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College Student Leadership Development Participation and Emotional Intelligence

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College Student Leadership Development Participation and

Emotional Intelligence

by

Nicole Renae Portell Brown

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A Dissertation submitted to the Education Faculty of Lindenwood University in

partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

College Student Leadership Development Participation and

Emotional Intelligence

by

Nicole Renae Portell Brown

This Dissertation has been approved as partial fulfillment

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Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

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Abstract

Leadership development has been identified as a key college outcome (Komives, Dugan, Owen, Slack, & Wagner, 2011). Emotional intelligence as a leadership development framework has shown promise in many applications (Petrides, 2011). Able to be augmented through purposeful training and practice, high levels of emotional intelligence have been linked to job performance, healthy relationships, and emotional well-being (Joseph, Jin, Newman, & O'Boyle, 2014). This study focused on changes in emotional intelligence as a metric for personal and professional development through a state university's leadership program. Students' self-reported change in global and factor emotional intelligence were measured utilizing the Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF) as a research tool (Zampetakis, 2011). Additionally, students completed a survey consisting of open-ended questions designed to facilitate the evaluation of student perceptions in relation to emotional intelligence competencies after completing the leadership program. No statistical differences could be observed in pre-and post-participation TEIQue-SF results. Student perceptions after program completion revealed participation impacted their perceptions of and approach to emotional intelligence competencies as well as leadership. Overall, students expressed a level of personal awareness and the ability to nurture relationships and seek leadership roles.

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Chapter One: Introduction

Leadership is the accumulation of opportunities, experiences, and failures (Gaiter, 2013). Moving beyond positional power, leadership requires self-mastery and an acute awareness of emotions and the influence they have on personal well-being as well as relationships (Goleman, 2011; Patterson, 2012). Transformational leaders are able to harness emotions in order to grow, understand, and develop followers (Batchelor, Lawlor, & Abston, 2014).

Successful leaders share one key attribute—a high level of emotional intelligence (Malos, 2011). Studies on emotional intelligence began when researchers found evidence of intelligence quotient (IQ) playing only a small role in leadership capacities and achievement (Stein, Book, & Kanoy, 2013). Individuals with high levels of emotional intelligence are able to monitor and regulate their own personal emotions as well as understand the emotional states of those around them (Stein et al., 2013).

The utilization of emotional intelligence allows for intentional reaction to situations with awareness of potential outcomes (Komives, Dugan, Owen, Slack, & Wagner, 2011). While genetics do play a small part in emotional intelligence, competencies can be practiced and learned over time (Godarzi, 2012). All individuals, regardless of age or gender, are capable of improving emotional intelligence competencies (Devi, 2012).

This chapter includes a historical basis for research, the theoretical framework, statement of problem, and purpose of the study. Additionally, questions to guide the study are posed, key terms are defined, limitations of the study are identified, and assumptions are explored.

Background of the Study

Central to many university missions, thousands of college student leadership development programs now exist (Keating, Rosch, & Burgoon, 2014). These programs are grounded on the theory leadership skills can be taught and all personality types are capable of acquiring leadership competencies (Gaiter, 2013). Now deemed essential for personal and professional success, programs seek to strengthen skills needed for students to manage conflict, delegate, and communicate effectively (Dugan et al., 2011). College student leadership development programs were established to prepare students for the job market and to assist in the navigation of an ever-changing marketplace (Patterson, 2012).

Hundreds of institutions offer leadership development programs varying in theoretical models and methods of delivery (Keating et al., 2014; Posner, 2012). Dating back to 1972, these leadership programs have evolved to offer learning opportunities in a variety of formats (Roberts, 2007). Institutions vary in program recognition; some award college credit while others consider participation an extracurricular activity (Keating et al., 2014). As leadership theories and job markets change, institutions have reacted with new programming methods (Ingleton, 2013).

Focusing on modern constructs of leadership, programs seek to help students learn to leverage relationships in order to accomplish common goals (Komives, Lucas, & McMahon, 2013). Two leadership models are commonly utilized: transformational leadership and servant leadership (Janke, Traynor, & Boyle, 2013). Additionally, many schools have begun to implement facets of grit, relationship building, and self-awareness to program design (Wisner, 2011)

Emotional intelligence has been recognized as an effective tool for fostering leadership development and as a resource to identify potential in future leaders (Batool, 2013). Killian (2012) defined emotional intelligence as "the ability to perceive and identify emotions in self and others, and to manage one's own affective states to enhance well-being and the quality of one's personal and professional relationships" (p. 502). A foundation for relationship building and strengthening, emotional intelligence is an acquired group of abilities that can be improved with practice (Bharwaney, Bar-On, & MacKinlay, 2011).

Emotional intelligence has been identified as a key factor for professional success (Sadri, 2012). Personal and professional achievement, as well as effective leadership, are all influenced by elements of emotional intelligence, which include "self-awareness," "self-management," "social awareness," and "relationship management" (Goleman, 2011, p. 12). While genetics have been shown to influence emotional intelligence, studies have supported traits can be augmented through practice and study (Malos, 2011).

One state university established a leadership development initiative in September of 2012 as a way to identify and cultivate the next generation of community leaders (Anonymous, 2014). The program was created through a partnership between the university and the local chamber of commerce to help students build leadership skills through self-exploration, mentorship, and community education (Anonymous, 2014). To date, 66 students have completed the program (Anonymous, 2014). To participate, students must submit an application, pay an application fee or apply for a waiver, and complete an interview process (Anonymous, 2014). Limited to 15 participants per semester, candidates are judged on maturity, demonstrated interest in campus and

community involvement, and desire for personal growth (D. Fullerton, personal

communication, September 1, 2014).

Sessions include Leadership Development; Marketing, Media, and Advertising;

Small Business and Economic Development; Non-Profit and Volunteerism;

Manufacturing and International Business; Healthcare Industry; and Science and

Technology (Anonymous, 2014). Students tour facilities associated with the session

topic and interact with business professionals from a variety of organizations (D.

Fullerton, personal communication, September 1, 2014). Students are surveyed after

each session and at the program conclusion to identify opportunities for curriculum

improvement (D. Fullerton, personal communication, September 1, 2014).

Student professional development has been observed by a university official, who

stated, "**[**Students] leave this program with not only the knowledge about business and

industry, but also personal connections to top executives in a variety of industries" (D.

Fullerton, personal communication, September 29, 2014). Personal growth has been

observed by co-owners of the corporate leadership development program, which

facilitates the initial leadership development session and follow-up (V. Benson, personal

communication, September 15, 2014). Benson shared, "I can attest to specific behavioral

traits which undergo transformation. All students, after gaining a more accurate self-

awareness, demonstrate improved self-management skills which are vital to teamwork"

(V. Benson personal communication, October 20, 2014). Benson stated:

> The benefits of this program are evident as the students graduate with a new
>
> confidence, a better understanding of their own gifts and skills as a leader, a new

network of friends and associates, and a deeper appreciation for the university and

our community. (T. Benson, personal communication, October 20, 2014)

Volunteers have also commented on the level of maturity, confidence, and personal

awareness achieved after program completion (D. Fullerton, personal communication,

September 29, 2014)

Additionally, students have provided personal testimony about the program's

impact on their lives (Anonymous, 2014). Student N stated:

Meeting the [company] CEO and CFO had a big impact on me, the ability to

spend time with them and hear their perspectives, was invaluable. Those two

individuals were very passionate about what they did, were very relatable, and

spent a lot of time with us.

This perspective was furthered by Student M, who shared:

Learning about different personality types really resonated with me. I learned to

understand not only myself, but also those around me. It helped me to understand

how I need to interact with those people, how I need to expect different things

from different people and personality types in different situations. It was life

changing in the way I view myself and the world around me.

Session hosts often share observations of student development, maturity, and community

awareness after program completion (D. Fullerton, personal communication, September

29, 2014).

Theoretical Framework

This study was developed with emotional intelligence as a theoretical framework.

Mayer and Salovey (1997) established emotional intelligence:

Involves the ability to perceive accurately, appraise, and express emotion; the

ability to access and/or generate feelings when they facilitate thought; the ability

to understand emotion and emotional knowledge; and the ability to regulate

emotions to promote emotional and intellectual growth. (p. 10)

Petrides recognized four distinct factors of emotional intelligence based on Mayer and

Salovey's model: "well-being, sociability, self-control, and emotionality" (as cited in

Tsaousis & Kazi, 2013, p. 169). This current study focused on changes in emotional

intelligence as a metric for personal and professional development through a state

university's leadership program.

Students' self-reported changes in global and factor emotional intelligence were

measured utilizing the Trait Emotional Intelligence Questionnaire Short Form (TEIQue-

SF) as a research tool (Zampetakis, 2011). Paired sample *t*-tests were utilized to evaluate

differences in global and trait competencies. Additionally, students completed a survey

consisting of open-ended questions designed to facilitate the evaluation of student

perceptions in relation to emotional intelligence competencies and leadership after

completing the leadership program.

Statement of the Problem

A state university launched a leadership development program in cooperation

with the local chamber of commerce in September 2012 (D. Fullerton, personal

communication, September 1, 2014). Emotional intelligence components were added to

the curriculum during the Spring 2015 semester (D. Fullerton, personal communication,

November 25, 2014). The TEIQue-SF was implemented to provide students with a

measure of self-perception in emotional intelligence as well as a way to prompt

discussions and set goals (D. Fullerton, personal communication, November 25, 2014). Students were provided with TEIQue-SF results at the beginning and end of the program to encourage self-reflection and communication.

Purpose of the Study

Research questions and hypotheses. The following research questions guided the study:

1. What is the difference, if any, in emotional intelligence competencies after completing a state university's leadership program?

2. What is the difference, if any, in emotional intelligence competencies based upon participant age and college grade level?

3. What is the difference, if any, in emotional intelligence competencies based upon participant gender?

4. What are the perceptions of participants who complete a state university's leadership program about emotional intelligence?

$H1_0$: There is no difference in emotional intelligence competencies after completing the state university's leadership program.

$H2_0$: There is no difference in emotional intelligence competencies based upon participant age and college grade level.

$H3_0$: There is no difference in emotional intelligence competencies based upon gender.

Definition of Key Terms

Emotional intelligence. According to Mayer and Salovey (1997), emotional intelligence:

Involves the ability to perceive accurately, appraise, and express emotion; the

ability to access and/or generate feelings when they facilitate thought; the ability

to understand emotion and emotional knowledge; and the ability to regulate

emotions to promote emotional and intellectual growth. (p. 10)

Emotional intelligence is necessary for effective relationship building, leadership

development, and understanding of perspectives (Mayer, Salovey, Caruso, &

Cherkasskiy, 2011).

Limitations and Assumptions

The following limitations were identified in this study:

Sample demographics. The state university's leadership program is limited to

15 students per semester, thus limiting the sample population available for study.

Participant selection. Students must apply for program participation, and the

number of students who choose to apply varies. Panel interviews were utilized to select

candidates from the applicant pool. The interview panel was made up of university

employees, one of whom is the researcher.

Instruments. The assessment, TEIQue-SF, utilizes self-reported scales;

participants could provide societal-favored responses (Brackett, Rivers, & Salovey,

2011).

Survey. Students could choose to participate in the survey or opt out; there was

no way to predict the number of or demographics of students who would choose to

complete the survey. Additionally, student responses reflect individual perceptions and

may not be representative of the entire group.

The following assumptions were accepted as part of the study:

1. Participation in the state university's leadership program had an impact on student behaviors.

2. All students entered the state university's leadership program with a desire for personal and professional growth.

3. All students answered the TEIQue-SF and survey questions honestly and to the best of their abilities.

Summary

The need for leadership development as a college outcome has been recognize since 1972 (Roberts, 2007). A variety of models are utilized by institutions and vary in delivery method, credit award, and program length (Keating et al., 2014). The participating university launched a leadership development initiative in 2012 (Anonymous, 2014).

The leadership program is a leadership development initiative offered through a partnership between a state university and the local chamber of commerce to recognize and develop college student leadership capacities (Anonymous, 2014). The researcher evaluated outcomes from the TEIQue-SF to assess changes in emotional intelligence as a result of program participation. Additionally, survey responses were evaluated to appraise participant perceptions about emotional intelligence competencies and leadership after program completion.

Emotional intelligence acts as a foundation for relationship building and strengthening, and competencies can be improved with practice (Bharwaney et al., 2011). The TEIQue-SF helps students identify opportunities for improvement and quantify self-

perceived change (Allen, Shankman, & Miguel, 2012; Schutte et al., 1998). Review of

the TEIQue-SF results offers an opportunity for self-reflection and evaluation.

In Chapter One, a historical framework was established utilizing background

information. Emotional intelligence was explained as the theoretical basis for the study.

Emotional intelligence is characterized by an aptitude for emotion awareness in self and

others as well as an understanding of the effects emotions play in daily interactions

(Mayer & Salovey, 1997). Also introduced were the research questions, hypotheses, and

purpose of the study.

In Chapter Two, a review of the literature surrounding emotional intelligence is

discussed. The main topics include the models and facets of emotional intelligence;

assessment; gender, age, and college level differences in emotional intelligence; and

emotionally intelligent leadership. A review of student leadership programming models,

theories, and approaches is also presented.

Chapter Two: Review of Literature

When leadership is stripped of the positional hierarchy, transformational leadership emerges (Harrison, 2011). For decades, college campuses have been preparing students for leadership (Keating et al., 2014). With vast differences in focus and content, institutions have been under pressure to identify training objectives and desired outcomes (Dugan et al., 2011). Intelligence quotient is no longer enough for successful leadership; candidates must possess high levels of grit, self-discipline, drive, and relational skills (Rada-Florina, Simona, Rita-Monica, & Michaela, 2012).

Leadership and emotion are highly intertwined, and the ability to constructively utilize emotions to make decisions and manage relationships is the hallmark of emotional intelligence (Killian, 2012; Rada-Florina et al., 2012). It is estimated "98% of top performers have a high emotional quotient" (Rada-Florina et al., 2012, p. 745). Relying on 15% cognitive ability and 85% emotional quotient, top performers are able to overcome negative emotions to positively influence situations (Rada-Florina et al., 2012).

Studies have suggested natural propensities for differing leadership and emotional intelligence traits among males and females (Lopez-Zafra, Garcia-Retamero, & Pilar Berrios Martos, 2012). Additionally, differences among age groups have been observed (Nayak, 2014). With practice, both emotional intelligence and leadership competencies can be improved among all constituents (Allen et al., 2012).

Emotional Intelligence

Emotional intelligence is the capacity to recognize, evaluate, and produce emotions in order to facilitate understanding of self and others (McCleskey, 2014b). Academic study of emotional intelligence began in 1920 when Thorndike first introduced

the existence of alternative intelligence (Yusof, Kadir, & Mahfar, 2014). Gardner furthered the research in 1983 with the establishment of "interpersonal and intrapersonal intelligence," followed by Salovey and Mayer's definition of emotional intelligence and subsequent inventories for measurement (Yusof et al., 2014, p. 41). However, it was not until Goleman's book, *Emotional Intelligence: Why It Can Matter More than IQ*, that the general public became aware of emotional intelligence (Yusof et al., 2014).

Emotional intelligence is related to personality, and connections have been established with the "Big-Five personality dimensions" (Petrides, 2011, p. 666). Petrides (2011) asserted a heritable connection between genes associated with unique characteristics and emotional intelligence. Emotional intelligence is unique, as it can be "isolated in personality space," and complex "because the trait EI factor is oblique, rather than orthogonal to the Giant Three and the Big Five" (Petrides, 2011, p. 665). Assessment of emotional intelligence has been adapted for use with a variety of ages from young to old (Petrides, 2011).

Early attempts to measure emotional intelligence failed to recognize the distinction between "typical and maximum performance" (Petrides, 2011, p. 657). Further researchers realized varying results depending on the facet being measured (Petrides, 2011). This led to the development of two models of emotional intelligence, trait and ability (Petrides, 2011). Ability emotional intelligence focuses on the measure of "maximum" capacity, while the trait model concentrates on "typical performance" (Petrides, 2011, p. 657). Trait assessments utilize self-perception of competencies, while ability models use assessments similar to IQ tests to gauge limitations of performance (Petrides, 2011).

Models of Emotional Intelligence

Two models of emotional intelligence, trait and ability, have been consistently

identified and agreed upon by the research community (Andrei, Mancini, Baldaro,

Trombini, & Agnoli, 2014; Petrides, 2011). Differing primarily in the area of

measurement, Petrides (2011) described trait emotional intelligence as "emotion-related

self-perceptions measured via self-report" and contrasted it to ability emotional

intelligence, which is "emotion-related cognitive abilities that ought to be measured via

maximum performance tests" (p. 657). Both models are rooted in the explanation of

emotional intelligence presented by Mayer and Salovey as a set of interconnected

emotional aptitudes (Walter, Cole, & Humphrey, 2011).

While trait emotional intelligence focuses on self-perception and opportunities for

growth, ability emotional intelligence focuses on limitations in capacity and has been

compared to measurement of intelligence quotient (Petrides, 2011). Some researchers

have failed to recognize the distinction between constructs, attempting to use

measurements interchangeably, essentially subverting their own studies (Petrides, 2011).

Petrides (2011) noted, "The distinction between trait EI and ability EI is based on the

method used to measure the construct" (p. 671). Although attempts have been made to

blend the models, no convergence has been established through empirical study of

assessment tools (Petrides, 2011). Measurement of trait emotional intelligence does not

translate to measurement of ability emotional intelligence and vice versa (Andrei et al.,

2014; Di Fabio & Saklofske, 2014).

The ability model centers on the relationship between emotional proficiencies and

mental aptitudes (Yusof et al., 2014). Assessments measure the ability to synthesize

emotional information in the context of maximum performance (Fiori et al., 2014). The

model has been utilized in mental health, education, and employment practices (Brackett

et al., 2011). Although assessments vary, Table 1 identifies consistent areas of measure.

Table 1

Areas of Measure in Ability Emotional Intelligence

Area	Competence
Perceiving and expressing emotions	Accurately identifies emotion expression in self and others
Using emotions	Uses emotions to guide thought and choice
Understanding emotions	Recognizes the reasons and results of emotion
Regulating emotions	Manages the recognition and use of emotion to foster individual growth and goal achievement

Note. Adapted from "Measuring Emotional Intelligence in Early Adolescence with the MSCEIT-YV:

Psychometric Properties and Relationship With Academic Performance and Psychosocial Functioning," by S.

Rivers, M. Brackett, M. Reyes, J. Mayer, D. Caruso, & P. Salovey, 2012, *Journal of Psychoeducational*

Assessment, 30(4), 344-366.

The ability construct assumes individuals begin at a baseline level of emotional

intelligence that can be augmented only within a finite range determined by mental

capacity (Mayer et al., 2011). The model also asserts every person will reach a peak

level and plateau at a specific age range (Mayer et al., 2011). Attainable levels are

affected by the baseline theory that emotionally intelligent individuals are more likely to

have been raised in an environment utilizing high levels of emotional intelligence (Mayer

et al., 2011). It is believed this environment fosters the ability to articulate emotions and yields attitudes that are less likely to feel the need to self-justify (Mayer et al., 2011).

Studies employing the ability model utilize specific or integrative approaches (Mayer et al., 2011). A specific approach focuses on individual aspects, while an integrative approach evaluates a broad group of qualities (Mayer et al., 2011). One example of specific measurement focuses on recognizing emotions in facial expressions (Mayer et al., 2011). Integrative approaches utilize a sampling from the specific measures in order to create an overview of emotional competency (Mayer et al., 2011).

Benefits of assessment utilizing ability emotional intelligence have been widely recognized (Smieja, Orzechowski, & Stolarski, 2014). The scoring structure has been credited with offering a high level of objectivity (Smieja et al., 2014). Also, ability assessments are less vulnerable to skewed results from feigning, where participants provide answers fitting within perceived societal norms, than are assessments used to measure trait emotional intelligence (Walter et al., 2011).

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is one of the most highly utilized assessments for ability emotional intelligence in research settings (Di Fabio & Saklofske, 2014). The construct has found utility in evaluating both adult and youth participants (Bracket et al., 2011). Although many studies have been conducted utilizing measurements of ability emotional intelligence, limitations have been found in the reliability of assessments (Petrides, 2011).

Ability emotional intelligence utilizes the measurement of maximum performance ability determined by responses deemed as correct (Petrides, 2011). The correct responses were determined by a compilation of answers from several thousand industry

experts (Brackett et al., 2011). Critics have suggested the utilization of averaged responses yields a level of normal emotional intelligence rather than maximum (Brackett et al., 2011). Further, these assessments rely on answers to theoretical problems instead of measuring behavior (Walter et al., 2011).

The ability model has also been criticized for the lack of evidence distinguishing it from other theories "such as personality and general intelligence—and how it accounts for emotionally intelligent performance" (Fiori et al., 2014, p. 1). Additionally, the model is especially difficult to operationalize due to the subjectivity of creating and scoring items which comprehensively represent the sampling domain (Petrides, Furnham, & Mavroveli, 2007). Finally, the scoring of answers has been highly criticized, and a variety of procedures have been tested with limited success (Petrides, 2011).

Trait emotional intelligence is defined by Petrides et al. (2007) as a "constellation of emotion-related self-perceptions and dispositions" (p. 157). Martskvishvili, Arutinov, and Mestvirishvili (2013) offered an alternative definition as a construct concerning "perceived ability to recognize, process, and utilize emotion-laden information" (p. 84). Focused on personal insight into individual emotional aptitudes, trait emotional intelligence relies on self-reported assessments (Petrides, 2011; Walter et al., 2011).

Trait assessments rely solely on self-perception, connecting trait emotional intelligence with personal disposition and the capacity to cope with emotional situations (Di Fabio & Saklofske, 2014). Individuals with a high level of trait emotional intelligence possess exemplary self-awareness (Petrides, 2011). The trait theory posits emotional intelligence is not related to cognitive ability and is instead related to personality constructs (Di Fabio & Saklofske, 2014; Petrides et al., 2007).

In contrast to the ability model, trait assessments are credited for recognizing and operationalizing the partiality of emotions (Petrides, 2011). Additionally, the construct has "concurrent and predictive validity with many criteria" and is "consistent with models of differential psychology" (Petrides et al., 2007, p. 152). Results are reported as global or factor scores (Andrei et al., 2014). Global scores utilize all elements, while factor scores employ groupings of facets (Abe et al., 2013). Although elements vary among assessments, Table 2 showcases the 15 consistent facets identified by Petrides (2011).

Table 2

The Sampling Domain of Trait Emotional Intelligence in Adults and Adolescents

Facets	High scorers perceive themselves as…
Adaptability	Flexible and willing to adapt to new conditions.
Assertiveness	Forthright, frank, and willing to stand up for their rights.
Emotion expression	Capable of communicating their feelings to others.
Emotion management (others)	Capable of influencing other people's feelings.
Emotion perception (self and others)	Clear about their own and other people's feelings.
Emotion regulation	Capable of controlling their emotions.
Impulsiveness (low)	Reflective and less likely to give in to their urges.
Relationship Skills	Capable of having fulfilling personal relationships.
Self-esteem	Successful and self-confident.
Self-motivation	Driven and unlikely to give up in the face of adversity.
Social awareness	Accomplished networkers with excellent social skills.
Stress management	Capable of withstanding pressure and regulating stress.
Trait empathy	Capable of taking someone else's perspective.
Trait happiness	Cheerful and satisfied with their lives.
Trait optimism	Confident and likely to "look on the bright side" of life.

Note. Adapted from "London Psychometric Laboratory at UCL," with permission. © K. V. Petrides – London Psychometric Laboratory, 2001. All rights reserved.

Studies have shown a high level of connection between emotional intelligence and job performance (Joseph et al., 2014). Trait emotional intelligence assessment has proven helpful in many applications including physical and mental health, as well as in education (Petrides, 2011). Additionally, assessment has shown utility in the growth of skills needed to foster healthy interpersonal relationships (Petrides, 2011). Scores can be used to identify strong skillsets as well as opportunities for development (Petrides, 2011).

High levels of trait emotional intelligence have been linked to leadership characteristics, academic achievement, effective stress management, and decision making (Di Fabio & Saklofske, 2014; Petrides, 2011). Effective leaders are able to manage the emotions of self and others to accomplish common goals (Cherniss, 2010). Academic achievement is affected by an individual's ability to recognize, comprehend, and utilize emotions in classroom interactions (Rivers et al., 2012). The ability to manage stress and facilitate decision making is supported by the emotional intelligence facets of emotion management, emotion regulation, and stress management (Petrides, 2011).

Trait emotional intelligence levels can be significantly augmented through training and development (Andrei et al., 2014; Komives et al., 2013). One example of a trait able to be identified and developed is empathy, of which exceptional listening is a pillar (Komives et al., 2013). Individuals with extraordinary listening skills are aware of others' emotions and are able to utilize that awareness for effective responses (Komives et al., 2013).

Through purposeful practice of active listening and the utilization of feedback, facets of empathy can be strengthened (Komives et al., 2013). Studies have found

substantial improvements in individual leadership competencies and engagement

after establishing only a basic level of emotional intelligence understanding (Parrish, 2011).

Trait emotional intelligence has been criticized for its reliance on self-reported assessments, which require a high level of self-awareness and virtue (Smieja et al., 2014). Individuals with an inaccurate or delusional self-perception may skew results (Smieja et al., 2014). Smieja et al. (2014) expressed concerns with the construct due to its reliance on the "assumption that people know how well they understand and deal with emotions" (p. 1). Concerns have also been expressed with the construct's reliance on self-perception, and its vulnerability to the "Dunning-Kruger effect," which posits the awareness needed for evaluation is the same awareness needed to execute what is being evaluated (Sheldon, Dunning, & Ames, 2014, p. 125).

Criticisms involving concern for the reliance on self-awareness in assessment are paradoxical to the foundation of emotional intelligence (Di Fabio & Saklofske, 2014). Individuals with high levels are conscious of their emotions and are capable of utilizing the emotions of themselves and others to make sound decisions (Di Fabio & Saklofske, 2014). It is recognized the true value of trait emotional intelligence assessments lies in helping individuals reflect on the perceived level of emotional intelligence rather than the actual level of emotional intelligence (Komives et al., 2013; Smieja et al., 2014).

A third model of emotional intelligence, mixed, has received much media attention, but has not been utilized extensively in research (Mayer et al., 2011). This is attributed to the general confusion surrounding the mixed model (Joseph et al., 2014). While trait and ability models draw distinction from their process of measurement within

the concept, the mixed model is discerned by the components it is theorized to include,

shown in Table 3 (Petrides, 2011). Petrides (2011) described this as a theoretical mixing

of intellectual aptitudes and temperament.

Table 3

Components of Mixed Model Emotional Intelligence

Author	Skills
Goleman	
	Knowing one's emotions
	Managing emotions
	Motivating oneself
	Recognizing emotions in others
	Handling relationships
Bar-On	
	Intrapersonal Skills
	Interpersonal Skills
	Adaptability
	Stress management
	General Mood

Note. Adapted from "Emotional Intelligence," by J. Mayer, P. Salovey, D. Caruso, and L.

Cherkasskiy, 2011, in R. Sternberg & S. Kaufman (Eds.), *The Cambridge Handbook of Intelligence*

(pp. 528-549). New York, NY: Cambridge University Press.

Made up of an assortment of behavioral attributes viewed as significant facets of

emotional intelligence, the mixed model includes "conscientiousness, extraversion, self-

related qualities (i.e., general self-efficacy and self-rated performance), ability emotional

intelligence, emotional stability, and cognitive ability" (Joseph et al., 2014, p. 2).

Although the extensive construct yields more variance, it is difficult to determine if this is due to emotional intelligence or other aspects included in the measure (O'Boyle, Humphrey, Pallack, Hawver, & Story, 2011).

The mixed model has been criticized for including too many areas outside the realm of emotional intelligence (Joseph et al., 2014). Joseph et al. (2014) attributed this to the use of "heterogeneous domain sampling from seven well-established content domains" typically found in psychology rather than emotional intelligence (p. 19). Many of the areas measured in mixed model assessments overlap with Big Five personality traits (Killian, 2012; Van Zyl & De Bruin, 2012).

Various researchers have taken issue with the mixed model's inclusion in the emotional intelligence construct, suggesting it should be renamed to reflect a study of personality aspects (Joseph et al., 2014; Mayer et al., 2011). Mixed model assessments include subskills such as independence, problem solving, and self-actualization, all of which have been recognized as personality traits rather than emotional intelligence traits (Joseph et al., 2014). Mixed model assessments, much like trait assessments, rely on self-report (Cherniss, 2010).

Popularized by the success of Daniel Goleman, many companies offer mixed model assessments to aid in staff development and vetting (Joseph et al., 2014). Joseph et al. (2014) estimated nearly "75% of Fortune 500 companies have adopted EI-related products and services" (p. 1). The service has grown into a highly lucrative industry (Joseph et al., 2014).

The Bar-On Emotional Quotient Inventory (EQ-i) is the most widely recognized and accepted assessment of mixed model emotional intelligence (Di Fabio & Kenny,

2012). Unlike many mixed model assessments offered through private firms, the EQ-i has undergone academic scrutiny and gained support as a valid measure (Di Fabio & Kenny, 2012; Joseph et al., 2014) Mixed model assessment is highly utilized by consulting firms offering assistance with candidate selection and professional development services (Joseph et al., 2014)

The utilization of mixed model assessments has received varied reviews (O'Boyle et al., 2011). Joseph et al. (2014) found strong connections between job success and mixed model assessments. Candidates possessing high levels of self-awareness were likely to participate in high achievement activities when employed (Joseph et al., 2014). Di Fabio and Kenny (2012) found relationship between mixed model components and decision-making styles. Individuals with low levels of mindfulness exhibit avoidance when faced with decisions (Di Fabio & Kenny, 2012).

Critics caution against the assessment's inability to isolate emotional intelligence competencies (Joseph et al., 2014). Its mixed nature of personality traits and emotional intelligence captures general traits related to job success (Joseph et al., 2014). Strong warnings have been issued against hiring managers relying heavily on mixed model assessments for employment selection due to the lack of credible evidence supporting the assessments (Mayer et al., 2011). Many tools used in this practice have undergone little research scrutiny due to their proprietary nature, which limits research access to evaluate the assessments' reliability or validity (Joseph et al., 2014).

Facets of Emotional Intelligence

Mayer and Salovey (1997) established four segments of emotional intelligence for assessment. Segments were referred to as "branches" and were made up of (a)

"perception, appraisal, and expression of emotion;" (b) "emotion's facilitation of thinking;" (c) "understanding and analyzing emotions; employing emotional knowledge;" and (d) "reflective regulation of emotions to promote emotional and intellectual growth" (Mayer & Salovey, 1997, pp. 10-14). These sectors served as a basis for future facet and measure development (Mayer, Salovey, & Caruso, 2012).

Assessments measuring ability, trait, or mixed model emotional intelligence incorporate facet scores (Joseph et al., 2014; Mayer et al., 2012; Petrides, 2011). These facets feed into an overall or global score (Petrides, 2011). However, consistent naming conventions for facets have not been utilized in all assessments (Joseph et al., 2014; Mayer et al., 2012; Petrides, 2011).

The Bar-On Emotional Quotient Inventory (EQ-i), a trait assessment, reports five composite scales, which include "intrapersonal, interpersonal, adaptability, stress management, and general mood" (Van Zyl, 2014, p. 3). The Trait Emotional Intelligence Questionnaire (TEIQue) measures "well-being, self-control, emotionality, and sociability" (Mikolajczak, Luminet, Leroy, & Roy, 2007, p. 353). The Schutte Self-Report Inventory of Emotional Intelligence (SSRI) provides a measure of mixed model emotional intelligence (Brackett & Mayer, 2003). The instrument initially provided only a global score but has since undergone adaption to include three, four, or six facets (Austin, Saklofske, Huang, & McKenney, 2004; Jonker & Vosloo, 2008; Petrides & Furnham, 2000b).

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) offers measurement of ability emotional intelligence (Mayer et al., 2012). The instrument produces facet scores in "perceiving emotions, using emotions to facilitate, thinking,

understanding emotions, and managing emotions" (Fiori et al., 2014, p. 2). The Wong and Law Emotional Intelligence Scale (WLEIS) returns facet scores in "self-emotional appraisal," "others' emotion appraisal," "use of emotion," and "regulation of emotion" (Karim, 2010, p. 4042). The results are evaluated in the context of ability emotional intelligence (Wong, Wong, & Law, 2007).

Varying in title, all of the assessments provide some form of overall and individual scale scores (Mayer et al., 2012; Mikolajczak et al., 2007; Van Zyl, 2014). Several also produce intermediary scores, which further group facets (Fiori et al., 2014). Researchers have attempted to establish validity of assessments by comparing one to another with limited success (Karim, 2010).

Assessment

Much of the criticism surrounding emotional intelligence is rooted in the convoluted definitions used in the vast number of assessments claiming to measure emotional intelligence (De Weerdt & Rossi, 2012). While many assessments claim to measure differing facets of emotional intelligence, few have successfully withstood empirical review (Consortium for Research on Emotional Intelligence in Organizations, 2015). The number of studies evaluating the validity of emotional intelligence assessments has grown over the past few years (De Weerdt & Rossi, 2012). The Bar-On Emotional Quotient Inventory (EQ-i), Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), Schutte Self-Report Inventory (SSRI), Wong's Emotional Intelligence Scale, and Trait Emotional Intelligence Questionnaire (TEIQue) assessments have successfully endured academic scrutiny and have been utilized in many studies (Consortium for Research on Emotional Intelligence in Organizations, 2015).

A pioneer in emotional intelligence assessment, the EQ-i was developed by Bar-On, and is one of the original tools utilized to measure trait emotional intelligence (De Weerdt & Rossi, 2012). The tool is intended to serve as a general gauge of emotional intelligence (De Weerdt & Rossi, 2012). Results include a "total EQ-score, five composite scale scores, and 15 content scale scores" (De Weerdt & Rossi, 2012, p. 150). Composite scores and content scales are detailed in Table 4.

De Weerdt and Rossi (2012) expressed concern with the "five composite scale scores," finding them inadequate because "the interpersonal, adaptation and stress management EQ scales contain subscales that display considerable different convergent and discriminate validity indexes" (p. 147). However, the "content scale scores" were found to be helpful in evaluating individual facets of emotional intelligence (De Weerdt & Rossi, 2012, p. 147). Due to the assessment's makeup, the EQ-i can be helpful in predicting an individual's future reactions to situations (De Weerdt & Rossi, 2012).

Table 4

The Bar-On Emotional Quotient Inventory (EQ-i) Measures

Composite Scale	Content Scale
Intrapersonal	
	Emotional Self-Awareness
	Assertiveness
	Self-Regard
	Self-Actualization
	Independence
Interpersonal	
	Empathy
	Interpersonal Relationship
	Social Responsibility
Adaptability	
	Problem Solving
	Reality Testing
	Flexibility
Stress Management	
	Stress Tolerance
	Impulse Control
General Mood	
	Happiness
	Optimism

Note. Adapted from "The Bar-On Emotional Quotient Inventory (EQ-i): Evaluation of Psychometric Aspects in the Dutch Speaking Part of Belgium," by M. De Weerdt and G. Rossi, 2012. In G. Rossi (Ed.), *Psychology- Selected papers* (pp. 145-172). Belgium: InTech.

Utilizing the trait emotional intelligence theory, the EQ-i assessment utilizes self-awareness to rate the applicability of individual statements (De Weerdt & Rossi, 2012). Originally consisting of 133 questions, specific statements were included to assist researchers in disqualifying participants and controlling for agreeability and legitimacy (De Weerdt & Rossi, 2012). The instrument is also available in a shortened form for

lessened participant time commitment, a youth version for ages seven to 18, and a version utilizing peer raters, the EQ-360 (Keefer, Holden, & Parker, 2013; Larin et al., 2011; Stein et al., 2013). Although studies have yielded varying results, the instrument has been criticized for inconsistency and lack of reliability (De Weerdt & Rossi, 2012; Keefer et al., 2013; Van Zyl, 2014).

The MSCEIT focuses on four facets of emotional intelligence and evaluates "perceiving emotions, using emotions to facilitate, thinking, understanding emotions, and managing emotions" to collectively create a "global score" (Fiori et al., 2014, p. 2). Intermediary scores are created by combining the facets "perceiving emotions" and "using emotions to facilitate" to create an "experiential area score" and combining "thinking" and "understanding emotions" to create a "strategic area score" (Fiori et al., 2014, p. 2). Characteristics and subscales are detailed in Table 5. The first to measure ability emotional intelligence, the assessment was launched in 2000 as the Multifactor Emotional Intelligence Scale (MEIS) (Fiori et al., 2014).

Table 5

The Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT) Measures

Characteristic	Subscale
Perceiving Emotions	Identifying emotions conveyed through facial expressions
	Identifying emotions conveyed through abstract pictures
Using Emotions	How emotions may be employed in different situations
	How emotions may be associated with sensations such as hot or cold
Understanding Emotions	Understanding the results of combinations of emotions
	Knowing how emotions may change and develop
Managing Emotions	Rating which emotional strategy would be most effective to manage emotions for oneself
	Rating which emotional strategy would be most effective to manage other people's emotions

Note. Adapted from "What is the Ability Emotional Intelligence Test (MSCEIT) Good For? An Evaluation Using Item Response Theory," by M. Fiori, J. Antonietti, M. Mikolajczak, O. Luminet, M. Hansenne, and J. Rossier, 2014, *PLOS One*, *9*(6), 1-11.

Consisting of 141 tasks, the assessment employs a Likert scale to collect responses measured against answers deemed correct and weighted utilizing majority or expert correct answers as a baseline for measure (Fiori et al., 2014). Tasks include identifying emotions shown in photos and artwork, evaluating the usefulness of emotions in relation to events, producing an emotion based on prompts, recognizing emotions based on scenarios, and rating the efficiency of reactions in relation to self and others

(Maul, 2012). In addition to the original assessment, a youth version was developed to evaluate individuals age 10-17 (Rivers et al., 2012).

The MSCEIT has been highly criticized based on scoring methods, validity of tasks, and precision of measurement (Fiori et al., 2014). The validity of tasks has come into question due to the context of situations (Fiori et al., 2014). Reactions may be appropriate in one situation but not in another, and the assessment fails to provide appropriate measure for situational context (Fiori et al., 2014). The scoring process allows researchers a choice in using measures based on majority or expert correct answers (Fiori et al., 2014). The subjectivity of answers deemed correct has been identified as a consistent concern, as the system weighs answers based on the number of respondents with similar responses in the majority or expert pool (Fiori et al., 2014). Finally, the precision of measure has been deemed questionable when employing the assessment in research (Fiori et al., 2014). The tool fails to distinguish between samples that are average or above average; however, it does show promise in use with individuals falling in low scoring areas of emotional intelligence (Fiori et al., 2014).

Schutte et al. (1998) developed the Schutte Self-Report Inventory of Emotional Intelligence (SSRI), also referred to as the Schutte Emotional Intelligence Scale (SEIS) and Schutte Self Report Inventory (SSRI) (Brackett & Mayer, 2003; Jonker & Vosloo, 2008; Sanchez-Nunez, Fernandez-Berrocal, & Latorre, 2013). Focused on Salovey and Mayer's earliest definition of emotional intelligence, the assessment utilizes self-report to evaluate competency levels (Petrides & Furnham, 2000b). A measure of trait emotional intelligence, the assessment is based on the mixed model of emotional intelligence (Brackett & Mayer, 2003).

The instrument consists of 33 questions (Jonker & Vosloo, 2008). Respondents rate their level of agreement with statements on a one to five-point scale; the higher the rating, the more the individual agrees with the statement (Jonker & Vosloo, 2008). Questions have endured academic scrutiny, and the instrument is highly utilized in research applications (Brackett & Mayer, 2003).

The SSRI's short length, 33 questions, in comparison to the MSCEIT's 141 questions and EQ-i's 133 questions, has made it a highly utilized research tool (Bester, Jonker, & Nel, 2013; Brackett & Mayer, 2003). Additionally, the assessment is easily accessible to researchers (Bester et al., 2013). Unlike many emotional intelligence assessments, the tool is offered free-of-charge for research purposes (Jonker & Vosloo, 2008).

The assessment has been criticized for an inconsistent number of factors in the measure, shown in Table 6 (Jonker & Vosloo, 2008). Schutte et al. claimed one factor, supporting only an overall appraisal of emotional intelligence (as cited in Petrides & Furnham, 2000b). Petrides and Furnham (2000b) identified four factors of measure. Jonker and Vosloo (2008) suggested six factors. Austin et al. (2004) identified four factors. Additional criticism has come from the lack of "reverse-keyed items," designed to subvert tendencies of socially agreeable responses (Jonker & Vosloo, 2008, p. 24).

Table 6

The Schutte Emotional Intelligence Scale

Three Factor	Four Factor	Six Factor
Optimism/mood regulation	Optimism/ mood regulation	Emotional management
Appraisal of emotions	Appraisal of emotions	Emotions-others
Utilization of emotions	Utilization of emotions	Happy emotions
	Social skills	Emotions-own
		Non-verbal emotions
		Positive affect

Note. From "Measurement of Trait EI: Testing and Cross-validating a Modified Version of Schutte et al.'s (1998) Measure," by E. Austin, D. Saklofske, S. Huang, and D. McKenney, 2004, *Personality and Individual Differences*, *36*(3), 555–562; "On the Dimensional Structure of Emotional Intelligence," by K. V. Petrides and A. Furnham, 2000, *Personality and Individual Differences*, *329*(2), 313-320; "The Psychometric Properties of the Schutte Emotional Intelligence Scale: Empirical Research" by C. S. Jonker and C. Vosloo, 2008, *SA Journal of Industrial Psychology*, *34*(2), 21-30.

Overall, Petrides and Furnham (2000b) supported the utility of the assessment, verifying its "face validity as well as some evidence of construct, predictive and discriminant validities" (p. 318). The assessment has been utilized in many languages and in a variety of applications (Bester et al., 2013). Future research may narrow the facet structure and further bolster the assessment's value (Petrides & Furnham, 2000b).

Developed by Wong et al. (2007), the Wong's Emotional Intelligence Questionnaire, also referred to as the Wong and Law Emotional Intelligence Scale

(WLEIS), is a two-part measure of emotional intelligence (Libbrecht, Beuckelaer, Lievens, & Rockstuhl, 2014). Developed in Hong Kong, China, the assessment was created to provide an alternative method of measuring ability emotional intelligence (Wong et al., 2007). Measuring emotional intelligence in relation to four facets shown in Table 7, the assessment attempts to measure ability emotional intelligence through self-reported scales (Fukuda, Saklofske, Tamaoka, & Lim, 2012). However, it has been argued the self-report structure classifies the instrument as a trait emotional intelligence scale rather than an ability scale (Perez, Petrides, & Furnham, 2005).

Table 7

Wong's Emotional Intelligence Questionnaire

Facet
Self emotion appraisal
Others' emotion appraisal
Use of emotion
Regulation of emotion

Note. Adapted from "Measurement Invariance of the Wong and Law Emotional Intelligence Scale Scores: Does the Measurement Structure hold across Far Eastern and European Countries?" by N. Libbrecht, A. D. Beuckelaer, and F. Lievens, 2014, *Applied Psychology*, *63*(2), 223-237.

Wong et al. (2007) expressed concern with cultural barriers present in typical ability-based assessments created in Western culture. One challenge, the task of identifying facial expressions in photos, may yield varied results depending on the participant's cultural background (Wong et al., 2007). Unique in its construct, the instrument has participants choose between two alternatives in 20 scenarios (Wong et al.,

2007). Additionally, participants judge which ability they feel is stronger between two choices in 20 pairings (Wong et al., 2007)

Considered to have "good internal consistency reliabilities" as well as "reliability," the assessment has found utility in many applications (Perez et al., 2005, p. 136). Despite concerns raised about the lack of research ensuring accurate translation among cultures, the assessment is one of the most widely utilized in international applications (Libbrecht et al., 2014). Overall, the assessment has been widely accepted in the research community (Perez et al., 2005).

The TEIQue was developed by Petrides (2011) as a self-reported measure of trait emotional intelligence. Consisting of 153 questions, the assessment measures 15 facets directed toward four factors referenced in Table 8 (Andrei et al., 2014). The remaining two facets are not included in a factor but contribute to the global score (Andrei et al., 2014). Additional versions of the assessment include a shortened form, adolescent and child forms, and a 360-degree version, which utilizes observer ratings (Petrides, 2011).

Table 8

TEIQue Factor Clusters and Associated Facets

Factor	Facets
Well-being	
	Self-esteem
	Trait happiness
	Trait optimism
Self-Control	
	Emotion regulation
	Impulsiveness (low)
	Stress management
Emotionality	
	Emotion expression
	Emotion perception (self and others)
	Relationship skills
	Trait empathy
Sociability	
	Assertiveness
	Emotion management (others)
	Social awareness
No specific factor (contributes only to overall score)	
	Adaptability
	Self-motivation

Note. Adapted from "Psychometric Properties of the Trait Emotional Intelligence Questionnaire:

Factor Structure, Reliability, Construct, and Incremental Validity in a French-Speaking

Population," by M. Mikolajczak, O. Luminet, C. Leroy, and E. Roy, 2007, *Journal of Personality*

Assessment, 88(8), p. 353. Copyright 2007 by Lawrence Erlbaum Associates, Inc.

Like many self-reported assessments, the TEIQue is criticized for "desirable

responding" where applicants choose responses they believe are appropriate or popular

instead of providing honest personal assessments (Mikolajczak et al., 2007, p. 348).

Specifically, the factors "well-being and self-control" are most affected (Mikolajczak et

al., 2007, p. 349). Another criticism of TEIQue is "gender difference" in results

(Mikolajczak et al., 2007, p. 349). Males score lower on "emotionality," while females

score lower on "self-control" and "sociability" (Mikolajczak et al., 2007, p. 348). The

assessment has been shown to "be significantly more reliable in the prediction of selected

criteria than other questionnaires" (Andrei et al., 2014, p. 3). However, concerns have

been expressed over the number of available responses in the Likert scale; researchers

have suggested pairing down the options (Cooper & Petrides, 2010).

Gender Differences in Emotional Intelligence

Studies evaluating gender differences in overall emotional intelligence have

yielded mixed results (Nayak, 2014; Tsaousis & Kazi, 2013). Nayak (2014) referenced

eight studies finding significantly lower scores in males than females. This is

contradicted by Tsaousis and Kazi (2013), who found four studies yielding no differences

in emotional intelligence among genders. Several studies, however, have reported

differences in individual traits (Tsaousis & Kazi, 2013).

Women and men seem to have natural propensities for specific emotional

intelligence skillsets (Lopez-Zafra et al., 2012). Women typically exhibit a higher

mastery of skills associated with interpersonal relationships, while men exhibit a

penchant for effective stress management (Lopez-Zafra et al., 2012). Gender differences

in emotional intelligence vary depending on the assessment utilized and are somewhat

contradictory (Lopez-Zafra et al., 2012).

Versions of the Trait Emotional Intelligence Questionnaire used in the trait model

yield differences in specific domains (Martskvishvili et al., 2013). Women achieve lower

scores in factors associated with "assertiveness and emotion regulation," in addition to

"self control and sociability," while men exhibit lower scores in the facet of

"relationships" (Martskvishvili et al., 2013, p. 87). The Trait-Meta Mood Scale, often

utilized in the ability model, yields lower emotional intelligence scores for men (Lopez-

Zafra et al., 2012). The Emotional Intelligence Questionnaire, used for trait emotional

intelligence, yields substantial differences in the social skills subset, with men scoring

lower than women but with no other differences on the total measure (Petrides &

Furnham, 2000a).

Overall, gender differences can be found in emotional intelligence (Lopez-Zafra

et al., 2012). Male and female differences in trait levels of emotional intelligence have

been attributed to socially normed expectations for gender roles (Siegling, Furnham, &

Petrides, 2015). For example, assertiveness is closely associated with male roles, while

empathy is associated with female roles (Siegling et al., 2015). Bias was claimed by

Petrides and Furnham (2000a) to attribute to self-reported assessment. Females are

inclined to self-deprecation, while males are inclined to self-commendation (Petrides &

Furnham, 2000a). This is further supported by Shahzad and Bagum (2012), who

hypothesized men perceive themselves to be more emotionally intelligent.

Despite contradictory results on gender difference in emotional intelligence, there

is an equal ability between genders to grow emotional intelligence through training and

practice (Abe et al., 2013; Shankman, Haber, Facca, & Allen, 2010). Emotional

development can be affected by many factors such as discrimination, upbringing, and

culture (Runcan & Goian, 2014; Shahzad & Bagum, 2012). Contradictory results

indicate the need for additional research in the realm of gender differences (Nayak,

2014).

Differences in Emotional Intelligence in Relation to Age and College Grade Level

As age increases, emotional intelligence also increases (Nayak, 2014; Sparkman, Maulding, & Roberts, 2012). Bar-on; Mayer, Caruso, and Salovey; as well as Van Rooy, Alonso, and Viswesvaran, all found younger individuals to possess lower levels of emotional intelligence than older counterparts (Sliter, Chen, Withrow, & Sliter, 2013). With practice, individuals typically realize substantial growth in emotional intelligence over a span of four years (Nayak, 2014). However, even without intentional practice, experience navigating situations and relationships can develop emotional intelligence (Sliter et al., 2013).

Several assessments have been modified to evaluate emotional intelligence in relation to age (Windingstad, McCallum, Bell, & Dunn, 2011). The Trait Emotional Intelligence Questionnaire-Adolescent Form (TEIQue-AF) was developed to assess individuals age 13-17 (Gugliandolo, Costa, Cuzzocrea, Larcan, & Petrides, 2015). The Trait Emotional Intelligence Questionnaire-Child Form (TEIQue-CF) is appropriate for use with children age 8-12 (London Psychometric Laboratory at UCL, n.d.). The Bar-On Emotional Quotient Inventory: Youth Version (EQi-YV) was adapted for use on 7-18 year olds (Keefer et al., 2013). The Mayer-Salovey-Caruso Emotional Intelligence Test: Youth Version MSCEIT:YV is appropriate for use with individuals age 8-19 (Windingstad et al., 2011). All youth versions are evaluated and modified to support appropriate reading levels (Windingstad et al., 2011).

Emotional intelligence changes with age and is positively correlated until age 65 (Tsaousis & Kazi, 2013). After age 65, studies have shown reductions in overall emotional intelligence scores (Tsaousis & Kazi, 2013). Individual traits vary with age;

younger individuals typically score lower on "facilitation, understanding, and management of emotions" (Tsaousis & Kazi, 2013, p. 170). Few studies have compared teens to other age groups; instead, the focus has been placed on longitudinal results among adolescents (Keefer et al., 2013).

Studies exploring relationships between collegiate academic grade levels and emotional intelligence have yielded mixed results (Noor-Azniza, Malek, Ibrahim, & Farid, 2011). Pope, Roper, and Qualter (2012) found no difference in emotional intelligence competencies when comparing students who graduated college to individuals who dropped out. Variations have been attributed to the demographic assortment involved in college grade levels that consist of differing hours of enrollment, ages, and life experience (Fernandez, Salamonson, & Griffiths, 2012). In order to narrow the focus, many researchers have chosen to study specific grade levels, majors, or age groups (Fernandez et al., 2012; Noor-Azniza et al., 2011).

Narrowed methodology in the study of collegiate academic success has produced a direct connection between emotional intelligence and college progress (Fernandez et al., 2012). Connections have also been found between levels of emotional intelligence, adjustment, and academic persistence (Noor-Azniza et al., 2011). Evaluating levels of emotional intelligence in students has shown promise as a way of identifying students in need of interventions to increase college success (Pope et al., 2012).

Attempts have been made to track student emotional intelligence levels from the beginning to end of college careers (Pope et al., 2012). Sparkman et al. (2012) evaluated students in the categories of enrolled, not enrolled, and graduated in relation to levels of

emotional intelligence. Sparkman et al. (2012) found aspects of emotional intelligence relating to social connections to be a strong forecaster of college completion.

Other researchers evaluated student emotional intelligence levels in relation to age (Noor-Azniza et al., 2011). Noor-Azniza and Jdaitawa as well as Abdallah, Mahyuddin, and Ulie found lower emotional intelligence levels in younger college students compared to older (Noor-Azniza et al., 2011). This was supported by the findings of Pike, Schroeder, and Berry, who evaluated students over and under 21 years of age; students under 21 produced lower emotional intelligence scores than students over 21 (as cited in Noor-Azniza et al., 2011). Age connections to emotional intelligence may account for the moderating factor of age on academic success found in Laidro, Pullman, and Allik's study (Noor-Azniza et al., 2011).

The evaluation of college success and specific college grade level has been employed by many researchers (Devi, 2012; Fernandez et al., 2012; Garza, Bain, & Kupczynski, 2014; Leedy & Smith, 2012). Schutte, Malouff, Haggerty, Cooper, Golden, and Dornheim narrowed their study to college freshmen (Fernandez et al., 2012). Schutte et al. found emotional intelligence levels at the beginning of the school year to be a strong predictor of grade point averages at the end of the school year (Fernandez et al., 2012). Leedy and Smith (2012) focused on college freshmen in their first semester. Their study yielded mixed results with only females exhibiting positive changes in emotional intelligence (Leedy & Smith, 2012). Garza et al. (2014) focused on college seniors. They found attributes of emotional intelligence to be strong predictors of college graduation (Garza et al., 2014). Devi (2012) explored the emotional intelligence levels of post-graduate students. She found a positive connection between student age and

emotional intelligence; emotional intelligence levels were higher the older the student (Devi, 2012). Additionally, she found most post-graduate students to have high levels of emotional intelligence (Devi, 2012)

Transition from high school to college can be stressful for students; individuals with high levels of emotional intelligence are more likely to successfully adjust to their new environments and achieve academic success (Sparkman et al., 2012). Fernandez et al. (2012) urged institutions of higher education to incorporate opportunities for emotional intelligence augmentation as a method of preparing students for academic success. Student retention has been connected to high levels of emotional intelligence, supporting the urge for purposeful training as a college component (Sparkman et al., 2012).

Leadership and Emotions

Over 200 leadership theories have been identified, studied, or augmented, and additional theories continue to be explored (McCleskey, 2014a). Leadership theories have changed drastically since their first study in 1869, shifting from a focus on hierarchy to shared responsibilities and teachable attributes (Humphreys, 2011; McCleskey, 2014a). Modern leadership theories embrace the roles of both leaders and followers, recognizing both roles practice leadership in some capacity with varying levels of influence (Humphreys, 2011).

The conventional idea of effective leadership traits has transitioned away from intellect, strength, and vision accompanied by specialized knowledge (Komives et al., 2013). These traits have been surpassed by traits associated with emotional intelligence: "self-awareness, self-regulation, motivation, empathy, and social skills" (Komives et al., 2013, p. 162). Leadership is a highly emotional endeavor; emotional intelligence

enriches leadership and judgment abilities, thus necessitating the utilization of emotional intelligence for effective leadership (Jansen, Moosa, Van Niekerk, & Muller, 2014; Rehman & Waheed, 2012). It is estimated 75-90% of skills needed for successful performance in leadership roles involve the management of emotion (Yusof et al., 2014).

Ingleton (2013) hypothesized any individual dedicated to improving society as a whole regardless of intellect or societal status is a prospective leader. This is further supported by leadership theories utilizing emotional intelligence as a predictor for leadership potential (Batool, 2013). Walter et al. (2011) asserted, "All published articles support the notion that emotionally intelligent individuals are more likely to emerge as leaders" (p. 48). Studies suggest personal and professional success and effective leadership are all influenced by elements of emotional intelligence (Brackett et al., 2011).

Three models of leadership are consistently recognized in academic literature: (a) laissez-faire, (b) transactional, and (c) transformational (Rowold, 2014). Laissez-faire leadership is recognized as docile and lacking guidance (Rowold, 2014). Transformational leadership utilizes a shared engagement in the process of change, raising the morale and enthusiasm of all parties (Harrison, 2011). Transactional leadership focuses on the trade of benefits between leaders and followers and relies heavily on the use of reward and punishment (Yusof et al., 2014). Without emotional intelligence, leaders will rely on laissez-faire or transactional leadership tendencies (Batchelor et al., 2014; Rowold, 2014).

Emotional intelligence is the foundation of effective transformational leadership (Hur, Van Den Berg, & Wilderom, 2011). Transformational leadership utilizes emotion to "instill commitment, inspire, foster creativity, and fulfill the desires of followers"

(Batchelor et al., 2014, p. 99). Transformational leaders are able to clearly communicate a vision, exhibit ethical behavior, and respectfully challenge and embrace the viewpoints of others in order to accomplish a common goal (Ingleton, 2013).

From the early study of emotional intelligence, transformational leadership has been closely intertwined (Batchelor et al., 2014). Batchelor et al. (2014) posited one must first become emotionally intelligent before mastering transformational leadership. Researchers evaluating the usefulness of emotional intelligence in the workplace found high levels of correlation between emotional intelligence and transformational leadership style, supporting theories which encourage investment in skill development (Yusof et al., 2014).

Emotionally Intelligent Leadership

Developed from characteristics found in both transformational leadership and emotional intelligence, the emotionally intelligent leadership model includes the ability to regulate emotions in relation to leadership competencies (Jansen et al., 2014). Emotionally intelligent leadership mixes emotional intelligence with leadership theory and practice to create a blend of intellectual practices, temperament, actions, and skills that interrelate to forecast how individuals will react in leadership circumstances (Allen et al., 2012). The model has primarily been utilized for leadership development in college students (Haber, 2011)

The theory relies on focused attention to situations affecting personal and group experiences (Haber, Allen, Facca, & Shankman, 2012). It is designed to help individuals gain the skills needed to identify opportunities for the recognition, analysis, and piloting of situations (Haber et al., 2012). Individuals with a mastery of emotionally intelligent

leadership are able to use their skillsets to guide the fulfilment of preferred results in team settings (Allen et al., 2012).

Shankman and Allan first introduced the emotionally intelligent leadership model in their 2008 edition of *Emotionally Intelligent Leadership: A Guide for College Students* (as cited in Haber, 2011). A relatively new construct, the theory has been credited with providing a methodology to explore leadership in the framework of higher education (Allen et al., 2012). Just as Gardner (1990) established leadership skills are learned rather than inborn, the emotionally intelligent leadership model supports purposeful practice and training to strengthen competencies (Allen et al., 2012). Additionally, the theory focuses on both the immediate and enduring facets of emotional intelligence and leadership development (Jansen et al., 2014).

Based on components from trait emotional intelligence, emotionally intelligent leadership focuses on building awareness around three core areas shown in Table 9: "consciousness of context, consciousness of self, and consciousness of others" (Facca & Allen, 2011, p. 74). The first emotionally intelligent leadership facet, "consciousness of context," is characterized as a cognizance of situation and condition (Shankman et al., 2015, p. 10). This competency can be developed by studying the subtleties of team interactions and politics (Shankman, Allen, & Haber-Curran, 2015, p. 10). Mindfulness of personal aptitudes, feelings, and insights are at the core of the facet "consciousness of self" and can be developed through introspection (Shankman et al., 2015, p. 10). The final facet, "consciousness of others," is exhibited through the ability to recognize the aptitudes, feelings, and insights of others; this trait can be developed through deliberate team interaction (Shankman et al., 2015, p. 10).

Table 9

Emotionally Intelligent Leadership Facets and Competencies

Facet	Competency
Consciousness of context	
	Environmental awareness
	Group savvy
Consciousness of self	
	Emotional self-perception
	Honest self-understanding
	Healthy self-esteem
	Emotional self-control
	Authenticity
	Flexibility
	Achievement
	Optimism
	Initiative
Consciousness of others	
	Empathy
	Citizenship
	Inspiration
	Influence
	Coaching
	Change agent
	Conflict management
	Developing relationships
	Teamwork
	Capitalizing on difference

Note. Adapted from "College Students' Emotionally Intelligent Leadership: An Examination of Differences by Student Organization Involvement and Formal Leadership Roles," by P. Haber, S. Allen, T. Facca, and M. Shankman, 2012, *International Journal of Leadership Studies*, *7*(2), 246-265.

Evaluation of emotionally intelligence leadership competencies is offered through the Emotionally Intelligent Leadership for Students (EIS) assessment (Nelson, Fierke, Sucher, & Janke, 2015). The self-evaluation tool is designed to evaluate "21 capacities" and "three facets" (Komives et al., 2011, p. 190). The assessment has found utility in both research and academic application (Haber et al., 2012; Nelson et al., 2015).

The emotionally intelligence leadership model has been utilized in several studies (Haber et al., 2012). Shankman et al. (2010) evaluated gender differences in behaviors. The analysis found significant dissimilarities; males exhibited lower levels of competencies associated with emotionally intelligent leadership in comparison to females (Shankman et al., 2010). Haber et al. (2012) employed the model to evaluate connections between involvement with collegiate organizations and emotionally intelligent leadership competencies. Students involved in multiple student organizations reported higher levels of competencies associated with emotionally intelligent leadership (Haber, 2011).

The emotionally intelligent leadership model embraces opportunities for growth in both leadership and emotional intelligence (Haber et al., 2012). The model shows potential with further study (Shankman et al., 2010). Application could move beyond student leadership to adult studies in organizational success (Haber, 2011).

Student Leadership Programming

Central to many university missions, thousands of college student leadership development programs now exist (Wisner, 2011). The leadership development field is ever-changing in response to the marketplace (Patterson, 2012). The global job market will require leaders who are capable of exhibiting a high level of emotional maturity in

addition to possessing the necessary skillsets to be successful in the field (Ingleton, 2013).

One of the first documented college student leadership development programs began in 1972 at the University of Colorado with the President's Leadership Class (Roberts, 2007). This initiative was created to encourage positive engagement with the community, campus leadership, and eventually leadership in the workplace (Roberts, 2007). Now, it is estimated over 1,000 leadership development programs exist on U.S. college campuses (Keating et al., 2014).

Many institutions answered the challenge for increased leadership development programs; however, few developed systems to evaluate their effectiveness (Keating et al., 2014). Additionally, leadership literature has changed drastically over the decades as theoretical models have been developed and refined (Ingleton, 2013). A modern construct of leadership was suggested by Komives et al. (2013), where it is "a relational process based on mutual goals toward some action or change" (p. 51). Leadership theories originated in industrialism, which focused on positions of authority for a select chosen few, and have transitioned over the years to include a wider population with developable capacities (Ingleton, 2013).

Leadership development programs vary greatly in higher education (Posner, 2012). Researchers have urged institutions to equip students with the necessary skillsets required to provide healthy leadership in an ever-changing world (Ingleton, 2013). This has led to the development of recent textbooks designed to assist universities in the endeavor of leadership training (Komives et al., 2013; Kouzes & Posner, 2014; Shankman et al., 2015; Stein et al., 2013). Varying in theories and models, college

textbooks can assist institutions to produce measurable learning outcomes (Komives et al., 2013; Kouzes & Posner, 2014; Shankman et al., 2015; Stein et al., 2013).

Focusing on leadership exploration, *The Student Leadership Challenge* and *Exploring Leadership* each offer varied approaches to collegiate education (Komives et al., 2013; Kouzes & Posner, 2014). *The Student Leadership Challenge* is designed to assist students in the exploration of leadership potential (Kouzes & Posner, 2014). Based on a model of "Five Practices of Exemplary Leadership," the textbook guides students through activities intended for personal development (Kouzes & Posner, 2014, p. 9). *Exploring Leadership* introduces the Relational Leadership Model (Komives et al., 2013). This model is based on the theory of leadership involving complex processes, empowerment of individuals, ethical guidelines, the need to include other perspectives, and the effect all of these facets have on the processes used for effective leadership (Komives et al., 2013).

Emotional intelligence offers an alternative approach to leadership education and is detailed in *Emotionally Intelligent Leadership* and *The Student EQ Edge* (Shankman et al., 2015; Stein et al., 2013). *Emotionally Intelligent Leadership* explores the relationship between emotions and leadership (Shankman et al., 2015). Students are encouraged to develop self-awareness while gaining an appreciation for others' emotions and how they intertwine with daily interactions (Shankman et al., 2015). *The Student EQ Edge* also utilizes emotional intelligence as a foundation (Stein et al., 2013). Designed to help students grow in emotional intelligence competencies, the book utilizes the Bar-On model of emotional-social intelligence (Stein et al., 2013).

Assessments designed specifically for college students are offered in conjunction with academic textbooks and on a stand-alone basis (Posner, 2012). The Student Leadership Practices Inventory (S-LPI) evaluates mannerisms and performance in relation to student recollection of individual bests (Posner, 2012). The assessment is designed to encourage self-reflection in the context of personal development (Posner, 2012). Copies of *The Student Leadership Challenge* include access to the resource (Kouzes & Posner, 2014).

The Kouzes and Posner Student Leadership Inventory was designed to measure the leadership capacities of individuals enrolled in college (Coder et al., 2014). The Student Development Task and Lifestyle Inventory (SDTLI) has been used in multiple studies to evaluate changes in leadership participation during higher education enrollment (Coder et al., 2014). The Emotional Quotient Inventory 2.0 (EQ-i 2.0) offers a version for students age 18 and older (Stein et al., 2013). Although it is not included in *The Student EQ Edge* textbook, students are encouraged to seek assessment through a variety of avenues (Stein et al., 2013).

Transformational leadership and servant leadership models are commonly utilized in college leadership development programs (Hur et al., 2011; Janke et al., 2013). It is important to recognize the significance of relationships fostered through participation in leadership development programs (Rosch & Caza, 2012). One study found the program structure was not as impactful to long-term leadership practices as the "creation of a sense of community within a program and students' sense of belonging" (Rosch & Caza, 2012, p. 32). Leadership development programs on college campuses vary greatly in

structure and design (Rosch & Caza, 2012). Ranging from one-day workshops to multi-semester programs, it is essential for institutions to identify program objectives and methods to measure outcomes (Komives et al., 2011; Rosch & Caza, 2012).

Summary

Leadership is fluid and situational; it requires flexibility and adaptability (Komives et al., 2013). Leadership is expressed not only through taking charge, but also through team participation (Humphreys, 2011). Both leaders and followers exercise leadership in some capacity, with differing levels of influence (Humphreys, 2011).

Effective leaders are able to do more than just accomplish a short-term goal (Komives et al., 2013). Transformational leaders are able to inspire team members to action through emotion, vision, and engagement (Rehman & Waheed, 2012). Possessing a high level of emotional intelligence, transformational leaders are able to harness emotions in a constructive manner (Rehman & Waheed, 2012). Both leadership and emotional intelligence competencies can be strengthened through purposeful training and practice (Batool, 2013; Komives et al., 2013).

A variety of methods are available to assist with the evaluation of emotional intelligence competencies (Andrei et al., 2014; De Weerdt & Rossi, 2012; Di Fabio & Saklofske, 2014; Fiori et al., 2014; Libbrecht et al., 2014; Sanchez-Nunez et al., 2013). Measurement can provide opportunities for personal reflection and development (Brackett et al., 2011). Individuals of all backgrounds, genders, and ages are capable of augmenting emotional intelligence competencies (Godarzi, 2012)

Colleges are tasked with preparing students for leadership in an ever-changing world (Dugan et al., 2011; Ingleton, 2013). Emotional intelligence serves as a pertinent

and substantial framework for college student leadership development (Parrish, 2011). Although delivery methods vary, programs seeking to create long-term impact should incorporate opportunities for the exploration and development of emotional intelligence competencies (Facca & Allen, 2011; Parrish, 2011).

Chapter Two included a detailed evaluation of literature related to emotional intelligence. A description of the problem and purpose is provided in Chapter Three. The research questions and hypotheses are stated, and the population, sample, and the instrument utilized for the quantitative study are outlined. The process for data collection and the method for data analysis are described.

Chapter Three: Methodology

Institutions of higher education are tasked with preparing individuals for leadership roles in the 21st century (Ingleton, 2013). These roles differ greatly from earlier models guided by principles of positional leadership (Ingleton, 2013). Successful leaders must utilize acute social and emotional awareness, or emotional intelligence (Batool, 2013). Emotional intelligence includes consciousness, utilization, and channeling of emotions to influence desired outcomes (Stein et al., 2013).

Central to leadership success, emotional intelligence has been shown to give individuals a competitive advantage (Malos, 2011). Identified as a resource for gauging potential in future leaders in addition to providing guidance to strengthen competencies, extensive studies have supported emotional intelligence can be enhanced, and assessment is useful in measuring growth (Batool, 2013; Bharwaney et al., 2011). Emotional intelligence can assist leaders in cultivating relationships, making effective decisions, and managing stress (Batool, 2013).

Basic knowledge of emotional intelligence principles has been shown to result in marked improvement in capacities (Parrish, 2011). During the Spring 2015 semester, the state university incorporated the Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF) as a way to augment the campus leadership development initiative (D. Fullerton, personal communication, November 25, 2014). The assessment was implemented to offer students a resource to gauge self-perceived competencies, set goals for improvement, and demonstrate personal growth (D. Fullerton, personal communication, November 25, 2014).

In this chapter, the population and sample are discussed. The research questions and hypotheses are restated. Procedures for data collection and data analysis are explained, and ethical considerations are provided.

Problem and Purpose Overview

Leadership, job performance, and stress management have all been tied to emotional intelligence (Sadri, 2012). Additionally, differences in academic performance beyond those due to IQ have been credited to levels of emotional intelligence (Cherniss, 2010). In order to better prepare students for the workforce, higher education institutions have been urged to incorporate social and emotional training into curricular and extracurricular offerings (Fall, Kelly, MacDonald, Primm, & Holmes, 2013; Ingleton, 2013).

Introduced in September 2012, the state university's leadership program recently completed its sixth semester of programming (Anonymous, 2014). In an effort to augment program components, the TEIQue-SF (see Appendix A) was implemented during the Spring 2015 semester (D. Fullerton, personal communication, November 25, 2014). The assessment allowed students to evaluate self-perceived emotional intelligence, set goals for improvement, and facilitate conversations (D. Fullerton, personal communication, November 25, 2014). After careful evaluation of multiple assessment options, the TEIQue-SF was selected due to cost and ease of administration (D. Fullerton, personal communication, November 25, 2014).

Research questions and hypotheses. The following research questions guided the study:

1. What is the difference, if any, in emotional intelligence competencies after completing a state university's leadership program?

2. What is the difference, if any, in emotional intelligence competencies based upon participant age and college grade level?

3. What is the difference, if any, in emotional intelligence competencies based upon participant gender?

4. What are the perceptions of participants who complete a state university's leadership program about emotional intelligence?

$H1_0$: There is no difference in emotional intelligence competencies after completing the state university's leadership program.

$H2_0$: There is no difference in emotional intelligence competencies based upon participant age and college grade level.

$H3_0$: There is no difference in emotional intelligence competencies based upon gender.

Research Design

Designed to evaluate the change in emotional intelligence through participation in the state university's leadership development program, the researcher utilized primary quantitative data from survey responses, as well as secondary data consisting of pre- and post-participation TEIQue-SF results. Data from the TEIQue-SF were reviewed to determine differences in global and factor emotional intelligence scores in conjunction with age, college grade level, and gender of the participants. Global emotional intelligence and the factors "Well-being, Self-control, Emotionality, and Sociability"

were measured utilizing the TEIQue-SF, a shortened version of the TEIQue designed by
Petrides and Furnham (Petrides, 2009, p. 9).

Students' perceptions of emotional intelligence after completing the leadership
development program were evaluated through open-ended survey questions (see
Appendix B). Surveys were administered anonymously through SurveyMonkey;
participants utilized an anonymous link and were asked to provide demographic
information such as sex, age, and college grade level at the time of participating in the
leadership development program.

Population and Sample

The state university's leadership program is limited to 15 participants per
semester, thus limiting the size and scope of the study (Anonymous, 2014). Secondary
data from a consensus sample of participants were evaluated consisting of the total
population of Spring 2015 leadership program participants. Primary data from survey
results were also evaluated. All participants were invited to complete the survey.
Participants varied in age, sex, and academic grade level.

Applicants were selected through an interview process conducted by university
employees (D. Fullerton, personal communication, September 1, 2014). Participants
completed the TEIQue-SF before the first program session (D. Fullerton, personal
communication, September 1, 2014). Results were shared with students on an individual
basis to retain confidentiality, encourage candid conversation about the results, and set
goals for improvement (D. Fullerton, personal communication, September 1, 2014).
After completing the last session, students repeated the TEIQue-SF (D. Fullerton,
personal communication, September 1, 2014). Students were notified of changes in

TEIQue-SF scores via private meeting or e-mail, depending on the student's preference, in order to discuss perceived change and opportunities for future development (D. Fullerton, personal communication, September 1, 2014).

After program conclusion, surveys were administered to evaluate how participation affected students' approach to, perception of, or opinion of emotional intelligence competencies and leadership of themselves and others. Surveys were administered anonymously through SurveyMonkey; 15 surveys were distributed, and 11 surveys were completed. Survey participation was not a program requirement; students completed the surveys of their own free will.

Instrumentation

Grounded in Mayer and Salovey's model of emotional intelligence, the TEIQue was created to quantify self-perceived emotional intelligence competency and has been utilized by many researchers (Petrides, 2011). Petrides (2011) asserted utility of the assessment:

> The TEIQue should be preferred over other EI-related questionnaires for three
> main reasons: first, it offers a direct route to the underlying theory of trait
> emotional intelligence; second, it provides comprehensive coverage of the trait EI
> sampling domain; and, third, it has greater predictive validity. Indeed, every
> study that has compared the TEIQue to other EI questionnaires has concluded that
> it has superior predictive validity and superior psychometric properties more
> generally. (p. 663)

The full version of the TEIQue consists of "153 items, providing scores on 15 facets, 4 factors, and global trait EI" (Petrides, 2011, p. 663). Participants respond to each

question signifying the degree to which respective items represent them utilizing a five-point scale ranging from one, indicating complete disagreement, to five, indicating complete agreement (Petrides & Furnham, 2001).

A shortened version of the assessment, TEIQue-SF, was designed for research with restricted participant time (Petrides, 2011). Made up of 30 questions, the assessment is intended to gauge "global trait emotional intelligence" (Petrides, 2011, p. 663). It is estimated participants need less than 10 minutes for completion (Petrides, 2006a).

Limited factor analysis can be derived by evaluating questions designed to address "well-being, self-control, emotionality, and sociability" (Petrides, 2006b, p. 1). Studies have supported the "internal consistency of the TEIQue-SF was .88 ($N = 1119$)" and "corresponding internal consistencies for males and females were .89 ($N = 455$) and .88 ($N = 653$), respectively" (Petrides, 2006a, p. 2). Although the assessment utilizes questions from each of the 15 facets referenced in Table 2, individual facet measurement is not fully supported by the shortened form and was not evaluated in this study (Cooper & Petrides, 2010).

A survey consisting of five open-ended questions was utilized to prompt responses pertaining to the emotional intelligence competencies "well-being, self-control, emotionality, and sociability" in addition to leadership and personal growth through program participation (Petrides, 2006b, p. 1). Responses were evaluated to identify "themes" and "patterns" (Butin, 2010, p. 75). The survey was administered through an anonymous link imbedded in an e-mail, sent in response to the student's consent to study participation.

Data Collection

Secondary and primary data were evaluated for this quantitative study. Primary

data were collected through a survey completed by students from the Spring 2015

leadership program administered anonymously through SurveyMonkey. Notification of

the opportunity to participate in the study was distributed via e-mail, text message, and

social media message (see Appendix C). E-mails and social media messages contained

an adult consent form and explanation of the study (see Appendix D). Upon student

response, an e-mail containing an anonymous link to the survey was sent. Survey

completion was at the student's discretion with no program requirement to participate.

Eleven students completed the survey. Survey questions were open-ended and

designed to elicit thought around the subject of emotional intelligence competencies,

leadership, and personal growth through program participation. All questions were

optional; students were able to skip any questions at their discretion.

Secondary data collected during the Spring 2015 leadership program were also

evaluated. A consensus sample consisting of all program participants was included.

After being notified of acceptance into the state university's leadership program,

participants were e-mailed the TEIQue-SF assessment administered through

SurveyMonkey (D. Fullerton, personal communication, September 1, 2014). In addition

to answering the TEIQue-SF questions, participants were asked to provide name, age,

sex, and academic level (D. Fullerton, personal communication, September 1, 2014).

Participants were given their scores during a private meeting, and results were explained

in context with the program content (D. Fullerton, personal communication, September 1,

2014). After completing the final program session, participants were e-mailed a follow-

up copy of the TEIQue-SF to complete via SurveyMonkey (D. Fullerton, personal communication, September 1, 2014). Students were given the option to receive their post-program TEIQue-SF scores via private meeting or e-mail (D. Fullerton, personal communication, September 1, 2014). Meetings were offered to provide an opportunity for discussion of perceived change in emotional intelligence and plans for future development (D. Fullerton, personal communication, September 1, 2014). E-mail results were offered due to the program end coinciding with finals and graduation, limiting student availability (D. Fullerton, personal communication, September 1, 2014).

All program participants were included in the study. Students were notified of all program requirements during the interview process and given the opportunity to opt out of participation (D. Fullerton, personal communication, September 1, 2014). Students applied to participate in the leadership program and were selected based on a panel interview (D. Fullerton, personal communication, September 1, 2014). The interview panel consisted of committee members associated with the program (D. Fullerton, personal communication, September 1, 2014). No selection bias existed, as the students were not given the TEIQue-SF until after selection for program participation (D. Fullerton, personal communication, September 1, 2014). The researcher is the program advisor and conducted the student meetings to discuss pre-and post-participation results.

Administration of TEIQue-SF by e-mail removed research bias; students completed the assessment in private. The study was limited by the number of applicants and participants. Only 15 students are selected each semester, and the number of applications varies by semester.

Data Analysis

Inferential statistics were employed to evaluate primary and secondary data. Inferential statistics are used to make assumptions about a broad group based on the outcomes from a small group (Gupta, 2012). Results from the study were utilized to make assumptions about future student outcomes.

Multiple paired sample *t*-tests were employed to evaluate Spring 2015 leadership program participant pre- and post-participation TEIQue-SF results. Outcomes were evaluated to assess differences in emotional intelligence scores after program completion. Global emotional intelligence was evaluated utilizing the TEIQue-SF's full 30 questions, and factor results were gleaned from question subsets (Petrides, 2006b). Responses to questions 5, 20, 9, 24, 12, and 27 provided assessment of the factor well-being (Petrides, 2006b). Self-control was evaluated based on questions 5, 20, 9, 24, 12, and 27 (Petrides, 2006b). Questions 4, 19, 7, 22, 15, and 30 yielded results in self-control (Petrides, 2006b). Emotionality was evaluated based on questions 1, 16, 2, 17, 8, 23, 13, and 28 (Petrides, 2006b). Finally, the factor sociability was assessed from questions 6, 21, 10, 25, 11, and 26 (Petrides, 2006b). The paired sample *t*-tests were utilized to evaluate differences in pre- and post-program participation results as related to participant age and college grade level, gender, and extent of overall and subscale differences in emotional intelligence.

Survey results were evaluated to identify "patterns, themes, and distinctive perspectives" (Butin, 2010, p. 75). Questions were open-ended and designed to elicit thought around the subject of emotional intelligence competencies, leadership, and

personal growth through program participation. Results will be useful for future analysis of emotional intelligence and college leadership development programs.

Ethical Considerations

Application was made to the Lindenwood University Institutional Review Board to approve the study before research began (see Appendix E). Secondary data from the TEQue-SF were evaluated. Primary data were collected via anonymous survey. No identifiable information was collected in the survey. All results were kept secure and confidential.

Summary

The next generation of leaders must be able to adapt and react appropriately in a quickly changing work environment (Ingleton, 2013). Emotional intelligence assumes emotions are central to daily interactions; individuals possess varying levels of aptitudes in understanding and utilizing emotions, and these aptitudes affect leadership potential (McCleskey, 2014b). Universities have a unique opportunity to influence students' leadership habits and can equip them with the tools needed to lead in an ever-changing world (Ingleton, 2013).

In Chapter Three, the research design was explained. Research questions and hypotheses, population and sample, as well as instrumentation were explored. The processes for data collection and data analysis were also described.

Data are analyzed in Chapter Four, and tables are utilized to display results. The population sample and demographics are evaluated. Finally, the results from open-ended survey questions are evaluated.

Chapter Four: Analysis of Data

Leadership involves the management of stress, perceptions, and attitudes to strive for common goals (Shankman et al., 2015). The ability to recognize and direct emotions in self and others is a key attribute for effective leaders (Komives et al., 2011). Transformational leaders are able to bond teams, inspire action, and help others reach their full potential (Rowold, 2014).

Much attention has been directed toward the need for leadership development as a college outcome (Komives et al., 2011). Emotional intelligence as a leadership development framework has shown promise in many applications (Petrides, 2011). Able to be augmented through purposeful training and practice, high levels of emotional intelligence have been linked to job success, healthy relationships, and emotional well-being (Joseph et al., 2014).

Chapter Four includes a review of the sample and study design. The chapter also includes an exploration of pre- and post-program participation TEQue-SF results in addition to observations from survey results. Multiple paired sample *t*-tests were conducted to evaluate differences in self-perceived emotional intelligence as a result of participating in the leadership development initiative (Bluman, 2013). Survey results were evaluated to discern student perceptions after program completion in relation to leadership and emotional intelligence.

Study Design

The purpose of this study was to evaluate the differences in self-perceived emotional intelligence competencies in addition to exploring the perceptions of participants who complete the state university's leadership program. Designed to

measure global emotional intelligence as well as individual competencies, the TEIQue-SF was administered before and after program participation (Petrides, 2011). Derived from the full version of TEIQue, the shortened form, TEIQue-SF, consists of 30 questions in contrast to over 150 questions (Petrides, 2011). The shortened version is designed for research with limited participant time (Petrides, 2011). Results were evaluated using multiple paired sample t-tests to assess if significant differences in means could be observed. Data were evaluated to assess differences in overall emotional intelligence and traits; it was further parsed by separating groups according to age, college grade level, and gender.

Additionally, surveys were administered to evaluate personal perceptions related to emotional intelligence competencies and leadership after program completion. The survey consisted of five open-ended questions inviting individuals to share how program participation affected their approach to, perception of, or opinion of emotional intelligence competencies and leadership of themselves and others. Responses were submitted anonymously to encourage candid response. Emotional intelligence competencies include well-being, self-control, emotionality, and sociability (Petrides, 2006b).

Research questions and hypotheses. The following research questions guided the study:

1. What is the difference, if any, in emotional intelligence competencies after completing a state university's leadership program?

2. What is the difference, if any, in emotional intelligence competencies based upon participant age and college grade level?

3. What is the difference, if any, in emotional intelligence competencies based upon participant gender?

4. What are the perceptions of participants who complete a state university's leadership program about emotional intelligence?

$H1_0$: There is no difference in emotional intelligence competencies after completing the state university's leadership program.

$H2_0$: There is no difference in emotional intelligence competencies based upon participant age and college grade level.

$H3_0$: There is no difference in emotional intelligence competencies based upon gender.

Sample

The size and scope of the study was limited by the state university leadership program's maximum capacity of 15 participants per semester (Anonymous, 2014). Secondary data from a consensus sample of participants were evaluated, consisting of the total population of Spring 2015 leadership program participants. Primary data were also evaluated, consisting of survey responses from 11 Spring 2015 leadership program participants. Participants varied in age, sex, and collegiate grade level.

Program participants were selected through an interview process conducted by university employees (D. Fullerton, personal communication, September 1, 2014). Students completed the TEIQue-SF before the first program session (D. Fullerton, personal communication, September 1, 2014). Results were shared on an individual basis to retain confidentiality, encourage candid conversation about the results, and set goals for improvement (D. Fullerton, personal communication, September 1, 2014). After

completion of the last session, students repeated the TEIQue-SF (D. Fullerton, personal communication, September 1, 2014). Students were notified of changes in TEIQue-SF scores via e-mail or private meeting, depending on the student's preference, in order to discuss perceived change and opportunities for future development (D. Fullerton, personal communication, September 1, 2014).

After program completion, surveys were administered to evaluate how program participation affected students' approach to, perception of, or opinion of emotional intelligence competencies and leadership of themselves and others. Surveys were administered anonymously through SurveyMonkey; 15 surveys were distributed, and 11 surveys were completed. Five females, four males, and two undeclared individuals provided responses. Survey participation was not a program requirement; students completed the survey of their own free will.

Demographics

A consensus sample of all participants in the state university's leadership program was evaluated in the study. The demographics by gender compared to the entire campus's student population were similar. As show in Table 10, males made up 43% of the participating university's population and 47% of the leadership program's population. Females represent 57% of the campus population and 53% of the university's leadership program.

Table 10

Demographics of Sample Population by Gender

Gender	2014-2015	% Student Population
Participating University		
Male	2,370	43%
Female	3,190	57%
Total	5,560	100%
Leadership Program		
Male	7	47%
Female	8	53%
Total	15	100%

Note. Participating institution *n* = 5560. Leadership program *n* = 15.

The demographics by collegiate grade level of the leadership program consensus sample varied significantly from the campus population. As shown in Table 11, the participant university had a somewhat evenly distributed enrollment among freshmen, sophomores, juniors, and seniors, while the leadership program demonstrated a higher concentration of seniors. The leadership program consisted of 54% seniors, while the campus population consisted of 25% seniors.

Table 11

Demographics of Sample Population's Enrollment by Grade Level

Grade Level	2014- 2015	% Student Population
Participating University		
Non-Degree Seeking	455	8%
Freshman	1,497	27%
Sophomore	950	17%
Junior	1,117	20%
Senior	1,395	25%
Post-Graduate	173	3%
Graduate	29	1%
Total	5,616	100%
Leadership Program		
Freshman	1	7%
Sophomore	2	13%
Junior	3	20%
Senior	8	53%
Post-Graduate	1	7%
Total	15	100%

Note. Participating institution $n = 5616$. Leadership program $n = 15$.

Participant ages in the leadership program are shown in Table 12, which vary significantly from the ages of students enrolled at the participating university. The demographics present near opposites, with the university enrolling 62% 18-24 year olds and 24% 25-39 year olds. In contrast, the leadership program consisted of 33% 18-24 year olds and 67% 25-39 year olds.

Table 12

Demographics of Sample Population by Age

Age	2014- 2015	% Student Population
Participating University		
Under 18	276	5%
18-24	3,223	62%
25-39	1,271	24%
40 and over	444	9%
Unreported	9	0%
Total	5,223	100%
Leadership Program		
18-24	5	33%
25-39	10	67%
Total	15	100%

Note. Participating institution *n* = 5,223. Leadership program *n* = 15.

Analysis of Quantitative Data

One purpose of this quantitative study was to determine if a difference in emotional intelligence competencies, or traits, could be realized after completing the state university's leadership program. Data to assess global emotional intelligence as well as the traits well-being, self-control, emotionality, and sociability were generated utilizing the TEIQue-SF (Petrides, 2006b). Participants in the university's leadership development program completed the assessment both before and after program completion.

Two-tailed, paired sample *t*-tests were employed to evaluate changes in participant scores. Paired sample *t*-tests are guided by the following assumptions: a) "samples are random;" b) "sample data are dependent;" and c) "when the sample size or samples sizes are less than 30, the population or populations must be normally or

approximately normally distributed" (Bluman, 2013, p. 489). *T*-tests were developed to

assist with the evaluation of small samples (de Winter, 2013).

Paired sample *t*-tests, also referred to as dependent samples *t*-tests or *t*-tests for

dependent means, allow researchers to study one group under two conditions (Bluman,

2013). The test provides a method to evaluate data on an even basis; only the increases

and decreases are evaluated (Bluman, 2013). By removing original high or low values

from the equation, data can be accurately compared on change alone (Bluman, 2013).

T-tests are evaluated under a one- or two-tailed test, which determine uni-

directional movement, one-tailed, or bi-directional movement, two-tailed (Bluman,

2013). Two-tailed tests create two "critical regions" on opposite ends of the mean, while

one-tailed tests identify one "critical region" (Bluman, 2013, pp. 405-406). In order to

reject the null hypothesis, the results must fall within the identified region (Bluman,

2013).

First, the overall emotional intelligence scores were evaluated. The level of risk

assumed for this assessment was 0.05, which accepts a less than 5% probability of the

results being due to chance. This resulted in critical values of +2.14 and -2.14; data must

be greater than +2.14 or less than -2.14 to reject the null hypothesis that there is no

difference in emotional intelligence competencies after completing the state university's

leadership program.

The obtained value was -0.61, which was too low to reject the null hypothesis.

However, noteworthy differences were observed in the mean scores used to evaluate

central tendencies, which increased from 172 to 174.33, as shown in Table 13 (Bluman,

2013). Variance, which signifies the level of spread among scores, also grew from

301.86 to 349.38 (Bluman, 2013). This indicates scores had a larger deviance in the

second assessment compared to the first.

Table 13

Central Tendency Data for Overall Emotional Intelligence

TEIQue-SF Results	Overall Emotional Intelligence		
	Mean	Median	Standard Deviation
Before	172.00	174.00	17.37
After	174.33	173.00	18.69

Note. $n = 15$.

Next, the differences in trait scores were evaluated using the same levels of risk,

0.05, creating critical values of +2.14 and -2.14. The trait well-being yielded an obtained

value of -0.62, too low to reject the null hypothesis. The trait self-control yielded an

obtained value of 0.07, also too low to reject the null hypothesis. The trait emotionality

yielded an obtained value of -0.49, too low to reject the null hypothesis. The trait

sociability yielded an obtained value of -1.11, also too low to reject the null hypothesis.

Differences in mean varied by trait shown in Table 14. Well-being changed from

31.87 to 32.27, a growth of 0.04; self-control changed from 31.8 to 31.73, a decline of

-0.07; emotionality changed from 44.67 to 45.4, a growth of 0.73; and sociability

changed from 33.67 to 34.73, the largest growth in mean at 1.06. Changes in variance

were also diverse, as well-being changed from 7.12 to 10.35, an increase of 3.23; self-

control changed from 25.89 to 27.64, a growth of 1.75; emotionality changed from 38.1

to 34.4, a decline of 3.7; and sociability changed from 17.24 to 27.5, the largest trait

growth at 10.26.

Table 14

Central Tendency Data by Emotional Intelligence Trait

	Emotional Intelligence Trait		
TEIQue-SF Results	Mean	Median	Standard Deviation
Well-Being			
Before	31.87	32.00	2.67
After	32.27	34.00	3.22
Self-Control			
Before	31.80	31.00	5.09
After	31.73	31.00	5.26
Emotionality			
Before	44.67	47.00	6.17
After	45.40	45.00	5.87
Sociability			
Before	33.67	33.00	4.15
After	34.73	35.00	5.24

Note. $n = 15$.

The second purpose of this quantitative study was to determine if a difference in emotional intelligence competencies could be observed according to participant age and college grade level after completing the state university's leadership program. The program has no age or grade level requirement (D. Fullerton, personal communication, September 1, 2014). The average age of program participants was 26.5 with a median age of 26. One freshman, two juniors, two sophomores, eight seniors, and one post-graduate completed the program.

Participant ages were divided into two groups, 18-24 and 25-39, with eight students in the 18-24 group and seven in the 25-39 group. Utilizing a 0.05 level of risk,

critical values must be reached to reject the null hypothesis that there is no difference in emotional intelligence competencies based upon participant age and college grade level. The critical values associated with the 18-24 year old group were +2.36 and -2.36, with critical values of +2.45 and -2.45 for the 25-39 year old group. The obtained values were -0.36 for 18-24 and -0.5 for 25-39, both too low to reject the null hypothesis. Both groups did produce changes in mean values, with the 18-24 group changing from 168.5 to 170.50, a growth of 2; and the 25-39 group changing from 176 to 178.71, a growth of 2.71 (see Table 15). Variance also changed in both groups, with 18-24 decreasing from 470 to 320, a decline of 150, and 25-39 growing from 121 to 399.90, an increase of 279.9. This indicates scores associated with overall emotional intelligence were more compact in the 18-24 group and more scattered in the 25-39 group.

Table 15

Central Tendency Data for Overall Emotional Intelligence by Age Group

TEIQue-SF Results	Overall Emotional Intelligence by Age Group		
	Mean	Median	Standard Deviation
18-24 year old			
Before	168.50	168.00	20.28
After	170.50	171.50	16.73
25-39 year old			
Before	176.00	179.00	10.18
After	178.71	180.00	18.51

Note. Ages 18-24, $n = 8$. Ages 25-39, $n = 7$.

Individual traits were evaluated using the same categories and level of risk. All traits were assigned the same critical values, with the 18-24 year old group at +2.36 and

-2.36, and +2.45 and -2.45 for the 25-39 year old group. All yielded differences in

means, as illustrated in Table 16.

Table 16

Central Tendency Data by Emotional Intelligence Trait and Age Group

Age Group	Emotional Intelligence Trait		
TEIQue-SF Results	Mean	Median	Standard Deviation
Well-Being			
18-26 year old			
Before	31.38	31.50	3.12
After	31.63	33.00	3.24
27-37 year old			
Before	32.43	32.00	1.59
After	33.00	34.00	2.78
Self-Control			
18-26 year old			
Before	32.63	32.00	3.98
After	32.38	31.50	5.15
27-37 year old			
Before	30.86	31.00	3.98
After	31.00	31.00	5.15
Emotionality			
18-26 year old			
Before	41.63	41.00	5.98
After	42.88	43.50	4.75
27-37 year old			
Before	48.14	51.00	3.56
After	48.29	47.00	5.23
Sociability			
18-26 year old			
Before	33.50	32.00	4.74
After	33.75	33.50	3.80
27-37 year old			
Before	33.86	34.00	2.95
After	35.86	36.00	6.01

Note. Ages 18-24, *n* = 8. Ages 25-39, *n* = 7.

When evaluating well-being, the obtained values were -0.24 for 18-24 and -0.70 for 25-39, both too low to reject the null hypothesis. Both groups did produce changes in mean values; 18-24 grew slightly from 31.38 to 31.63, a change of 0.25, and 25-39 changing from 32.43 to 33, a growth of 0.57. Variance also changed in both groups, with 18-24 increasing from 11.13 to 11.98, a change of 0.86, and 25-39 growing more significantly from 2.95 to 9, an increase of 6.05.

Self-control yielded obtained values of 0.18 for 18-24 and -0.1 for 25-39, both too low to reject the null hypothesis. Both groups produced changes in mean values with 18-24 declining slightly from 32.63 to 32.38, a decline of 0.25, and 25-39 changing from 30.86 to 31, a growth of 0.14. Variance yielded substantial decline and growth in each respective group; 18-24 declined from 34.47 to 27.70, a -6.57 drop, and 25-39 grew from 18.48 to 31, an increase of 12.52.

Obtained values for emotionality also failed to reject the null hypothesis at -0.59 for 18-24 and -0.7 for 25-39. Each group yielded growth in mean; 18-24 changed from 41.63 to 42.88, a variation of 1.25, and 25-39 changed from 48.14 to 48.29, a movement of 0.14. Similar to self-control, the variance in emotionality showed converse results; 18-24 decreased from 40.84 to 25.84, a -15 drop, and 25-39 grew from 14.81 to 31.90, an increase of 17.10.

Sociability returned an obtained value of -0.18 for 18-24 and -1.49 for 25-39, both too low to reject the null hypothesis. Changes in mean were realized in both groups; 18-24 changed from 33.50 to 33.75, a slight increase of 0.25, and 25-39 increased more significantly from 33.86 to 35.86, a growth of 2. Variance contrasted drastically; 18-24 decreased from 25.71 to 16.5, a -9.21 drop, and 25-39 grew drastically from 10.14 to

42.14, an increase of 32. This indicates a significant increase in array of scores from pre-

to post-program assessment for individuals in the 25-39 age group.

Next, participant grade levels were divided into two categories shown in Table 17.

Group A consisted of students enrolled as a freshmen, sophomore, or junior during the

study. Group B consisted of students enrolled as a senior or post-graduate during this

study. Group A contained one freshmen, two sophomores, and three juniors. Group B

consisted of eight seniors and one post-graduate. Both groups were assigned critical

values in order to reject the null hypothesis, with Group A at +2.57 and -2.57 and +2.31

and -2.31 for Group B.

Table 17

Central Tendency Data for Overall Emotional Intelligence by College Grade Level

Grade Level	Overall Emotional Intelligence		
TEIQue-SF Results	Mean	Median	Standard Deviation
Group A			
Before	171.83	179.50	17.48
After	171.67	174.00	22.41
Group B			
Before	172.11	173.00	16.31
After	176.11	173.00	14.17

Note. Group A, $n = 6$. Group B, $n = 9$.

In evaluation of overall emotional intelligence by grade level, obtained values

were 0.04 for Group A and -0.7 for Group B, both too low to reject the null hypothesis.

The groups produced contrasting results in both mean and variance. Mean values

decreased slightly in Group A from 171.83 to 171.67, a change of -0.02, while Group B

increased from 171.11 to 176.11, a growth of 4. Changes in variance were drastically

different; Group A increased from 366.57 to 602.67, a change of 236.10, while Group B

decreased from 299.11 to 225.86, a change of -73.25.

In evaluation of emotional intelligence traits, some groups showed no change in

mean while others yielded slight differences, shown in Table 18. Group A's trait, well-

being, yielded the first observed obtained value of zero in the study. Group B produced

an obtained value of -0.70, and both values were too low to reject the null hypothesis.

Mean values for Group A remained constant at 31.33, while Group B changed slightly

from 32.22 to 32.89, growing by 0.67. Variance showed change in both groups; Group A

moved from 10.27 to 16.27, a growth of 6, while Group B increased from 5.69 to 6.86, an

increase of 1.17.

Table 18

Central Tendency Data by Emotional Intelligence Trait and College Grade Level

Grade Level	Emotional Intelligence Trait		
TEIQue-SF Results	Mean	Median	Standard Deviation
Well-Being			
Group A			
Before	31.33	31.50	2.92
After	31.33	32.50	3.68
Group B			
Before	32.22	33.00	2.25
After	32.89	34.00	2.47
Self-Control			
Group A			
Before	31.50	32.50	3.95
After	31.50	32.00	5.25
Group B			
Before	32.00	30.00	5.46
After	31.89	31.00	4.95
Emotionality			
Group A			
Before	46.83	49.00	4.78
After	45.17	45.00	5.76
Group B			
Before	43.22	44.00	6.23
After	45.56	46.00	5.60
Sociability			
Group A			
Before	32.67	32.50	4.03
After	34.33	33.00	6.16
Group B			
Before	34.33	33.00	3.86
After	35.00	35.00	4.16

Note. Group A, *n* = 6. Group B, *n* = 9.

The trait self-control resulted in similar results to the trait well-being. Group A yielded another obtained value of zero, while Group B realized a value of 0.08. Both values were too small to reject the null hypothesis. Like the results for well-being, mean values for Group A remained constant at 31.33, while Group B decreased slightly from 32 to 31.89, changing by -0.11. Variance showed converse results; Group A increased from 18.70 to 33.10, a growth of 14.4, while Group B decreased from 33.5 to 27.61, a change of -5.89.

Group A's obtained value for the trait emotionality was 0.99, while Group B's was -1.11. Both values were too small to reject the null hypothesis. Differences were realized in the mean of both groups. Group A decreased from 46.83 to 45.17, a change of -1.67, while Group B increased more significantly from 43.22 to 45.56, an increase of 2.33. Changes in variance were also realized by both groups. Group A increased from 27.37 to 39.77, a change of 12.40, while Group B decreased from 43.69 to 35.28, a change of -8.42.

Results from the trait sociability also failed to reject the null hypothesis. Group A's obtained score of -1.33 and Group B's score of -0.47 were too low. Both groups realized changes in mean and variance. Group A produced a change in mean from 32.67 to 34.33, an increase of 1.67, while Group B moved from 34.33 to 35, a change of 0.67. Variance of Group A increased from 19.47 to 45.47, a change of 26. Group B also increased, moving from 16.75 to 19.5, a change of 2.75.

The third purpose of this quantitative study was to determine if a difference in emotional intelligence competencies could be observed with participant gender after completing the state university's leadership program. Data were divided by participant

sex. Seven males and eight females participated in the study. Both groups were assigned

critical values needed to reject the null hypothesis, with males at +2.45 and -2.45 and

females at +2.36 and -2.36.

In evaluation of overall emotional intelligence by gender, obtained values were

-0.58 for males and -0.25 for females, both too low to reject the null hypothesis. The

groups produced similar results in mean and contrasting results in variance. As shown in

Table 19, mean values for males increased from 178.71 to 182.29, an increase of 3.57,

while females increased from 166.13 to 167.38, a growth of 1.25. Changes in variance

were conflicting with males decreasing from 335.24 to 249.24, a change of -86, while

females increased from 231.84 to 366.55, a change of 134.71.

Table 19

Central Tendency Data for Overall Emotional Intelligence by Sex

Sex	Overall Emotional Intelligence		
TEIQue-SF Results	Mean	Median	Standard Deviation
Female			
Before	166.13	165.00	15.23
After	167.38	169.50	19.15
Male			
Before	178.71	180.00	18.31
After	182.29	180.00	15.79

Note. Female, *n* = 8. Male, *n* = 7.

The emotional intelligence trait well-being resulted in an obtained value of -0.49

for males and -0.34 for females, too low to reject the null hypothesis. Similar results

were observed in both mean and variance. Mean values, shown in Table 20, changed

slightly for both groups; males changed from 32.57 to 33.14, a growth of 0.57, and females changed from 31.25 to 31.25, a growth of 0.25. Variance also grew; males moved from 4.25 to 5.48, a change of 1.19, while females grew from 9.64 to 14.57, a change of 4.93.

Table 20

Central Tendency Data by Emotional Intelligence Trait and Sex

Sex	Emotional Intelligence Trait		
TEIQue-SF Results	Mean	Median	Standard Deviation
Well-Being			
Female			
Before	31.25	31.00	2.90
After	31.50	33.50	5.57
Male			
Before	32.57	33.00	1.92
After	33.14	34.00	2.17
Self-Control			
Female			
Before	29.88	29.50	4.20
After	29.75	29.00	5.29
Male			
Before	34.00	35.00	4.75
After	34.00	33.00	3.70
Emotionality			
Female			
Before	44.50	43.00	4.39
After	45.13	45.50	5.93
Male			
Before	44.86	48.00	7.36
After	45.71	45.00	5.34
Sociability			
Female			
Before	32.00	32.00	3.00
After	32.88	32.50	4.43
Male			
Before	35.57	37.00	4.17
After	36.86	36.00	4.91

Note. Female, $n = 8$. Male, $n = 7$.

The trait self-control produced the second observed obtained value of zero in the study for males and 0.92 for females, both values too low to reject the null hypothesis. Mean values for males were constant at 34, while females changed from 29.88 to 29.75, a decrease of -0.13. Variance produced opposite results; males changed from 26.33 to 16, a decrease of -10.33, while females grew from 20.13 to 31.93, an increase of 11.80.

The males' obtained value for the trait emotionality was 0.35, while females' were -0.32. Both values were too small to reject the null hypothesis. Changes in mean values were similar while changes to variance were opposing. The mean value for males increased from 44.86 to 45.71, a change of 0.86; females also increased from 44.50 to 45.13, an increase of 0.63. Variance for males decreased from 63.14 to 33.24, a decrease of -29.90, and females increased from 22 to 40.13, a growth of 18.13.

Results from the trait sociability also failed to reject the null hypothesis. Both the males' obtained score of -0.80 and the females' score of -0.72 were too low. Both groups produced changes in mean and variance. Males produced a change in mean from 35.57 to 36.86, a decrease of -1.29, and females moved from 32 to 32.88, an increase of 0.88. Variance of males decreased from 20.29 to 28.14, a change of -7.85, while females increased, moving from 10.29 to 22.41, a change of 12.13.

The fourth purpose of this study was to evaluate student perceptions regarding emotional intelligence and leadership. This was assessed by responses to open-ended survey questions administered to students after program completion. Survey questions were designed to elicit responses pertaining to students' approach to, perception of, or opinion of their own and others' leadership as well as emotional intelligence

competencies, well-being, self-control, emotionality, and sociability. Surveys were administered anonymously through SurveyMonkey; 11 surveys were completed.

Survey respondents represented a nearly equal distribution among males and females. Additionally, both age groups utilized in previous analysis were represented, as detailed in Table 21. College grade level varied; however, the researcher posited students may have provided their grade level after the semester's end instead of the grade level at the time of program completion. This is evidenced by the one response of graduate, as no graduate students participated in the leadership program. Survey participation was not a program requirement; students completed the surveys of their own free will.

Table 21

Demographic Information of Survey Participants

Demographic Group	Number of Participants	% Participant Population
Age		
18-24	2	18.18%
25-39	7	63.64%
Not disclosed	2	18.18%
Total	11	100%
Gender		
Male	4	36%
Female	5	45%
Not disclosed	2	18%
Total	11	100%
College grade level		
Junior	3	27%
Senior	5	45%
Graduate	1	9%
Not disclosed	2	18%
Total	11	100%

Note. n = 11.

When asked, "How has participating in the [leadership program] affected your approach to, perception of, or opinion of your and other people's self-esteem, happiness, and optimism (Well-being)?" student responses varied. Nearly half of respondents indicated program participation affected their approach to and perceptions of both their own and others' self-esteem, optimism, or happiness. Student A shared:

It has made me more aware of my own esteem and happiness. It has made me realize that the only person who can change this is me. I am more aware of what others are going through and I am trying to help them.

Two respondents indicated the program had especially helped them in understanding and meeting the needs of others. Student K explained:

[The program] has helped me to try to understand people better. To look at people at a deeper level to try and understand why they do things. Everyone is different and everyone has things that make them happy that I might not understand but to be able to work well with them and have a good relationship I need to try.

Additionally, two student responses indicated the program had helped them to gain a better understanding of themselves. This was summarized by Student G, "I became more aware of what contributes positively to my well-being, and try to focus on those things now." Overall, all students responded positively, indicating they had experienced a growth in well-being as a result of program participation.

Student perceptions of self-control were explored when asked, "How has participating in the [leadership program] affected your approach to, perception of, or opinion of your and other people's emotion regulation, impulse control, and stress

management (Self-Control)?" Responses centered around emotions as well as consciousness of self and others. Recognition of emotions was explained by Student B, "The [leadership program] has taught me how to recognize the positive and negative emotional triggers of my peers. I am now able to lead or follow someone more effectively." Consciousness of self and others was expounded on by Student J:

> I have better control over my emotions and stress. I am able to control my thoughts in difficult or stressful times and channel them into positive thinking. I can easily tell when others are stressed, which can allow me to help them.

All students expressed a growth in or increased understanding of self-control as a result of program participation.

Next the question, "How has participating in the [leadership program] affected your approach to, perception of, or opinion of your and other people's emotion expression, emotion perception in yourself and others, relationship skills, and empathy (Emotionality)?" was posed. Relationship building, personal connections, and empathy formed an underlying theme within responses. Several students expressed feeling better prepared to create and nurture relationships. This was explained by Student E:

> The [leadership program] taught me to be more aware of other people's emotions. Everyone does not think the same, therefore it is important to get to know how others think in order to better communicate with them and form better relationships.

This was furthered by Student J, "After [the leadership program], I understand the importance of relationships and how to handle certain situation[s]. Understanding

[emotional intelligence] enables me to understand myself and others to better my

relationships." The importance of personal connections was explained by Student K:

> For me I try not to show my feelings so [the leadership program] has showed me
>
> that feelings are important to some people. A lot of people need that emotional
>
> connection so I've tried to slow down and listen to what they have going on.

Student D expounded on the biggest impact, "Empathy was the biggest thing I learned

from the program. Now I have a much better opinion of other people's emotions."

Overall, all students expressed a better understanding and awareness of emotionality as a

result of program participation.

The final emotional intelligence trait evaluated, sociability, was explored in the

question, "How has participating in the [leadership program] affected your approach to,

perception of, or opinion of your and other people's assertiveness, emotion management

of others, and social awareness (Sociability)?" Responses fell into two distinct

categories: points of views and self-awareness. Nearly half of the responses indicated a

newly found appreciation and understanding of others' points of view.

This was contrasted by half of responses indicating a new sense of self-awareness.

Appreciation of points of view was exhibited by Student A, "It has helped me learn how

others operate and what drives them to act in a certain way." This was furthered by

Student B, "I now know what is important to someone and how to better show

appreciation for their efforts." Self-awareness was exhibited by Student D, "The

[program] helped me to be more comfortable with who I am, and develop my natural

skills into a strong leader." Student J also conveyed, "The [program] allowed me to open

up. It allowed me to see myself from a different angle and others from a different angle." Growth or greater understanding of sociability was expressed by all participants.

Finally, leadership was explored through the question, "How has participating in the [leadership program] affected your perception of leadership?" Personal confidence was exemplified by Student B, "I can adapt to almost every individual I encounter now and that allows me to be a better and more effective leader." This sentiment was echoed by Student I, "I can do it. Before, I didn't think I had the skills. I now know I do and others are rooting for me."

Long-term impact was explained by Student F, "The [leadership program] taught me how to be a better mom and leader for my children. What I learned about communicating and leading has changed the way I approach nearly every interaction with others." Student B expanded on this sentiment, "I can adapt to almost every individual I encounter now and that allows me to be a better and more effective leader." Responses indicated the program provided impactful and personal effects on individual lives.

Summary

Emotions play a key role in group dynamics; a leader's emotions can be contagious with both positive and negative implications (Komives et al., 2011). Thousands of leadership programs now exist on college campuses across the United States, answering the call for leadership development as a higher education outcome (Komives et al., 2011). In the Spring 2015 semester, the participating university set out to implement emotional intelligence components in its leadership development program (D. Fullerton, personal communication, September 1, 2014).

Evaluation of changes in emotional intelligence competencies was realized through the implementation of the TEIQue-SF. Additionally, student perceptions were evaluated utilizing responses to open-ended survey questions. The emotional intelligence traits well-being, self-control, emotionality, and sociability were explored in addition to global emotional intelligence.

An analysis of the sample and study design was included in Chapter Four. Pre- and post-program participation TEQue-SF were explored in addition to observations from survey results. Results of paired sample *t*-tests were evaluated to explore differences in self-perceived emotional intelligence as a result of program participation (Bluman, 2013). Finally, student perceptions were explored through the evaluation of survey results.

In Chapter Five, a summation of the study is provided. The study findings are presented, and differences in emotional intelligence competencies and leadership are explained. Research questions are revisited, and conclusions are formed based on the study results. Finally, suggestions for future studies and impacts on the field are shared.

Chapter Five: Summary and Conclusions

The management of emotions plays a key part in effective leadership, relationship building, and career development (Flowers, Thomas-Squance, Brainin-Rodriguez, & Yancey, 2014). Trait emotional intelligence employs self-perception to measure levels of competency in the areas of "well-being, self-control, emotionality, and sociability" (Mikolajczak et al., 2007, p. 353). Emotion regulation is essential to successful performance in leadership roles and is attributed to 80% of the necessary skillsets (Yusof et al., 2014). The use of emotional intelligence in higher education leadership development is a relatively new concept that shows potential in both curricular and co-curricular applications (Petrides, 2011; Sparkman et al., 2012). Individuals with a high level of emotional intelligence are able to recognize and utilize their own and others' emotions to positively affect outcomes (Singh, 2014).

In this chapter, a summation of the study is provided. Study findings, which include an exploration of differences in emotional intelligence competencies as a result of leadership program participation, are explained. Conclusions are elucidated as the research questions are revisited. Limitations of the findings, as well as relationships of the findings to the theoretical framework and implications for practice, are also evaluated. Finally, recommendations for future research are shared.

Findings

Research question 1. What is the difference, if any, in emotional intelligence competencies after completing a state university's leadership program?

H1₀: There is no difference in emotional intelligence competencies after completing the state university's leadership program.

Many studies have supported changes in emotional intelligence competencies as a result of training interventions (Schutte, Malouff, & Thorsteinsson, 2013). Significant increases in overall emotional intelligence scores were observed by Kirk, Schutte, and Hine (2011). Although changes in emotional intelligence were observed in the data collected from the university leadership program, statistical significance could not be established. The results did not provide enough evidence to reject the null hypothesis.

Two-tailed, paired sample *t*-tests were utilized to evaluate the collected data. The largest positive change in mean scores occurred in overall emotional intelligence, a change from 172 to 174.33. Scores were generated by student responses to the TEIQue-SF, a measure of self-evaluated emotional intelligence. Only small changes in emotional intelligence were observed when the data were parsed by trait. All traits yielded a positive result except for self-control, which declined by -0.07.

Research question 2. What is the difference, if any, in emotional intelligence competencies based upon participant age and college grade level?

H2₀: There is no difference in emotional intelligence competencies based upon participant age and college grade level.

Differences in emotional intelligence in relation to age were studied by Bar-on; Mayer, Caruso, and Salovey; as well as Van Rooy, Alonso, and Viswesvaran (Sliter et al., 2013). All found younger individuals to possess lower levels of emotional intelligence than older counterparts (Sliter et al., 2013). In this study, mean overall emotional intelligence scores yielded slight changes. However, changes were not

statistically significant and failed to allow the researcher to reject the null hypothesis. The 18-24 year old group yielded the lowest scores and smallest growth at 2 points, from 168.5 to 170.50. The 25-39 year old group exhibited higher scores and a larger increase of 2.71 from 176 to 178.71. This observation is in line with Nayak (2014) and Sparkman et al. (2012), who posited a positive correlation between age and levels of emotional intelligence. In observation of trait scores, the 18-26 year old group decreased in mean score for self-control by -0.25 but demonstrated a substantial growth in emotionality at 1.25. The 27-37 year old group increased in all traits and increased the most of the two groups in sociability.

Mixed results have been produced when exploring relationships between collegiate grade level and emotional intelligence (Noor-Azniza et al., 2011). This is attributed to variations involved in collegiate grade levels that consist of differing hours of enrollment and varied ages (Fernandez et al., 2012). Many researchers have chosen to narrow the focus, studying specific grade levels, majors, or age groups (Fernandez et al., 2012; Noor-Azniza et al., 2011). Research utilizing this narrowed focus has revealed a direct connection between emotional intelligence and academic success (Fernandez et al., 2012; Noor-Azniza et al., 2011).

In this study, college grade levels were divided into two groups. Group A consisted of students enrolled in college as freshmen, sophomores, or juniors. Group B consisted of students enrolled as college seniors or post-graduates. In line with the work of Fernandez et al. (2012), Group B's mean overall emotional intelligence scores grew from 171.11 to 176.11, a change of 4. Students in higher grade levels achieved academic success to advance, thus supporting the theories of Fernandez et al. (2012) and Noor-

Azniza et al. (2011) about the connection of emotional intelligence levels to academic

success. This theory is furthered by Group A's overall mean emotional intelligence score

which declined slightly from 171.83 to 171.67, a change of -0.02. Although both groups

exhibited a change in emotional intelligence, the differences were not statistically

significant and did not allow the null hypothesis to be rejected. In exploration of mean

trait scores, Group A showed no change in well-being or self-control. Additionally,

Group A declined and increased in equal amounts in emotionality, -1.66, and sociability,

1.66. Group B decreased slightly in self-control, -0.11, and grew notably in emotionality,

2.43.

Research question 3. What is the difference, if any, in emotional intelligence

competencies based upon participant gender?

H3$_0$: There is no difference in emotional intelligence competencies based upon

gender.

Gender differences in emotional intelligence have been observed at varying levels

depending on the assessment utilized (Lopez-Zafra et al., 2012; Siegling et al., 2015).

Although contradictory results have been reported, both genders are equally able to

produce changes in emotional intelligence as a result of training and practice (Abe et al.,

2013; Shankman et al., 2010). Differences in emotional intelligence competencies were

observed between male and female participants. However, no statistical significance was

present in the data, thus failing to provide enough evidence to reject the null hypothesis.

Attributed to social norms, males and females differ in emotional intelligence

results (Lopez-Zafra et al., 2012). Overall emotional intelligence mean scores differed by

gender; males increased from 178.71 to 182.29, a change of 3.57. Changes in mean

scores for females were much less than the males, a change of 1.25 from a starting mean score of 166.13 to a final mean score of 167.38. Within trait measures, females scored lower in means of all areas and yielded the lowest changes in all areas. In the trait self-control, males stayed the same at 34, while females decreased slightly from 29.88 to 29.75.

Research question 4. What are the perceptions of participants who complete a state university's leadership program about emotional intelligence?

Student perception of the emotional intelligence trait well-being varied among responses. Nearly half of the respondents expressed changes in perception of and approach to both their own and others' self-esteem, optimism, or happiness. All students expressed feelings of self-worth, hopefulness, and positive emotions. Specific examples included the ability to affect their own and others' emotions through actions, an awareness of other people's perceptions and the need to appreciate them, and optimism in future relationship-building. Additionally, two students expressed a better understanding of how to affect their own happiness. All students responded positively, indicating they had experienced growth in the emotional intelligence trait well-being as a result of program participation.

In exploration of the trait self-control, student responses were relatively consistent. All focused on emotions as well as consciousness of self and others. Students expressed the ability regulate emotions, control impulses, and manage stressors. Specific examples included the ability to recognize emotional challenges, opportunities in peer groups, and awareness of personal stressors and their effect on emotions. All students

expressed a growth in or increased understanding of self-control as a result of program participation.

In response to the emotional intelligence trait emotionality, students consistently cited improvement in relationship building, personal connections, and empathy. Facets associated with the trait emotionality include expression and perception of personal and others' emotions, relationship skills, and empathy (Mikolajczak et al., 2007). Students also expressed feeling better prepared to create and nurture relationships. Additionally, a new awareness of emotions was cited. Student responses covered all facets, indicating they experienced growth in emotionality.

Sociability facets include assertiveness, management of others' emotions, and social awareness (Mikolajczak et al., 2007). Two distinct categories were observed in the data: points of view and self-awareness. These categories represent the facets of management of others' emotions, as well as social awareness. A new-found appreciation and understanding of other points of view were expressed by almost half of the responses. This is contrasted by the citation of self-awareness by half of the respondents. Although not referenced in the question associated with sociability, students addressed strengthened confidence and assertiveness in response to questions regarding leadership. This indicates students successfully grew in awareness and practice of sociability.

Finally, overall leadership was explored. Students expressed strengthened confidence as well as positive long-term effects as a of program participation. Student I's perspective may have summarized it best, "[Program participation] made me realize the superstars of the community are normal people like me. I can do that, which I had not

considered before." Data indicated the program provided impactful and personal effects on individual lives.

Limitations of Findings

Four major limitations to the study were identified. First, the study utilized a small sample demographic. This was due to limitations of the state university's leadership program which is confined to 15 students per semester, thus limiting the sample population available for study. Additionally, participant selection served as another limiting factor. Participants must apply for program consideration; the number of students who choose to apply each semester varies. Candidates are selected by an interview panel from the applicant pool. The interview panel was made up of university employees, one of whom is the researcher.

A third limiting factor was instrumentation. The assessment utilized, the TEIQue-SF, relies on self-reported scales; participants could provide societal-favored responses (Brackett et al., 2011). Additionally, the survey utilized to collect primary data is a study limitation. Student responses reflect individual perceptions and may not be representative of the entire group. Moreover, students were able to choose to participate in the survey or opt out; there was no way to predict the number of or demographics of students who would choose to complete the survey.

The following assumptions were accepted as part of the study:

1. Participation in the state university's leadership program has an impact on student behaviors.

2. All students entered the state university's leadership program with a desire for personal and professional growth.

3. All students answered the TEIQue-SF and survey questions honestly and to the best of their abilities.

Relationship of Findings to Theoretical Framework

Emotional intelligence was used as a theoretical framework for the study. Mayer and Salovey (1997) established emotional intelligence includes the perception, assessment, and communication of emotions. Parrish (2011) established the ability to realize substantial improvements in individual leadership competencies and engagement after establishing only a basic level of emotional intelligence understanding.

The state university leadership program employed purposeful interventions designed to augment students' emotional intelligence. Changes in emotional intelligence were evaluated as a metric for personal and professional development through the leadership program. The Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF) was used as a research tool to measure students' self-reported change in global and factor emotional intelligence (Zampetakis, 2011). Emotional intelligence competencies or factors include "well-being, sociability, self-control, and emotionality" (Tsaousis & Kazi, 2013, p. 169). Additionally, students completed a survey consisting of open-ended questions designed to facilitate the evaluation of student perceptions in relation to emotional intelligence competencies after program completion.

Conclusions

Data from this study do not support a statistically significant difference in emotional intelligence after completing the state university's leadership program. Although individual differences were observed among students, results yielded from paired sample *t*-tests failed to exceed statically significant thresholds. Analysis of the

data in Chapter Four established only a small change in overall emotional intelligence and even less significant values when the data were evaluated by trait.

Differences in emotional intelligence competencies based upon participant age and college grade level were not supported by the data in this study. Although differences related to age groups and levels of emotional intelligence were established by Nayak (2014) and Sparkman et al. (2012), the data failed to indicate statistically significant differences in the sample population. The data also failed to support connections to grade levels. Variations in age, credit hours, and life experience may have affected the participant perceptions (Fernandez et al., 2012).

Differing levels of change in emotional intelligence competencies in males versus females were not supported by the data. Martskvishvili et al. (2013) found similar results. Mavroveli and Sanchez-Ruiz (2011) credited minor differences in trait emotional intelligence found in other studies to the canceling effects at the global emotional intelligence level. This means slight increases in one trait area are offset by a decline in another area. Trait differences by gender were not supported in this study.

Overall, no statistical differences could be observed in this study. The study relied on self-evaluation; students may not have possessed the knowledge necessary for accurate self-evaluation in the assessment administered before program start (Brackett et al., 2011). Scores may have been affected by a phenomena referred to as the "Dunning-Kruger effect" (Sheldon et al., 2014, p. 125). The effect posits the knowledge needed for evaluation is the same knowledge needed to execute what is being evaluated (Sheldon et al., 2014, p. 125).

Student perceptions after program completion revealed participation impacted their perceptions of and approach to emotional intelligence competencies as well as leadership. Student responses reflected Mayer and Salovey's (1997) definition of emotional intelligence, which includes governance, understanding, and mastery of emotions. Overall, students expressed a level of personal awareness and the ability to nurture relationships and seek leadership roles. Rosch and Caza (2012) found similar results.

Implications for Practice

The changes in student perception in relation to emotional intelligence and leadership suggest several implications for practice. Leadership development facilitators can utilize this information to guide learning strategies and program outcomes. Purposeful interventions can help students to identify and manage emotions effectively in a variety of practices.

Academic and student affairs administrators can utilize the research to support emotional intelligence as a theoretical framework in curricular and co-curricular applications. Instructors can utilize textbooks designed to incorporate emotional intelligence education into curriculum design and assessment. Additionally, the research supports the meaningful and personal impact emotional intelligence training can have on students' overall wellbeing.

The failure to support measured changes in emotional intelligence competencies through leadership development activities suggests the need for variation in methods of measure. Evaluation of student perceptions proved more beneficial than comparison of pre- and post-intervention TEIQue-SF results. The addition of journaling, 360-degree

evaluations, and mentor programs all provide opportunities to enhance emotional intelligence and leadership development activities.

Recommendations for Future Research

Future studies should employ additional data collection points. Self-assessment of emotional intelligence in addition to perceptions before training, after training, and at program completion could be beneficial to gauge progression and levels of understanding. Self-reported measures of trait emotional intelligence show promise as a self-reflection and teaching tool in higher education. The addition of assessment after initial training instead of before-only could yield results that are more accurate. Students would be familiar with the construct and better-prepared for accurate self-assessment. Follow-up assessments should then be administered at the program end after students have had opportunities to put the knowledge into practice.

Second, longitudinal studies evaluating long-term effects of leadership interventions should be explored. Many studies have focused on short-term effects; few have conducted follow-up studies (English, John, Srivastava, & Gross, 2012; Sparkman et al., 2012). Flowers et al. (2014) reassessed participants 12 months after training and measured perceived accuracy in previous assessment. Additional utility could be found in the higher education setting by following up with participants after college graduation and employment. This analysis could provide insight into the value of collegiate leadership programs and their long-term efficacy.

Opportunities exist to evaluate progression of emotional intelligence levels through college grade levels. Although differences exist in all grade levels due to age, number of hours enrolled, and life experience, the researcher posits similar levels of

emotional intelligence competencies should be realized with levels of academic achievement. Several researchers explored emotional intelligence in relation to grade point averages and college retention, but none were found to explore how college progression affected emotional intelligence (Burgess-Wilkerson & Frankforter, 2012; Sparkman et al., 2012). Research could assist institutions in identifying opportunities for meaningful interventions that could affect college progression and graduation rates.

Summary

Leadership development has been identified as a critical collegiate outcome (Komives et al., 2011). Emotional intelligence serves as a substantial and pertinent framework for collegiate leadership development (Parrish, 2011). Able to recognize and regulate their own personal emotions as well as understand the emotional states of those around them, individuals with high levels of emotional intelligence are able to be effective leaders (Stein et al., 2013).

Successful leaders must employ more than IQ alone; they must possess high levels of self-discipline, drive, and relational skills (Rada-Florina et al., 2012). Emotional intelligence can be learned and developed with practice (Godarzi, 2012). Leaders utilizing emotional intelligence are able to react intentionally to situations with awareness of potential outcomes (Komives et al., 2011).

The purpose of this study was to evaluate changes in emotional intelligence as a result of participation in a university's leadership development program. The state university embedded emotional intelligence components into their leadership development program. The researcher evaluated the efficacy of changes in emotional intelligence as a program outcome.

In Chapter One, a historical basis was established utilizing background information. Emotional intelligence was explained as a theoretical framework for the study. Research questions, hypothesis, and purpose of the study were also introduced. In Chapter Two, a review of the literature was explored.

In Chapter Three, the instrument utilized for the quantitative study was explored in detail. Additionally, the analysis, population, and sample were identified. Chapter Four provided an analysis of the sample and study design. Additionally, the data were presented, and student perceptions were explored through the evaluation of survey results.

A summation of the study was provided in Chapter Five. Findings of the study were presented, and differences in emotional intelligence competencies and leadership were explained. Conclusions were formed based on the study results, and research questions were revisited. Finally, impact on the field as well as suggestions for future studies were shared.

Appendix A

TEIQue-SF

TEIQue-SF

Instructions: Please answer each statement below by putting a circle around the number that best reflects your degree of agreement or disagreement with that statement. Do not think too long about the exact meaning of the statements. Work quickly and try to answer as accurately as possible. There are no right or wrong answers. There are seven possible responses to each statement ranging from 'Completely Disagree' (number 1) to 'Completely Agree' (number 7).

1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 7
Completely   **Completely**
Disagree   **Agree**

	1	2	3	4	5	6	7
1. Expressing my emotions with words is not a problem for me.	1	2	3	4	5	6	7
2. I often find it difficult to see things from another person's viewpoint.	1	2	3	4	5	6	7
3. On the whole, I'm a highly motivated person.	1	2	3	4	5	6	7
4. I usually find it difficult to regulate my emotions.	1	2	3	4	5	6	7
5. I generally don't find life enjoyable.	1	2	3	4	5	6	7
6. I can deal effectively with people.	1	2	3	4	5	6	7
7. I tend to change my mind frequently.	1	2	3	4	5	6	7
8. Many times, I can't figure out what emotion I'm feeling.	1	2	3	4	5	6	7
9. I feel that I have a number of good qualities.	1	2	3	4	5	6	7
10. I often find it difficult to stand up for my rights.	1	2	3	4	5	6	7
11. I'm usually able to influence the way other people feel.	1	2	3	4	5	6	7
12. On the whole, I have a gloomy perspective on most things.	1	2	3	4	5	6	7
13. Those close to me often complain that I don't treat them right.	1	2	3	4	5	6	7
14. I often find it difficult to adjust my life according to the circumstances.	1	2	3	4	5	6	7
15. On the whole, I'm able to deal with stress.	1	2	3	4	5	6	7
16. I often find it difficult to show my affection to those close to me.	1	2	3	4	5	6	7
17. I'm normally able to "get into someone's shoes" and experience their emotions.	1	2	3	4	5	6	7
18. I normally find it difficult to keep myself motivated.	1	2	3	4	5	6	7
19. I'm usually able to find ways to control my emotions when I want to.	1	2	3	4	5	6	7
20. On the whole, I'm pleased with my life.	1	2	3	4	5	6	7
21. I would describe myself as a good negotiator.	1	2	3	4	5	6	7
22. I tend to get involved in things I later wish I could get out of.	1	2	3	4	5	6	7
23. I often pause and think about my feelings.	1	2	3	4	5	6	7
24. I believe I'm full of personal strengths.	1	2	3	4	5	6	7
25. I tend to "back down" even if I know I'm right.	1	2	3	4	5	6	7
26. I don't seem to have any power at all over other people's feelings.	1	2	3	4	5	6	7
27. I generally believe that things will work out fine in my life.	1	2	3	4	5	6	7
28. I find it difficult to bond well even with those close to me.	1	2	3	4	5	6	7
29. Generally, I'm able to adapt to new environments.	1	2	3	4	5	6	7
30. Others admire me for being relaxed.	1	2	3	4	5	6	7

Scoring key: Reverse-score the following items and then sum up all responses

I don't know how to show the people close to me that I care about them. (R) 16
I often find it hard to see things from someone else's point of view. (R) 2
I find it hard to keep myself motivated. (R) 18
I find it hard to control my feelings. (R) 4
My life is not enjoyable. (R) 5
I change my mind often. (R) 7
Sometimes, I get involved in things I later wish I could get out of. (R) 22
I find it hard to know exactly what emotion I'm feeling. (R) 8
I find it hard to stand up for my rights. (R) 10
I tend to "back down" even if I know I'm right. (R) 25
I'm unable to change the way other people feel. (R) 26
Sometimes, I think my whole life is going to be miserable. (R) 12
Sometimes, others complain that I treat them badly. (R) 13
Sometimes, I wish I had a better relationship with my parents. (R) 28
I find it hard to cope when things change in my life. (R) 14

*Numbers on the right correspond to the position of the items in the questionnaire.

Trait Emotional Intelligence Questionnaire – Adolescent Short Form (TEIQue-ASF).
The TEIQue-ASF is a simplified version, in terms of wording and syntactic
complexity, of the adult short form of the TEIQue. The ASF comprises 30 short
statements, two for each of the 15 trait EI facets, designed to measure *global* trait EI.
It is also possible to derive factor scores from the TEIQue-ASF, but these tend to be
somewhat less reliable. For details on how to derive factor scores, go to
www.psychometriclab.com The internal consistency of the global score usually
exceeds .80. The form has been used successfully with children as young as 11 years
old.

Reference for the TEIQue-ASF: Petrides, K. V., Sangareau, Y., Furnham, A., &
Frederickson, N. (2006). Trait emotional intelligence and children's peer relations at school. *Social
Development, 15, 537-547.*

Please note that any commercial use of this instrument is strictly prohibited.

For more information about the trait emotional intelligence research program go to:
http://www.psychometriclab.com

Appendix B

Survey

Emotional intelligence, by definition, ''involves the ability to perceive accurately,

appraise, and express emotion; the ability to access and/or generate feelings when they

facilitate thought; the ability to understand emotion and emotional knowledge; and the

ability to regulate emotions to promote emotional and intellectual growth''(Mayer &

Salovey, 1997, p. 10).

 1.   How has participating in the [College Leadership Development] program affected
your approach to, perception of, or opinion of your and other people's **self-esteem,
happiness, and optimism (Well-being)**

 2.   How has participating in the [College Leadership Development] program affected
your approach to, perception of, or opinion of your and other people's **emotion
regulation, impulse control, and stress management (Self-Control)**

 3.   How has participating in the [College Leadership Development] program affected
your approach to, perception of, or opinion of your and other people's **emotion
expression, emotion perception in yourself and others, relationship skills, and
empathy (Emotionality)**

 4.   How has participating in the [College Leadership Development] program affected
your approach to, perception of, or opinion of your and other people's **assertiveness,
emotion management of others, and social awareness (Sociability)**

 5.   How has participating in the [College Leadership Development] program effected
your perception of leadership.

6. While participating in the leadership program my:

Age ___   Prefer not to respond ___

College Grade Level ___ Prefer not to respond ___

Sex ___   Prefer not to respond ___

Appendix C

Recruitment Letter

I am conducting a study on emotional intelligence and participation in the Super

Leader Program. The study is completely anonymous; no institution, program, or student

names will be included. It will be referred to as "a state university leadership

development program." The study will utilize secondary data from the TEQueSF

assessment completed as part of the Super Leader Program. All identifiable information

was stripped from the data.

I need your help with part two of the study. I am collecting open-ended

responses in one final survey. Participation is optional. However, I would greatly

appreciate your help. **Please review the attached Adult Consent Form. After**

reviewing the consent form, if you agree to participate, please reply "yes" to this

email. An anonymous survey will be sent to you via email for completion.

Thank you!

Nicole Brown

Appendix D

Informed Consent Letter

LINDENWOOD

INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES

College Student Leadership Development Participation and Emotional Intelligence

Principal Investigator Nicole Brown   Telephone: 417-317-2794   E-mail: brownjn1419@gmail.com

1. You are invited to participate in a research study conducted by Nicole Brown under the guidance of Dr. Fransen. The purpose of this research is to evaluate college leadership development program participation and emotional intelligence.

2. a) Your participation will involve **completing an anonymous survey**

   b) The amount of time involved in your participation will be **approximately five minutes**.

   Approximately 15 students will be involved in this research.

3. There are no anticipated risks associated with this research.

4. There are no direct benefits for you participating in this study. However, your participation will contribute to the knowledge about college leadership development program participation and emotional intelligence. and may help society.

5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

6. We will do everything we can to protect your privacy. Due to the small number of individuals involved in the study, there is a small chance that your identity may be known, at least to the researcher. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study and the information collected will remain in the possession of the investigator in a safe location.

7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Nicole Brown at 417-317-2794 or the Supervising Faculty, Dr. Fransen at 417-337-0040. You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Marilyn Abbott, Interim Provost at mabbott@lindenwood.edu or 636-949-4912.

   I have read this consent form and have been given the opportunity to ask questions. I may retain a digital copy of this consent form for my records. By replying "YES" to this email, I consent to my participation in the research described above.

   If you would like to participate in this study, please reply yes to this email. You will be sent an anonymous link to complete a survey.

Appendix E

IRB Approval

LINDENWOOD

LINDENWOOD UNIVERSITY   ST. CHARLES, MISSOURI

DATE: July 10, 2015

TO: Nicole Brown
FROM: Lindenwood University Institutional Review Board

STUDY TITLE: [767383-1] College Student Leadership Development Participation and
                               Emotional Intelligence
IRB REFERENCE #:
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: July 10, 2015
EXPIRATION DATE: July 10, 2016
REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this research project. Lindenwood University
Institutional Review Board has APPROVED your submission. This approval is based on an appropriate
risk/benefit ratio and a study design wherein the risks have been minimized. All research must be
conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

- The reviewers would like to point out that there is a typo in the revised Informed Consent form: the
  word "change" should be "chance"

Please remember that informed consent is a process beginning with a description of the study and
insurance of participant understanding followed by a signed consent form. Informed consent must
continue throughout the study via a dialogue between the researcher and research participant. Federal
regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to
initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the
appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should
also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the
IRB.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires
continuing review by this committee on an annual basis. Please use the completion/amendment form for

Generated on IRBNet

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Vita

Nicole Renae Portell Brown was born in Lebanon, Indiana, on August 27, 1978. Nicole grew up on a horse farm. Both of her parents were highly involved in the community and instilled a need to give back to others. They both worked in professional positions in addition to volunteering countless hours to create a better community. Growing up, Nicole was heavily involved in 4-H and was inspired by the many volunteers who gave their time as mentors. They taught her the importance of investing in future generations.

Nicole received her bachelor of science in agricultural business from Missouri Valley College in Marshall, Missouri. She competed on the college rodeo team and later became the assistant rodeo coach. She also earned a master of arts in business management from Lindenwood University.

Nicole has worked in higher education for 12 years. She spent her first eight years leading the recruitment efforts of Northeastern Oklahoma A&M College in Miami, Oklahoma. Next, she oversaw career services at Missouri Southern State University. She now fulfills a duel role, which includes career services and enrollment management.