavior Description Questionnaire-Form XII, and the Supervisory Behavior Description Questionnaire (Chelladurai & Saleh, 1980). The selected items were modified to reflect the sports environment. These statements have not been generated from actual declarations and experiences of athletes. The phrase "The coach should..." preceded each item. The responses to each item were factor analyzed, with the most meaningful being a five-factor solution (Chelladurai & Saleh, 1978, 1980). Items were selected if they had a loading of .40 or

above on one factor and a loading of below .3 on any other factor (Chelladurai & Saleh, 1978, 1980) Thirty-seven items, which scored a high loading on one factor and a low loading on all four other factors, were retained. The five factors were named Training Behavior, Autocratic Behavior, Democratic Behavior, Social Support and Rewarding Behavior.

Due to discrepancies with the ‘Training Behavior’ and ‘Social Support’ dimensions, the second stage of the construction of the LSS involved adding six more items to Social Support and six additional items to Training & Instruction. Physical education students and athletes given the LSS recorded their preferences for leadership behavior. These results were factor analyzed separately, and items were selected to constitute the five dimensions from the first stage of the development of the LSS (Multidimensional Model of Sport Leadership), resulting in the retained 40 items (Chelladurai & Saleh, 1980).

Dimension one was named “Training Behavior” as its 13 items focused on the training process to improve athlete’s performance (Chelladurai & Saleh, 1978). In the second stage of the development of the LSS, Chelladurai and Saleh (1980) changed the name of this dimension to Training & Instruction. It encompasses how the coach directs his/her behavior toward improving athlete’s performance by instructing athletes in the skills; emphasizing and facilitating strenuous training; techniques, and tactics of sport; clarify the relationship among the athletes; and structuring and coordinating the athletes’ activities. (see Table 2).

Table 2

*Items for Training and Instruction Coaching Behavior Preference*

---

I prefer a coach who:

---

1. Sees to it that every player is working to her capacity.
2. Explains to each player the techniques and tactics of the sport.
3. Pays special attention to correcting players' mistakes.
4. Makes sure that his/her part in the team is understood by all the players.
5. Instructs every player individually in the skills of the sport.
6. Figures ahead on what should be done.
7. Explains to every player what she should and what she should not do.
8. Expects every player to carry out her assignment to the last detail.
9. Points out each players' strengths and weaknesses.
10. Gives specific instructions to each player as to what she should do in every situation.
11. Sees to it that the efforts are coordinated.
12. Explains how each players' contribution fits into the total picture.
13. Specifies in detail what is expected of each player.

---

The second dimension of the LSS, named "Democratic," relates to the democratic style of leadership. In this coaching style, athletes are encouraged to voice their opinions and participate in decision making on significant coaching, practice or game related issues (Chelladurai & Saleh, 1978). The democratic coach tends to share his or her decisions with the team and often delegates responsibility to team captains or leaders. By giving ownership of a task to individuals in a group, the group will work harder collectively, developing unity and a common purpose (Lyle, 2002).



Table 3

*Items for Democratic Coaching Behavior Preference (#14-22)*

---

I prefer a coach who:

---

14. Asks for the opinion of the players on strategies for specific competitions.
15. Gets team approval on important matters before going ahead.
16. Lets his/her players share in decision making.
17. Encourages players to make suggestions for ways of conducting practices.
18. Lets the team to set its own goals.
19. Lets the players try their own way even if they make mistakes.
20. Asks for the opinion of the players on important coaching decisions.
21. Allows players to work at their own speed.
22. Lets the players decide on the plays to be used in a game.

---

The third dimension, named "Autocratic Behavior," denotes the coaches tendency to make all decisions on behalf of their players and is motivated to complete the task as quickly and efficiently as possible (Chelladurai & Saleh, 1978). This style is most effective when quick decisions are needed for large groups, or teams when discipline is necessary. This 'authoritarian' style does not account for any opinions or preferences of the group. The autocratic leader will not delegate responsibility but instead, focus on team performance and the achievements of that team. It appears that it is not so much whether a coach's autocratic style is more effective than a democratic, social supporting, rewarding or training and instruction one would be, but whether that style is right for the situation and team. The importance of coaching flexibility cannot be ignored, with a critical skill being the ability to perceive the needs of the team at any moment and to adapt as necessary to maximize team performance (Crust & Lawrence, 2006). The five questions in the survey measure the independence of the coach and lack of participation in the decision making he/she allows their team (see Table 4).

Table 4

*Items for Autocratic Coaching Behavior Preference (#23-27)*

---

I prefer a coach who:

---

23. Works relatively independent of the players.
24. Does not explain his/her actions.
25. Refuses to compromise a point.
26. Keeps to himself/herself.
27. Speaks in a manner not to be questioned.

---

The fourth dimension was named "Social Support" as it refers to the behavior of the coach that focused on the personal needs of his/her athletes. Chelladurai and Saleh (1980) considered this dimension to be like the House and Dessler and Bowers and Seashore's leadership scales, and research studies by Cartwright & Zander, Mitchell, and Danielson (as cited in Chelladurai & Saleh, 1978). Social support coaching behavior characterizes a concern for the welfare of individual athletes, positive group atmosphere, and interpersonal relations with members. Lack of agreement regarding the nature and conceptual definition of the social support paradigm has led to an excess of forms of measurement of this psychosocial variable, many with psychometric limitations (Rees & Hardy, 2000). Table 5 illustrates the eight questions measuring this dimension.

Table 5

*Items for Social Support Behavior Preference (#28-35)*

---

I prefer a coach who:

---

28. Helps the players with their personal problems.
29. Helps members of the team settle their conflicts.
30. Looks out for the personal welfare of the players.
31. Does personal favors for the players.
32. Expresses affection he/she feels for his/her players.
33. Encourages the player to confide in him/her.
34. Encourages close and informal relations with players.
35. Invites players to his/her home.

---

Every athlete, regardless of talent or competitive level, wants to be rewarded for good performances by their coaches. The fifth dimension was named "Rewarding Behavior" as the items were similar to the 'recognition' dimension of Hemphill & Coons Leader Behavior Questionnaire (Chelladurai & Saleh, 1978). This dimension referred to remunerating athletes for their performance. It was then renamed "Positive Feedback" by Chelladurai and Saleh (1980) in the second stage of the construction of the LSS as it correlated to the need of the coach to maintain motivation by complimenting athletes and recognizing and rewarding their good performance. Striving for wins is an important goal for both coaches and athletes in the measurement of success on their athletic performance. To reach that level, leaders must provide the drive toward goal determination and goal attainment (Watkins & Rikard, 1991). Chelladurai and Saleh (1978; 1980) claimed that the items in each dimension were valid as they were similar to dimensions and leader behaviors from previous research (see Table 6).

Table 6

*Items for Positive Feedback Behavior Preference (#36-40)*

---

I prefer a coach who:

---

36. Compliments a player for her performance in front of others.
37. Tells a player when she does a particularly good job.
38. Sees that a player is rewarded for a good performance.
39. Expresses appreciation when a player performs well.
40. Gives credit when credit is due.

---

**Reliability of LSS (Athlete Preference Version)**

The reliability analysis of the LSS was conducted by Chelladurai and Saleh (1980) based on the assessment of the internal consistency coefficient. Cronbach's Alpha estimates were used to measure the five leadership dimensions of the LSS in studies by Brooks, Ziatz, Johnson, and Hollander (2000), Carron and Chelladurai (1981); Chelladurai and Saleh (1980), Dwyer and Fischer (1988), Hastie (1995), Horne and Carron (1985), and Sherman et al. (2000) to show the reliability of the LSS. Nunnally (as cited in Dwyer and Fischer, 1988) recommended satisfactory reliabilities of at least .70 (factor coefficients closer to one are considered reliable).

The internal consistency estimates for the athletes' preference version of the LSS were similar. Chelladurai and Saleh (1980) indicated that coefficients for all 5 dimensions of leader behavior were acceptable, although coefficients for Autocratic Behavior were the lowest (.66 for student' preferences and .45 for athletes' preferences). This tendency was also observed by Carron and Chelladurai (1981) in his study of leadership in youth sports, who reported acceptable coefficients for Training & Instruction, Democratic Behavior, Social Support, and Positive Feedback, but a low value for Autocratic Behavior (.48). Research by Chelladurai et al. (1987) and Sherman et al. (2000) observed a similar trend in the coefficient values for the five

dimensions of leader behavior. Hastie (1995) reported similar coefficients in his studies. Scores for all the leadership dimensions were above .72 and considered acceptable. These usually high coefficient values indicate that the athletes preference version of the LSS is reliable, however, in a review of Leadership in sports, Chelladurai (1990) recommended low values for Autocratic Behavior (which have been consistently low) should be viewed guardedly. Carron and Chelladurai (1981); Chelladurai et al. (1987) also stated in their studies that caution must be taken when examining the Autocratic Behavior results.

To define the optimal number of factors, the Kaiser criterion test was employed (Chelladurai & Saleh, 1980). A few years later, Chelladurai and Riemer (1998) conducted a confirmatory factor analysis to re-examine the validity of the LSS (preference and perception version). The obtained results ( $\chi^2/df < 2$ ; RMSEA = 0.06 and 0.062) indicate an acceptable fit of the five-factor model. Similarly, Trail (2004) demonstrated that the LSS is characterized by a reasonable fit of the model (RMSEA = 0.58;  $\chi^2/df = 1.65$ ) (Wałach-Biśta, 2014). Fletcher and Roberts (2013), showed that in three out of four measurements, the LSS was characterized by an equal or better fit to a five-factor model than indicated by the results obtained by (Chelladurai & Riemer, 1998). These three RMSEA measurements of the LSS ranged from 0.062 to 0.071 and can be measured acceptable.

The internal consistency estimates for the athletes' perception version of the LSS were generally higher than for the athletes' preference version. This trend was also stated by Chelladurai (1990) in his review of Leadership in sport. However, Chelladurai and Riemer (1998) observed low coefficient values for Autocratic Behavior for the athletes' preference version. All scores were considered by the authors (Chelladurai, Imamura, Yamaguchi, Oinuma,

& Miyauchi, 1988; Chelladurai & Saleh, 1980) to be satisfactory; however, caution must be used when examining the results relating to autocratic behavior.

### **Validity of LSS**

Validity of the LSS refers to the extent to which the scale measures what it was designed to measure, which is leadership in sports (Carmines & Zeller, 1979). The LSS has proven to be a valid instrument in the measurement of leadership in sports by various studies. Four different types of validity have been established for the LSS including Convergent and Discriminant Validity, Content Validity, Factorial Validity, and Criterion-Related Validity. Chelladurai and Saleh (1980) maintained Factorial Validity for numerous reasons. The items had a comparable factor structure across numerous samples (Chelladurai, 1990). Thus, the factor structure was considered stable. As expected, the items and factors extracted were like those extracted from the Multidimensional Model of Leadership for Sport, thus making these factors reproducible. The subscales of leader behavior were consistent with previous literature on leadership, thus affirming Content Validity. This proportion shows the importance of the five-factor solution. Convergent & Discriminant Validity refers to the extent to which the scale relates to other measures of theoretically concluded hypotheses concerning leadership (Carmines & Zeller, 1979). Thus, different versions of the LSS can be used to measure leadership in sports.

Convergent and Discriminant validity for the LSS was asserted by Chelladurai (1990) as different versions of the LSS have been successfully used to measure leadership in Youth Sports (Chelladurai & Carron, 1981) with Japanese athletes (Chelladurai et al., 1988). It has also been used to measure 104 Finnish Coaches (Salminen & Luikkonen, 1994) and NCAA Division I strength & conditioning coaches (Brooks et al, 2000) perceptions of their behavior. These studies provide evidence for the validity of the LSS.

Criterion-related validity describes the capacity of the scale to estimate a form of behavior different from what the scale was created to measure (Carmines & Zeller, 1979). It describes whether the LSS can be used to estimate psychological factors other than leadership. According to Chelladurai (1990), criterion-related validity can be inferred from support for the relationship between the five dimensions of leader behavior and selected criterion variables. Numerous studies have shown a supportive relationship between the five dimensions of leader behavior and other psychological factors. These factors include athletes' satisfaction, performance levels of athletes, performance, and dropout behavior in athletics, and coach-athlete compatibility (Horne & Carron, 1985) as cited in (Chelladurai & Riemer, 1998). Other variables studied have included athletic maturity (Chelladurai & Carron, 1983), coach-athlete compatibility (Horne & Carron, 1985), and teacher/coach effectiveness (Laughlin & Laughlin, 1994). These studies also provide confirmation of the validity of the LSS.

Several trends emerged from the psychometric data in the LSS that do not constitute norms. Chelladurai and Carron (1983) found that training and instruction preferences decreased from freshman to senior high school basketball players, but then increased for university basketball athletes. Though, players' preference for Social Support rose from high school freshman to university athletes. Replicable research findings appear to be critical when reviewing the literature concerning the LSS model. First, it seems that, as athletes age and mature, higher preference for an autocratic and supportive style of leadership emerges (Horn, 2008). These preferences might reflect the athletes becoming more goal-oriented and increasing their focus on performance. Interestingly, Chelladurai and Carron (1983) suggested that the relationship between age and preference for autocratic style may occur because athletes become programmed into preferring less responsibility in a sport that is an autocratic organization.

These trends should not be recognized as the norms for a sport, culture, or context as many factors influence leadership, and therefore may have skewed results for these particular studies. For example, not all Japanese athletes will prefer Autocratic Behavior, and Social Support, and not all Dixie Youth baseball coaches will place more emphasis on positive feedback and training and instruction. However, the sampling characteristics in these particular studies have generated distinct results. Although these results have some meaning regarding leadership in that given situation, it is not the only factor that should be weighed when studying leadership behavior in similar circumstances. There is little research on leadership style preferences of female professional basketball players. Attempting to attribute the findings of male athletes to female athletes is simply not appropriate (Chelladurai et al., 1987; Garland & Barry, 1990; Weiss & Friedrichs, 1986).

#### **Revision of the Leadership Scale for Sports:**

Zhang Zhang, Jensen, and Mann (1997) attempted to revise the three versions of the Leadership Scale for Sports due to a number of potential problems cited in the literature regarding studies using the LSS. One problem pertained to differences in the culture of the coaches. Research found that the behavior of coaches in some cultures differed from what is tested in the LSS due to rules and regulations governing coaching behavior. Zhang et al. anticipated that a cautious revision of the original LSS would result in a more effective tool for measuring leadership in sport. After revising the original version of the LSS through adding factors and items, validating the content and construct of the revised scale and analyzing the internal consistency reliability of the revised scale, Zhang et al. proposed a revised version of the LSS (Revised Leadership Scale for Sports). The revised version (RLSS) of the LSS, Zhang et al. (1997) maintained the same three versions, with similar preceding phrases, along with the same



5-point response scale. Two extra factors were added, which accounted for the coaches' behavior directed towards group cohesion and consideration of situational factors. Through the revision process, Zhang et al. discovered that the revised version of the LSS was not a perfect measurement instrument with respect to historical measurement standards. However, they did reveal that it was acceptable to use in the measurement in the same way as the original LSS. Although this revised scale was considered acceptable for measuring leadership, and its relationship with other variables, in the sports context, evidence of its application has not been substantiated. Chelladurai (1990) concludes that the original version of the Leadership Scale for Sports is still considered valid and reliable in the measurement of leadership in sport.

### **Strategic Leadership**

The ability to craft a winning game plan is only part of what it takes to be a successful coach. That coach must be able to motivate, communicate, and understand team dynamics when recruiting new athletes each year. The best coaches in the business give these attributes as much attention as their ability to break down the X's and O's. Teams take advantage of the coach's strategic plan by developing personal leadership skills and maintaining communication with their fellow coaches and players. Successful coaches clearly identify each player's role on a team. Hambrick (1989), defines strategic leadership as a concentrated focus on the people with the overall responsibility for an organization – the characteristics of those people, what they do, and how they do it. In sports, the art of leadership involves applying the right strategy in the right way at the right time with the right players during a practice or competition. Given the enormous changes occurring in sports and the challenges that lie ahead, there is a great sense of urgency to identify and develop leaders who can effectively position their teams for success. Whether on the basketball court, in the boardroom, or as part of a project or athletic team, effective leaders and

coaches use similar philosophies and tools to help their teams excel. Coaches in different industries might implement these tools in different ways, but the common denominators present in most coaching relationships can have lasting effects on employees' or players' performances, as well as their own (Walters, 2001).

There are a few strategies identified that coaches can apply to enhance their success in the sports settings: trust and respect, communication, setting goals, individual development, team building, conflict resolutions, and role modeling. A coach can facilitate trust and respect by valuing team members and empowering and supporting them in practices and games. Coaches should place value on and employ effective verbal and nonverbal communication techniques (Martens, 1996). They earn respect and trust by being respectful and trustworthy. Coaches can then trust team members with levels of responsibility and accountability needed to be a successful team. Coaches should foster individual development and facilitate the development of the team; in fact, doing so is essential to the coaches maintained success. As is evident in successful sports teams, an organization achieves its goals only through the combined effort of its team members (Parker, 2011). Thus, effective leaders build each team member's confidence and genuinely care about his or her well-being. Every team members' pursuit of team goals is supported, making individualization invaluable in achieving desired group results. A coach who facilitates teamwork, emphasizes the common interests of everyone on the team and supports communication, will build a team culture which is appreciated by the team.

Team conflict is unavoidable in sports, but an experienced coach can use it to enhance team commitment. Addressing conflict effectively can provide a direct path to approval as a coach (Baker & Esherick, 2013). Vernacchia, McGuire, and Cook (1996) noted that a natural and healthy part of the team process is conflict. Engaging in a comprehensive discussion process

generates positive outcomes wherein the feeling of collaboration reduces the perception of compromise. These strategies, are not suitable in every circumstance, for every coach or team member, or in every sports team. Therein lies the true art of leadership and coaching. The most efficient strategy in all of sports that coaches use is to earn the respect of their players.

While there have been some nearly comprehensive insights into leadership, the leadership process remains both personally and environmentally determined. It is very diverse and dependent on a collection of precursors, best practices, and intended consequences. For confirmation of this point, there are personalities of the successful coaches in professional women's basketball. The WNBA's Los Angeles Sparks Head Coach Michael Cooper, for example, presents a much different study in leadership than the coach of the WNBA New York Liberty, Bill Laimbeer. Both coaches, former NBA athletes, are good at their jobs and both coaches have won WNBA Championships, but their approaches are very different. Cooper has built a culture of "Showtime" in Los Angeles, modeling his team after the NBA Los Angeles Lakers. Laimbeer, in contrast, has modeled his team after his own "bad boy" image with the Detroit Pistons. Each coach approaches his team differently, and yet they both have yielded incredible success in their relatively young coaching careers.

### **Leadership Qualities Women Prefer**

A Harvard Business Review studied 92 mid-career women across three higher education organizations. The results indicated five specific things aspiring female's look for in leadership and support (Vongalis-Macrow, 2012).

#### **Focused on leading**

Mid-career women can discern leaders who are controlling and managerial as leaders seeking to maintain their position. This kind of maintenance creates tension and frustration

within the organization (Vongalis-Macrow, 2012). The leader is more concerned about their position rather than leading others in the team. This kind of leadership also decreases the action and energies of other professionals. Taking risks and enabling innovation are examples of leadership that drives mid-career women to follow and act.

### **Inspirational and looks at the big picture**

Inspiring leaders are important as women desire a vision and direction that captures the future. For mid-career women, having a sense of the future direction and how they fit within the organization's vision focuses their energy and commitment. The visionary leader is more confident and willing to take risks on behalf of their followers (Vongalis-Macrow, 2012).

### **Taking fast, decisive action**

Women tend to seek leadership which is decisive and action-orientated rather than tentative decision making. Because women tend to be multi-taskers, leadership decisions which are made decisively allow them to tackle the task in front of them quickly (Vongalis-Macrow, 2012).

### **Demonstration of both hard and soft leadership skills**

Females prefer leaders who can assert themselves in tough situations and simultaneously display some compassion towards them. The study found no statistically significant difference between preferences of men or women as leaders as long as they were able to adjust their leadership style to the situation and have the ability to empathize with their followers (Vongalis-Macrow, 2012)

### **Balance emotional labor**

The women studied felt more judged by female leaders. Female leaders can get personal and emotional, which often leads to jealousy and pettiness (Vongalis-Macrow, 2012) . However,

the respondents also noted that male leaders could be too unemotional and put too much emphasis on strategy and outcomes (Vongalis-Macrow, 2012). The ability to balance emotions and approach with emotional intelligence leads to an increased feeling of support.

### **Responsibility of Coaches**

The coach plays a paramount role in the success of his or her team, regardless of the level of competition. Coaches at the professional level have numerous responsibilities, most outside of the athletic arena, including obtaining and conveying content knowledge, communicating and motivating athletes, acting as a mentor, and setting goals, all which are characteristics of the coaching styles assessed by the Leadership Scale for Sport (Chelladurai & Saleh, 1980).

#### **Content knowledge**

Coaches instruct their athletes on how to perform skills necessary for their sport, so in many ways, coaches are teachers. Even in the professional arena, where athletes are expected to have already mastered their craft, coaches are still expected to teach aspects of the game and assist in their player's development. Qualifications of coaches typically depend on a high level of knowledge about the sport, experience, and the level of athlete they once were themselves (Gordon, 2009). However, the most successful coaches understand that for an athlete to reach his or her maximum potential, a mixture of both education and application is necessary. According to Gordon (2009), coaches gain knowledge and a better understanding of their athletes through experience. There are two types of knowledge related to the coaching process: theoretical and on the job knowledge. Theoretical knowledge is knowledge obtained through education, such as courses, seminars, clinics or in books. On the job knowledge is acquired by the practice and game coaching experience. Therefore, the longer one coaches, the more on the job experience he or she has (Martens, 1987). Since coaches teach individual technique, as well as a team tactics

approach when dispensing information (Hughes & Franks, 2004), it is vital that coach remains up to date on new rules and regulations of the game, as they are always changing.

### **Communication**

Coaches often find themselves in situations where they need to resolve conflicts or motivate players, and that is accomplished through effective communication (Haselwood, Joyner, Burke, & Geyerman, 2005). Coaches must be able to evaluate the student-athlete in practice and competition and give positive criticism and possible suggestions on how to improve (Gordon, 2009). Effective coach-athlete relationships are defined by an understanding of one another's thoughts, feelings, and behaviors (Jowett & Poczwadowski, 2007). In addition, it is crucial that a coach knows his or her intentions and communicates them successfully in order to accomplish what her or she wanted to achieve (Martens, 1996).

### **Motivation**

Positive feedback is a critical aspect of coaching because it fuels motivation in athletes (Chelladurai & Riemer, 1998). While some feel that an athlete should be self-motivated, especially one who is being paid to play, it is the responsibility of a coach to motivate their athletes through the monotony of practice and poor performances (Gordon, 2009).

Understanding an elite athlete's personality and values are necessary to find out what motivates them (Balague, 1999).

### **Goal setting**

A coach plays an important role in helping athlete's set goals (Weinberg, 2002). Before the coach can assist an athlete with setting goals, he or she needs to mentally interpret the potential of the athlete to reach a desired goal (Gordon, 2009). Although the motivational technique of goal setting has improved performance in industrial psychology research, the effect

has not been clearly validated in the sport environment. The various explanations for this incongruity have resulted in a debate in the literature. However, scientists have overlooked the importance of statistical power (Kyllo & Landers, 1995). A meta-analytic procedure by Hedges and Vevea (1998) investigating the effects of goal setting on performance in sport and exercise statistically combined 36 studies identified as meeting inclusion criteria. Results indicate that moderate, absolute, and combined short- and long-term, goal setting improves sport by 0.34 of a standard deviation.

### **Mentor**

Coaches spend much of their time with their athletes, and can both teach and demonstrate integrity, responsibility, and respect daily. Additionally, most coaches understand it is their responsibility to reinforce morals and ethical behavior to their athletes and lead by example (Lumpkin, 2010). Often, a coach becomes a support system and someone the athlete can trust to seek advice or discuss problems which can improve their lives, even outside of athletics (Lyle, 2002). One reason the literature gives for the lack of women in coaching is the lack of female coaches as mentors (Lirgg, Dibrezzo, & Smith, 1994). Research shows that female athletes that play for female coaches are more likely to coach than those who did not (Lirgg et al., 1994).

### **Preferred Coaching Styles of Female Athletes**

A substantial body of literature refers to coaches as leaders. Similarly, many researchers in sport settings use the terms 'coach' and 'leader' interchangeably, reinforcing the conjecture that coaches are leaders. It is generally accepted that both the performance and satisfaction of an athlete can either be diminished or enhanced by the effects of the personality or leadership of a coach (Turman, 2001). The coach is expected to ensure congruency between their required, actual and preferred leadership behavior. This may require the coach to display flexibility in

adapting his/her leadership style to suit specific leadership situations so that all athletes are satisfied.

Communication of desired athlete responses is a preferred element of coaching by female athletes (Ford, 2000). An important job of a head coach is to understand the sports concept and know the way to communicate it effectively (Haselwood et al., 2005). Athletes from Generation Z, those born after 1995, are more receptive to coaches who utilize more democratic methods (Parker et al., 2012). These athletes, especially female athletes, did not respond well to tactics that involved yelling and other aggressive verbal techniques. In a study of elite female soccer players from Germany, Norway, Sweden and the United States, Fasting and Pfister (2000) found that female athletes are more satisfied with coaches who communicate openly and with positivity when dealing with conflict management. Often, coaches who use an autocratic and aggressive verbal coaching style suffer from burnout and negatively affect their teams while creating a lack of satisfaction in the athletes (Altahayneh, 2003). Vealey et al. (1998) found that burnout experienced by athletes and coaches, and particularly how athletes perceive their coach's behavior and communication style, may relate to unhealthy levels of anxiety experienced by athletes. A coach should avoid placing added stress on athletes by using harsh criticism or negative reinforcement. Professional athletes already put significant pressure on themselves to perform well. Athletes expect the coach to have a positive effect on the athlete's performance. Therefore, to be successful, coaches should develop a more complete understanding of the female athlete than they may have in the past (Hemphill, 2012). A study by Gould, Greenleaf, Guinan, and Chung (2002) found that variables perceived to have influenced coaching effectiveness included constant changing coaching behaviors to specific situations, the ability to



establish trust with athletes, the ability to effectively handle crisis situations, staying calm under pressure, and making fair but decisive decisions.

A study by Burke and Collins (2001) found no difference in how male coaches and female coaches lead their teams. This conflict in results indicates that more research must be conducted to determine if female athletes prefer one gender of a coach or the other and to determine the preferred style of coaching. It is important that a coach utilizes a style which is congruent with the preference of the athlete. Cote, Salmela, and Russell (1995) identified coaches' involvement in training, intervention style, technical skills, mental skills, and simulation as necessary components in their leadership style.

Altahayneh (2003) and McGee, Strasser, Mckenzie, and Stoll (2005) each found that contrasting coaching styles and a negative experience contributed to an early termination of a sporting career for athletes. A tainted self-perception and poor self-worth may also be the result of an experience of a negative coach (Manley et al., 2008). Athletes experiencing burnout have cited the coach as a negative influence due to the coaches' lack of belief in the athlete, extreme pressure of their job, and unrealistic expectations (Udry, Gould, Bridges, & Tuffey, 1997). Researchers have found that autocratic coaching styles cause athletes to quit participation in athletics. The environment may be too harsh when the coach utilizes aggressive techniques. Preferences for a coaching style may be developed by the athlete early in a career. Females prefer more democratic leadership style of coaching (Weinberg & Gould, 2014).

A coach should have the ability to work with any athlete and adapt to their specific needs. However, the importance of coaching style on the experience of athletes goes beyond the adolescent level of participation. Females who participated in sports have been found to have better self-perception as they mature, and those who did not participate in sports tended to have

lower levels of self-esteem. McGee et al. (2005) emphasized that it is important for adolescent females to enjoy their athletic experiences to encourage further participation as they mature.

The level of competition may also come into play when determining a preferred style of coaching (Posner, 1999). Beam (2001) studied Division I athletes and Division II athletes. Her findings indicated that NCAA Division I athletes were more satisfied with autocratic coaching than NCAA Division II athletes. Weiss and Friedrichs (1986) found that NAIA athletes were more pleased with supportive coaching than Division I athletes. The exceptions to these studies indicated slight differences in findings. Aumand (2005) studied 140 Division I student-athletes and determined that all athletes preferred a democratic style of coaching. However, athletes preferred higher levels of democratic coaching.

Turner (2015) found that female athletes preferred training and instruction behavior and that the athletes preferred situational consideration as well. Ronayne (2004) found that democratic styles including training and instruction, social support, and situation consideration were most desired. Terry and Howe (1984) also found that elite female track athletes desired democratic styles because these behaviors allowed the athlete to be part of the decision-making process, both individually and as a team. Female athletes have shown a preference for more democratic behaviors despite also being exposed primarily to male coaches (Beam, 2001). More research is needed for a better understanding of the coach-athlete relationship (Beam, 2001).

A study of the preferred and perceived leadership styles of coaches showed that female basketball players preferred a greater emphasis on a democratic coaching style (Lam, Chen, Zhang, Robinson, & Ziegler, 2007). Studies by Beam (2001), Lam et al. (2007), and Ronayne (2004) found that female basketball players desired higher levels of teaching and instruction, social support, and positive feedback than their male counterparts. The results of this study

caused Lam et al. (2007) to recommend that coaches consider coaching male and female athletes differently. Miller, Ogilvie, and Branch (2008) agreed and concluded that female athletes have different coaching style preferences than male athletes. A coach who communicates by screaming or yelling will likely deter a female athlete as female athletes prefer coaches to approach them in a less aggressive manner (Henson, 2010). Female athletes also do not respond well to negative criticism. A study by Fasting and Pfister (2000) found that 38 elite female soccer players from Germany, Norway, Sweden and the United States were more satisfied with female than male coaches because of their feminine style of communication. These results question whether there exists a ‘female coaching philosophy’ (Fasting & Pfister, 2000).

Elite athletes also respond well to qualified, task oriented coaches. The goal of action in achievement is assumed to be the demonstration of competence. An athlete approaches a task with particular goals of work reflecting her perceptions and beliefs about the performance activity in which she is engaged (Duda, 2001). The athlete evaluates her performance to determine whether the effort is exhausted and mastery accomplished; thus, when a coach demonstrates his/her knowledge of the game, he/she can then motivate the athlete to attain her highest level of performance. Balaguer, Duda, Atienza, and Mayo (2002) found that when a stronger task-involving climate was present, players’ performances improved as well as their satisfaction with the coach.

### **The Emergence of Professional Women’s Basketball**

Over the past two decades, women’s basketball has exploded onto the national sports scene. The Women’s National Basketball Association (WNBA) and National Collegiate Athletic Association (NCAA) television ratings have increased; movies, magazine articles, and clothing lines now showcase female players. Sports agents are now spending as much time trying to

secure female basketball players as they are male players. But, women's basketball has a much longer history, reaching back over a century of struggle, liberation, and gutsy play (Grundy & Shackelford, 2007).

When Dr. James Naismith created basketball in 1891 for the men of the YMCA, the expectation for women was to stay obedient to the middle-class, be gentle and beautiful and well informed of the limitations of reaching outside any box. Because of a pre-conceived notion that women were susceptible to fainting and bouts of mental exhaustion, they were considered fragile and physically limited. It is because of this view that a creation of a set of modified rules for a separate women's game were created. That effort, spearheaded by Senda Berenson, the Director of Physical Education at Smith College, started in 1892 (Melnick, 2007).

The history of women's basketball success is a long one: collegiate teams and women's basketball at the Olympics, as well as the history of many numerous attempts at professional leagues. The first women's college basketball game took place between the University of California and Stanford in 1896. The first women's professional basketball league, the Women's Basketball Association (WBA), was founded in 1977 (Porter, 2006). The league started with eight teams but lasted just three seasons.

Supporters of women's basketball considered the sport an important opportunity to showcase both the physical and intellectual ability of women. They were seeking validation of the growing opportunities for women in the country and around the world. Women's professional teams have been successful in South America, Europe, Japan, and Australia, which may partly be due to the lack of male competition outside the United States. Overseas women's basketball is not considered to be a weaker version of men's game. The International Basketball Federation (FIBA) had typically been the only avenue that American women who wanted to pursue a

professional basketball career could take. The international league which only allows two American players on each team has been in existence nearly 75 years. Although the association provides opportunities for women to get paid to play, these women are sometimes kept from their families for months at a time in countries where they may know little to none of the languages. They needed a league in America.

The American Basketball League (ABL) began in fall of 1996 and was very popular with fans. The Women's National Basketball Association (WNBA) began in summer of 1997. For the short-lived period the leagues were simultaneously in operation, people involved felt as though it was great for women's basketball players to have two options. That was not the case, and the ABL subsequently folded in December 1998. The WNBA, which currently has teams in Atlanta, Chicago, Connecticut, Dallas, Indiana, Los Angeles, Minnesota, New York, Phoenix, San Antonio, Seattle, and Washington, and has been successful for twenty years and given nearly 700 women the opportunity to play professional basketball (see Figure 5).



Figure 5 WNBA Teams (2017)

### **Benefits of Female Participation in Professional Athletics**

Sports has been one of the most significant socio-cultural experiences for men for many decades which has made professional athletics a field largely dominated by men. Women's

professional leagues have consistently had difficulty securing the television coverage and sponsorship needed to be successful. While women in golf and tennis have proven to be successful as individuals, professional team leagues such as softball, basketball, and volleyball have not. In many cases, these teams were drawing fan support but were unable to gain the support needed from sponsors and television viewers.

However, society has slowly accepted the influx of women as professional athletes. Additional reasons for the increased numbers are awareness of the benefits available from sport participation, such as increased media coverage of women's sports, and advocacy efforts by organizations like the Feminist Majority Foundation, National Coalition for Girls and Women in Education (NCGWE), the Women's Sports Foundation and the National Association for Girls and Women in Sport (NAGWS). Regardless of the reason, female athletes now have greater opportunities for participation in professional level organizations, especially playing basketball in the United States.

One of the biggest benefits of women's participation in professional basketball is the emerging female 'role model' for young girls in the sport. Research shows the majority of idols, especially of sports heroes, are men, and it is boys who admire sports stars (Biskup & Pfister, 1999). In the escalating field of sports and development, 'role models' have been beseeched as an essential component to increase the participation of women and girls in sports. Role-models and idols stimulate individuals to identify and to imitate patterns of interpretation and behavior (Mehler, 1995).

In the early 70's and 80's, many young girls' basketball players looked up to Michael Jordan and Magic Johnson as role models in the sport simply because they were the pinnacle of the sport. With many more opportunities to play professional women's basketball, and with the

success and exposure of the WNBA and its players, young girls now have role models with the names Brianna and Britney instead of Michael and Earvin.

### **Chapter Summary**

Barrow (1977) defines leadership as a process of someone influencing others to perform to their greatest potential. Every athlete in sports prefers different behaviors from their coach.

The concept of sports leadership encompasses a broad range of the various interpretations regarding the characteristics of the leader, his/her behavior, and his /her impact on players and their performance. Successful athletic teams have strong leaders, and the leader's contribution to the effectiveness of a team's performance is also significant. As such, a coach has the dual function of ensuring player satisfaction while steering the individual or group to success.

Leadership skills in sport are essential on and off the court. They help create personal growth and championship teams. Athletes seem to be satisfied when coaches emphasize training and instruction as well as positive feedback (Chelladurai et al., 1993).

Understanding the coaching leadership style preferences of female professional basketball players is becoming increasingly more important as participation in, and support of this sport continue to rise. Also, with more professional coaches coming from the college ranks, understanding of leadership preferences of professional athletes could be the key to changes in how they lead their college teams.

## CHAPTER III: METHODS

### **Introduction**

The purpose of this research was to determine coaching leadership style preferences of female professional basketball players. The female professional basketball players participating in the study were current or retired players from the Women's National Basketball Association (WNBA) or the International Basketball Federation (FIBA). The research design, population, and sampling procedure are described in this chapter. The measurement, validity, and reliability of the Leadership Scale for Sport developed by Chelladurai and Saleh (1980) are described in the instrumentation section of this chapter. A description of the collection, hypotheses testing, as well as limitations to the study are provided. A summary of the data analyses procedures implemented concludes the chapter.

### **Purpose of Study**

The purpose of this study was to examine coaching leadership style preferences of professional female basketball players. Previous studies involving coaching leadership style preferences of female athletes included only high school and collegiate athletes within their sample (Riemer & Toon, 2001; Vealey et al., 1998). Previous studies involving coaching leadership behaviors in professional sports included only male athletes within their sample (Høigaard et al., 2008; Ramzaninezhad & Keshtan, 2009). Attempting to attribute the findings of male athletes to female athletes is simply not appropriate (Chelladurai et al., 1987; Garland & Barry, 1990; Weiss & Friedrichs, 1986).



## **Research Questions**

The following research questions were used in this study:

1. What is the difference between coaching leadership style preference of current and retired female professional basketball players?
2. What is the relationship between total number of years of professional playing experience and coaching leadership style preference of female professional basketball players?
3. What is the relationship between ethnicity and coaching leadership style preference of female professional basketball players?

## **Design of Study**

Quantitative research measures using both paper copy and electronic online survey were used in this study. Demographic information was also collected from the participants (see Appendix C). There are several positives to conducting web-based survey research. One major advantage of internet-based survey research is saved time for researchers (Wright, 2005). Information can reach hundreds of people with common characteristics in a short amount of time, despite possibly being separated by geographical distance. The participants in this study lived all over the world, and the online survey was distributed to them with relative ease. Research conducted via the internet is both reliable and valid (Meyerson & Tryon, 2003).

In some instances, a mixed-mode strategy has been suggested as a means for using the advantages of web surveys as well as minimizing non-responses (Dillman, 2000). A research study suggested that in populations with access to the Internet, response rates for internet surveys may not be as productive (Couper, 2000). Shih and Fan (2008) meta-analyzed thirty-nine study published studies within the last ten years and found that mail surveys had higher response rates than electronic surveys in general. Apparent differences in response rates for electronic surveys

and mail surveys have numerous explanations. One explanation may be that less time and attention have been devoted to developing and testing motivating tools to increase electronic survey responses, compared to the time spent studying tools employed in mail surveys. In this study, the researcher determined that paper copy survey distribution to current WNBA players was more effective because the team participants could participate in the survey at the same time and in a central location.

The Leadership Scale for Sports (LSS), developed by Chelladurai and Saleh (1980), was used to collect and analyze coaching leadership style preferences of female professional basketball players. The experimental survey design allowed the researcher to identify variables, measure them, and analyze the data. A cross-sectional, experimental online LSS survey was used to collect the data. A likert scale was used to rate the preferences (Chelladurai & Saleh, 1980). The LSS is a questionnaire comprised of 40 items divided into 5 subscales; Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback (Chelladurai & Saleh, 1980). The dependent variables included preferences in five LSS coaching styles.

### **Independent Variables**

Several independent variables were utilized in this study, including ethnicity (African American, Caucasian, Latino, Asian, or other), current professional playing status (active or retired), number of years played professionally (less than 5 years, 6-10 years, or more than 10 years), and umbrella of professional experience (WNBA, FIBA or both). Differences between groups were investigated.

Previous research found differences in coaching style preferences dependent on level of athletes maturity and skill (Henson, 2010). Female professional basketball players from the

WNBA and FIBA leagues were included in this study. Leagues played in was included as an independent variable in this study because to date, the coaching style preferences of female professional basketball players has not been examined.

An athlete's age may also influence her coaching style preference, meaning an athlete may be more likely to prefer a different coaching style as a 10-year veteran opposed to a player with less than 5 years professional playing experience. In one study, athletes preferred the authoritarian approach during their senior year of college more than they would have as freshmen (Weinberg & Gould, 2014). However, research about coaching style preferences based on a female's number of years playing professional sports is limited. Therefore, the degree to which the number of years impacts coaching style preference is unknown. Additionally, Hersey et al. (1979) suggested that the leader's behavior should change as the maturity level of the group increases. For these reasons, preferences based on number of years playing professional basketball were investigated in the current study.

The Multidimensional Model for Sport Leadership (MML) theorizes that an athlete's performance and satisfaction are functions of the consistency between the preferred leadership of athletes, the required behavior of the coach as dictated by the situation, and the actual behavior of the coach (Chelladurai & Saleh, 1980). As such, research in sport should examine how applicable the model is to today's athletic culture. Although gender, one member characteristic, has been researched considerably studies by Amorose and Horn (2000), Lam et al. (2007), Nazaurudin, Fauzee, Jamalis, Geok, and Din (2009), and Turman (2001), found ethnicity has been largely ignored with preferential leadership. For these reasons, preferences based on ethnicity were investigated in the current study.

## **Protection of Human Participants**

The purposes and procedures for this research study were thoroughly detailed through written directives and responses (see Appendix A). The research protocol, information letter, and survey instrument were reviewed and approved by the Auburn University Institutional Review Board for the Protection of Human Subjects in Research (IRB), and the WNBA (see Appendix B). Research study participants were provided an information letter (see Appendix A) which served as the Waiver of Documentation of Consent.

Potential research study participants were sent an email which invited the players to participate in the research study. This email also provided a short overview of the purpose of the research study and the electronic online survey link. The anonymity of professional athletes participating in surveys was vital to the success of this study. The email presented any possible risks for research study participants as well as the precaution taken to reduce such risks to better preserve anonymity of research study participants. The athletes were also encouraged to review the accompanying information letter for additional information regarding the research study.

## **Population Sample Selection**

A research study request email along with an attached information letter was sent to the Institutional Review Board at Auburn University. After receipt of both this research request email and information letter, an Application for Human Subjects form, Project Description, email, and survey instrument was submitted to the Auburn University Review Board (see Appendix A). After a full review of these materials, Auburn University Institutional Review Board granted the researcher approval to conduct the research study at their institution contingent upon receiving official notification that the researcher's project was approved through

Auburn University's Institutional Review Board for the Protection of Human Subjects in Research (see Appendix A).

Once approval was granted through Auburn University's Institutional Review Board for the Protection of Human Subjects in Research, proof of such approval was sent to the WNBA Players Association and permission was granted for the athletes to participate in the study (see Appendix B). Current and retired female professional basketball players were the focus of the study. Only female professional basketball players from the WNBA and FIBA leagues were surveyed. The researcher believed these three leagues would best represent the population. Each current WNBA athlete, retired WNBA athlete, and several overseas athletes were invited by email to participate in the study.

Each of the 12 participating WNBA team rosters were evaluated by the researcher to estimate the potential sample-size. The sample included a total WNBA population of 144 potential participants. The link to the survey (Qualtrics.com) was sent to former and retired female professional basketball players from the WNBA and FIBA leagues. This sample included a potential of over 300 participants. The survey instrument was administered to all study participants during the months of April and May, 2017.

The number of returned and completed surveys totaled 234 female professional basketball players 18 years of age or older who voluntarily participated as a member of the Women's National Basketball Association (WNBA) and/or the International Basketball Federation (FIBA). The athletes were either current, former or retired participants in a professional basketball league.

## **Leadership Research Methodologies**

Although leadership is a complex concept, its complexity does not render it exempt from scientific study. Slife and Williams (1995) stated that the goal of science is to establish results which are objective and uncontaminated by traditions and subjective speculations. The creation of theoretical frameworks that can explain a practical phenomenon is the aim of science (Berlinger, 1980). In our daily lives, humans tend to be “intuitive” psychologists in the sense that, by using data from personal observations or ancillary sources, we try to figure out the world and people in it (Ross, 1977). We all have theories about how the world works and test these theories everyday through our observations. As intuitive psychologists, however, we often are wrong (Kahneman & Tversky, 1996; Ross, 1977). We tend to fall prey to our false beliefs in trying to understand the phenomenon of leadership because many of us, as followers or leaders, have experienced leadership firsthand (Avolio & Yammarino, 2002).

Understanding and conducting leadership research requires knowledge of research methodology (Avolio & Yammarino, 2002). The argument is that leadership is a social influence process, and that conventional leadership research methodologies have been somewhat unsuccessful in theorizing about the nature of these processes (Parry, 1998). Leadership researchers typically have used quantitative approaches, although qualitative approaches to studying leadership are sometimes also necessary (Bryman, Stephens, & a Campo, 1996; Conger, 1998). A quantitative approach was used in this study.

Leadership researchers employ a wide range of research methods, although the diversity of those methods is of relatively recent origin since the field has largely been dominated by a single method of data collection – the self-completion/self-administered questionnaire. Survey

methods have been used to answer many types of research questions emanating from all leadership perspectives (MacKenzie, Podsakoff, & Podsakoff, 2011).

### **Instrument Development**

The purpose of the LSS, developed by Chelladurai and Saleh (1980), was to attempt to address problems relating to leadership in the sport context by testing the Multidimensional Model (Salminen & Liukkonen, 1994). Three versions of the LSS include: the athlete preference version, the athlete perception version, and the coach self-evaluation version. One of the three versions of the LSS was utilized in the present study. It measured the athletes' preferred coaching behaviors. The athlete preference section includes 40 items that use a likert 5-point scale (see Appendix C). The LSS measures athlete preferences of five coaching behaviors. These behaviors included 13 items relating to Training and Instruction, 9 items relating to Democratic Behavior, 5 items relating to Autocratic Behavior, 8 items relating to Social Support, and 5 items relating to Positive Feedback (Chelladurai & Saleh, 1980). A likert scale of one to five indicating level of satisfaction by the athlete for each question was used. The responses available consisted of; Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree., 2 = Disagree, and 1= Strongly Disagree. The responses were coded as: Strongly Disagree = 5, Agree = 4, Neutral = 3, Agree = 2, and Strongly Agree = 1. Total scores for each dimension were used to determine the level of satisfaction.

Although an internal consistency problem in the Autocratic Behavior subscale has been reported, the LSS is believed to properly measure leadership behaviors of coaches in different sports and countries with reliable results (Kwon, Pyun, & Kim, 2010). Internal consistency estimates ranged from .45 to .93 and test-retest reliability coefficients ranged from .71 to .82 (Chelladurai & Saleh, 1980). Internal consistency was established for the LSS by Cronbach's

alpha measured greater than .70 in all dimensions. In this study, all strong alphas measured: (Training & Instruction .903, Democratic .89, Social Support .86, and Positive Feedback .89) The highest Cronbach's Alpha for Autocratic Behavior was .59 (Zhang et al., 1997). In this study, the Cronbach's Alpha for Autocratic Behavior measured .82.

The item scores are added to obtain a score for the specific leader dimension and then divided by the number of items per dimension to get a score out of 5 and then averaged. These total scores were disaggregated into racial classification (African American, Caucasian, Latino, Asian, or other), number of years played professionally (less than 5 years, 6-10 years, or more than 10 years), and type of professional experience (WNBA, FIBA or both).

### **Limitations**

While utilizing the athletes' preferences version of the LSS, a few limitations resulting from the lower reliability coefficients of one of the subscales – autocratic behavior – and its independence from the other subscales, should be noted. In most studies, this subscale yields low Cronbach's alpha coefficients. It is particularly important to take that into account when using the LSS, for it may lead to drawing false conclusions from the conducted research. One of the possibilities to overcome these limitations is adding some additional items to the autocratic behavior subscale. In previous studies by Price and Weiss (2000), adding additional items to the autocratic behavior subscale has produced the desired results. In past research, the issue of low reliability of the LSS didn't surface when the study was conducted on a homogeneous study group. In this study, items were worded to reflect an all-female population.

The Leadership Scale for Sports is a questionnaire that is widely used in research concerning leadership in sports and it has been adapted to many other languages (Weinberg & Gould, 2014). Even though it is not an instrument free of defects, studies by Henson (2010),



Terry and Howe (1984), Hastie (1995) utilizing this scale regard it as a valid and reliable tool. Such conclusions should be, however, drawn only for the versions examining the athletes' preferences of coaching behaviors.

### **Data Collection and Coding**

The researcher distributed the survey packets to representatives from the 12 WNBA teams which provided a short overview of the purpose of the research study. Each one of those packets contained permission from the Women's National Basketball Players Association (WNBPA) and the Auburn University Institutional Review Board (IRB). Additionally, a self-addressed, stamped priority envelope was included for which to return responses. Another way the surveys were distributed was through the researcher herself. The researcher sent text messages to retired players which included the link to the survey. The researcher also distributed packets to retired players at specific events. The packets were also sent electronically to all WNBA General Managers who had the option of handing out the packets to the players or forwarding the survey link. The information letter served as the Waiver of Documentation of Consent. An invitation reminder email was sent to the WNBA team representatives and retired female professional basketball players one week after the initial email was sent.

An electronic survey was created using Qualtrics. Once Institutional Review Board approval was obtained from the Auburn University, an email with the link to the survey was sent to 300 retired female professional basketball players. Paper copies of the survey were mailed to each WNBA team for the current players to participate ( $n=144$ ). The questionnaire and demographic questions are discussed in the Instrumentation section of this chapter. This email provided a short overview of the purpose of the research study and link.

The survey was administered using Qualtrics and no personal identifiers were tied to the athlete survey responses. After the data collection was complete, all survey responses were compiled using Qualtrics and then taken and securely stored for calculation in the IBM SPSS predictive analysis program. No personal identifiers were listed, ensuring anonymity; no research study participants were linked to their responses. Further, athletes were reminded that participation was completely voluntary and could discontinue their participation in the research study at any time. There were no incentives offered for their participation and the athletes were assured that there would be no consequences by their team managers or coaches for their participation in the study.

Once the survey closed (June 27, 2017), all survey responses were compiled using Qualtrics and securely stored for computation in the SPSS statistical analysis program. To analyze the research participant data, Multivariate Analysis of Variance tests were used to compare means between current and retired female professional basketball players and their preferred coaching leadership styles. The MANOVA was chosen as the preferred analytical method for this research study as it works to determine whether there are significant differences between the means of two or more independent groups in relation to multiple dependent variables.

The independent variables of this research study were the athletes' ethnicity (African American, Caucasian, Latino, Asian, or other), current professional playing status (active or retired), number of years played professionally (less than 5 years, 6-10 years, or more than 10 years), and location of professional experience (WNBA, FIBA or both). These Analysis of Variance tests compared the sum responses for each construct (democratic coaching leadership (DCS) style, autocratic coaching leadership style (ACS), social support coaching leadership style

(SSCS), training and instruction coaching leadership style (TICS) and positive feedback coaching leadership style(PFCS)) to the independent variables (athletes ethnicity, current professional playing status, number of years played professionally, and location of professional experience).

The responses were coded as: Strongly Disagree = 5, Agree = 4, Neutral = 3, Agree = 2, and Strongly Agree = 1. The LSS allowed the results of the study to fit within the MML framework to test the theory. The researcher created a demographic form with a total of five multiple choice items, which preceded the leadership behavior preference items of the Leadership Scale for Sports (LSS). The demographic form is found in Appendix C. The demographic form begins with five multiple choice items which asked each participant to identify ethnicity, current playing status, professional league(s) played in, and number of years played.

### **Chapter Summary**

This chapter consisted of the introduction, design of the study, protection of human rights, population sample selection, research methodologies, data collection procedures, instrument development, limitations, and data collection and coding. The methods employed in this research study focused on collecting data from current and retired female professional basketball players, as defined by this study. Lastly, the chapter discussed the description of the survey instrument and methods used to analyze the data. Chapter IV explores and includes a report of the quantitative statistical analyses of the data collected from the participants. Each research question and hypotheses presented the respective analyses.

The population was from the WNBA and FIBA leagues. The sample came from female professional basketball players who chose to participate voluntarily in the survey. The survey

used was the LSS developed by Chelladurai and Saleh (1980). The results were collected by a web-based provider (Qualtrics) and analyzed using a MANOVA.

## CHAPTER IV: RESULTS

### **Overview**

As certain trends in sports leadership become more defined, an interesting set of implications is created which can have a powerful effect on how sports leadership is practiced in the future. The purpose of this study was to examine coaching leadership style preferences of professional female basketball players in order to improve coaching style behavior in women's athletics. This study identified the coaching leadership style preferences of current female professional basketball players compared to retired female professional basketball players. There was a great need for this research as coaching leadership style preferences had yet to be fully explored, especially in the women's professional basketball setting.

### **Purpose of Study**

The purpose of this study was to examine coaching leadership style preferences of professional female basketball players. Previous studies involving coaching leadership style preferences of female athletes included only high school and collegiate athletes within their sample (Riemer & Toon, 2001; Vealey et al., 1998). Previous studies involving coaching leadership behaviors in professional sports included only male athletes within their sample (Høigaard et al., 2008; Ramzaninezhad & Keshtan, 2009). Attempting to attribute the findings of male athletes to female athletes is simply not appropriate (Chelladurai et al., 1987; Garland & Barry, 1990; Weiss & Friedrichs, 1986).

### **Research Questions**

The following research questions were used in this study:

1. What is the difference between coaching leadership style preference of current and retired female professional basketball players?
2. What is the relationship between total number of years of professional playing experience and coaching leadership style preference of female professional basketball players?
3. What is the relationship between ethnicity and coaching leadership style preference of female professional basketball players?

### **Demographic Results**

A total number of 234 female professional basketball players participated in the study. The overall participation rate for the study was approximately 97% of surveyed athletes. The sample included current and retired female professional basketball players (n=227) from the WNBA and FIBA. Among the 234 viable data, there were several participants who skipped a small number of questions at random. To preserve the effectiveness of the survey these, the researcher deleted that participants' responses. This is one strategy for missing data in multivariate analysis according to previous literature (Little & Rubin, 2014). Among the total replies, 227 responses were usable (usable rate equals to 97%) and included in the analysis. Table 7 shows the frequency distribution of the 227 survey participants by each demographic group. Among the valid respondents, 102 were current players (44.9%) and 125 were retired players (55.1%). Additionally, 41% of the participants reported they had between 1 and 5 years of playing experience, 32.2% of them played professionally between 6 and 10 years, and 26.9% reported having more than 10 years of professional playing experience. In terms of location of playing experience, most current participants (33.3%) reported playing as a member of both the Women's National Basketball Association (WNBA), and the International Federation of Basketball (FIBA). Similarly, most retired participants (46.3%) also reported playing as a

member of both the Women's National Basketball Association (WNBA), and the International Federation of Basketball (FIBA). In terms of ethnicity, 69.6% of the participants identified themselves as African American, 20.3% identified as Caucasian, and 10.1% classified themselves as others.

Table 7

*Demographic Characteristics of Participants*

Characteristics	<i>f</i>	Percent
Playing Status		
Current	102	44.9%
Retired	125	55.1%
Years of Experience		
1-5 years	93	41%
6-10 years	73	32.3%
More than 10 years	61	26.9%
Ethnicity		
African American	158	69.6%
Caucasian	46	20.3%
Other	23	10.1%

**Reliability**

Using the Cronbach Coefficient Alpha test, the results of the tests for coaching leadership style preferences are presented in Table 8. A value of .70 or higher was considered evidence of reliability, a value between 0.6 and 0.7 is acceptable, a value between 0.5 and 0.6 is considered a poor reliability, while a value that below 0.5 is unacceptable (Becker, 2000). The value of Cronbach's Alpha for Training and Instruction coaching style (TICS), Democratic coaching style (DCS), Positive Feedback coaching style (PFCS), Social Support coaching style (SSCS), and Autocratic coaching style (ACS), were .903, .89, .89, .86, and .82 respectively. Therefore, the values of these five variables were considered as reliable in this study.



Table 8

*Reliability of Coaching Leadership Style Preferences*

Leadership Style Preference Factors	Items	Cronbach's Alpha
Training & Instruction (TICS)	1-13	.903
Democratic (DCS)	14-22	.89
Positive Feedback (PFCS)	36-40	.89
Social Support (SSCS)	28-35	.86
Autocratic (ACS)	23-27	.82

### **Discussion of Findings**

In this section, the research study results in relation to the previously discussed research questions will be investigated. To analyze the research participant data, a multivariate analysis of variance test was used to compare means coaching leadership style preferences of current female professional basketball players and retired female professional basketball players. The multivariate analysis of variance was chosen as the preferred analytical method for this research study as it works to determine whether there are significant differences between the means of two or more independent groups in relation to numerous dependent variables. In this section, the results of the participant data analyses as such pertains to the research question are discussed.

Research Question 1: What is the relationship between preferred coaching leadership styles of current female professional basketball players and retired female professional female basketball players?

A multivariate analysis of variance (MANOVA) test was used to examine the potential difference between coaching leadership style preference of current female professional basketball players as compared to preferred coaching leadership styles of retired female professional female basketball players. The MANOVA was used to analyze the data with

statistical significance set at 0.05. The  $p$  value of Box M was set as .005 based on Huberty and Petoskey (2000) guidelines. The descriptive results indicated that the mean for current female professional basketball players with a Training & Instruction coaching leadership style preference was 4.1 with a standard deviation of .61, while the mean for retired female professional basketball players with a Training & Instruction coaching leadership style preference was 3.96 with a standard deviation of .58 (See Table 9).

Table 9

*Coaching Leadership Style Preferences – Descriptive Statistics*

Preferences based on current professional playing status?	Mean	Std. Deviation	n
<b>Training &amp; Instruction</b>			
Current Player	4.14	.61	102
Former/Retired Player	3.96	.58	122
Total	4.04	.60	224
<b>Democratic</b>			
Current Player	3.31	.75	102
Former/Retired Player	2.62	.70	122
Total	2.94	.80	224
<b>Autocratic</b>			
Current Player	2.05	.84	102
Former/Retired Player	2.00	.78	122
Total	2.03	.78	224
<b>Social</b>			
Current Player	3.14	.82	102
Former/Retired Player	3.16	.59	122
Total	3.15	.70	224
<b>Positive Feedback</b>			
Current Player	4.06	.62	102
Former/Retired Player	3.86	.68	122
Total	3.95	.66	224

Box's M test ( $F(15, 185375.642) = 3.99, p < .001$ ) indicated that covariance matrices of the dependent variables are not equal cross groups. Therefore, Pillai's Trace statistic was used to assess the differences. According to Pillai's Trace statistic (Pillai's Trace = .21,  $F(5, 218) = 11.59, p < .001$ ), current playing status has a statistically significant influence on the preferred coaching leadership style but with a small effect size (partial  $\eta^2 = .21$ ).

Univariate ANOVA was conducted to seek further information. Levene's test (.001), indicated only SSCS were not equal across groups. However, since an ANOVA is considered a robust test against the normality assumption, it tolerates violations to its normality assumption rather well. Therefore, according to the results, TICS ( $F(1, 224) = 5.58, p = .019, \text{partial } \eta^2 = .025$ ), DCS ( $F(1, 224) = 50.19, p < .001, \text{partial } \eta^2 = .18$ ), and PFCS ( $F(1, 224) = 5.12, p = .025, \text{partial } \eta^2 = .023$ ) are significant differences based on the current playing status but with a small to medium effect size (See Table 10).

Table 10

*In Between Test Subjects Effect*

Coaching Leadership Style	<i>f</i>	<i>p-value</i>	Partial $\eta^2$
TICS	5.58	.019	.025
DCS	50.19	< .001	.18
PFCS	5.12	.025	.025

The MANOVA revealed significant differences of Training and Instruction, Democratic, and Positive Feedback Coaching Style Leadership preferences between current and retired female professional basketball players (See Table 11).

Current female professional basketball players have a higher preference for TICS ( $M = 4.15, SD = .61$ ) and DCS ( $M = 3.32, SD = .75$ ), and PFCS ( $M = 4.06, SD = .63$ ) than retired female professional basketball players TICS ( $M = 3.96, SD = .58$ ) and DCS ( $M = 2.63, SD = .71$ ), and PFCS ( $M = 3.86, SD = .69$ ).

Table 11

*Descriptive Statistics of Leadership Style Preferences*

Leadership Styles	Female Profession Basketball Player Current Playing Status					
	Current Players			Retired Players		
	M	SD	n	M	SD	n
TICS	4.15	.61	102	3.96	.58	125
DCS	3.32	.75	102	2.63	.71	125
PFCS	4.06	.63	102	3.86	.69	125

Research Question 2: What is the relationship between total number of years played professionally and preferred coaching leadership styles of female professional basketball players?

A multivariate analysis of variance (MANOVA) test was used to examine the potential relationship between coaching leadership style preference female professional female basketball players based on total years playing experience. The MANOVA was used to analyze the data with statistical significance set at 0.05. The descriptive results indicated that the mean for female professional basketball players with less than 5 years professional playing experience with a preference for Positive Feedback coaching leadership style was 4.19 with a standard deviation of .57. The descriptive results indicated that the means for female professional basketball players with both 6-10 and more than 10 years professional playing experience who prefer a Training and Instruction coaching leadership style were 4 with a standard deviation of .58 (See Table 12).

Table 12

*Coaching Leadership Style Preferences Based on Playing Experience*

Preferences based on professional experience?	Mean	Std. Deviation	n
<b>TICS</b>			
0-5 Years	4.11	.63	92
6-10 Years	3.99	.58	72
More Than 10 Years	4.00	.57	60
Total	4.04	.60	224
<b>DCS</b>			
0-5 Years	3.28	.68	92
6-10 Years	2.80	.83	72
More Than 10 Years	2.57	.73	60
Total	2.94	.80	224
<b>ACS</b>			
0-5 Years	2.05	.66	92
6-10 Years	2.14	.93	72
More Than 10 Years	2.12	.88	60
Total	2.09	.81	224
<b>SSCS</b>			
0-5 Years	3.32	.76	92
6-10 Years	2.98	.62	72
More Than 10 Years	3.09	.64	60
Total	3.15	.70	224
<b>PFCS</b>			
0-5 Years	4.18	.56	92
6-10 Years	3.75	.72	72
More Than 10 Years	3.83	.63	60
Total	3.95	.66	224

Box's M test ( $F(30, 124906.196) = 1.88, p = .002$ ) indicated that covariance matrices of the dependent variables were equal across groups. Therefore, Wilk's Lambda statistic was used

to assess the differences. According to Wilk's Lambda statistic (Wilk's Lambda = .79,  $F(10, 434) = 5.5$ ,  $p < .001$ ), years of professional playing experience has a statistically significant influence on the preferred coaching leadership style but with a large effect size (partial  $\eta^2 = .11$ ).

Univariate ANOVA was conducted to seek further information. Levene's test (.009), indicated only ACS was not equal across groups. According to the results, DEM ( $F(2, 224) = 18$ ,  $p < .001$ , partial  $\eta^2 = .14$ ), SSCS ( $F(2, 224) = 5.1$ ,  $p = .007$ , partial  $\eta^2 = .04$ ), and PFCS ( $F(2, 224) = 10.9$ ,  $p < .001$ , partial  $\eta^2 = .09$ ) are significantly difference based on years of professional playing experience (See Table 13).

Table 13

*Tests of Between Subject Effects*

Coaching Leadership Style	<i>f</i>	<i>p-value</i>	Partial $\eta^2$
DCS	18	< .001	.14
SSCS	5.2	.007	.04
PFCS	10.9	< .001	.09

Players with 5 years or less years playing experience have a higher preference for DCS ( $M = 3.3$ ,  $SD = .68$ ) and PFCS ( $M = 4.2$ ,  $SD = .57$ ) than players with both 6-10 years (DCS:  $M = 2.8$ ,  $SD = .84$ ,  $p < .001$ , PFCS:  $M = 3.8$ ,  $SD = .72$ ,  $p < .001$ ) and players with more than 10 years (DCS:  $M = 2.6$ ,  $SD = .73$ ,  $p < .001$ , PFCS:  $M = 3.8$ ,  $SD = .63$ ,  $p = .003$ ) professional playing experience preference. Also, female basketball players with 5 years or less professional playing experience have a higher preference for SSCS ( $M = 3.3$ ,  $SD = .76$ ) than players with 6-10 years of professional playing experience SSCS ( $M = 2.99$ ,  $SD = .62$ ,  $p = .007$ ) (See Table 14).

Table 14

*Years of Playing Experience Descriptive Statistics*

Female Basketball Player Total Years Professional Playing Experience									
	1-5 Years			6-10 Years			More than 10 Years		
Leadership Styles	M	SD	n	M	SD	n	M	SD	n
DCS	3.28	.68	92	2.80	.83	72	2.57	.73	60
PFCS	4.18	.56	92	3.75	.72	72	3.83	.63	60
SSCS	3.32	.76	92	2.98	.62	72			

Research Question 3: What is the relationship between ethnicity and coaching leadership style preferences of female professional basketball players?

A multivariate analysis of variance (MANOVA) test was used to examine the potential relationship between ethnicity and coaching leadership styles of female professional basketball. The MANOVA was used to analyze the data with statistical significance set at 0.05. The descriptive results indicated that the mean for players of different ethnicities was as follows; the mean for players identifying as African American with a Training and Instruction coaching leadership style preference was 4 with a standard deviation of .62; the mean for players identifying as Caucasian with a Training and Instruction coaching leadership style preference was 4.1 with a standard deviation of .56; the mean for current and retired players identifying as other with a Training and Instruction coaching leadership style preference was 4.2 with a standard deviation of .58 (See Table 15).



Table 15

*Descriptive Statistics of Ethnicity*

Preferences based on professional experience?	Mean	Std. Deviation	n
<b>TICS</b>			
African American	4.02	.61	156
Caucasian	4.06	.55	46
Other	4.18	.57	22
Total	4.04	.60	224
<b>DCS</b>			
African American	2.92	.80	156
Caucasian	2.86	.76	46
Other	3.26	.87	22
Total	2.94	.80	224
<b>ACS</b>			
African American	2.03	.77	156
Caucasian	2.26	.88	46
Other	2.18	.89	22
Total	2.09	.81	224
<b>SSCS</b>			
African American	3.14	.70	156
Caucasian	3.09	.77	46
Other	3.36	.48	22
Total	3.15	.70	224
<b>PFCS</b>			
African American	3.96	.64	156
Caucasian	3.90	.76	46
Other	3.95	.65	22
Total	3.95	.66	224

Box's M test ( $F(30, 13206.932) = .94$   $p = .56$ ) indicated that covariance matrices of the dependent variables are equal across groups. Therefore, Wilk's Lambda statistic was used to assess the differences. According to Wilk's Lambda statistic (Wilk's Lambda =  $F(10, 434) =$

1.16,  $p = .31$ ), ethnicity has no statistically significant influence on the preferred coaching leadership style but with a small effect size (partial  $\eta^2 = .026$ ).

## **Chapter Summary**

This chapter explored the results of the statistical analyses of each research question from the collection of participant data. Demographic information of the respondents was presented to describe the participants of the study.

Descriptive statistics were used to answer the first research question, which asked which coaching style preference, as identified by the Leadership Scale for Sport, female professional basketball players preferred. A Multivariate Analysis of Variance (MANOVA) test indicated a significant interaction occurred between current playing status and preference for Training and Instruction coaching leadership style (TICS) and Democratic coaching leadership style (DCS). Specifically, the univariate ANOVA test indicates that current female professional basketball players have a higher preference for TICS and DCS than retired female professional basketball players.

Descriptive statistics were used to answer the second question which addressed whether the total number of years playing experience affected coaching style preferences of female professional basketball players. A Multivariate Analysis of Variance (MANOVA) test indicated a significant interaction occurred between playing experience and preference for Democratic coaching leadership style (DCS) Positive Feedback coaching leadership style (PFCS) and Social Support coaching leadership style (SSCS). Specifically, the univariate ANOVA test indicates that female professional basketball players with between 1-5 years playing experience have a higher preference for DCS and PFCS than female professional basketball players with 6-10, as well as more than 10 years of playing experience. Additionally, results showed that female

professional basketball players with between 1-5 years playing experience have a higher preference for SSCS than players with 6-10 years of professional playing experience.

Descriptive statistics were used to answer the final research question which addressed whether ethnicity affected coaching style preferences of female professional basketball players. A Multivariate Analysis of Variance (MANOVA) test indicated no significant interaction occurred between ethnicity and coaching leadership style preferences of female professional basketball players.

Chapter V reviews and discusses the findings of this study in further detail, connecting the finding of this study to the existing review of literature, while also expounding on the implications for coaching leadership. It also discusses the limitations of the study, and offers suggestions for future research. The final chapter concludes with a summarization of the research study.

## CHAPTER V: SUMMARY, DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

### **Introduction**

This study investigated coaching leadership style preferences of female professional basketball players using the Leadership Scale for Sport (LSS). Several factors including ethnicity, a total number of years played, the location of professional experience, and current or retired player status were also explored to determine if they influenced the coaching style preferences of the athletes. This chapter summarizes the results of the study as they relate to the research questions presented in Chapter I. The primary focus of this chapter is to discuss the meaning of the results of this study and their implications to professional women's basketball and its coaches while integrating the theoretical background and relevant findings from existing literature.

### **Purpose of Study**

The purpose of this study was to examine coaching leadership style preferences of professional female basketball players. Previous studies involving coaching leadership style preferences of female athletes included only high school and collegiate athletes within their sample (Riemer & Toon, 2001; Vealey et al., 1998). Previous studies involving coaching leadership behaviors in professional sports included only male athletes within their sample (Høigaard et al., 2008; Ramzaninezhad & Keshtan, 2009). Attempting to attribute the findings of male athletes to female athletes is simply not appropriate (Chelladurai et al., 1987; Garland & Barry, 1990; Weiss & Friedrichs, 1986).

## **Research Questions**

The following research questions were used in this study:

1. What is the difference between coaching leadership style preference of current and retired female professional basketball players?
2. What is the relationship between total number of years of professional playing experience and coaching leadership style preference of female professional basketball players?
3. What is the relationship between ethnicity and coaching leadership style preference of female professional basketball players?

## **Summary**

This study had three primary goals: (1) to determine the difference between coaching leadership style preference of current and retired female professional female basketball players; (2) to determine the relationship between total number of years of professional playing experience and coaching leadership style preference of female professional basketball players; and (3) to determine the relationship between ethnicity and coaching leadership style preference of female professional basketball players.

The sample used in this research study was comprised of current and retired female professional basketball players from the Women's National Basketball Association (WNBA) and International Basketball Federation (FIBA). The survey instrument was administered to all study participants during May and June, 2017. The survey for this study consisted of one independent variable which was the preferred coaching leadership style. In total, 227 female professional basketball players participated in this research study. Of these student participants, 102 were current players and 125 retired players. Additionally, 93 have 1-5 years professional playing experience; 73 6-10 years of playing experience and; 61 have over 10 years of playing

experience. Lastly, 158 identified as African-American, 46 Caucasian, and 23 classified as Other.

The first portion of the survey instrument asked demographic questions which determined the players' status (current or retired), leagues played in (WNBA, overseas, or both), years' experience (1-5 years, 6-10 years, more than 10 years), and ethnicity (African-American, Caucasian, Asian, Hispanic, Other). Research study participants utilized a five-point Likert-style scale for 40 survey question responses. Each question was scored on an ordinal scale using the following options: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree.

### **Findings of the Survey**

Research Question 1 examined the differences of coaching leadership style preferences of current and retired female professional basketball players. Results that current players have a higher preference for Training and Instruction, Democratic and Positive Feedback than retired players.

Research Question 2 explored the relationship of coaching leadership style preferences of female professional basketball players based on playing experience. Data indicated that coaching style preferences of players with 1-5 years of experience (Training & Instruction, Positive Feedback) differed than those with 6-10 years, and players with more than 10 years' experience. Additionally, the results showed statistically significant differences in preferred coaching leadership style (Social Support) from players with 1-5 years playing experience and those with 6-10 years playing experience.

Research Question 3 investigated the relationship of coaching leadership style preferences of female professional basketball players based on ethnicity. The results showed no statistically significant difference in preferred coaching style in relation to ethnicity.

## Conclusions

Consistencies and inconsistencies between existing literature and the findings of the current study are reviewed to determine the degree to which the results of this study support or differ from existent theoretical positions. While limited research on the coaching style preferences of female professional athletes exists, this study provides some insights on the coaching style preferences of female professional basketball players. Previous literature has consisted of studies that investigated the coaching leadership style preferences of athletes from several sports Beam et al. (2004); Henson (2010), or the preferences of collegiate female basketball players (Chelladurai & Arnott, 1985; Chelldurai, Haggerty, & Baxter, 1989; Horne & Carron, 1985; Lam et al., 2007; Terry & Howe, 1984). This study addressed a gap in the literature by exploring coaching leadership style preferences of female professional basketball players as well as factors that impact those preferences. This research may help professional women's basketball coaches gain a better understanding of their athletes' coaching style preference, and adjust their behavior to those preferences for maximum results.

Researchers have suggested that when the coach's leadership style matches the athlete's preferred leadership style, team cohesiveness and athlete satisfaction both increase, as do ratings of coach effectiveness by athletes (Mageau & Vallerand, 2003). Results of the current study suggest that female professional basketball players prefer training and instruction coaching leadership style, with democratic and social support styles also being highly preferred. Because of these findings, a coach may want to use these behaviors and observe his or her team and determine which style would apply to his or her current team.

The training and instruction coaching style coach corrects mistakes as they occur, by using a variety of drills, and unbiased measures for evaluations (Zhang et al., 1997). Some

essential similarities between teaching and coaching are the objectives and mindsets required for both (Todorovich, 2009). Both have a daily purpose that the teacher/coach sets for the student/athlete. In sports, coaches call them practice or game goals, while in teaching, teachers call them the lesson plan. The training and instruction coaching style may be preferred by today's female professional basketball players because it aligns with the instant feedback they are accustomed to getting with technology. They can quickly turn to technology for instant answers and responses, so it is not surprising they desire the same type of immediate feedback from their coaches.

Democratic style coaching occurs when the coach makes the final decisions but not without listening to and considering the thoughts of his or her team. The democratic coach outlines the goals, yet doesn't restrict their athletes to a single way of doing things. This coach allows players to find their individual means of accomplishing goals while supporting them throughout the process. Every team has many players with various individual different objectives. Although the end goal of winning may be the same, the ways of approaching/achieving those ends can be tremendously different. The Democratic style coach allows his or her team to work in a manner which works for them and holding them accountable for their actions and performance. Female professional basketball players that thrive under these conditions are athletes who look for a basic understanding of expectations placed upon them, but wish to work at their own pace, in a manner of which works best for them. This coaching style is best suited for the team of players who want their opinions to be heard and want to feel as though they are contributing more than just the physical duties required without the burden of feeling micromanaged by their coach.



Coaches who exhibit the social support coaching style satisfy the interpersonal needs of their athletes (Zhang et al., 1997). This result is not surprising, as literature has asserted that interpersonal relationships are more natural for women than men (Haselwood et al., 2005). Complimenting athletes when necessary and developing personal relationships improves team motivation and performance (Brush & Naples, 2011; Haselwood et al., 2005)

The female athletes in the current study reported that they preferred to experience coaching behaviors associated with positive feedback. Positive feedback is a crucial aspect of coaching because it motivates athletes (Chelladurai & Saleh, 1980). Research has suggested that a coach's personality can affect player effort (Hansen, et al., 2003), and this study supports that female professional basketball players prefer coaches who provide positive feedback.

The least preferred coaching leadership style in the current study was the autocratic style, which involves a coach acting independently of their athletes, disregarding the concerns of his or her team (Zhang et al., 1997). It is not surprising that female professional basketball players ranked this style of coaching behavior the lowest of all six coaching styles. Basketball is a team sport, so the players on the court need to work as a cohesive unit in order to be successful; therefore, a basketball team's success depends heavily on all the players on the court. Because of the nature of the game, the autocratic coaching style, which is an independent form of coaching that rejects input from the team, appears to be the opposite of being team oriented, which is how the sport is defined. The low coefficient correlations between the autocratic coaching subscale scores and the other subscales in the current study prove that assumption. Also, there was only one study at the time of this research that resulted in the autocratic coaching style being the most preferred. High school wrestlers indicated that they preferred the autocratic coaching style

(Turman, 2003). No previous study of team sports reported a preference of autocratic coaching style.

Lastly, this study examined coaching style preferences of female professional basketball players based on the players ethnicity. The results indicated that there were no significant differences in players coaching style preference and ethnicity.

Given the sample size in the current study in relation to overall population, and the similarities of preferred coaching leadership styles over demographic groups, it emerges that training and instruction is the preferred coaching style of current and retired female professional basketball players regardless of demographic information.

### **Implications**

Today's athletic coaches face a dilemma: failing to act when the sports environment is radically changing, with players and the pressure to win increases, can cause destruction in team culture. Yet, making rash decisions under these conditions of seeming chaos can be equally fatal. If coaches learn to understand these changes, they can influence, while not controlling, the outcome of their athletes' performances. There is a distinction between an effective leader and a successful leader (Anshel & Lidor, 2012). Success in coaching means the ability to apply consistent professional, interpersonal, and intrapersonal knowledge to improve their athletes' proficiency, confidence, and character (Côté & Gilbert, 2009). Most professional athletes are subject to intense mental and physical pressure not only during competition but also during practice. A coach's leadership shapes an athlete's behavior as a function of the coach's effort. Although the task may be completed, and the coach's needs satisfied, the players' needs are largely left unaddressed (Cribbin, 1981). Effective coaching leadership occurs when athletes perform per the coach's intentions while finding their needs satisfied. Successful coaches

prioritize maintaining healthy relationships with their athletes as well as winning games (Anshel & Lidor, 2012; Murphy, 2005; Williams & Krane, 2015).

Most sports leadership research conducted with the Leadership Scale for Sport has focused on the relationship between athlete satisfaction and leadership behavior. While research and theories from non-sports settings present valuable frameworks for understanding leadership (Horn, 2008), distinct methods that reflect the challenging demands of the sports context are required. Sports is one small part of society and is subject to the same social trends and changes experienced in other areas of life. The way society is changing, it is highly unlikely that the autocratic style of coaching will re-emerge as the dominant style of leadership style in sports. A trend has emerged where leadership behaviors associated with social support, training and instruction, and positive feedback, are most highly related to athletes' satisfaction and motivation. Research should be conducted to determine any past trends in overall style of leadership and preferences of athletes. Why has the autocratic style of coaching frowned upon in sports? Numerous basketball coaches at both the collegiate and professional levels have been terminated due to an autocratic style of leadership.

### **Speed of Change**

The magnitude and speed of change in the sports industry will continue (Conner, 1993). The discomfort of coaches having a decreasing amount of time to respond to change will be experienced as the complexity of change events will increase. Because the total system will be more interconnected, the number of facets that need to be considered will also increase. This will require sports leadership to design, support and nurture flexible, durable teams and organizations. It will also require a systemic understanding to respond positively to the change events. As virtual training becomes more fantasy than reality in sports, coaches will have to

focus their leadership style on their athlete's brains and the conceptualization of the game rather than strictly on their physical capabilities. In sports leadership, the coach responsible for encouraging the speed at which athletes absorb information and to provide opportunities for these athletes to grow in understanding how this learning can be brought into the changing culture with the team.

### **Increasing Player Diversity**

The increasing popularity of the professional women's basketball phenomenon has stimulated global interest and a population growth which creates a significant increase in diversity in the sport. This phenomenon will continue to challenge the assumptions many teams and organizations have used to shape standards of excellence. Coaching athletes means dealing with a diverse group of individuals. Diversity was once thought of as solely ethnicity and gender. But age, sexual orientation, personality and even functional diversity are types to consider as well, especially in the sports environment. There has also been an influx of international players playing in the WNBA. Although each type of diversity presents its unique challenges, each also shares the common theme of making it difficult to understand each other fully. New thinking will be required to create a team culture that increase inclusiveness and diversity in coaching decisions. This will have an enormous effect on how coaches behave with their athletes. If diversity is viewed as a problem to be endured, the coach will not gain the potential benefits of a talented team. If a coach genuinely believes in the power of people, they will achieve the intrinsic rewards. The key to managing a diverse team is the ability to believe in the athletes and know the best way to coach them individually.

## **Era of Individualization**

A constant challenge for coaches is the ability to show flexibility in adjusting their coaching leadership style to suit specific situations, and with teams of highly paid professional athletes, to keep every athlete satisfied. At the professional level, with the emphasis on finding and exploiting every possible advantage, athletics has become an individualized sport encased in a team context. A critical area for leadership is now for players to be leading themselves to the best of their capabilities, both on and off the playing surface. A trend which has become apparent is the “it’s all about me” culture of the Millennial generation and generation “I” athlete. In the past, teams were talked about in terms of “we,” and have now become the topic of “me.” Previous concepts of “team” and “leadership” must drastically change as we are at the start of some radical shifts in how we study, think about and approach both these areas.

## **Limitations**

One limitation of this study was time. Participants were only allotted three weeks to complete the survey and the researcher was restricted to 16 weeks to finish the study. This timeframe is too short to present a thorough data analysis.

A notable limitation of this study was the reliability and accountability the researcher had regarding athlete participation. The researcher had to rely on third parties to distribute and remind the athletes to participate in the study. Because the researcher had to rely on third parties, participation in the study could have decreased.

Additionally, the time of year in which the study was conducted could be a considerable limitation. During the spring, many WNBA players are overseas playing basketball. Participation from the current WNBA players in this study could have been decreased due to the busy schedule of the short, three-month season. Participation from current WNBA players in the study

also could have been decreased because players may have been in the process of restructuring previous contracts or signing new contracts. Therefore, the researcher had to wait until all current WNBA team rosters were finalized, which did not happen until after the second game of the regular season (May, 2017).

### **Recommendations for Further Research**

Further research should take place between coaching style preferences and experience level of female athletes. There is a multitude of research studying gender differences and task dependence (Feltz, 1988; Lirgg et al., 1994; Riemer & Toon, 2001), however, there is little to no research comparing the coaching style preferences with experience level. For example, what is the comparison of coaching style preferences of middle school female basketball players and college female basketball players? What coaching style is preferred collegiate female basketball players and professional basketball players? This research could help answer the question of significance between experience level and coaching preference. It can also be studied in multiple sports to better prepare coaches at various skills, from youth to the professional level. In return, coaches and their athletes will have greater success in the long run.

First, empirical and qualitative studies such as observation, focus group or interviews are needed to explore different situational interactions between coaches and players during practices and games. These studies could also serve as evidence or arguments to the findings of the present study.

Second, factors such as playing time, team cohesiveness and team winning percentage should be included to further investigate coaching leadership style preferences among female professional athletes. It is also suggested to compare international players with native players regarding their coaching leadership style preferences.

Third, past research has failed to include time as a possible variable affecting athletes' preferences of their coaches' leadership style (Turman, 2001). When examining the result of athlete experience level, results indicated only athletes' preference for a social support leadership style was affected by the athletes' experience across time. Also, athletes' preference and perception of a coaches' autocratic leadership style for successful and unsuccessful teams were notably different at the end of the season. Other research suggested is the examination of the change in preferences between playing college basketball and playing at the professional level. As so many college coaches transition to professional sports, it is important to research if an athletes' preferences change as a result of becoming a professional athlete and getting paid to play the sport. Although this research included players with different number of years experience, it will be beneficial if potential female professional athletes were surveyed before and after they enter the professional level.

Finally, while research question one revealed the coaching leadership style preferences for the female profession basketball players involved in this study, these preferences do not reflect the coaching style preferences for every athlete or every team. Teams change each year with different athletes and many personalities; however, this study may serve as a framework for coaches to better understand the coaching styles and how they may implement or adapt to their athletes, team, and the sport of women's basketball. A coach can apply the information provided in research question one as a starting point in determining the coaching style preferences the athletes on his or her team have. Also, learning more about theses coaching styles may help a coach determine which style he or she uses and may serve as motivation to try different styles, so they can motivate their athletes and ultimately improve the performance of the team.

Because so many studies have contradicting results, it cannot be inferred that sports leaders can be successful using a cookie-cutter approach. 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 team outcomes, whether they be wins, graduation rates, athlete satisfaction, etc. The key to coaching seems to be finding the behaviors that resonate with the particular team a coach is leading. Coaches, it may seem, should adapt to what their teams prefer rather than practicing one method based on the demographic characteristics of the individual players. When this is accomplished, all evidence suggests that the productivity of the team increases. This is the goal of all great coaches and leaders, to do all in their power to help their teams reach their greatest potential.



## References

- Acosta, R. V., & Carpenter, L. J. (2012). *Women in intercollegiate sport: A longitudinal, national study: thirty-five year update, 1977-2012*: Brooklyn College.
- Altahayneh, Z. (2003). *The effects of coaches' behaviors and burnout on the satisfaction and burnout athletes. 2003. 148 f.* Dissertation (Doctor of Philosophy in Sport Management, Recreation Management, and Physical Education)-College of Education, Florida State University, Florida, 2003.[Links].
- Anshel, M. H., & Lidor, R. (2012). Talent detection programs in sport: The questionable use of psychological measures. *Journal of Sport Behavior*, 35(3), 239.
- Aumand, E. A. (2005). *"For the Love of the Game": Factors Influencing Athlete Enjoyment in Sport*. West Virginia University.
- Avolio, B., & Yammarino, F. (2002). John Antonkis and Robert J. House. *Transformational and charismatic leadership: The road ahead*, 3-28.
- Baker, R. E., & Esherick, C. (2013). *Fundamentals of sport management*: Human Kinetics.
- Balague, G. (1999). Understanding identity, value, and meaning when working with elite athletes. *The Sport Psychologist*, 13(1), 89-98.
- Balaguer, I., Duda, J. L., Atienza, F. L., & Mayo, C. (2002). Situational and dispositional goals as predictors of perceptions of individual and team improvement, satisfaction and coach ratings among elite female handball teams. *Psychology of Sport and Exercise*, 3(4), 293-308.

- Barnes, K. A. (2003). *NCAA Division I athletes coaching behavior preferences*. University of North Texas.
- Barrow, J. C. (1977). The variables of leadership: A review and conceptual framework. *Academy of Management Review*, 2(2), 231-251.
- Bass, B. M. (2008). The Bass handbook of leadership. *Theory, research and managerial applications*, 4.
- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications*: Simon and Schuster.
- Beam, J. W. (2001). Preferred leadership of NCAA Division I and II intercollegiate student-athletes.
- Beam, J. W., Serwatka, T. S., & Wilson, W. J. (2004). Preferred leadership of NCAA Division I and II intercollegiate student-athletes. *Journal of Sport Behavior*(27), 3-17.
- Becker, G. (2000). Creating comparability among reliability coefficients: the case of Cronbach alpha and Cohen kappa. *Psychological reports*, 87(3\_suppl), 1171-1182E.
- Bekiari, A. (2014). Verbal aggressiveness and leadership style of sports instructors and their relationship with athletes' intrinsic motivation. *Creative Education*, 5(2), 114.
- Bennis, W., & Nanus, B. (1985). The strategies for taking charge. *Leaders*, New York: Harper. Row.
- Berlinger, E. (1980). *An information theory based complexity measure*. Paper presented at the Proceedings of the May 19-22, 1980, national computer conference.
- Biskup, C., & Pfister, G. (1999). I would like to be like her/him: Are athletes role-models for boys and girls? *European Physical Education Review*, 5(3), 199-218.

- Blanchard, C. M., Amiot, C. E., Perreault, S., Vallerand, R. J., & Provencher, P. (2009). Cohesiveness, coach's interpersonal style and psychological needs: Their effects on self-determination and athletes' subjective well-being. *Psychology of Sport and Exercise, 10*(5), 545-551.
- Blanchard, K. H., Zigarmi, D., & Zigarmi, P. (1985). *Leadership and the One Minute Manager: Increasing Effectiveness Through Situational Leadership*: Huang Chia Book Company.
- Bolden, R., Gosling, J., Marturano, A., & Dennison, P. (2003). *A review of leadership theory and competency frameworks*. Retrieved from
- Brooks, D. D., Ziatz, D., Johnson, B., & Hollander, D. (2000). Leadership Behavior and Job Responsibilities of NCAA Division 1A Strength and Conditioning Coaches. *The Journal of Strength & Conditioning Research, 14*(4), 483-492.
- Brush, B. C., & Naples, G. J. (2011). Winning In NCAA Women's Soccer: Does The Gender Of The Coach Matter? *Contemporary Issues in Education Research, 4*(8), 19.
- Bryman, A. (2011). *The SAGE handbook of leadership*: Sage Publications.
- Bryman, A., Stephens, M., & a Campo, C. (1996). The importance of context: Qualitative research and the study of leadership. *The Leadership Quarterly, 7*(3), 353-370.
- Burke, S., & Collins, K. M. (2001). Gender differences in leadership styles and management skills. *Women in Management Review, 16*(5), 244-257.
- Caperchione, C., Mummery, W. K., & Duncan, M. (2011). Investigating the relationship between leader behaviours and group cohesion within women's walking groups. *Journal of Science and Medicine in Sport, 14*(4), 325-330. doi:10.1016/j.jsams.2011.03.005
- Carlyle, T. (1895). *On Heroes* (Vol. 13): Chapman and Hall.

- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment* (Vol. 17): Sage publications.
- Carroll, G. R., & O'Connor, K. (2013). *Biology, Evolution and Organizations*.
- Carron, A., & Chelladurai, P. (1981). The Dynamics of Group Cohesion in Sport. *Journal of Sport Psychology*, 3, 123-129.
- Case, R. (1998). Leader member exchange theory and sport: Possible applications. *Journal of Sport Behavior*, 21(4), 387.
- Chelladurai, P. (1990). Leadership in sports: A review. *International journal of sport psychology*.
- Chelladurai, P., & Arnott, M. (1985). Decision styles in coaching: Preferences of basketball players. *Research Quarterly for Exercise and Sport*, 56(1), 15-24.
- Chelladurai, P., & Carron, A. (1983). Athletic maturity and preferred leadership. *Journal of Sport Psychology*, 5(4), 371-380.
- Chelladurai, P., Imamura, H., & Yamaguchi, Y. (1987). A cross-cultural study of preferred leadership in sports. *Canadian Journal of Sport Sciences*, 12(2), 106-110.
- Chelladurai, P., Imamura, H., Yamaguchi, Y., Oinuma, Y., & Miyauchi, T. (1988). Sport leadership in a cross-national setting: The case of Japanese and Canadian university athletes. *Journal of Sport and Exercise Psychology*, 10(4), 374-389.
- Chelladurai, P., & Riemer, H. (1998). Measurement of leadership in sport. *Advances in sport and exercise psychology measurement*, 227-253.
- Chelladurai, P., & Saleh, S. (1978). Preferred leadership in sports. *Canadian Journal of Applied Sport Sciences*(3), 85-92.

- Chelladurai, P., & Saleh, S. (1980). Dimensions of leader behavior in sports: Development of a leadership scale. *Journal of Sport Psychology, 2*(1), 34-45.
- Chelladurai, P., Singer, R., Murphey, M., & Tennant, L. (1993). Handbook of research on sport psychology. *Handbook of research on sport psychology*.
- Chelladurai, P., Haggerty, T. R., & Baxter, P. R. (1989). Decision style choices of university basketball coaches and players. *Journal of Sport and Exercise Psychology, 11*(2), 201-215.
- Conger, J. A. (1998). Qualitative research as the cornerstone methodology for understanding leadership. *The Leadership Quarterly, 9*(1), 107-121.
- Conner, D. (1993). *Managing at the Speed of Change*: Mentor Media.
- Côté, J., & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. *International journal of sports science & coaching, 4*(3), 307-323.
- Cote, J., Salmela, J. H., & Russell, S. (1995). The knowledge of high-performance gymnastic coaches: Competition and training considerations. *The Sport Psychologist, 9*(1), 76-95.
- Couper, M. P. (2000). Review: Web surveys: A review of issues and approaches. *The Public Opinion Quarterly, 64*(4), 464-494.
- Cribbin, J. J. (1981). *Leadership: Strategies for organizational effectiveness*: Amacom.
- Crust, L., & Lawrence, I. (2006). A review of leadership in sport: Implications for football management. *Athletic Insight: The Online Journal of Sport Psychology, 8*(4), 28-48.
- Daft, R. L. (2014). *The leadership experience*: Cengage Learning.
- De Backer, M., Boen, F., Ceux, T., De Cuyper, B., Høigaard, R., Callens, F., . . . Vande Broek, G. (2011). Do perceived justice and need support of the coach predict team identification

- and cohesion? Testing their relative importance among top volleyball and handball players in Belgium and Norway. *Psychology of Sport & Exercise*, 12(2), 192-201.
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method* (Vol. 2): Wiley New York.
- Duda, J. L. (2001). Achievement goal research in sport: Pushing the boundaries and clarifying some misunderstandings. *Advances in motivation in sport and exercise*, 129, 182.
- Dwyer, J. J., & Fischer, D. G. (1988). Psychometric properties of the coach's version of Leadership Scale for Sports. *Perceptual and Motor skills*, 67(3), 795-798.
- Fasting, K., & Pfister, G. (2000). Female and male coaches in the eyes of female elite soccer players. *European Physical Education Review*, 6(1), 91-110.
- Feltz, D. L. (1988). Gender differences in the causal elements of self-efficacy on a high avoidance motor task. *Journal of Sport and Exercise Psychology*, 10(2), 151-166.
- Feltz, D. L., & Lirgg, C. D. (2001). Self-efficacy beliefs of athletes, teams, and coaches. *Handbook of sport psychology*, 2(2001), 340-361.
- Fiedler, F. E. (1978). The contingency model and the dynamics of the leadership process. *Advances in experimental social psychology*, 11, 59-112.
- Fletcher, R. B., & Roberts, M. H. (2013). Longitudinal stability of the leadership scale for sports. *Measurement in Physical Education and Exercise Science*, 17(2), 89-104.
- Ford, H. R. (2000). *Male coaches' perceptions of relationships with female athletes*.
- Freishlag, J. (1985). Team Dynamics. Implications for Coaching. *Journal of Physical Education, Recreation & Dance*, 56(9-), 67-71.

- Garland, D. J., & Barry, J. R. (1990). Personality and leader behaviors in collegiate football: A multidimensional approach to performance. *Journal of research in personality, 24*(3), 355-370.
- Gordon, D. (2009). *Coaching science: Learning Matters*.
- Gould, D., Greenleaf, C., Guinan, D., & Chung, Y. (2002). A survey of US Olympic coaches: Variables perceived to have influenced athlete performances and coach effectiveness. *The Sport Psychologist, 16*(3), 229-250.
- Grint, K. (2005). *Leadership: Limits and possibilities*: Palgrave Macmillan.
- Grundy, P., & Shackelford, S. (2007). *Shattering the Glass: The Remarkable History of Women's Basketball*: UNC Press Books.
- Hambrick, D. C. (1989). Guest editor's introduction: Putting top managers back in the strategy picture. *Strategic Management Journal, 10*(S1), 5-15.
- Haselwood, D. M., Joyner, A. B., Burke, K. L., & Geyerman, C. B. (2005). Female athletes' perceptions of head coaches' communication competence. *Journal of Sport Behavior, 28*(3), 216.
- Hastie, P. A. (1995). Factors affecting coaching preferences of secondary school volleyball players. *Perceptual and Motor skills, 80*(1), 347-350.
- Hedges, L. V., & Vevea, J. L. (1998). Fixed-and random-effects models in meta-analysis. *Psychological methods, 3*(4), 486.
- Hemphill, B. (2012). Collegiate athletes' family communication styles and their preferred coaching styles.
- Henson, R. L. (2010). *Preferences of college female athletes in coach gender and coaching style*: Northcentral University.

- Hersey, P., Blanchard, K. H., & Natemeyer, W. E. (1979). Situational leadership, perception, and the impact of power. *Group & Organization Management, 4*(4), 418-428.
- Høigaard, R., Jones, G. W., & Peters, D. M. (2008). Preferred coach leadership behaviour in elite soccer in relation to success and failure. *International journal of sports science & coaching, 3*(2), 241-250.
- Horn, T. S. (2008). Coaching effectiveness in the sport domain. *Advances in sport psychology, 3*, 239-267.
- Horn, T. S., Bloom, P., Berglund, K. M., & Packard, S. (2011). Relationship between collegiate athletes' psychological characteristics and their preferences for different types of coaching behavior. *Sport Psychologist, 25*(2), 190.
- Horne, J. (2013). The philosophical foundations of leadership.
- Horne, T., & Carron, A. V. (1985). Compatibility in coach-athlete relationships. *Journal of Sport Psychology, 7*(2), 137-149.
- House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative science quarterly, 32*, 321-339.
- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The Leadership Quarterly, 7*(3), 323-352.
- Huberty, C. J., & Petoskey, M. D. (2000). Multivariate analysis of variance and covariance. *Handbook of applied multivariate statistics and mathematical modeling, 183-208*.
- Hughes, M., & Franks, I. M. (2004). *Notational analysis of sport: Systems for better coaching and performance in sport*. Psychology Press.



- Jacob, R. L. (2006). *The relationship between perceived coaching behaviors and win-loss success in National Collegiate Athletic Association (NCAA) Division I men and women's basketball coaches.*
- Jambor, E. A., & Zhang, J. J. (1997). Investigating leadership, gender, and coaching level using the Revised Leadership for Sport Scale. *Journal of Sport Behavior, 20*(3), 313.
- Jowett, S., & Poczwadowski, A. (2007). Understanding the Coach-Athlete Relationship.
- Kahneman, D., & Tversky, A. (1996). On the reality of cognitive illusions.
- Kets de Vries, M. F. R. (2005). Leadership group coaching in action: The Zen of creating high performance teams. *Academy of Management Executive, 19*(1), 61-76.  
doi:10.5465/AME.2005.15841953
- Kokemuller, N. (2015). Transformational leadership vs. situational leadership. *Demand Media.*
- Kwon, H. H., Pyun, D. y., & Kim, M. (2010). Perceived leadership behavior of physical education teacher-coaches: When they teach vs. when they coach. *Journal of Teaching in Physical Education, 29*(2), 131-145.
- Kyllo, L. B., & Landers, D. M. (1995). Goal setting in sport and exercise: A research synthesis to resolve the controversy. *Journal of Sport and Exercise Psychology, 17*(2), 117-137.
- Lam, E. T., Chen, L., Zhang, J. J., Robinson, D. A., & Ziegler, S. G. (2007). Preferred and perceived leadership styles by NCAA basketball players. *Research Quarterly for Exercise and Sport, 78*, 107-114.
- Laughlin, N., & Laughlin, S. (1994). The relationship between the similarity in perceptions of teacher/coach leader behavior and evaluations of their effectiveness. *International journal of sport psychology.*

- Light Shields, D. L., Gardner, D. E., Light Bredemeier, B. J., & Bostro, A. (1997). The relationship between leadership behaviors and group cohesion in team sports. *the Journal of Psychology, 131*(2), 196-210.
- Lirgg, C. D., Dibrezzo, R., & Smith, A. N. (1994). Influence of gender of coach on perceptions of basketball and coaching self-efficacy and aspirations of high school female basketball players. *Women in Sport and Physical Activity Journal, 3*(1), 1-14.
- Little, R. J., & Rubin, D. B. (2014). *Statistical analysis with missing data*: John Wiley & Sons.
- Lockwood-Rayermann, S. (2003). Preceptor leadership style and the nursing practicum. *Journal of Professional Nursing, 19*(1), 32-37.
- Loehr, J. (2005). Leadership: Full engagement for success. *The sport psych handbook*, 155-170.
- Lord, R. G., De Vader, C. L., & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures: American Psychological Association.
- Lumpkin, A. (2010). Teachers and coaches as leaders demonstrating character and competence. *Journal of Physical Education, Recreation & Dance, 81*(8), 49-52.
- Lyle, J. (2002). *Sports coaching concepts: A framework for coaches' behaviour*: Psychology Press.
- MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS quarterly, 35*(2), 293-334.
- Mageau, G. A., & Vallerand, R. J. (2003). The coach-athlete relationship: A motivational model. *Journal of sports science, 21*(11), 883-904.

- Manley, A. J., Greenlees, I., Graydon, J., Thelwell, R., Filby, W. C., & Smith, M. J. (2008). Athletes' perceived use of information sources when forming initial impressions and expectancies of a coach: An explorative study. *The Sport Psychologist*, 22(1), 73-89.
- Martens, R. (1987). *Coaches guide to sport psychology: A publication for the American Coaching Effectiveness Program: Level 2 sport science curriculum*: Human Kinetics Books.
- Martens, R. (1996). *Successful coaching*: Human Kinetics.
- Martin, D. (1993). *Teamthink: using the sports connection to develop, motivate and manage a winning business team*: EP Dutton.
- Martin, M. M., Rocca, K. A., Cayanus, J. L., & Weber, K. (2009). Relationship between coaches' use of behavior alteration techniques and verbal aggression on athletes' motivation and affect. *Journal of Sport Behavior*, 32(2), 227.
- Matthews, G., Deary, I. J., & Whiteman, M. C. (2003). *Personality traits*: Cambridge University Press.
- McGee, Z., Strasser, J., Mckenzie, I., & Stoll, S. (2005). Why young athletes sign up for sports. *Strategies*, 18(3), 33-34.
- Mehler, F. (1995). Von Albert Schweitzer zu Madonna-Braucht die Jugend heute noch Vorbilder. *Deutsche Jugend*, 10(43), 453-459.
- Melnick, R. (2007). *Senda Berenson: the unlikely founder of women's basketball*: Univ of Massachusetts Press.
- Meyerson, P., & Tryon, W. W. (2003). Validating Internet research: A test of the psychometric equivalence of Internet and in-person samples. *Behavior Research Methods, Instruments, & Computers*, 35(4), 614-620.

- Miller, T. W., Ogilvie, B. C., & Branch, J. (2008). Sport psychology consultation: The influence of gender on learning style. *Consulting Psychology Journal: Practice and Research*, 60(3), 279.
- Murphy, L. (2005). Transformational leadership: a cascading chain reaction. *Journal of Nursing Management*, 13(2), 128-136.
- Nizam, M. S. M., Zareha, Z., Vincent, P., & Nagoor, M. A. (2016). The Correlation between Leadership Coaching Style and Satisfaction among University Silat Olahraga Athletes. *Ido Movement for Culture. Journal of Martial Arts Anthropology*, 16(3), 34-39.
- Norris, W. R., & Vecchio, R. P. (1992). Situational leadership theory a replication. *Group & Organization Management*, 17(3), 331-342.
- Northouse, P. G. (2011). *Introduction to leadership: Concepts and practice*: Sage.
- Oshagbemi, T., & Ocholi, S. A. (2006). Leadership styles and behaviour profiles of managers. *Journal of Management Development*, 25(8), 748-762.
- Parker, G. M. (2011). *Team players and teamwork: New strategies for developing successful collaboration*: John Wiley & Sons.
- Parker, K., Czech, D., Burdette, T., Stewart, J., Biber, D., Easton, L., . . . McDaniel, T. (2012). The preferred coaching styles of generation Z athletes: A qualitative study. *Journal of Coaching Education*, 5(2), 5-23.
- Parry, K. W. (1998). Grounded theory and social process: A new direction for leadership research. *The Leadership Quarterly*, 9(1), 85-105.
- Penman, K. A., Hastad, D. N., & Cords, W. L. (1974). Success of the authoritarian coach. *The Journal of social psychology*.

- Piccolo, R. F., Greenbaum, R., Hartog, D. N. d., & Folger, R. (2010). The relationship between ethical leadership and core job characteristics. *Journal of Organizational Behavior*, 31(2 - 3), 259-278.
- Porter, K. (2006). *Mad seasons: the story of the first Women's Professional Basketball League, 1978-1981*: U of Nebraska Press.
- Posner, S. (1999). Athletes' perceptions of coaching empowerment. *UMI: Bell & Howell*. 連結
- Price, M. S., & Weiss, M. R. (2000). Relationships among coach burnout, coach behaviors, and athletes' psychological responses. *The Sport Psychologist*, 14(4), 391-409.
- Ramzaninezhad, R., & Keshtan, M. H. (2009). The relationship between coach's leadership styles and team cohesion in Iran football clubs professional league. *Brazilian journal of Biomotricity*, 3(2), 111-120.
- Rees, T., & Hardy, L. (2000). An investigation of the social support experiences of high-level sports performers. *The Sport Psychologist*, 14(4), 327-347.
- Riemer, H., & Chelladurai, P. (1995). Leadership and Satisfaction in Athletics. *Journal of Sport & Exercise Psychology*, 17(3), 276-293.
- Riemer, H., & Toon, K. (2001). Leadership and satisfaction in tennis: Examination of congruence, gender, and ability. *Research Quarterly for Exercise and Sport*, 72(3), 243-256.
- Rocca, K. A., Martin, M. M., & Toale, M. C. (1998). Players' perceptions of their coaches' immediacy, assertiveness, and responsiveness. *Communication Research Reports*, 15(4), 445-450.

- Ronayne, L. S. (2004). *Effects of coaching behaviors on team dynamics: how coaching behaviors influence team cohesion and collective efficacy over the course of a season*. Miami University.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. *Advances in experimental social psychology*, 10, 173-220.
- Sage, G. (1998). Does sport affect character development in athletes? *Journal of Physical Education, Recreation & Dance*, 69(1), 15-18.
- Salminen, S., & Liukkonen, J. (1994). The convergent and discriminant validity of the coach's version of the Leadership Scale for Sports. *International journal of sport psychology*, 25(1), 119-127.
- Sari, I., Soyer, F., & Yigiter, K. (2012). The relationship among sports coaches' perceived leadership behaviours, athletes' communication skills and satisfaction of the basic psychological needs. *International Journal of Academic Research*, 4(1), 112-119.
- Serpa, S. O. d. C. (1999). Relationship coach-athlete: outstanding trends in European research. *Motricidade humana: portuguese journal of human performances studies*, 7-19.
- Sherman, C., Fuller, R., & Speed, H. (2000). Gender comparisons of preferred coaching behaviors in Australian sports. *Journal of Sport Behavior*, 23(4), 389.
- Shih, T.-H., & Fan, X. (2008). Comparing response rates from web and mail surveys: A meta-analysis. *Field methods*, 20(3), 249-271.
- Simonton, D. K. (1994). *Greatness: Who makes history and why*: Guilford Press.
- Slife, B., & Williams, R. N. (1995). What's behind the research. *Discovering hidden*.
- Smoll, F. L., & Smith, R. E. (1989). Leadership Behaviors in Sport: A Theoretical Model and Research Paradigm1. *Journal of Applied Social Psychology*, 19(18), 1522-1551.

- Sorenson, G. (2000). *An intellectual history of leadership studies: The role of James MacGregor Burns*. Paper presented at the Annual meeting of the American Political Science Association, Washington DC, August.
- Spencer, H. (1892). *The study of sociology* (Vol. 5): Kegan Paul, Trench, Trübner.
- Terry, P., & Howe, B. (1984). Coaching preferences of athletes. *Canadian Journal of Applied Sport Sciences*, 9(4), 188-193.
- Todorovich, J. R. (2009). Research on teaching health and physical education *International handbook of research on teachers and teaching* (pp. 1061-1077): Springer.
- Turman, P. D. (2001). Situational Coaching Styles The Impact of Success and Athlete Maturity Level on Coaches' Leadership Styles Over Time. *Small group research*, 32(5), 576-594.
- Turman, P. D. (2003). Athletic coaching from an instructional communication perspective: The influence of coach experience on high school wrestlers' preferences and perceptions of coaching behaviors across a season. *Communication Education*, 52(2), 73-86.
- Turner, B. (2015). *Factors Related to Preferences of Female Collegiate Volleyball Players' Coaching Style*: Robert Morris University.
- Turner, J. R., & Müller, R. (2005). *The project manager's leadership style as a success factor on projects: A literature review*.
- Tutko, T. A., Lyon, L. P., & Ogilvie, B. C. (1969). Athletic motivation inventory. *San Jose, CA: Institute for the Study of Athletic Motivation*.
- Udry, E., Gould, D., Bridges, D., & Tuffey, S. (1997). People helping people? Examining the social ties of athletes coping with burnout and injury stress. *Journal of Sport and Exercise Psychology*, 19(4), 368-395.

- Vealey, R. S., Armstrong, L., Comar, W., & Greenleaf, C. A. (1998). Influence of perceived coaching behaviors on burnout and competitive anxiety in female college athletes. *Journal of applied sport psychology, 10*(2), 297-318.
- Vernacchia, R., McGuire, R., & Cook, D. (1996). What coaches want from sport psychology. *Journal of applied sport psychology, 10*, 129-130.
- Vongalis-Macrow, A. (2012). What Women Want in Their Leaders. *Harvard Business Review*.
- Wałach-Biśta, Z. (2014). Leadership Scale for Sports-theoretical background and review of psychometric properties research. *Česká kinantropologie/Czech kinanthropology/, 18*(3).
- Walters, J. (2001). Six Coaching Strategies You Can Apply in the Workplace. *Online transaction. Message posted to [http://www/. inc. com](http://www.inc.com).*
- Watkins, D. L., & Rikard, G. L. (1991). Perceptions of the leader behavior of athletic directors: Implications for change. *Physical Educator, 48*(1), 2.
- Weinberg, R., & Gould, D. (2003). Introduction to psychological skills training. *Foundations of sport and exercise psychology*.
- Weinberg, R. S. (2002). Goal setting in sport and exercise: Research to practice.
- Weinberg, R. S., & Gould, D. (2014). *Foundations of Sport and Exercise Psychology, 6E*: Human Kinetics.
- Weiss, M. R., & Friedrichs, W. D. (1986). The influence of leader behaviors, coach attributes, and institutional variables on performance and satisfaction of collegiate basketball teams. *Journal of Sport Psychology, 8*(4), 332-346.
- Williams, J., & Krane, V. (2015). Personal Growth to Peak Performance: Applied Sport Psychology”, Seven Edition, McGraw-Hill International Edition, McGraw Hill Education.



- Woodman, T., & Hardy, L. (2001). A case study of organizational stress in elite sport. *Journal of applied sport psychology, 13*(2), 207-238.
- Wright, K. B. (2005). Researching Internet - based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer - Mediated Communication, 10*(3), 00-00.
- Zhang, J., Jensen, B. E., & Mann, B. L. (1997). Modification and revision of the leadership scale for sport. *Journal of Sport Behavior, 20*(1), 105.

## APPENDIX A: INSTITUTION INFORMATION LETTER



AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

**INFORMATION LETTER for a Research Study entitled**

***“An Examination of Coaching Leadership Style Preferences of  
Professional Female Basketball Players”***

**You are invited to participate in a research study** to investigate preferred coaching leadership styles of female professional basketball players. The study is being conducted by Chantel Tremitiere, a retired WNBA athlete and current Doctoral Student, under the direction of Dr. James E. Witte, Professor, in the Auburn University Department of Educational Foundations, Leadership, and Technology. You are invited to participate because you are currently playing or have previously played professional basketball. The sample includes female individuals who are currently playing or have previously played professional basketball in America and/or overseas.

**What will be involved if you participate?** Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete a short survey. The survey will be administered by paper copy or electronic form and will take approximately 6-8 minutes to complete. The link is provided here:

[https://auburn.qualtrics.com/SE/?SID=SV\\_czRBo4L2VJ15ejH](https://auburn.qualtrics.com/SE/?SID=SV_czRBo4L2VJ15ejH)

**Are there any risks or discomforts?** You should not encounter any reasonable risks if you decide to participate in this research study because there are no known risks or discomforts.

4036 Haley Center, Auburn, AL 3684-5221; Telephone: 334-844-4460; Fax: 334-844-3072

w w w . a u b u r n . e d u

**Are there any benefits to yourself or others?** There is no benefit.

**Will you receive compensation for participating?** There is no compensation.

**Are there any costs?** If you decide to participate, you will not have to pay anything.

**You may withdraw at any time by closing your browser window.** Once you have submitted your data, I will not be able to withdraw it since it will be recorded anonymously. Your decision about whether or not to participate will have no effect on your current or future playing opportunities.

**Any data obtained within this study will remain completely anonymous.** I will protect your privacy and the data you provide by maintaining anonymous response practices. Information collected through your participation may be used to fulfill an educational requirement, publication in a professional journal, and/or presentation at a professional meeting.

**If you have questions about this study,** please Chantel Tremitiere at [chantel@auburn.edu](mailto:chantel@auburn.edu) or Dr. James E. Witte at [witteje@auburn.edu](mailto:witteje@auburn.edu). A copy of this document is yours to keep.

**If you have questions about your rights as a research participant,** you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or e-mail at [IRBadmin@auburn.edu](mailto:IRBadmin@auburn.edu) or [IRBChair@auburn.edu](mailto:IRBChair@auburn.edu).

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Chantel Tremitiere                      March 27, 2017  
Investigator's Name                      Date

Chantel Tremitiere  
Print Name

Dr. James E Witte  
Major Professor

**The Auburn University Institutional  
Review Board has approved this  
document for use from  
March 28, 2017 to March 28, 2018  
Protocol #17-110**

APPENDIX B: WNBPA APPROVAL OF RESEARCH PROJECT

Terri Jackson<terri.jackson@wnbpa.com>

Sat 9/17/2016 8:43 AM

To: Chantel Tremitiere <crt0027@tigermail.auburn.edu>; Chantel Tremitiere <chantel@auburn.edu>;

This was sitting in my outbox for days! I just saw it. Sent from my iPhone

> On Sep 17, 2016, at 9:41 AM, Terri Jackson <terri.jackson@wnbpa.com> wrote:

> Chantel

Thank you for your patience. I have spoken with our legal folks and based on your description of the survey and because it is for educational purposes, I am authorized to give you permission to conduct doctoral research with the players by working with or coordinating with the Players Association.

>

> Please feel free to share this communication with your institution's dissertation committee and Institutional Review Board as appropriate. And let me know if you need anything further.

>

> Again, I apologize for the delay. You have our support.

>

> Terri Jackson

> WNBPA

> Director of Operations.

>

> Sent from my iPhone

<https://outlook.office.com/owa/?viewmodel=ReadMessageItem&ItemID=KojL305uDnqAAI8ZLptAAA%3D&IsPrintView=1&wid=83&ispopout=1&path=>

## APPENDIX C: INSTRUMENT

**LEADERSHIP SCALE FOR SPORT**  
(Players Preference Version)

Thank you for participating in my short survey. This is completely anonymous and will take approximately 6-8 minutes to complete.

Demographic Questions: (Please circle the appropriate answer)

1. What is your current professional playing status?
  - a. Current Player
  - b. Former/Retired Player
  
2. If you answered (A) in question 1: Where are you currently playing?
  - a. WNBA (Women's National Basketball Association)
  - b. Overseas
  - c. Both in the WNBA and Overseas
  
3. If you answered (B) in question 1: Where did you play your professional career?
  - a. WNBA (Women's National Basketball Association)
  - b. Overseas
  - c. Both in the WNBA and Overseas
  
4. How many years have you played professional basketball?
  - a. 5 years or less
  - b. 6-10 years
  - c. More than 10 years
  
5. What is your ethnicity/ethnicity?
  - a. African American
  - b. Caucasian
  - c. Asian
  - d. Hispanic
  - e. Other \_\_\_\_\_



**Directions:** Each of the following statements describes a specific behavior that a coach may exhibit. For each statement, there are five alternative answers, as follows:

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Please indicate your preference by circling the appropriate space. Answer all items even if you are unsure of a response. Please note that this is **NOT** an evaluation of your present coach or any other coach. **It is your own personal preference that is required.** There are no right or wrong answers. Your spontaneous and honest response is important for the success of this evaluation.

**Example:** I prefer a coach who likes each athlete on the team. 1 2 3 4 5

**I prefer a coach who:**

1. Sees to it that every player is working to her capacity. 1 2 3 4 5
2. Explains to each player the techniques and tactics of the sport. 1 2 3 4 5
3. Pays special attention to correcting players' mistakes. 1 2 3 4 5
4. Makes sure that his/her part in the team is understood by all the players. 1 2 3 4 5
5. Instructs every player individually in the skills of the sport. 1 2 3 4 5
6. Figures ahead on what should be done. 1 2 3 4 5
7. Explains to every player what she should and what she should not do. 1 2 3 4 5
8. Expects every player to carry out her assignment to the last detail. 1 2 3 4 5
9. Points out each players' strengths and weaknesses. 1 2 3 4 5
10. Gives specific instructions to each player as to what she should do in every situation. 1 2 3 4 5
11. Sees to it that the efforts are coordinated. 1 2 3 4 5
12. Explains how each players' contribution fits into the total picture. 1 2 3 4 5
13. Specifies in detail what is expected of each player. 1 2 3 4 5
14. Asks for the opinion of the players on strategies for specific competitions. 1 2 3 4 5
15. Gets team approval on important matters before going ahead. 1 2 3 4 5

16. Lets his/her players share in decision making.	1	2	3	4	5
17. Encourages players to make suggestions for ways of conducting practices.	1	2	3	4	5
18. Lets the team to set its own goals.	1	2	3	4	5
19. Lets the players try their own way even if they make mistakes.	1	2	3	4	5
20. Asks for the opinion of the players on important coaching decisions.	1	2	3	4	5
21. Allows players to work at their own speed.	1	2	3	4	5
22. Lets the players decide on the plays to be used in a game.	1	2	3	4	5
23. Works relatively independent of the players.	1	2	3	4	5
24. Does not explain his/her actions.	1	2	3	4	5
25. Refuses to compromise a point.	1	2	3	4	5
26. Keeps to himself/herself.	1	2	3	4	5
27. Speaks in a manner not to be questioned.	1	2	3	4	5
28. Helps the players with their personal problems.	1	2	3	4	5
29. Helps members of the team settle their conflicts.	1	2	3	4	5
30. Looks out for the personal welfare of the players.	1	2	3	4	5
31. Does personal favors for the players.	1	2	3	4	5
32. Expresses affection he/she feels for his/her players.	1	2	3	4	5
33. Encourages the player to confide in him/her.	1	2	3	4	5
34. Encourages close and informal relations with players.	1	2	3	4	5
35. Invites players to his/her home.	1	2	3	4	5
36. Compliments a player for her performance in front of others.	1	2	3	4	5
37. Tells a player when she does a particularly good job.	1	2	3	4	5
38. Sees that a player is rewarded for a good performance.	1	2	3	4	5
39. Expresses appreciation when a player performs well.	1	2	3	4	5
40. Gives credit when credit is due.	1	2	3	4	5