

RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND LEADERSHIP STYLE  
OF LEADERS IN FLORIDA AGRICULTURE

By

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To my Poppy and Granny, Bob and LaVada Wainscott, for their constant love and support.

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Abstract of Thesis Presented to the Graduate School  
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RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND LEADERSHP STYLE  
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By

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The purpose of the study was to identify the relationship between emotional intelligence and leadership style among the alumni ( $n=56$ ) of the Wedgworth Leadership Institute for Agriculture and Natural Resources (WLIANR).

The participants completed the Multifactor Leadership Questionnaire (MLQ) and the Bar-On EQi. The MLQ measured the preferred leadership styles utilized by the alumni including transformational, transactional, and passive/avoidant leadership styles. The Bar-On EQi measured the levels of emotional intelligence of the alumni. The dependent variables in this study were the leadership styles, the leadership style scales, total emotional intelligence, and the emotional intelligence scales. The independent variables were gender, age, and education.

Participants in this study reported the use of transformational leadership more than transactional or passive/avoidant leadership. The females in this study reported using transformational leadership slightly more than the males. Participants reported emotional intelligence levels comparable to the national norms. The males reported higher levels than the females. Additionally, the younger participants reported slightly higher levels of emotional intelligence than older age groups. There was little to no relationship found between leadership style and emotional intelligence within this sample of WLIANR alumni.

## CHAPTER 1 INTRODUCTION

### **Introduction to the Study**

Emotional intelligence involves how an individual manages his or her emotions, as well as his or her relationships with others. This concept of emotional intelligence is the basis for personal qualities such as self-confidence, self-motivation, perseverance, and knowledge of personal strengths and weaknesses (Cherniss & Adler, 2000). However, the current studies of emotional intelligence have been focused toward corporations and smaller businesses with little focus on the agricultural industry's influential leaders at the state level (Cavallo & Brienza, n.d.). This study utilized survey research to examine the relationship between emotional intelligence and leadership style of leaders in Florida agriculture, specifically those who have completed the Wedgworth Leadership Institute for Agriculture and Natural Resources (WLIANR).

With the importance of developing and maintaining relationships with others, individuals have been asked to increase their ability to understand and manage their own emotions as well as the emotions of others and the relationships found within organizations (Cherniss & Adler, 2000). An increase in leadership skills and abilities is becoming more important compared to the technical skills previously sought out by organizations (Cherniss & Adler, 2000; Goleman, 1998). Emotional intelligence and leadership style are two components of these social skills needed for an individual to become an effective leader (Bass & Riggio, 2006).

Emotional intelligence is briefly defined by Goleman, Boyatzis, and McKee (2002) as "how leaders handle themselves and their relationships" (p. 6). Emotional intelligence further encompasses clusters of different leadership competencies such as self-awareness, self-regulation, motivation, empathy, and social skills (Goleman, 1998). Boyatzis, Cherniss, and Elias (2000) also stated that an individual can change his or her personal level of emotional

intelligence over a period of time. Research focusing on the importance of emotional intelligence for organizations is becoming increasingly important within organizations such as Johnson & Johnson Company (Cavallo & Brienza, n.d.). Furthermore, organizations are becoming increasingly interested not only in the level of emotional intelligence of employees, but also the leadership styles used by the employees (Barbuto & Burbach, 2006).

Leadership style is the behavior pattern in which an individual leads others. There are many different types of leadership styles which have been categorized by previous researchers. Some of the most recent research on leadership style emphasizes the transformational leadership styles founded in Burns's (1978) work which include laissez-faire, transactional, and transformational leadership (Bass & Riggio, 2006).

As a step to begin creating leaders within agriculture, many states have created adult leadership programs specifically for individuals that are heavily involved in a specific state's agriculture sector. These leadership programs have been designed to expand the knowledge of adult leaders in agricultural and natural resources positions by engaging them in study and experiences (Carter & Rudd, 2000). These programs assume the skills, knowledge, and attitudes of a leader can be learned (Bolton, 1991). The Florida Leadership Program for Agriculture and Natural Resources, now known as the Wedgworth Leadership Institute for Agriculture and Natural Resources, was implemented on October 1, 1991 to assist leaders in Florida agriculture develop skills to achieve their leadership potential (Carter & Rudd, 2000). As of this writing, the program has completed six classes with approximately 170 alumni members. In regard to emotional intelligence of leaders in Florida agriculture, specifically the WLIANR alumni, the literature review found limited research in this specific area or on the relationship between emotional intelligence and leadership style.

## **Problem Statement**

The problem addressed by this study was the lack of knowledge surrounding the relationship between emotional intelligence and leadership style in leaders of Florida agriculture, specifically the WLIANR alumni. There has been little or no research on the emotional intelligence of leaders in agriculturally related organizations. Previous studies were developed to evaluate the abilities of leaders in other business, organizational, and industry settings and how those leaders' emotional intelligence capabilities affect their leadership style (Barbuto & Burbach, 2006; Moore, 2003; Weinberger, 2004). Several studies have begun to explore the relationship between leadership style - specifically transformational leadership in some studies - and emotional intelligence, yet there is still a gap in the knowledge base between these two leadership components, specifically within Florida agriculture (Barbuto & Burbach, 2006; Leban & Zulauf, 2004). The need for effective leadership in agriculture was originally identified by the Kellogg Foundation to increase the abilities of individuals involved in agriculture to better handle complex issues which may concern the industry and society as a whole (Howell, Weir, & Cook, 1982).

Barbuto and Burbach (2006) specifically focused on the relationship between emotional intelligence and transformational leadership of elected public officials. They further suggested that additional research is needed to ascertain the relationship between emotional intelligence and leadership. However, this research should be focused on a private sector organization so the findings can be more generalized (Barbuto & Burbach, 2006). Moore (2003) also recommended further research to determine the relationship between leader characteristics and leadership style and skills. Weinberger (2004) further stated that the amount of research on emotional intelligence is limited, and research that examines the relationship between emotional

intelligence and leadership is even more limited. All of these studies suggested there is a need for further research on the relationship between emotional intelligence and leadership style.

### **Purpose and Objectives of the Study**

The purpose of the study was to identify the relationship between emotional intelligence and leadership style among the alumni of the WLIANR.

The following research objectives were used to guide this investigation:

1. Describe the leadership styles among of WLIANR alumni.
2. Describe the current levels of emotional intelligence of the WLIANR alumni.
3. Identify the relationship between emotional intelligence and leadership style of the WLIANR alumni.

### **Significance of the Study**

This study explored the relationship between emotional intelligence and leadership style used by the alumni of the WLIANR. Determining this relationship helped further the understanding of the importance of emotional intelligence as a dimension of effective leadership. The research findings can also guide future leadership development programming for the WLIANR or other agricultural organizations in Florida. The study created awareness for the importance of maintaining relationships and developing leadership in the agricultural industry. Furthermore, this research explained the current leadership styles used by the WLIANR alumni and how their emotional intelligence levels helped them be successful in their organizations so future leaders will be able to learn from their leadership styles and emotional intelligence capabilities. Finally, this study contributed to the limited amount of research on emotional intelligence.

### **Definition of Terms**

For the purpose of this study, the following terms were defined:

1. Emotional intelligence - The composite set of capabilities which can be observed when a person demonstrates the competencies that constitute self-awareness, self-management, social awareness, and social skills at appropriate times and ways in sufficient frequency to be effective in the situation (Boyatzis, Goleman, & Rhee, 1999). In this study, emotional intelligence will be measured by the Bar-On EQ-i.
2. Leader - An individual that uses different styles and skills in a group or team to direct the group or team through a process in order to reach a common goal (Northouse, 2004).
3. Leadership - A process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2004).
4. Leadership style - The behavior of an individual who attempts to influence others by using both directive and supportive behaviors (Northouse, 2004). In this study, leadership style will be measured by the Multifactor Leadership Questionnaire developed by Bass and Avolio (2000).
5. Transformational leadership - A leadership style which focuses on the process whereby an individual stimulates and inspires followers to achieve extraordinary outcomes and, in the process, develop their own leadership capacity (Bass & Riggio, 2006; Northouse, 2004).
6. Transactional leadership - A leadership style which focuses on the exchanges of one thing for another that occur between leaders and their followers (Bass & Riggio, 2006; Northouse, 2004).
7. Laissez-faire leadership - A leadership style whereby the leader is avoidant or has an absence of leadership and is inactive (Bass & Riggio, 2006; Northouse, 2004).
8. Wedgworth Leadership Institute for Agriculture and Natural Resources - An adult leadership program designed to develop leadership capabilities of individuals between the ages of 25 and 45 years old involved in the Florida agricultural industry who will become increasingly involved in policy formation processes in Florida's agriculture, natural resources, and rural communities.

### **Limitations of the Study**

Several limitations affect the generalizability of this specific study. The study used the alumni from the WLIANR, therefore the findings are limited in generalizability to other organizations since this program is specialized in its structure and function. A second limitation is regarding the method of measuring emotional intelligence and leadership style. Self-reported assessments can be biased and can have an effect on determining the true relationship of emotional intelligence and leadership style of the leaders (Kobe, Reiter-Palmon, & Rickers,

2001). Another limitation was that the researcher did not collect data on previous leadership experiences which could have influenced the leadership styles and/or emotional intelligence levels.

There are several basic assumptions which must be stated with this study. The researcher assumed that participants answered any assessments and questionnaires truthfully. The researcher also assumed the participants had an understanding of leadership styles and some understanding of the constructs of emotional intelligence, such as interpersonal and intrapersonal skills, since they have participated in the WLIANR program. Seminars include topics on leadership style and other aspects of leadership, while other seminars require participants to utilize and improve their interpersonal skills.

### **Summary**

Chapter 1 provided the background and significance of the problem, as well as the purpose of the study. This study identified the relationship between emotional intelligence and leadership style among the alumni of the WLIANR. The study also investigated the influence of demographics on the level of emotional intelligence and leadership style utilized by the WLIANR alumni.

This research addressed the following specific objectives:

1. Describe the leadership styles of the WLIANR alumni.
2. Describe the current levels of emotional intelligence of the WLIANR alumni.
3. Identify the relationship between emotional intelligence and leadership style of the WLIANR alumni.

Chapter 2 addresses the theoretical framework and the conceptual framework for the study. Research on emotional intelligence, leadership styles, and adult leadership programs in agriculture, as well as the WLIANR will be discussed.

## CHAPTER 2 REVIEW OF THE LITERATURE

The purpose of this study was to identify the relationship between emotional intelligence and leadership style of the alumni of the WLIANR. The objectives of this study were to describe the leadership styles, levels of emotional intelligence, and the relationship between these levels of emotional intelligence and leadership styles of the alumni of the WLIANR.

This chapter presents a review of the literature concerned with leadership, emotional intelligence and leadership style. The chapter focuses on leadership development programs, emotional intelligence, leadership styles, and the effect of demographic variables on emotional intelligence and leadership style and presents the relevant theoretical and conceptual frameworks. The chapter is divided into the following major sections: leadership, emotional intelligence, and the interaction between emotional intelligence and leadership style.

### **Leadership**

Leadership is one of the most studied, yet least understood subjects (Bennis & Nanus, 1985). There are many definitions for the term leadership with little consensus on a definite/specific definition among the experts. According to Bass (1990), “there are almost as many different definitions of leadership as there are persons who have attempted to define the concept” (p. 11). However, even without one specific definition, leadership remains an important topic of discussion in all disciplines and fields of studies.

The following examples demonstrate the various definitions of leadership that have been developed over the years. Bass (1990) defined leadership as “an interaction between two or more members of a group that often involves a structuring or restructuring of the situation and the perceptions and expectations of the members” (p. 19). Kouzes and Posner (2002) stated that leadership is “a relationship between those who aspire to lead and those who choose to follow”

(p. 20). Leadership is also defined as a “social influence process shared among all members of a group” (Hughes, Ginnett, & Curphy, 2006). Northouse (2004) defined leadership as “a process whereby an individual influences a group of individuals to achieve a common goal” (p. 3).

Studies have shown that leadership has a profound influence on an organization (Bass, 1990). Leaders can make a difference in whether an organization is successful or fails. Research shows the skills of leadership can be learned (Adair, 1984). Taylor (1962) felt that coaching people who demonstrate leadership qualities will help them to reach their leadership potential. Therefore, organizations, businesses, and many industries focus on the development of leadership abilities in their employees in order to develop leaders that will lead the organization to success.

Leadership development programs in agriculture and natural resources are developed to increase the level of awareness for leaders involved in these industries by engaging them in study and experiences. The first documented agricultural leadership development program began in 1965 at Michigan State University’s College of Agriculture when the Kellogg Foundation provided a grant to start the program (Howell et al., 1982). Other programs were then developed in California and Pennsylvania. Each of these programs were developed separately yet consisted of workshops and travel seminars which focused on the social, economic, cultural, and political dimensions of public problems and how the public policies are developed. Furthermore, these programs also focused on developing individuals’ communication skills, problem-solving skills, and increasing their knowledge of governmental processes (Howell et al., 1982).

Currently, there are 30 programs in the U. S., with three more emerging, and six international programs in Australia, U.K. Scotland, U.K. Nuffield, Canada, Ontario, and New Brunswick (Abington-Cooper, 2005). More than half of these programs in place were initiated

without support from the Kellogg Foundation (Abington-Cooper, 2005). The total support garnered by 28 reporting U.S. agriculture/rural leadership programs in 2001 was more than \$111 million. The most typical financial support comes from corporate grants, alumni donations, university grants, state appropriations, and foundation grants. By 2001, there were more than 7,500 alumni of these programs in the U. S. (Foster, 2001). The common experiences of the U.S. programs include seminars throughout the home state of the program, a national trip to Washington, D.C. and another location within the U.S., as well as an international trip to another country.

These agricultural leadership programs were originally developed for farmers and persons employed in occupations and professions related to agriculture. The programs were developed because it was felt that these individuals had the technical knowledge, but often lacked the background in the social sciences and humanities to deal with issues related to the agriculture and natural resources industries effectively (Howell et al., 1982). Program characteristics which were determined to be important included “1) an educational program design with ‘intensive’ and ‘extensive’ dimensions that emphasized the analysis of public issues, 2) participants who had leadership potential and a concern for agricultural and/or public affairs, and 3) staff and involved institutions that had a strong commitment to the attainment of program goals” (Howell et al., 1982, p. 51).

Although the W.K. Kellogg Foundation no longer fully sponsors state agriculture leadership development programs, the Foundation still has basic assumptions about leadership in the 21<sup>st</sup> century:

- “Leadership must be vision driven and value-based;
- Leadership must be transforming—focused on new ways of being;
- Leadership will be more about the individual’s contribution to collective action;

- Collective leadership can only be expressed through vision, values, and purposes and confidence in others as leaders;
- Leadership is relational and contextual;
- Leaders must be more attentive to global implications of local decisions, and vice versa;
- Leaders in the 21<sup>st</sup> century will not change society as much as be changed by society” (Foster, 2001, p. 2).

The Florida Leadership Program for Agriculture and Natural Resources began on October 1, 1991 (Carter & Rudd, 2000). The program later became the WLIANR. The target audience for this program includes individuals that have shown leadership potential involved in industries related to private sector Florida agriculture and natural resources. The selection process for participants includes three phases: nomination, application, and interview. From this process, up to 30 individuals are chosen to participate in the program. After the selection process, the participants attend 11 seminars over a 22-month period. The first year of the program focuses on local and state agriculture and natural resource issues. The second year focuses on national and international issues. Each of these seminars incorporates the objectives of the program. The program developed six objectives:

- To prepare potential leaders to assume greater leadership responsibilities in their organizations, industries, and communities.
- To assemble individual networks composed of class members, alumni, and program resources for the purpose of developing future industry, organizational, civic and political leaders.
- To create strategic alliances and build strong linkages within and across Florida’s agriculture and natural resources sectors.
- To analyze complex issues facing individuals interested in areas related to agriculture, natural resources and Florida’s communities.
- To apply inner-personal skills so as to develop a better understanding of people—themselves, fellow citizens and their environment as to more effectively work with individuals from diverse backgrounds.

- To create an understanding of social, economic and political systems in which people function and how to work within these systems to effectively bring about change (Carter, 2007).

### **Transformational Leadership Theory**

The Transformational Leadership Theory is often related to charismatic leadership which is reflected in the leader's personal characteristics such as being dominant, self-confident, and having a strong sense of his or her own moral values (Bass & Riggio, 2006; Jones, 2006; Northouse, 2004). However, charisma is only a portion of transformational leadership as transformational leaders do more in order to achieve superior results (Bass & Riggio, 2006). Transformational leadership behaviors are concerned with "emotions, values, ethics, standards, and long-term goals" which allow the leader to influence his or her followers more effectively (Northouse, 2004, p. 169). These behaviors involve four components: 1) idealized influence [attributed and behavioral], 2) inspirational motivation, 3) intellectual stimulation, and 4) individualized consideration (Bass & Riggio, 2006).

1. Idealized influence - "Attributed: the social charisma of the leader, focusing of whether or not the leader is perceived as competent, self-confident, and committed to higher-order ideals and ethics. Behavioral: the actions of the leader related to values, beliefs, and mission" (Jones, 2006, p. 35).
2. Inspirational motivation - "leader's behaviors, including articulating appealing visions, focusing followers' efforts, and modeling appropriate behaviors to energize followers" (Jones, 2006, p. 36).
3. Intellectual stimulation - "behaviors exhibited by the leader that assist the followers to view problems and issues they face from a new perspective" (Jones, 2006, p. 36).
4. Individualized consideration - "the ability of the leader to be supportive and to show concern for his or her followers' needs and well-being. Giving encouragement and compliments to improve the followers' self-confidence falls into this component" (Jones, 2006, p. 36).
5. Transformational leadership focuses on the process whereby an individual stimulates and inspires followers to achieve extraordinary outcomes and, in the process, develop their own leadership capacity (Bass & Riggio, 2006; Northouse, 2004).

Avolio, Waldman, and Yammarino (1991) developed a model of transformational leadership which identified four characteristics to stimulate and engage followers. These transformational leadership characteristics include:

1. Individual consideration - gives personal attention to others, making each individual feel uniquely valued.
2. Intellectual stimulation - actively encourages a new look at old methods, stimulates creativity, encourages others to look at problems and issues in a new way.
3. Inspirational motivation - increases optimism and enthusiasm, communicates high expectations, and points out possibilities not previously considered.
4. Idealized influence - provides vision and a sense of purpose; elicits respect, trust, and confidence from followers.

Transformational leaders engage followers by using at least one or more of the previous four characteristics in their leadership techniques. The transformational leader seeks to engage the follower and manage by inspiration (Abington-Cooper, 2005).

Transformational leadership is a leadership style that focuses on the process whereby an individual stimulates and inspires followers to achieve extraordinary outcomes and, in the process, develop their own leadership capacity (Bass & Riggio, 2006; Northouse, 2004). In organizational settings, the transformational leadership style has been found to be most effective and to promote greater organizational performance compared to the transactional leadership style (Lowe & Kroeck, 1996). Furthermore, transformational leadership has been found to be more emotion-based than transactional leadership (Yammarino & Dubinsky, 1994).

Tichy and DeVanna (1986) provide a different definition of transformational by stating that “transformation is about change, innovation, and entrepreneurship” (p. viii). Yukl (1989) describes transformational leadership as a process of micro-level and macro-level influence. At the micro-level, the transformational leader takes charge of the social systems and reforms the

organization. While at the macro-level, the leader focuses on the personalities in the organization to facilitate change at an interpersonal level (Yukl, 1989). Barker (1994) suggests that transformational leaders are interested in collective results, not maximum benefit for individual gain which is based on interaction and influence, not directive power acts.

Transactional leadership is a leadership style that focuses on the exchanges of one thing for another that occur between leaders and their followers (Bass & Riggio, 2006; Northouse, 2004). The factors of transactional leadership are contingent reward and management-by-exception. This type of leadership occurs when the leader rewards or disciplines the follower with constructive and corrective transactions, depending on the performance of the follower (Avolio & Bass, 2004). Leaders utilizing the transactional leadership style use rewards that are material, such as a bonus, or makes corrective transactions by rearranging followers to fit the situation (Bass & Riggio, 2006). While transactional leadership is immature and unrefined, it is still a foundation to build on to become transformational (Bass & Riggio, 2006).

Laissez-faire leadership (also referred to as passive/avoidant leadership) is a leadership style whereby the leader is avoidant or has an absence of leadership and is inactive (Bass & Riggio, 2006; Northouse, 2004). Opposite from transactional leadership, laissez-faire does not utilize a transaction of any kind. The leader does not make decisions, actions are delayed, responsibilities are often ignored and authority is unused (Bass & Riggio, 2006). The leader using this style takes a hands-off approach by disregarding any responsibilities to followers.

The Multifactor Leadership Questionnaire (MLQ) developed by Avolio and Bass (2004) has evolved over the past 25 years and measures individual leadership styles as being transformational, transactional, passive/avoidant, and outcomes of leadership. This assessment has been utilized among various populations including the “military, government, education,

manufacturing, high technology, church, correctional, hospital, and volunteer organizations” (Avolio & Bass, 2004). The transformational leadership style includes the subscales of idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation and individualized consideration. The transactional leadership style includes contingent reward and management-by-exception (active), while the passive/avoidant style includes management-by-exception (passive) and laissez-faire. Contingent reward clarifies expectations and offers recognition when goals are achieved. When using management-by-exception (active) the leader specifies the standards for compliance, as well as what is considered dissatisfactory performance, and may also punish followers for not meeting these standards. Management-by-exception (passive) is similar to laissez-faire in that leaders fail to take action until problems become serious. Leaders will take on the belief of “If it ain’t broke, don’t fix it.” The outcomes of leadership include extra effort, effectiveness, and satisfaction (Avolio & Bass, 2004).

Transformational, transactional, and passive/avoidant leadership styles have been well-researched and developed over the past 25 years. Many researchers have determined that behaviors related to the transformational leadership style are the most desirable, while the passive/avoidant leadership behaviors are the least desirable (Avolio & Bass, 2004). However, all of these leadership styles are important in the development of an individual to reach his or her full potential as a leader.

### **Emotional Intelligence**

The study of emotional intelligence is a more recent concept which is defined as a composite set of capabilities which can be observed when a person demonstrates the competencies that constitute self-awareness, self-management, social awareness, and social skills at appropriate times and ways in sufficient frequency to be effective in the situation (Boyatzis et al., 1999). Each of these competencies further addresses and evaluates different leadership

competencies more in depth (Boyatzis et al., 1999). Goleman (1995) defines emotional intelligence as “abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one’s moods and keep distress from swamping the ability to think; to empathize and to hope” (p. 34). Boyatzis et al. (2000) and Goleman (1995) also stated that an individual can change his or her level of emotional intelligence by learning and improving the crucial emotional competencies over a period of time. Emotional intelligence has recently been said to be a critical component for leaders to be effective in their organizations (Cherniss & Adler, 2000).

Emotional intelligence consists of five competencies each with a set of subscales. These competencies include: 1) intrapersonal, 2) interpersonal, 3) adaptability, 4) stress management, and 5) general mood (Mandell & Pherwani, 2003).

1. Intrapersonal - A scale that assesses the inner self.
2. Interpersonal - A scale that assesses the characteristics of being responsible and dependable with social skills.
3. Adaptability - A sign of how well individuals are able to cope with environmental demands and pressures.
4. Stress management - A sign of how an individual deals with stress.
5. General mood - An indicator of an individual’s ability to enjoy life.

The different competencies incorporate leadership characteristics such as emotional awareness, self-confidence, self-control, innovativeness, commitment, and empathy. These characteristics have been found to be important in an individual’s leadership ability (Goleman, 1998). Each of these subscales represents a small portion of the overall emotional intelligence of an individual. Table 2-1 demonstrates the competencies and the corresponding subscales used by Bar-On (2004). Bar-On (2004) defines the subscales as follows:

Table 2-1. Emotional intelligence competencies and subscales.

Intrapersonal	Interpersonal	Adaptability	Stress Management	General Mood
Self-regard Emotional self-awareness Assertiveness Independence Self-actualization	Empathy Social responsibility Interpersonal relationship	Reality testing Flexibility Problem solving	Stress tolerance Impulse control	Happiness Optimism

1. Self-regard is the ability to respect and accept oneself as basically good.
2. Emotional self-awareness is the ability to recognize one's feelings.
3. Assertiveness is the ability to express feelings, beliefs, and thoughts and defend one's rights in a nondestructive manner.
4. Independence is the ability to be self-directed and self-controlled in one's thinking and actions and to be free of emotional dependency.
5. Self-actualization pertains to the ability to realize one's potential capacities.
6. Empathy is the ability to be aware of, to understand, and to appreciate the feelings of others.
7. Social responsibility is the ability to demonstrate oneself as a cooperative, contributing, and constructive member of one's social group.
8. Interpersonal relationship skill involves the ability to establish and maintain mutually satisfying relationships that are characterized by intimacy and by giving and receiving affection.
9. Reality testing is the ability to assess the correspondence between what is experienced and what objectively exists.
10. Flexibility is the ability to adjust one's emotions, thoughts, and behavior to changing situations and conditions.
11. Problem solving aptitude is the ability to identify and define problems as well as to generate and implement potentially effective solutions.
12. Stress tolerance is the ability to withstand adverse events and stressful situations without 'falling apart' by actively and positively coping with stress.
13. Impulse control is the ability to resist or delay an impulse, drive, or temptation to act.
14. Optimism is the ability to look at the brighter side of life and to maintain a positive attitude even in the face of adversity.

15. Happiness is the ability to feel satisfied with one's life, to enjoy oneself and others, and to have fun (p. 15-18).

There are multiple assessments that can be used to measure emotional intelligence. Each of these has assessments has developed different areas of emotional intelligence to be measured. These areas are all consistent in the concepts, but use different terminology when describing the components of emotional intelligence. Due to the differences, several of the assessments are discussed. Table 2-2 further illustrates these assessments and the components of each.

For this study the Bar-on EQ-i was utilized as this assessment is one of the longer-lived and most widely used instruments (Brown et al., 2005). Another assessment is the Swinburne University Emotional Intelligence Test (SUEIT) which scores emotional intelligence on five factors: emotional recognition and expression, emotions direct cognition, understanding of emotions external, emotional management, and emotional control (Gardner & Stough, 2005). The Mayer-Salovey-Caruso Emotional Intelligence Ability Test (MSCEIT) is another assessment which measures emotional intelligence on the following subscales: self-awareness, emotional resilience, motivation, interpersonal sensitivity, influence, decisiveness, and conscientiousness and integrity (Leban & Zulauf, 2004). The Hay's Emotional Competency Inventory (ECI) measures emotional intelligence using self-awareness, self-management, social awareness, and social skills as the four subscales (Watkin, 2000). Additionally, the Trait Meta-Mood Scale measures emotional intelligence with three factors, attention to feelings, clarity of feelings, and mood repair (Downey, Papageorgiou, & Stough, 2006). Finally, the assessment developed by Carson and Carson (1998) utilizes the following subscales: empathetic response, mood regulation interpersonal skills, internal motivation, and self-awareness. The following table illustrates the multiple assessments as well as the subscales used by each (Table 2-2).

Table 2-2. Emotional intelligence assessments.

	Bar-On EQi	Hay's ECI	SUEIT	TMMS	MSCEIT	Carson et al.
Competencies Measured	Intrapersonal	Self-awareness	Emotional recognition & expression	Attention to feelings	Perceiving emotions	Empathetic response
	Interpersonal	Self-management	Understanding emotions external	Clarity of feelings	Facilitating thought	Mood regulation
	Adaptability	Social-awareness	Emotions direct cognition	Mood repair	Understanding emotions	Interpersonal skills
	Stress management	Social skills	Emotional management		Managing emotions	Internal motivation
	General mood		Emotional control			Self-awareness

### Demographics of Emotional Intelligence and Leadership Style

When discussing leaders and leadership, it is important to discuss the influence of the demographics on the study. Numerous studies have been conducted in the field of leadership which address the influence of demographics on leadership style, emotional intelligence and the relationship between these two variables. The independent variables involved in this study include gender, age, and education.

#### Gender

Research on gender differences in emotional intelligence has been limited. While Goleman (1995) considered males and females to each have their own strengths and weaknesses for emotional intelligence capacities, other studies have indicated that women score higher on measures of emotional intelligence than men (Mayer, Caruso, & Salovey, 1999; Mayer & Geher, 1996). Mandell and Pherwani (2003) also found the emotional intelligence levels of female managers and supervisors of mid-sized to large organizations in the northeastern section of the U. S. were higher than those of the male managers and supervisors. In the study conducted by Cavallo and Brienza (n. d.), women received higher peer ratings than men in the emotional competencies consisting of emotional self-awareness, conscientiousness, developing others,

service orientation, and communication. In the supervisor ratings, women received higher ratings in the areas of adaptability and service orientation, but in the direct report ratings men received higher ratings in the competency which measured them as a change catalyst (Cavallo & Brienza (n. d.).

However, even though there are differences between males and females, researchers show that the overall emotional intelligence scores do not differ. Only when looking at specific competencies will there be significant differences in the scores (Cavallo & Brienza, n. d.). This is supported by research utilizing Bar-On's (2004) inventory where no differences were found in the overall emotional intelligence. However, when focusing on specific components there were small differences. Females show stronger interpersonal skills, while males have a higher intrapersonal capacity, are more adaptable, and score higher in stress management. Females are also more aware of their emotions, demonstrate more empathy, and score higher interpersonally and socially (Bar-On, 2004).

Several studies have been conducted to determine if male or female leaders are more transformational in their leadership style. Bass and Riggio (2006) state that there is anecdotal, research, and meta-analytic evidence that show women have a higher tendency to use a more transformational leadership style in the leadership positions they hold. Again, Mandell and Pherwani (2003) found the transformational leadership scores of females to be slightly higher than those of the males. Mandell and Pherwani's (2003) research is supported by other studies that found females more likely to use transformational leadership than males and that males are more likely to use transactional leadership as their preferred leadership style (Druskat, 1994; Eagly & Johnson, 1990; Rosener, 1990). Eagly, Johannesen-Schmidt, and van Engen (2003) also found that female leaders utilize transformational behaviors more than male leaders and also

exhibited contingent reward behaviors, a component of transactional leadership. Male leaders used other aspects of transactional leadership such as active and passive management by exception (Eagly et al., 2003).

### **Age**

Studies have been conducted to determine the influence of age on the individual's level of emotional intelligence. These studies have shown that older individuals show higher levels of emotional intelligence because the different competencies can be developed over time, changed throughout life, and improved through training and development programs (Gardner & Stough, 2002). Bar-On (2004) also found differences in emotional intelligence based on age in a population of 3,831 North Americans. While the differences were small, individuals in the 30 to 39 years of age, 40 to 49 years of age, and 50 or over years of age scored higher levels of emotional intelligence than those individuals under 20 years of age and 20 to 29 years of age. These results are consistent throughout the subscales of the Bar-On EQ-i (Bar-On, 2004).

Research has also been conducted on the relationship between age and leadership style in many organizations. Holder (1990) found that age was not significantly related to the preferred leadership style of Extension faculty and middle managers. This is also supported by Haynes (1997) who determined that age did not affect participants in his study.

### **Education**

Educational background is a variable which has received considerably less attention than other demographic variables within both emotional intelligence and leadership style literature. Higher levels of education have been shown to be associated with greater critical thinking ability and open-mindedness (Rothert, 1969). There is little research in the area of education and emotional intelligence or leadership style.

## **Interaction between Emotional Intelligence and Leadership Style**

Research studies have been conducted on the relationship between emotional intelligence and leadership styles within many organizations, industries, and businesses. However, there is no research on the relationship within the field of agriculture, specifically within Florida agriculture and the WLIANR. Among the research that has been conducted, there has been a positive relationship between many of the components of emotional intelligence and leadership style while other components have shown either a negative or no relationship at all (Gardner & Stough, 2002).

Bass and Riggio (2006) show emotional intelligence is closely correlated to transformational leadership in various studies. Ashforth and Humphrey (1995) suggest that these two leadership qualities are correlated as transformational leadership is a process of evoking and managing the emotions of followers which is similar to the concepts behind emotional intelligence. Mandell and Pherwani (2003) found a significant relationship between emotional intelligence and transformational leadership style when assessing managers and supervisors of mid-sized to large organizations. This study further states that the transformational leadership style of managers could be predicted from their emotional intelligence scores which is important for effective leadership (Goleman, 1998; Mandell & Pherwani, 2003).

Barling, Slater, and Kelloway (2000) found emotional intelligence to be positively associated with three aspects of transformational leadership. These include idealized influence, inspirational motivation, and individualized consideration. Barling et al. (2000) also found management-by-exception and laissez-faire management were not associated with emotional intelligence. Gardner and Stough (2001) also found the five components of emotional intelligence to positively correlate with all of the components of transformational leadership. Table 2-3 presents the linkage between emotional intelligence and transformational leadership as

described by Leban and Zulauf (2004). Figure 2-1 presents the model used to represent the relationship between emotional intelligence and leadership style.

Table 2-3. Linkage between emotional intelligence and transformational leadership (Leban & Zulauf, 2004).

Emotional Intelligence factors (Dulewicz & Higgs, 1999)	Transformational Leadership factors (Alimo-Metcalfe, 1999)
Self-awareness Emotional resilience Motivation Interpersonal sensitivity Influence Decisiveness Conscientiousness and integrity	Individual consideration Decisive, achieving, determined Involves other in values Networks Change management Accessible Intellectual versatility (integrity/openness)

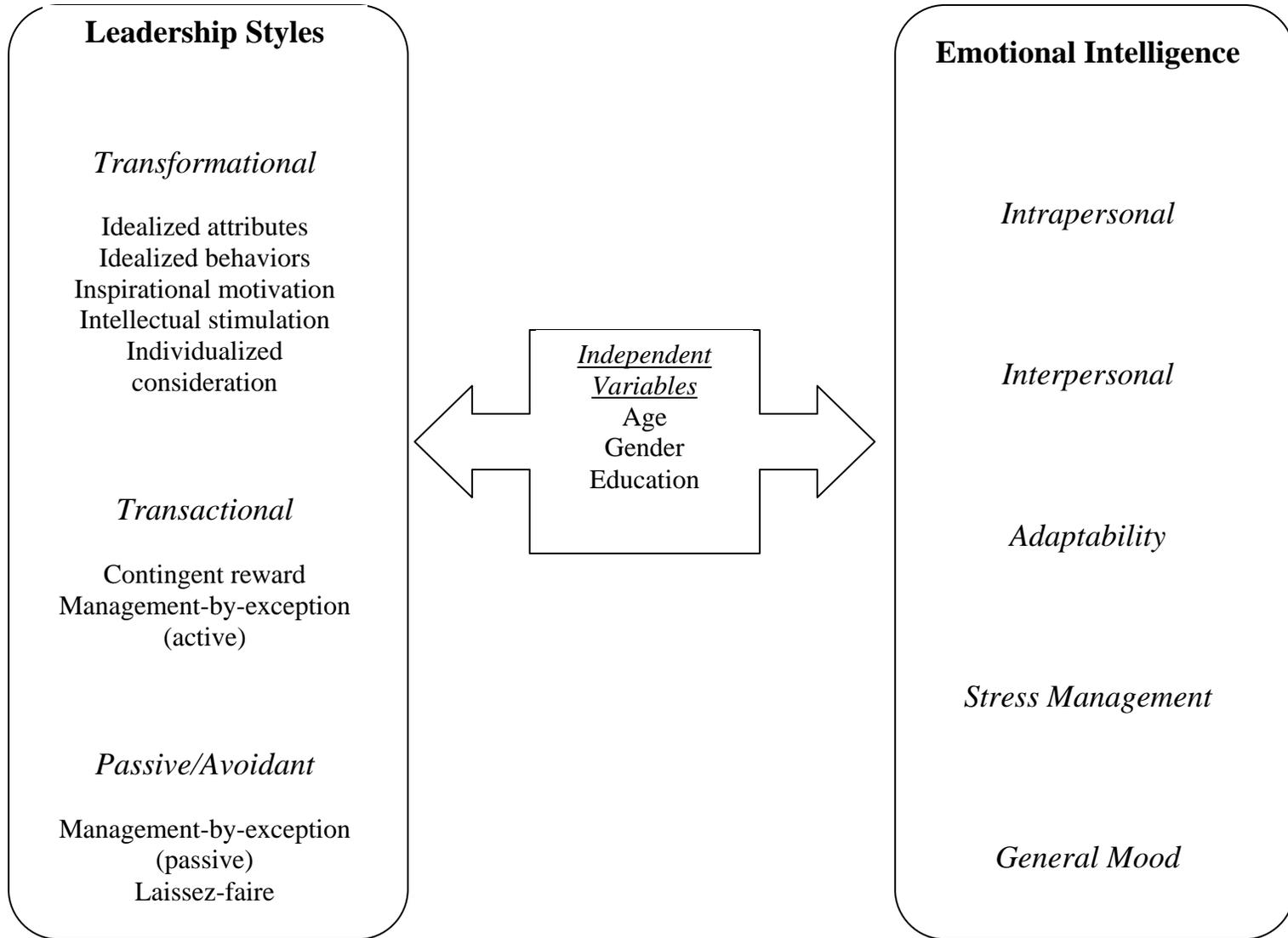


Figure 2-1. Model of the Relationship between Emotional Intelligence and Leadership Style.

## **Summary**

Chapter 2 discussed the research on emotional intelligence, leadership styles, adult leadership programs in agriculture, as well as the WLIANR. This chapter also addressed the theoretical framework and the conceptual framework for the study.

Chapter 3 will describe the methodology used to answer to the research questions. Chapter 3 will also address the research design, population, instrumentation development, data collection, and analysis.

## CHAPTER 3 METHODOLOGY

Chapter 1 described the importance of leadership in agriculture and natural resources and provided the background for studying emotional intelligence and leadership style of leaders in Florida agriculture. Chapter 1 also explained the significance of the study and identified its purpose. The chapter concluded by defining key terms and stating the assumptions and limitations of the study.

Chapter 2 presented a review of the literature concerned with leadership, emotional intelligence and leadership style. The chapter focused on leadership development programs, emotional intelligence, leadership styles, and the effect of demographic variables on emotional intelligence and leadership style and presents the relevant theoretical and conceptual frameworks. The literature contains a limited amount of research on the relationship between leadership style and emotional intelligence, thus further establishing the need for additional research.

This chapter describes the methodology used to answer the research questions presented in the study. This chapter will also address the research design, population, instrumentation development, data collection, and analysis.

The following research objectives were addressed:

1. Describe the leadership styles of the WLIANR alumni.
2. Describe the current levels of emotional intelligence of the WLIANR alumni.
3. Identify the relationship between emotional intelligence and leadership style of the WLIANR alumni.

The purpose of this quantitative study was to identify the relationship between emotional intelligence and leadership style of the alumni of the WLIANR. The dependent variables in this

study were emotional intelligence levels and leadership style. The independent variables in this study were gender, age, and education.

### **Research Design**

This study utilized census survey research (Ary, Jacobs, Razavieh, & Sorensen, 2006). The survey instruments were developed by previous researchers and have been utilized in many studies (Barbuto & Burbach, 2006; Brown, Bryant, & Reilly, 2006). Census survey research is a method of gathering data by asking a series of questions to the entire population being studied (Ary et al., 2006). According to Ary et al. (2006) a census study of intangibles such as success, motivation, achievement, leadership, and other psychological related assessments can be used.

The validity of the questionnaires has been established through previous research. The Multifactor Leadership Questionnaire has been validated more than ten times since its initial use by leadership experts (Bass & Avolio, 2000). However, according to Ary et al. (2006) a study will produce more valid responses if the individuals participating in the study have an interest in the topic and/or are informed about it. To address this issue, the assessments were approved by the Program Director of the WLIANR, as well as the research study being approved by the Board of Directors of the WLIANR Alumni Association. Another threat to validity was non-response (Ary et al., 2006). While most of the alumni had working e-mail addresses, many of them do not use the e-mail address or do not have the technical skills to use the e-mail address.

### **Population**

The population of this study consisted of all alumni members of the WLIANR since the inception of the leadership program. All attempts were made to obtain e-mail addresses from all of the alumni members. For the purpose of this study, the alumni members with a working e-mail address were defined as graduates of the WLIANR ( $N=133$ ). In order to participate in the WLIANR, individuals were required to meet certain criteria. This included being a citizen of the

U. S. as well as a resident of the State of Florida for one year prior to the application deadline.

The participants were required to earn a substantial percentage of his/her income from the private sector of Florida's agriculture, natural resources, and/or related areas. Participants were also required to be between the ages of 25 and 45. Finally, the participants were required to demonstrate strong leadership potential.

### **Procedure**

Prior to the collection of data, a proposal to conduct the study was submitted to the University of Florida Institution Review Board (IRB) for non-medical projects (IRB-02). The proposal was approved (Protocol #2007-U-532). A copy of the informed consent form that was sent to the participants was submitted to the IRB along with the proposal. The informed consent form described the study, the voluntary nature of participation, and informed participants of any potential risks and/or benefits associated with participating in the study.

Once approval to conduct this study was granted by the IRB, data was collected by the researcher starting November 2007. Contact information for the alumni members was obtained from the WLIANR Alumni Association directory. A personalized e-mail letter was sent to each alumni member on November 26, 2007 (See Appendix A). The purpose of the letter was to inform the participant that two web-based survey instruments would be sent to them via e-mail and their participation was greatly appreciated. This was the pre-notice letter that should be sent before sending the instruments according to Dillman (2000). The second contact was made on December 3, 2007, seven days after the pre-notice letter was mailed (See Appendix A). During this second contact with the alumni members, the web-based surveys were sent to the participants via electronic mail. On December 11, 2007 the third contact was sent out to only those included in the population that had not yet responded (See Appendix A). A one week window is suggested by expert survey researchers (Dillman, 2000). Due to the holidays, an

additional contact was made on January 2, 2008 (See Appendix A). On January 10, 2008 the fifth contact was sent out only to the non-responding participants by way of e-mail (See Appendix A). The electronic survey was closed on January 18, 2008. Once the responding data was collected, it was then analyzed by the researcher.

### **Instrumentation**

Two questionnaires were used to collect data for this study. The Bar-On EQi was used to measure the emotional intelligence levels of the WLIANR alumni members developed by Reuven Bar-On (2004). The second instrument was the Multifactor Leadership Questionnaire (MLQ) designed by Bass and Avolio (1995). The MLQ was used to determine the degree to which each alumni member uses transformational, transactional, and/or laissez-faire leadership styles. Both the Bar-On EQi and MLQ have had their reliability and validity established through previous research (Avolio & Bass, 2004; Bar-On, 2004). The demographic variables were obtained when the participants applied to participate in the WLIANR; therefore the demographic data was available through the program director.

#### **Multifactor Leadership Questionnaire**

The MLQ is based on the Full Range Leadership Model developed by Bass and Avolio (2004). The survey consists of 45 items that measure a full range of leadership behaviors and takes approximately 15 minutes to complete. The MLQ measures leadership behaviors used to determine leadership styles, ranging from transformational leadership, transactional leadership, and/or passive/avoidant leadership (Jones, 2006). The MLQ was used to determine which leadership style is demonstrated by each of the alumni members of the WLIANR. The MLQ was purchased for use from an organization entitled Mind Garden. Participants selected a number rating for his or her self-perceived leadership behavior by responding on a Likert scale ranging

from 0 (not at all) to 4 (frequently, if not always). The reliability of the MLQ, as reported by Bass and Avolio (2000) for each leadership factor, ranges from 0.74 to 0.91.

### **Bar-On EQi**

The Bar-On EQi is based on the research of Reuven Bar-On (Bar-On, 2004). This survey consists of 125 items that measure the total emotional intelligence as well as the subscales of emotional intelligence which include: interpersonal, intrapersonal, stress management, adaptability, and general mood. The Bar-On EQi was used to determine the current levels of emotional intelligence demonstrated by each of the alumni members of the WLIANR. Participants selected a number rating for his or her self-perceived behaviors by responding on a Likert scale ranging from 1 (very seldom true or not true of me) to 5 (very often true of me or true of me). The validity of the results was tested based on the inconsistency index score provided by Multi-Health Systems (MHS) in the scored data set. MHS is the organization in which the assessment was purchased. The reliability of the Bar-On EQi was examined by using the Cronbach alpha which scored an average of 0.76 for all of the subscales (Bar-On, 2004).

### **Data Analysis**

Data was analyzed using the SPSS 16.0 for Windows statistical package. Nonresponse should be considered and addressed in survey-based research studies because the potential for nonresponse error exists in all survey research (Dillman, 2000). Based on Dillman's recommendation to always address nonresponse error, a comparison of early to late respondents was utilized. Lindner, Murphy, and Briers (2001) recommended late respondents "be defined operationally and arbitrarily as the later 50% of respondents" (p. 242). This study defined early respondents (n=28) as the first 50% who responded to each survey and late respondents (n=28) as the latter 50% of respondents to each survey. Early respondents were compared to late respondents on the basis of the key variables of interest, including total emotional intelligence

scores, emotional intelligence scale scores, and transformational, transactional, and passive/avoidant leadership style scores.

With respect to the main variables measured in this study, there were no significant differences between early and late respondents as demonstrated by an independent samples t-test for each instrument (Table 3-1 and Table 3-2).

Table 3-1. Emotional Intelligence T-test for Significant Differences Between Early and Late Respondents. (*n*=56)

Key Variable	Early Respondents		Late Respondents		t Value	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Total Emotional Intelligence	101.86	12.12	99.36	9.81	0.85	0.400
Intrapersonal	105.25	12.30	99.93	10.99	1.71	0.094
Interpersonal	101.04	12.81	96.36	8.54	1.61	0.114
Stress Management	98.18	14.81	101.68	11.31	-0.99	0.325
Adaptability	100.14	11.87	98.86	11.86	0.41	0.687
General Mood	103.00	13.99	101.82	7.80	0.39	0.699

Table 3-2. Leadership Style T-test for Significant Differences Between Early and Late Respondents. (*n*=56)

Key Variable	Early Respondents		Late Respondents		t Value	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Transformational leadership	2.95	0.53	3.06	0.42	-0.82	0.414
Transactional leadership	2.10	0.44	2.28	0.52	-1.36	0.179
Passive/avoidant leadership	0.98	0.50	0.78	0.42	1.63	0.110

Prior to any inferential analysis, variables were described using descriptive statistics. Inferential statistics were then used to gain a better understanding of the data. A one-way analysis of variance (ANOVA) was used to assess the relationships between the independent variables and dependent variables (emotional intelligence and leadership style). This is a collection of statistical models, and their associated procedures, in which the variance is partitioned into components due to the different explanatory variables (Agresti & Finlay, 1997). Finally, Pearson Correlation was used to measure possible associations among the dependent variables as well as strength and relationship between the variables (Agresti & Finlay, 1997).

## **Summary**

This chapter described the method that was used to examine the emotional intelligence and leadership style of leaders in Florida agriculture. Chapter 3 also discussed the research design, population, instrumentation, procedures, and data collection and analysis. The design of this research was a census population survey study. The dependent variables in this study were emotional intelligence and leadership style. The independent variables in this study were gender, age, and education. The reliability and validity of this study were addressed. Finally, a summary and description of the analysis was discussed.

Chapter 4 will provide specific information on data analysis procedures and the results received from the two questionnaires.

## CHAPTER 4 RESULTS

Chapter 1 described the importance of leadership in agriculture and natural resources and provided the background for studying emotional intelligence and leadership style of leaders in Florida agriculture. Chapter 1 also explained the significance of the study and identified its purpose. The chapter concluded by defining key terms and stating the assumptions and limitations of the study.

Chapter 2 presented a discussion of the theoretical and conceptual frameworks that guided this study. Chapter 2 focused specifically on research related to leadership, leadership programs in agriculture and natural resources, leadership styles, emotional intelligence, and other variables related to the study. The literature contains a limited amount of research on the relationship between leadership style and emotional intelligence, thus further establishing the need for additional research.

Chapter 3 described the research methodology utilized to accomplish the objectives of the study. Specifically, chapter 3 described the research design, population, procedure, instrumentation, and data analysis procedures.

This chapter presents the findings of the study, beginning with a description of the population and the findings for each of the objectives.

The population of this study consisted of the 133 alumni of the WLIANR. At the conclusion of the data collection procedures via the e-mail instruments outlined in Chapter 3, 56 (42.1%) graduates responded to the survey. The gender of the respondents was 71.4% ( $n=40$ ) male and 28.6% ( $n=16$ ) female (Table 4-1). The average age of the respondents was 43, with the youngest respondent of 29 and the oldest of 59. In the age category of 28 to 37 years, there were 13 respondents ( $n=13$ ). There were 26 respondents ( $n=26$ ) in the 38 to 47 years category, 15

respondents ( $n=15$ ) in the 48 to 57 years category, and two respondents ( $n=2$ ) in the 58 years and older category (See Table 4-2). In regard to the respondents' educational background, 17.9% ( $n=10$ ) had some college, 60.7% ( $n=34$ ) had a bachelors degree, 1.8% ( $n=1$ ) had some graduate school, and 19.6% ( $n=11$ ) had a graduate degree (Table 4-3).

Table 4-1. Number of WLIANR Graduates and Survey Respondents by Gender. ( $N=133$ )

Gender	Number of WLIANR Graduates	Number of Respondents from WLIANR Graduates
Male	99	40
Female	34	16
Total	133	56

Table 4-2. Number of WLIANR Graduates and Survey Respondents by Age. ( $N=133$ )

Age	Number of WLIANR Graduates	Number of Respondents from WLIANR Graduates
28 to 37 years	28	13
38 to 47 years	55	26
48 to 57 years	41	15
58 years and older	9	2
Total	133	56

Table 4-3. Number of WLIANR Graduates and Survey Respondents by Education. ( $N=133$ )

Education	Number of WLIANR Graduates	Number of Respondents from WLIANR Graduates
High school	3	0
Some college	18	10
Bachelors degree	84	34
Some graduate	2	1
Graduate degree	26	11
Total	133	56

### **Objective 1: To Describe the Leadership Styles among the WLIANR Alumni**

The leadership styles of the WLIANR alumni were determined using the MLQ Scoring Key. The nine leadership scales as well as the transformational, transactional, and/or passive/avoidant leadership style scores are presented in Table 4-4 and Table 4-5. Leadership scale scores have a range possibility of 0 to 4. Of the nine scale scores, inspirational motivation

received the highest mean score ( $M=3.11$ ,  $SD=0.60$ ), and laissez-faire scale scores received the lowest mean score ( $M=0.63$ ,  $SD=0.46$ ).

The leadership style scores had a range of 0 to 4. The range of scale scores for the respondents for transformational leadership style was 1.95 to 3.95. Transactional leadership style scores ranged from 1.12 to 3.25. The passive/avoidant leadership style scores ranged from 0.12 to 2.00. Transformational leadership scores reported by the respondents were the highest of the leadership style scores ( $M=3.00$ ,  $SD=0.48$ ), while passive/avoidant was reported as having the lowest score ( $M=0.88$ ,  $SD=0.47$ ). Table 4-4 presents the scores for each of the nine leadership scales. Table 4-5 presents the three leadership style scores: transformational, transactional, and passive/avoidant.

Table 4-4. Leadership Style Scale Scores. ( $n=56$ )

	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
<i>Leadership Scale Scores</i>					
Idealized Influence (Attributed)	56	3.04	0.58	1.00	4.00
Idealized Influence (Behavior)	56	2.95	0.65	1.67	4.00
Inspirational Motivation	56	3.11	0.60	1.50	4.00
Intellectual Stimulation	56	2.90	0.58	1.75	4.00
Individual Consideration	56	3.01	0.58	1.25	4.00
Contingent Reward	56	2.86	0.56	1.50	3.75
Management-by-Exception (Active)	56	1.52	0.73	0.00	4.00
Management-by-Exception (Passive)	56	1.13	0.65	0.00	2.50
Laissez-faire	56	0.63	0.46	0.00	2.00

Table 4-5. Total Leadership Style Scores. ( $n=56$ )

	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
<i>Leadership Style Scores</i>					
Transformational Leadership Style	56	3.00	0.48	1.95	3.95
Transactional Leadership Style	56	2.19	0.48	1.12	3.25
Passive/Avoidant Leadership Style	56	0.88	0.47	0.12	2.00

### Leadership Style and Gender

There were fewer female respondents ( $n=16$ ) than there were male ( $n=40$ ). Table 4-6 shows the leadership style scores by gender. No significant correlations were found between

leadership style and gender. Leadership style scores had a possible range of 0 to 4. Females scored higher in the transformational leadership style, while males scored higher in the transactional leadership style. Males and females scored the same in the passive/avoidant leadership style. Table 4-7 presents the mean leadership scale scores by gender.

Table 4-6. Total Leadership Style Scores by Gender. (*n*=56)

Construct	Gender	<i>n</i>	<i>M</i>	<i>SD</i>
MLQ-Transformational	Female	16	3.05	0.53
	Male	40	2.99	0.47
MLQ-Transactional	Female	16	2.09	0.34
	Male	40	2.23	0.53
MLQ-Passive/Avoidant	Female	16	0.88	0.56
	Male	40	0.88	0.43

There were no significant differences between men and women in any of the leadership scale scores.

Table 4-7. Leadership Scale Scores by Gender. (*n*=56)

Construct	Gender	<i>n</i>	<i>M</i>	<i>SD</i>
Idealized Influence (Attributed)	Female	16	3.07	0.60
	Male	40	3.03	0.57
Idealized Influence (Behavior)	Female	16	2.97	0.58
	Male	40	2.94	0.68
Inspirational Motivation	Female	16	3.23	0.64
	Male	40	3.06	0.59
Intellectual Stimulation	Female	16	2.83	0.65
	Male	40	2.93	0.56
Individualized Consideration	Female	16	3.13	0.53
	Male	40	2.97	0.60
Contingent Reward	Female	16	2.90	0.60
	Male	40	2.85	0.55
Management-by-Exception (Active)	Female	16	1.28	0.55
	Male	40	1.62	0.78
Management-by-Exception (Passive)	Female	16	1.06	0.77
	Male	40	1.15	0.60
Laissez-faire	Female	16	0.69	0.49
	Male	40	0.60	0.45

## Leadership Style and Age

When examining the respondents by age, most of the respondents were in the 38 to 47 years category ( $n=26$ ). There were 15 respondents in the 48 to 57 years category, 13 respondents in the 28 to 37 years category, and only two respondents in the 58 years and older category. The 38 to 47 years category had a transformational leadership style mean score of 2.97 ( $SD=0.50$ ), a transactional leadership style mean score of 2.16 ( $SD=0.50$ ), and a passive/avoidant leadership style score of 0.84 ( $SD=0.48$ ). The 48 to 57 years category had a transformational leadership style mean score of 3.11 ( $SD=0.55$ ), a transactional leadership style mean score of 2.23 ( $SD=.49$ ), and a passive/avoidant leadership style mean score of 0.83 ( $SD=0.41$ ). The 28 to 37 years category had a transformational leadership style mean score of 2.93 ( $SD=0.38$ ), a transactional leadership style mean score of 2.22 ( $SD=0.49$ ), and a passive/avoidant leadership style score of 0.99 ( $SD=0.55$ ). The 58 years and older category had a transformational leadership style mean score of 3.10 ( $SD=0.57$ ), a transactional leadership style mean score of 2.19 ( $SD=0.44$ ), and a passive/avoidant leadership style mean score of 0.94 ( $SD=0.09$ ). Table 4-8 shows the leadership style mean scores by age.

Table 4-8. Total Leadership Style Scores by Age. ( $n=56$ )

Construct	Age	$n$	$M$	$SD$
MLQ-Transformational	28 to 37 years	13	2.93	0.38
	38 to 47 years	26	2.97	0.50
	48 to 57 years	15	3.11	0.55
	58 years and older	2	3.10	0.57
MLQ-Transactional	28 to 37 years	13	2.22	0.49
	38 to 47 years	26	2.16	0.50
	48 to 57 years	15	2.23	0.49
	58 years and older	2	2.19	0.44
MLQ-Passive/Avoidant	28 to 37 years	13	0.99	0.55
	38 to 47 years	26	0.84	0.48
	48 to 57 years	15	0.83	0.41
	58 years and older	2	0.94	0.09

### Leadership Style and Education

Most of the respondents held a bachelors degree ( $n=34$ ). There were 11 respondents with a graduate degree ( $n=11$ ) and ten respondents with some college ( $n=10$ ). Only one respondent had some graduate coursework ( $n=1$ ). There were no respondents in the high school category. The mean of the transformational leadership style in the bachelors degree category was 3.03 ( $SD=0.49$ ), the transactional leadership style had a mean of 2.15 ( $SD=0.48$ ), while the passive/avoidant leadership style had a mean of 0.89 ( $SD=0.48$ ). Respondents in the graduate degree category ( $n=11$ ) had a transformational leadership style mean of 2.90 ( $SD=0.48$ ), a transactional leadership style mean of 2.22 ( $SD=0.56$ ), and a passive/avoidant leadership style mean of 0.90 ( $SD=0.46$ ). The respondents in the some college category ( $n=10$ ) had a transformational leadership style mean of 3.05 ( $SD=0.51$ ), a transactional leadership style mean of 2.25 ( $SD=0.45$ ), and passive/avoidant leadership style mean of 0.84 ( $SD=0.49$ ). The some graduate category had a transformational mean score of 2.70 ( $SD=n/a$ ), a transactional leadership style mean of 2.50 ( $SD=n/a$ ), and a passive/avoidant leadership style mean of 0.75 ( $SD=n/a$ ) (See

Table 4-9). When examining the leadership style scores by education, no significant differences were found.

Table 4-9. Total Leadership Style Scores by Education. ( $n=56$ )

Construct	Education	<i>n</i>	<i>M</i>	<i>SD</i>
MLQ-Transformational	High school	0	--	--
	Some college	10	3.05	0.51
	Bachelors	34	3.03	0.49
	Some graduate	1	2.70	--
	Graduate	11	2.90	0.48
MLQ-Transactional	High school	0	--	--
	Some college	10	2.25	0.45
	Bachelors	34	2.15	0.48
	Some graduate	1	2.50	--
	Graduate	11	2.22	0.56
MLQ-Passive/Avoidant	High school	0	--	--
	Some college	10	0.84	0.49
	Bachelors	34	0.89	0.48
	Some graduate	1	0.75	--
	Graduate	11	0.90	0.46

**Objective 2: To Describe the Current Levels of Emotional Intelligence of the WLIANR Alumni**

The emotional intelligence levels of the WLIANR alumni were determined using the Bar-On EQi Scoring Key. The total emotional intelligence levels as well as the five emotional intelligence scales, intrapersonal, interpersonal, stress management, adaptability, and general mood are presented in Table 4-10. Emotional intelligence scale scores have a range possibility of 0 to 150. Of the five scale scores, general mood received the highest mean score ( $M=102.41$ ,  $SD=12.12$ ), and interpersonal received the lowest mean score ( $M=98.70$ ,  $SD=11.04$ ).

The range of scale scores for the respondents for intrapersonal was 77 to 127. Interpersonal scores ranged from 79 to 125. The range of scale scores for stress management was 62 to 128. Adaptability scores ranged from 69 to 129, while general mood scores ranged from 72 to 124.

The total emotional intelligence scores ranged from 76 to 127 with a mean score of 100.61 ( $SD=10.99$ ). Table 4-10 presents the scores for each of the five emotional intelligence scores as well as the total emotional intelligence scores.

Table 4-10. Emotional Intelligence Scale Scores and Total Scores. ( $n=56$ )

	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
<i>Emotional Intelligence Scale Scores</i>					
Intrapersonal	56	102.59	11.87	77	127
Interpersonal	56	98.70	11.04	79	125
Stress Management	56	99.93	13.17	62	128
Adaptability	56	99.50	11.77	69	129
General Mood	56	102.41	11.24	72	124
<i>Total Emotional Intelligence Score</i>	56	100.61	10.99	76	127

### Emotional Intelligence and Gender

In regard to emotional intelligence and gender, there were no significant differences found between the total emotional intelligence and gender. The males scored higher in the intrapersonal, interpersonal, and general mood scales. The total emotional intelligence score of males ( $M=100.82$ ,  $SD=11.31$ ) was slightly higher than the females ( $M=100.06$ ,  $SD=10.50$ ). Table 4-11 presents the mean emotional intelligence scores and scale scores by gender.

Table 4-11. Emotional Intelligence Scale Scores and Total Scores by Gender. ( $n=56$ )

Construct	Gender	<i>n</i>	<i>M</i>	<i>SD</i>
Total Emotional Intelligence	Female	16	100.60	10.50
	Male	40	100.82	11.31
Intrapersonal	Female	16	101.69	11.61
	Male	40	102.95	12.10
Interpersonal	Female	16	94.81	8.53
	Male	40	100.25	11.63
Stress Management	Female	16	103.75	12.21
	Male	40	98.40	13.38
Adaptability	Female	16	101.00	9.24
	Male	40	98.90	12.70
General Mood	Female	16	99.44	13.05
	Male	40	103.60	10.38

## Emotional Intelligence and Age

The age categories were 28 to 37 years ( $n=13$ ), 38 to 47 years ( $n=26$ ), 48 to 57 years ( $n=15$ ), and 58 years and older ( $n=2$ ). The total emotional intelligence scores were highest in the 28 to 37 years of age category ( $M=104.85$ ,  $SD=8.03$ ) and lowest in the 58 years and older category ( $M=92.50$ ,  $SD=0.70$ ). The 38 to 47 years category had a total emotional intelligence mean score of 101.00 ( $SD=12.49$ ) and the 48 to 57 years had a total emotional intelligence mean score of 97.33 ( $SD=10.18$ ). In regards to the emotional intelligence score scales, there were no significant differences between the age categories. The 28 to 37 years ( $n=13$ ) scored the highest in all of the scales (intrapersonal, interpersonal, adaptability, and general mood) except stress management. The 58 years and older ( $n=2$ ) scored the lowest in all categories except general mood. Table 4-12 shows the mean emotional intelligence scores by age. Table 4-13 presents the emotional intelligence scale scores by age. There were no significant differences between total emotional intelligence scores and age and emotional intelligence scale scores and age.

Table 4-12. Total Emotional Intelligence Scores by Age. ( $n=56$ )

Construct	Age	<i>n</i>	<i>M</i>	<i>SD</i>
Total Emotional Intelligence Scores				
	28 to 37 years	13	104.85	8.03
	38 to 47 years	26	101.00	12.49
	48 to 57 years	15	97.33	10.18
	58 years and older	2	92.50	0.71

Table 4-13. Emotional Intelligence Scale Scores by Age. ( $n=56$ )

Construct	Age	<i>n</i>	<i>M</i>	<i>SD</i>
Intrapersonal	28 to 37 years	13	107.92	8.48
	38 to 47 years	26	101.92	13.87
	48 to 57 years	15	100.00	10.37
	58 years and older	2	96.00	1.41
Interpersonal	28 to 37 years	13	102.54	10.85
	38 to 47 years	26	98.54	12.76
	48 to 57 years	15	96.53	7.27
	58 years and older	2	92.00	11.31
Stress Management	28 to 37 years	13	100.00	9.93
	38 to 47 years	26	101.92	13.84
	48 to 57 years	15	97.13	15.29
	58 years and older	2	94.50	4.95
Adaptability	28 to 37 years	13	102.62	9.39
	38 to 47 years	26	100.81	11.43
	48 to 57 years	15	96.40	13.12
	58 years and older	2	85.50	13.44
General Mood	28 to 37 years	13	107.77	7.33
	38 to 47 years	26	102.15	12.56
	48 to 57 years	15	98.27	11.05
	58 years and older	2	102.00	4.24

### Emotional Intelligence and Education

The mean of the total emotional intelligence score in the some graduate coursework category was 122.00 ( $SD=n/a$ ). The mean of the total emotional intelligence score in the graduate degree category was 100.91 ( $SD=11.34$ ). The mean of the total emotional intelligence score in the bachelor's degree category was 100.88 ( $SD=10.50$ ). The mean of the total emotional intelligence score in the some college category was 97.20 ( $SD=11.30$ ). Table 4-14 and Table 4-15 present the mean total emotional intelligence scores and the emotional intelligence scale scores by education. There were no significant differences between emotional intelligence and education.

Table 4-14. Total Emotional Intelligence Scores by Education. ( $n=56$ )

Construct	Education	<i>n</i>	<i>M</i>	<i>SD</i>
Total Emotional Intelligence Score	High school	0	--	--
	Some college	10	97.20	11.30
	Bachelors	34	100.88	10.50
	Some graduate	1	122.00	--
	Graduate	11	100.91	11.34

Table 4-15. Emotional Intelligence Scale Scores by Education. ( $n=56$ )

Construct	Education	<i>n</i>	<i>M</i>	<i>SD</i>
Intrapersonal	High school	0	--	--
	Some college	10	102.50	11.65
	Bachelors	34	102.24	11.80
	Some graduate	1	127.00	--
	Graduate	11	101.55	11.48
Interpersonal	High school	0	--	--
	Some college	10	98.80	13.06
	Bachelors	34	98.00	10.10
	Some graduate	1	125.00	--
	Graduate	11	98.36	10.44
Stress Management	High school	0	--	--
	Some college	10	88.50	14.26
	Bachelors	34	101.47	11.86
	Some graduate	1	120.00	--
	Graduate	11	103.73	10.59
Adaptability	High school	0	--	--
	Some college	10	93.90	12.26
	Bachelors	34	100.68	11.08
	Some graduate	1	102.00	--
	Graduate	11	100.73	13.54
General Mood	High school	0	--	--
	Some college	10	104.20	10.68
	Bachelors	34	101.56	11.31
	Some graduate	1	124.00	--
	Graduate	11	101.45	10.81

### **Objective 3: To Identify the Relationship between Emotional Intelligence and Leadership Style of the WLIANR Alumni**

In order to further describe the independent variables in this study, analyses were conducted to identify correlations that may have existed between variables. The magnitudes of the correlations are presented and discussed using the correlation magnitudes suggested by Miller (1994). Pearson  $r$  was used for all of the analyses. Correlation coefficients between 0.01 and 0.09 are considered negligible, correlations between 0.10 and 0.29 are considered low, correlations between 0.30 and 0.49 are considered moderate, correlations between 0.50 and 0.69 are considered substantial, correlations between 0.70 and 0.99 are considered very high, and a correlation coefficient of 1.00 is considered perfect. Table 4-16 presents the describing magnitudes for interpreting correlations.

Table 4-16. Magnitudes for Interpreting Correlations (Davis, 1971).

R	Description
1.0	Perfect
0.70 – 0.99	Very High
0.50 – 0.69	Substantial
0.30 – 0.49	Moderate
0.10 – 0.29	Low
0.01 – 0.09	Negligible

As presented in Table 4-17 a negative moderate correlation was found between management-by-exception (passive) and stress management ( $r=-0.35$ ). Negative low correlations were found between total emotional intelligence and transformational leadership style ( $r=-0.19$ ) and passive/avoidant leadership style ( $r=-0.15$ ). A negative negligible correlation was found between total emotional intelligence and transactional leadership style ( $r=-0.05$ ). As seen in Table 4-17, a number of low and negligible correlations were found among the leadership styles, leadership style scales, total emotional intelligence, and emotional intelligence scales.

## **Summary**

This chapter presented the findings of the study. Findings were organized and presented by the following objectives:

1. Describe the leadership styles among of WLIANR alumni.
2. Describe the current levels of emotional intelligence of the WLIANR alumni.
3. Identify the relationship between emotional intelligence and leadership style of the WLIANR alumni.

Chapter 5 will summarize the study and discusses the conclusions, implications and recommendations.

Table 4-17. Pearson Correlations between Independent Variables. ( $n=56$ )

Variable	Total Emotional Intelligence	Intrapersonal	Interpersonal	Stress Management	Adaptability	General Mood
Transformational	-0.19	-0.13	-0.02	-0.14	-0.23	-0.28
Transactional	-0.05	-0.04	-0.07	-0.10	-0.02	-0.05
Passive/Avoidant	-0.15	-0.18	0.09	-0.28	-0.10	-0.01
IIA	-0.18	-0.17	-0.05	-0.12	-0.19	-0.21
IIB	-0.14	-0.10	-0.02	-0.14	-0.09	-0.29
IM	-0.18	-0.12	-0.04	-0.14	-0.25	-0.24
IS	-0.06	0.01	0.06	-0.07	-0.17	-0.10
IC	-0.20	-0.16	-0.06	-0.09	-0.22	-0.28
CR	-0.10	-0.08	0.04	-0.12	-0.06	-0.17
MBEA	0.02	0.01	0.06	-0.04	0.02	0.07
MBEP	-0.26	-0.28	0.01	-0.35	-0.18	-0.10
LF	0.05	0.02	0.17	-0.08	0.05	0.13

*Note.* IIA=Idealized Influence (Attributed), IIB=Idealized Influence (Behavior), IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individualized Consideration, CR=Contingent Reward, MBEA=Management-by-Exception (Active), MBEP=Management-by-Exception (Passive), LF=Laissez-faire

## CHAPTER 5 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter summarizes the study and discusses the conclusions, implications and recommendations that have been drawn from the study. The first section of this chapter provides an overview of the study, including the purpose and specific objectives, methodologies and findings. The remainder of the chapter discusses the conclusions from the findings, implications of the findings, and recommendations for future research.

The problem that was addressed by this study was the lack of knowledge surrounding the relationship between emotional intelligence and leadership style in leaders of Florida agriculture, specifically the WLIANR alumni. In regard to emotional intelligence, leadership styles, and the relationship between the two, the review of literature showed a clear void in research in this area of leadership in Florida agriculture.

The purpose of this study was to identify the relationship between emotional intelligence and leadership style of the alumni of the WLIANR. This study also described the population of the WLIANR alumni in terms of gender, age, education levels, emotional intelligence scores, and leadership style. The following research objectives were used to guide this study: 1) describe the leadership styles among the WLIANR alumni, 2) describe the current levels of emotional intelligence of the WLIANR alumni and 3) identify the relationship between emotional intelligence and leadership style of the WLIANR alumni.

This study utilized the census survey research design, which asks a series of questions to the entire population being studied. The survey instruments were the Multifactor Leadership Questionnaire (MLQ) and the Bar-On EQi. The MLQ assessed the leadership styles of the alumni, while the Bar-On EQi assessed the emotional intelligence of the alumni. The demographics were obtained through the director of the program.

In this study, the population was defined as all alumni members of the WLIANR since the inception of the leadership program ( $N=133$ ). Responses were obtained from 56 of the 133 alumni members, for an overall response rate of 42.1%.

## Summary of Findings

### Objective 1

Objective one sought to assess the leadership styles of the WLIANR alumni. The demographics were used to describe differences in leadership styles of the respondents. Forty (71.4%) of the respondents were male and sixteen (28.6%) of the respondents were female. In terms of age, 23.2% ( $n=13$ ) of the respondents were between 28 and 37 years of age, 46.4% ( $n=26$ ) were between 38 and 47 years of age, 26.8% ( $n=15$ ) were between 48 and 57 years of age, and 3.6% ( $n=2$ ) were over the age of 58 years. In regard to education, 34 (60.7%) of the respondents had a bachelors degree. Eleven (19.6%) of the respondents had a graduate degree, ten (17.9%) of the respondents had some college, and one (1.8%) of the respondents had some graduate coursework.

The overall leadership style scores of the respondents were high in transformational leadership style ( $M=3.00$ ,  $SD=0.48$ ) and low in passive/avoidant leadership style ( $M=0.88$ ,  $SD=0.47$ ). The leadership style scale scores were similar as the transformational leadership style scale scores were higher than those of the transactional leadership style scales and passive/avoidant leadership style scale scores.

In regard to gender differences, the females scored slightly higher in transformational leadership than males. The males scored slightly higher in transactional leadership, and both males and females scored the same in the passive/avoidant leadership style. The females scored slightly higher in idealized influence (attributed and behavior), inspirational motivation and individualized consideration, while the males scored slightly higher in intellectual stimulation.

However, there were no significant differences found between the overall transformational leadership style scores by gender or between the transformational leadership style scale scores by gender. In the transactional leadership style scale scores, the females scored slightly higher in contingent reward and males scored slightly higher in management-by-exception (active). For the passive/avoidant leadership style scale scores, the males scored slightly higher in management-by-exception (passive) and females scored slightly higher in laissez-faire. There were no significant differences found between males and females in the transactional leadership style and the passive/avoidant leadership style.

There were also no significant differences when analyzing the leadership style scores and leadership style scale scores by age. In the transformational leadership style, the 58 years and older category scored the highest and the 28 to 37 years category scored the lowest. The 48 to 57 years category scored the highest in the transactional leadership style scores and the 38 to 47 years category scored the lowest. The passive/avoidant leadership style scores were similar. The 28 to 27 years category scored the highest and the 48 to 57 years category scored the lowest. In regard to age and leadership styles, there were no significant differences. The leadership styles by education also showed no significant differences. The some college category scored the highest in the transformational leadership style, while the some graduate category scored the lowest. In regard to the transactional leadership style scores, the some graduate category scored the highest and the bachelors' degree category scored the lowest. Finally, in the passive/avoidant leadership style scores, the graduate degree category scored the highest and the some graduate category scored the lowest.

## **Objective 2**

Objective two sought to describe the current levels of emotional intelligence of the WLIANR alumni. The demographics were also used to describe the differences in emotional

intelligence levels of the respondents. The total emotional intelligence mean scores were 100.61 ( $SD=10.99$ ). In regards to the emotional intelligence scale scores, the respondents scored highest in the intrapersonal scale and lowest in the interpersonal scale.

There were no significant differences found between emotional intelligence and gender. The total emotional intelligence mean scores were slightly higher for the males than females. The males scored slightly higher in the intrapersonal, interpersonal, and general mood emotional intelligence scale scores. The females scored slightly higher in stress management and adaptability. In regards to age, the total emotional intelligence mean scores were slightly higher in the 28 to 37 years category, while the 58 years and older category scored the lowest. The 28 to 37 years category also scored the highest in the following emotional intelligence scale scores: intrapersonal, interpersonal, adaptability, and general mood. The 38 to 47 years category scored the highest in stress management. The 58 years and older category scored the lowest in all of the emotional intelligence scale scores except general mood. The lowest score for general mood was reported by the 48 to 57 years category.

In regard to education, the highest total emotional intelligence score was reported by the some graduate category, while the lowest scores were reported by the some college category. The some graduate category also scored the highest in all of the emotional intelligence scale scores. The graduate degree category scored the lowest in the intrapersonal scale and general mood scale, the bachelors degree category scored the lowest in the interpersonal scale, and the some college category scored the lowest in the stress management scale and the adaptability scale.

### **Objective 3**

Objective three sought to identify the relationship between emotional intelligence and leadership style of the WLIANR alumni. Low, negative relationships were found between total

emotional intelligence scores and the transformational and passive/avoidant leadership styles. No relationship was found between total emotional intelligence scores and the transactional leadership style.

In regard to the scales of both emotional intelligence and leadership style, a correlational analysis found a moderate correlation between management-by-exception (passive) and stress management. All other correlations were low, positive or negative, or negligible, positive or negative.

### **Conclusions**

The following conclusions were drawn based upon the findings of the study:

- This sample of WLIANR alumni mirrors the national norms from 2004 concerning the preferred leadership styles as measured by the MLQ. The transformational leadership style and transactional leadership style means were comparable to the national norms described by Avolio and Bass (2004). The mean national norms for transformational, transactional and passive/avoidant respectively are  $M=3.02$ ,  $M=2.285$ , and  $M=0.84$ . The mean scores of the WLIANR alumni were  $M=3.00$ ,  $M=2.19$ , and  $M=0.88$  respectively.
- Females in this sample utilize desirable leadership characteristics and behaviors slightly more than males. However, the males do use desirable leadership characteristics as well. The females' mean score for transformational leadership was 0.06 higher than the males, while the males' mean score for transactional leadership was 0.14 higher than the females.
- In this sample, all age groups and education levels utilize the transformational leadership style behaviors more than the transactional leadership style. Alumni in this sample also use the transactional leadership style more than the passive/avoidant leadership style.
- This sample of WLIANR alumni mirrors the national norms concerning the levels of emotional intelligence as measured by the Bar-On EQi. The total emotional intelligence means were comparable to the national norms as 99.9% of the scores will fall between 55 and 145 (+/-3 standard deviations from the mean) and most score a total mean score of 100 (Bar-On, 2004). The WLIANR total emotional intelligence scores all fell in the 55 to 145 range with a total emotional intelligence mean score of 100.61.
- In this sample of alumni, the males scored higher in total emotional intelligence than females.
- The younger age groups scored higher than the older age groups in the total emotional intelligence means.

- This sample of WLIANR alumni showed little relationship between the emotional intelligence means and leadership style means.

### **Discussions and Implications**

This research shows that alumni of the WLIANR have comparable preferred leadership styles as measured by the MLQ. Much like the national norms, the females had a tendency to report higher levels of transformational leadership style behaviors than males. However, the differences were minimal within this sample of alumni. Both males and females reported using passive/avoidant leadership style behaviors, but only used them occasionally compared to the transformational leadership style or transactional leadership style. One question posed by the researcher is if participating in a leadership program, such as the WLIANR, helps to increase the use of transformational leadership style behaviors? The W.K. Kellogg Foundation made the assumption that “leadership is relational” (Foster, 2001, p. 2). If this is true, then what are programs like the WLIANR doing to help increase the knowledge base for participants in regards to leadership, leadership styles, and utilizing the transformational leadership styles?

The females in this sample utilize transformational leadership style behaviors more than males. This was expected because of the research by Mandell and Pherwani (2003) which showed females were more likely to use transformational leadership style, while males had a tendency to utilize more transactional leadership style behaviors. Additionally, the females reported using contingent reward which was also supported by the research of Eagley et al. (2003). The alumni in this sample showed no differences in leadership style based on the age or education level of the respondents. Age has not been shown to be related to the preferred leadership style (Holder, 1990). The relationship between education and leadership style has received little research previously, but shows to have no significant relationship on the leadership style of this sample of alumni.

This research also shows that this sample of WLIANR alumni has comparable levels of emotional intelligence as measured by the Bar-On EQi. All of the respondents reported total emotional intelligence mean scores which fell into the national norms as described by Bar-On (2004). However, the national norms for gender differences were different for this sample. The national norm is for females to demonstrate higher levels of emotional intelligence on more scales than males (Cavallo & Brienza, n.d.), but in this sample of alumni, the males reported slightly higher emotional intelligence levels in a majority of the scales compared to the females. Another interesting finding is that the younger age groups scored higher than the older age groups in the total emotional intelligence means. Many studies have shown that older individuals will score higher because many of the competencies can be developed over time, changed throughout life, or improved through training and development programs (Gardner & Stough, 2002). Therefore, the expected result would be for the older age groups to score higher than the younger age groups.

Finally, this research details the lack of relationship between emotional intelligence and leadership style in the WLIANR alumni. There was no significant relationship between the total emotional intelligence and leadership style and little to no relationship between the different emotional intelligence scales and leadership style scales. This is interesting due to the research conducted by Bass and Riggio (2006), which showed a close relationship between emotional intelligence and transformational leadership. These findings were not expected because the alumni of the WLIANR are considered to be leaders within Florida agriculture, therefore it was expected that there would be a strong correlation between the emotional intelligence levels and transformational leadership style. This is supported by the research of Goleman (1998) and Mandell and Pherwani (2003) which state that both of these leadership qualities are predictors

for effective leadership. When analyzing specific scales of emotional intelligence and leadership style, the results in this research study are different from those of previous research studies.

Barling et al. (2000) found a positive relationship between emotional intelligence and three of the transformational leadership style scales, while this research showed low, negative relationships among most of the correlations.

### **Recommendations**

Recommendations for future research and practice are provided as a result of assessing the leadership style and levels of emotional intelligence of the WLIANR alumni.

#### **Recommendations for Practice**

Based on the results of this study, there are several recommendations for the WLIANR and other agricultural leadership programs. While this study was focused on leaders in Florida agriculture, these recommendations could be applied to other leadership programs of similar function and structure. The WLIANR is encouraged to utilize the emotional intelligence and leadership style concepts to continue broadening the leadership development knowledge base for participants of the program.

The emotional intelligence assessment is recommended to be used in the first seminar of the program to assess the levels of emotional intelligence upon entering the program. Participants should then be assessed again upon graduation from the program because some of the scales can be developed over time (Gardner & Stough, 2002). Furthermore, a follow-up assessment should be utilized approximately five and/or ten years after graduation from the WLIANR. Other leadership programs can implement this into the curriculum of the program as well. Curriculum development is recommended to help participants fully understand the importance of emotional intelligence and interpretation of the scores.

However, while the implementation of the assessments is desirable, it may also be unfeasible for the WLIANR as well as other leadership programs due to time constraints. Therefore, curriculum should be developed around the subscales of emotional intelligence. This would include activities and programming which requires participants to practice skills and behaviors of each subscale. The interpersonal subscale can be incorporated into programming where participants interact with each other as well as speakers, presenters, and other individuals at social events throughout the program. The adaptability subscale can be incorporated into programming by having participants analyze current issues at the local, state, national and international level. This will allow participants to practice critical thinking as well as problem solving. This can also be incorporated into the international seminar because most participants will not be within their comfort zone and must adapt to the culture and language barriers. Other subscales can be incorporated into the program through various activities and programming.

The leadership style assessment is also recommended for the WLIANR to implement into the curriculum of the program when participants begin the program. By learning the preferred leadership styles of the participants, participants and directors will gain more understanding of the different leadership styles. Leaders are more likely to use the preferred transformational leadership style behaviors once gaining more knowledge of the three leadership styles, transformational, transactional, and passive/avoidant. Once implementing the transformational leadership style, participants will be more effective leaders within communities, states, and the nation which will help to achieve the goals of the WLIANR.

The WLIANR should also develop curriculum to increase the understanding of each participants' results as well as the application of the leadership styles. Curriculum should be developed around the three leadership styles as well as the subscales of each, specifically

transformational and transactional leadership. Intellectual stimulation can be addressed by having speakers present issues that go against the norms of the group. This can allow participants to view problems and issues from a new perspective. Idealized influence attributed can be incorporated into the program by having participants participate in presentations, introductions of speakers, and open-discussions in order to build the confidence and higher-order ideals of the participants.

### **Recommendations for Future Research**

Although this study specifically focused on the alumni of the WLIANR, research in other agriculture leadership programs and organizations is essential to further assess the levels of emotional intelligence and leadership style used by the leaders within agriculture throughout the nation. By comparing the levels of emotional intelligence and leadership style of different populations, researchers could further determine the need for implementing these leadership concepts into the programs and organizations. Researchers could also assess if the differences in the structure and focus of the programs is related to the results of the emotional intelligence levels and leadership style.

Additionally, other emotional intelligence assessments should be used to determine which assessment would be best for adult leadership programs in agriculture. One respondent of this study reported that “125 questions were excessive” and that many of the questions “were redundant.” Other respondents reported that the MLQ was confusing, therefore other leadership style assessments should be used as well. However, one respondent said, “Interesting survey questions!” and felt the surveys were easy to complete due to the online delivery of both surveys.

Another recommendation includes assessing other programs and organizations within agriculture that are focused on different populations, issues, or areas to further build the research within emotional intelligence, leadership style, and the relationship between the two. Using

different populations such as high school, college, or public sector populations would broaden the understanding of these leadership concepts. Different forms are available to use depending on the age demographic of the population. More research should be completed to test the effectiveness of leadership programs in regard to leadership development, specifically emotional intelligence and leadership styles. By assessing various leadership programs and organizations in agriculture, researchers will be able to understand the effectiveness of the leadership programs and organizations more thoroughly.

APPENDIX A  
SURVEY COMPLETION REQUESTS

**Pre-Survey Email**

Dear Wedgworth Leadership Institute Alumni:

I am greatly enjoying my work as WLI's new Program Coordinator and I'm extremely excited to be conducting my Master's research within the WLI Alumni Association as the results will be of great benefit to both Alumni and the agricultural leadership discipline.

As you know from the WLI newsletter, my thesis research project is "The Relationship between Emotional Intelligence and Leadership Styles of Leaders in Florida Agriculture." The time has finally come for me to send you my two surveys. In the next week, you will be receiving two emails. One will be from my personal email, **rotel20@ufl.edu**. The other will be from an organization called **Mind Garden entitled "Invite from Mind Garden."** Please feel free to contact me if you have any questions regarding either survey. I have sent this email to both your personal and work email addresses if you have listed both in the Alumni Directory. If you could please respond to me, letting me know which email would work best for you in receiving the surveys I will make sure you only receive emails from me once in the future.

Your participation is greatly appreciated and completely voluntary. There is no penalty for not participating. If you choose to participate, you will answer items on two confidential assessments that will take about 10-15 minutes each to complete. You can stop any time without penalty and you do not have to answer any question you do not wish to answer. All answers are confidential to the extent provided by law. There are no known risks or other direct benefits associated with this study. If you'd like to learn more about this project, please contact me at 408 Rolfs Hall, Gainesville campus, 352-392-1038, [rotel20@ufl.edu](mailto:rotel20@ufl.edu) or Dr. Hannah Carter, G037 McCarty D, Gainesville campus, 352-392-1038, [hscarter@ufl.edu](mailto:hscarter@ufl.edu). If you have questions about your rights as a research participant, please contact the UFIRB Office, Box 112250, University of Florida, Gainesville, FL, 32611-2250, 352-392-0433.

Once again, your participation in completing the following assessments is greatly appreciated. You are helping to develop a better understanding of these two leadership concepts as well as the possible use of these concepts in future Wedgworth Leadership Institute programs. You will be able to receive a full report on your leadership style as well as your level of emotional intelligence once my research is completed in the spring.

Thank you,

*Rochelle Strickland*

Program Coordinator  
Wedgworth Leadership Institute  
for Agriculture and Natural Resources  
UF/IFAS  
PO Box 110126  
Gainesville, FL 32611-0126  
Phone: 352-392-1038  
Fax: 352-392-0589  
Email: [rotel20@ufl.edu](mailto:rotel20@ufl.edu)

## Initial Contact Email

Dear Wedgworth Leadership Institute Alumni:

As you know from the WLI newsletter, my thesis research project is “The Relationship between Emotional Intelligence and Leadership Styles of Leaders in Florida Agriculture.” Below you will find the link for the Emotional Intelligence survey assessment, along with the **code and password** you will need. The other survey was sent out today as well from an organization called **Mind Garden** entitled “**Invite from Mind Garden.**” Please feel free to contact me if you have any questions regarding either survey.

Once again, your participation in completing the following assessments is greatly appreciated. You are helping to develop a better understanding of these two leadership concepts as well as the possible use of these concepts in future Wedgworth Leadership Institute programs. You will be able to receive a full report on your leadership style as well as your level of emotional intelligence once my research is completed in the spring.

*Link to Emotional Intelligence Survey:* [www.mhsassessments.com](http://www.mhsassessments.com)

**Code: 7510-001-067**

**Password: leadership**

Thank you,  
Rochelle

*Rochelle Strickland*  
Program Coordinator  
Wedgworth Leadership Institute  
for Agriculture and Natural Resources  
UF/IFAS  
PO Box 110126  
Gainesville, FL 32611-0126  
Phone: 352-392-0502 ext. 244  
Fax: 352-392-0589  
Email: [rotel20@ufl.edu](mailto:rotel20@ufl.edu)

## Follow-up Contact Email

Dear Wedgworth Leadership Institute Alumni:

Thank you to all of you who have already completed one, if not both, of my surveys for my thesis research! I truly appreciate your help. Several of you have also passed along your thoughts and opinions about the surveys, which I enjoy reading. Feel free to provide me with any feedback you wish. I don't want to continue to bombard you with emails, but it is part of the process of research that I have to provide you with a replacement survey.

Below you will find the link for the Emotional Intelligence survey assessment, along with the **code and password** you will need. The other survey will be resent today as well from an organization called **Mind Garden entitled "Invite from Mind Garden."** Please feel free to contact me if you have any questions regarding either survey.

Once again, your participation in completing the following assessments is greatly appreciated. You are helping to develop a better understanding of these two leadership concepts as well as the possible use of these concepts in future Wedgworth Leadership Institute programs. You will be able to receive a full report on your leadership style as well as your level of emotional intelligence once my research is completed in the spring.

***Link to Emotional Intelligence Survey:*** [www.mhsassessments.com](http://www.mhsassessments.com)

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Thank you,  
Rochelle

*Rochelle Strickland*  
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<http://wliandr.ifas.ufl.edu>

## Final Follow-up Contact Email

Dear Wedgworth Leadership Institute Alumni:

Thank you to all of you who have already completed one, if not both, of my surveys for my thesis research! I truly appreciate your help. Several of you have also passed along your thoughts and opinions about the surveys, which I enjoy reading. Feel free to provide me with any feedback you wish.

I am now on week 5 of my data collection process and the surveys will be closing soon. If you have not had a chance to complete them, the information for the Emotional Intelligence survey is below. I will also resend the survey for Leadership Style assessment.

Below you will find the link for the Emotional Intelligence survey assessment, along with the **code and password** you will need. The other survey will be resent as well from an organization called **Mind Garden entitled “Invite from Mind Garden.”** Please feel free to contact me if you have any questions regarding either survey.

Once again, your participation in completing the following assessments is greatly appreciated. You are helping to develop a better understanding of these two leadership concepts as well as the possible use of these concepts in future Wedgworth Leadership Institute programs. You will be able to receive a full report on your leadership style as well as your level of emotional intelligence once my research is completed in the spring.

***Link to Emotional Intelligence Survey:*** [www.mhsassessments.com](http://www.mhsassessments.com)

***Code:*** 7510-001-067

***Password:*** leadership

Thank you,  
Rochelle

*Rochelle Strickland*  
Program Coordinator  
Wedgworth Leadership Institute  
for Agriculture and Natural Resources  
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PO Box 110126  
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## BIOGRAPHICAL SKETCH

Lara Rochelle Strickland was born in Dublin, Texas in 1983. She was raised in Stephenville, Texas with her mom and younger sister. She graduated from Stephenville High School in May 2002. Miss Strickland earned her undergraduate degree from Texas A&M University in College Station, Texas in August 2006. Her degree was in agriculture leadership and development.

In August 2006, Miss Strickland entered the graduate program in the Department of Agricultural Education and Communication at the University of Florida where she specialized in agricultural leadership. During her time in the graduate program at the University of Florida she served as a graduate teaching assistant where she assisted in the direction of three different agricultural courses. She also served as the Program Coordinator for the Wedgworth Leadership Institute for Agriculture and Natural Resources where she was able to travel throughout Florida.