A PREDICTIVE CORRELATIONAL STUDY OF HIGHER EDUCATION LEADERS' EMOTIONAL INTELLIGENCE BASED UPON LEADERSHIP STYLE AND GENDER

by

Tamara Vanessa Hill

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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ABSTRACT

A predictive correlational study was done to ascertain predictive capabilities between a higher education leaders' transformational leadership style and their emotional intelligence. The study also sought to identify any correlation to emotional intelligence or transformational leadership style based upon gender. Higher education is a dynamic and constantly evolving environment. To ensure success, leadership of these institutions must remain flexible and intuitive to the changing ecosystem. A multiple regression analysis was used in the predictive correlational research design to corroborate the impact of emotional intelligence and gender on the level of transformational leadership style. The study participants consisted of 190 higher education leaders across the United States. The participants were surveyed using the Wong Law Emotional Intelligence Scale (WLEIS) and the Multi-Factor Leadership Questionnaire (MLQ) - 5X. The findings revealed the model, containing EI and gender significantly predict transformational leadership. Furthermore, EI scores do significantly predict a higher education leaders' level of transformational leadership style. The findings revealed gender does not significantly predict higher education leaders' level of transformational leadership style. These findings are consistent with prior research; however, research should continue to increase the body of knowledge relating to EI and transformational leadership in a higher education setting. In addition, future research should further explore the relationship gender may have with both EI and transformational leadership.

Keywords: emotional intelligence, leadership style, higher education, transformational, transactional, laissez-faire, gender

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Dedication

This dissertation is dedicated to my parents, Joseph and Plaze Hill. My father is no longer physically with us, but I know he is watching over me, cheering for me and extremely proud. He was not a man of many words, but I always knew he loved me and believed in me and my accomplishments. I know that if he was here, he would be making some joke about not calling me Doctor. Joking was the manner in which he downplayed any emotions he would be feeling. However, I know he would be filled with pride.

My mom has always demonstrated unwavering support for each of her seven children. The two things she constantly instilled in each of her children was her love for God and the importance of education. Although my doctoral journey appeared to be smooth to those watching from the outside, she knows of the struggles and challenges I endured. However, her daily words of support were constant and consistent. Mama, I'm not certain if my words can adequately express how grateful I am to have you as my mother. For always being there supporting me, believing in me, and inspiring me, I am forever thankful and appreciative of you. You always told us that we had one job as children, and that was to go to school and learn. Well, here I am many years later, still living by your advice.

Acknowledgments

I first want to give honor to God from whom all blessings flow. I know that it has been God's hand that has kept me steady and moving forward through this program. My prayer is that I continue to follow his will throughout the rest of my life journey.

I would like to thank everyone who has poured knowledge into me and encouraged me on my doctoral journey. This includes faculty, family, friends, and colleagues. The level of support was unwavering. I want to specifically thank Dr. Venrique Roberts for providing me with wisdom and guidance early in the process. It was his two and half-hour interview for my qualitative course that turned me in the direction of quantitative. However, the information he shared was extremely valuable and allowed me to gain perspective.

The support from Liberty faculty has been tremendous. The scriptures provided, and words of prayer offered, was always thoughtful and timely. I also consider myself extremely fortunate in having Dr. Barthlow as my instructor for EDUC 915 and 980. Her guidance and advice facilitated my ability to narrow down my dissertation topic and develop a solid framework for my dissertation proposal. I am equally as fortunate to have an attentive, engaged, and caring Committee Chair. When I hit roadblocks, Dr. Akers quietly stepped in and assisted me through the process. Her advice and guidance have been amazing. I consider myself fortunate to have her serving as my Chair. I would also like to thank Dr. Savage for serving as my methodologist. His feedback, resource tips, advice, and support were greatly appreciated.

Last but not least, I would like to thank Dr. Rockinson-Szapkiw. When issues were encountered with the data, you calmly guided me to a solution. Thank you for lending your expertise to my project.

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List of Abbreviations

American Psychological Association (APA)

Analysis of Variance (ANOVA)

Emotional Intelligence (EI)

Emotional Quotient (EQ)

Emotional-Social Intelligence (ESI)

Higher Education Institutions (HEI)

Intelligence Quotient (IQ)

Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT)

Other Emotion Appraisal (OEA)

Regulation of Emotion (ROE)

Self-Emotion Appraisal (SEA)

Standard Multiple Regression (SMR)

Statistical Package for the Social Sciences (SPSS)

Transformational Leadership (TL)

Use of Emotion (UOE)

Wong and Law Emotional Intelligence Scale (WLEIS)

CHAPTER ONE: INTRODUCTION

Overview

The purpose of this quantitative, predictive correlational study is to determine differences in the emotional intelligence (EI) of leaders in a higher education setting as it pertains to their leadership style and gender. Chapter One provides a background for the topics of EI and the various leadership styles. Included in the background is an overview of the theoretical framework for this study. The problem statement examines the scope of the recent literature on this topic. The purpose of this study is followed by the significance of the current study. Finally, the research questions are introduced, and definitions pertinent to this study are provided.

Background

When recruiting for future leadership roles, the hiring manager's focus could feasibly shift from the candidate's knowledge and skills, with a greater emphasis being placed on the applicants EI. Emotional Intelligence has been the buzzwords in corporate America since Daniel Goleman mainstreamed the ideology in 1995 with his best-selling book, *Emotional Intelligence – Why it can matter more than IQ* (Dhani & Sharma, 2016; Dhingram & Punia, 2016; Goleman, 1995; Jimenez, 2018; Ugoani, 2017). Since that time there has been numerous studies testing the different theories from various vantage points (Jimenez, 2018). Emotional intelligence is defined as having the ability to recognize one's own feelings and those of others; and using this capability to manage those emotions, in self and others, and use as a catalyst for motivating oneself (Goleman, 1998). The most globally accepted definition in academia is the ability to recognize and articulate emotion, assimilate emotion in thought, understand and reason with emotion and control emotion in self and others (Dhani & Sharma, 2016). It is having the ability of being cognizant of feelings and reactions of yourself and others; and then understanding how

to harness this information for development and problem solving. Research has revealed the benefits of EI and the results have demonstrated a positive effect gained on all facets of an individual's personal and professional life (Faltas, 2017; Kewalramani et al., 2015).

Historical Overview

The phenomenon of EI originally emerged under the construct of cognitive psychology with the research of those like Mayer and Salovey who believe EI was tied to cognitive ability (Dhani & Sharma, 2016; Faltas; 2017; Gomez-Leal, Gutierrez-Cobo, Cabello, Megias and Fernandez-Berrocal, 2018; Jauk, Freudenthaler & Neubauer, 2016; Mayer, Caruso & Salovey, 2016; Ugoani, 2017). Petrides viewed EI to be integral to personality traits (Jauk, Freudenthaler & Neubauer, 2016). Bar-On, credited with creating the phrase 'Emotional Quotient', defined EI as a behavior that combined both social and cognitive competencies (Faltas, 2017; Kewalramani et al., 2015; Ugoani, 2017). Goleman believed EI revolved around four major competencies that all contributed to workplace performance (Faltas, 2017; Kewalramani et al., 2015; Ugoani, 2017).

Today the concept of EI continues to evolve with a focus on organizational behavior in a multitude of settings (Ellis 2020). The association with EI and work settings has generated extensive research in academia (Faltas, 2017). Research focusing on the impact of EI on employee well-being and professional success has been conducted in workspaces in both private and public sectors, e.g., government settings, healthcare, corporate settings, and academia (Al-Motlaq, 2018; Alward & Phelps, 2019; Clapp & Town, 2015; Dabke, 2016; Ellis, 2020; Fernandez-Berrocal et al., 2017; Itzkovich, & Dolev, 2017; Li et al., 2015; Kellner et al., 2018; Majeed et al., 2019; Moeller & Kwantes, 2015**;** Newton et al., 2015**;** Parish, 2015; Stoller, 2020).

Goleman typically speaks of EI in the spectrum of leadership effectiveness (Goleman, 1995, 1998, 2019). Comparing underlying concepts of both EI and leadership, one would find similarities (Miao et al., 2018). Clapp and Town (2015) estimates, when comparing average leaders to exceptional leaders, EI contributes 85 to 90% to the disparity. Similar assertions have resulted in research that has focused on the impact of EI on the various leadership styles (Dabke, 2016; Kellner et al., 2018; Majeed et al., 2019; Miao et al., 2018; Yang & Zhu, 2016). Research supports the ideology that leadership effectiveness is impacted by EI (Dabke, 2016; Kellner et al., 2018).

Under transformational leadership the leader focuses on identifying the need for change and sets forth to inspire a shared vision across the organization (Campos 2020; Jimenez, 2018; Kellner et al., 2018). Ugoani (2017) theorizes EI competencies permit a transformational leader to identify the needed change in an organization. This leader has the responsibility of effectively developing relationships that motivate and encourage others to follow (Dabke, 2016; Kellner et al., 2018). Individuals with significant levels of EI have been shown to have the natural ability to develop strong interpersonal relationships (Dabke, 2016). The role of the transformational leader is to change the differing perspectives persuading all involved to place the interest of the organization at the forefront (Dabke, 2016).

Jimenez (2018) stress that both leadership and EI competencies are required to achieve organizational goals during change initiatives. Several researchers have made the connection between the emotional stressors and change (Dhingram & Punia, 2016). A transformational and emotionally intelligent leader must be aware of their surroundings and attentive to staff who may display an adverse reaction to change (Jimenez, 2018). The EI competencies of the leader is crucial to their ability to facilitate the change process (Dhingram & Punia, 2016).

For some it may appear that EI is a fairly new concept. However, there are many cultures who believe the concept is similar to historical teachings of their forefathers (Dhani & Sharma, 2016). Mayer and Salovey's emotionally intelligent person has been compared to the Hindu cultures Sthithapragnya which translates to the 'emotionally stable person' (Dhani & Sharma, 2016). Dhani and Sharma (2016) also brings attention to Plato who indicated learning has an emotional foundation.

Earlier references to varying concepts of EI has been noted. Thorndike discussed the concept of social intelligence in the early 1900s (Dhani & Sharma, 2016; Dhingram & Punia, 2016). Wechsler and Garner studied non-cognitive intelligence and multiple intelligences, respectively (Dhani & Sharma, 2016; Dhingram & Punia, 2016; Kewalramani et al., 2015). Many view Mayer and Salovey as the founding fathers of EI as they were the first to study the concept in a scientific manner (Dhani & Sharma; Faltas, 2017; Gomez-Leal et al., 2018; Kewalramani et al., 2015; Mayer, Caruso & Salovey, 2016).

Bar-On is credited with labeling the EI as the 'emotional quotient' and placed the focus of EI on the non-cognitive (Dhani & Sharma, 2016; Faltas, 2017; Kewalramani et al., 2015; Ugoani, 2017). Petrides believed EI was more closely related to the construct of personality traits (Kewalramani et al., 2015). Goleman is arguably the most popular person associated with the concept of EI, as he is credited with mainstreaming the terminology outside of academia and into the organizational setting (Dhani & Sharma, 2016; Dhingram & Punia, 2016; Faltas, 2017; Kewalramani et al., 2015; Ugoani, 2017).

Society-at-Large

Since the coining of the phrase emotional intelligence (EI) the concept has garnered significant attention and has resulted in extensive research (Faltas, 2017; Fernandez-Berrocal et

al., 2017; Jimenez, 2018). Emotional intelligence revolves around the construct of being conscious of your emotions and the emotions of those around you. Taking it a step further, an emotionally intelligent individual can harness this ability to interpret emotions and excel in all facets of their lives (Kewalramani et al., 2015).

The linking of EI to leadership is a natural fit. The goal of an effective leader is to motivate others towards a common goal and shared vision (Thrash, 2012). Being an effective leader requires the management of your own emotions and the skills to recognize and adapt accordingly to the emotions of others (Goleman, 1998). An effective leader, successfully employing EI, is equipped to move their organization through change allowing for continuous growth (Görgens-Ekermans & Roux, 2021).

Emotional Intelligence is a compilation of knowledge, skills and abilities that are linked to how everyone performs in every setting (Faltas, 2017; Mullen et al., 2018). EI facilitates the development and growth of an individual (Faltas, 2017; Fernandez-Berrocal et al., 2017). It plays a role in role in how we develop relationships and how we interact with individuals on a daily basis (Faltas, 2017).

Just as with book knowledge, everyone does not have the same level of EI. Also, similarly, having high levels of EI does not guarantee that an individual comprehends how to use that knowledge or skill (Kewalramani et al., 2015). Furthermore, conversations surrounding the topic of emotions has not always been welcomed in certain settings. Emotions are believed to be an obstacle hindering one's ability to maintain focus and make sound decisions (Warner, 2016). On the other hand, research has demonstrated the importance of emotions in helping one survive the challenges of life and thrive (Dhani & Sharma, 2016).

Theoretical Background

Several EI theories have been formed since Mayer and Salovey's initial theory. This chapter explores the four most widely referenced theories: ability, trait, competencies, and mixed-model. Mayer and Salovey were the first to approach EI from a scientific perspective (Kewalramani et al., 2015). They believe EI is a form of cognitive intelligence (Dhani & Sharma, 2017). Their work resulted in the development of the Ability Model of EI. The ability model, which was later revised by Mayer, Salovey and Caruso (2016), consists of four branches or abilities: a) perceiving emotion, b) facilitating thought by using emotion, c) understanding emotion, and d) managing emotions in oneself and others. Each branch contains a set of skills that are progressively difficult (Mayer, Salovey & Caruso, 2016). The model was updated to includes more problem-solving and reasoning content (Mayer, Salovey & Caruso, 2016). The ability model is measured by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Mayer et al., 2003).

Another common EI model is the trait model of EI developed by Konstantinos Petrides (Petrides & Furnham, 2000). The trait model contradicts the ability model where Petrides believes EI is a non-cognitive ability (Kewalramani et al., 2015). Under the trait model, EI is examined under the construct of personality traits (Petrides et al., 2007). It refers to a person's self-awareness of their own emotional aptitude (Petrides & Furnham, 2000). The model consists of fifteen traits that are grouped under four factors: a) wellbeing, b) self-control, c) emotionality, and d) sociability (Petrides & Furnham, 2001). This model measures EI via a self-report mechanism (Petrides, 2011).

The competencies model of emotional intelligence was developed by Reuven Bar-On (Bar-On, 2006). Bar-On spent the early parts of his career attempting to understand the role the

brain plays in the development of EI (Bar-On, 2006). Bar-On added a social intelligence context to this model and dubbed the model the 'Bar-On Model of Emotional-Social Intelligence (ESI)' (Bar-On, 2006). This model defines EI as "an arrangement of interconnected behavior driven by emotional and social competencies that influence performance and behavior" (Faltas, 2017, p. 1). Bar-On considers both cognitive abilities and EI to be equally important for a one's comprehensive intelligence and success (Kewalramani et al., 2015). Bar-on initially coined the phrase 'emotional quotient' (Dhani & Sharma, 2017). The Bar-On model is measured by the EQ-I (Emotional Quotient-Inventory), a self-report measure (Dhani & Sharma, 2016).

The final model reviewed is the Mixed-Model of EI sometimes also referenced as the performance model (Goleman, 1995). This model was introduced by Daniel Goleman in 1995, who expounded on Mayer and Salovey's definition of EI to include the importance of EI in terms of a person's professional life in conjunction with the role EI plays in leadership effectiveness (Goleman, 1995, 1998). With mixed model it is believed the natural abilities, related to intellectual functions and personality characteristics, are innate in everyone (Kewalramani et al., 2015). With the development of one's EI, these natural abilities can lead to ultimate success (Dhani & Sharma, 2016; Goleman, 1998). The mixed model operates under the constructs of 1) emotional self-awareness, 2) self-regulation, 3) motivation, 4) empathy, and 5) social skills (Goleman, 1998; Dhani & Sharma, 2016). The mixed model is measured utilizing the Emotional Intelligence appraisal and the Emotional Competency Inventory (Dhani & Sharma, 2016).

The various theories all assist in understanding the concept of EI (Dhani & Sharma, 2016). The differences primarily in the terminology utilized and the range of their defining characteristics (Kewalramani et al., 2015). Other differences revolve around the mechanism utilized to measure EI, e.g., self-report vs. task-based assessments (Gomez-Leal et al., 2018;

Kewalramani et al., 2015). Theorists are unified agreement that EI can be developed or enhanced (Kewalramani et al., 2015).

Emotional intelligence is vital to one's successful navigation of life. EI impacts both the professional and social spectrums and is integral to the development of relationships. Relationship building is central to effective leadership. The conjoining of EI to leadership is a valid match. A leader equipped with high EI can inspire and effect great change that has the potential to lead to great organizational success.

Problem Statement

Since 1990, after the introduction of the initial theory on EI, there have been numerous studies on the subject (Faltas, 2017; Fernandez-Berrocal et al., 2017; Jimenez, 2018). The construct has been analyzed from the perspectives of both cognitive and non-cognitive abilities (Mayer, Caruso & Salovey, 2016; Petrides, 2011; Petrides & Furnham, 2001; Petrides, Furnham & Kokkinaki, 2007). Goleman successfully mainstreamed the concept for the layman and demonstrated application to the organizational setting in terms of leadership success (Dhani & Sharma, 2016; Faltas, 2017; Goleman, 1995; Kewalramani et al., 2015).

As noted, there have been numerous studies that explore the significance and validity of the theories. In addition, studies have focused on the appropriate tools for measuring EI (Kong, 2014; Kuo et al., 2016; Maul, 2012; Mayer, Salovey & Caruso, 2012). Intuitively, with the lauding of EI as a positive attribute or skill, there have been studies dealing with the dark side of EI, specifically the personality triad of narcissism, Machiavellianism, and psychopathy (Jauk et al., 2016). EI has been explored in a multitude of workplace settings, from both the public and private sectors and from varying perspectives e.g., supervisor, employee, students (Al-Motlaq, 2018; Alward & Phelps, 2019; Clapp & Town, 2015; Dabke, 2016; Fernandez-Berrocal et al.,

2017; Li et al., 2015; Majeed et al., 2019; Moeller & Kwantes, 2015**;** Newton et al., 2015**;** Parish, 2015; Stoller, 2020).

Goleman (1995, 1998, 2019) speaks of EI in the realm of leadership effectiveness. As a result, research on EI and the correlation with leadership has been extensive (Dabke, 2016; Kellner et al., 2018; Majeed et al., 2019; Miao et al., 2018; Yang & Zhu, 2016). The research has explored and identified a correlation of EI to the varying leadership styles, e.g., authentic, transformational, charismatic, etc. (Dabke, 2016; Kellner et al., 2018; Majeed et al., 2019; Miao et al., 2018; Yang & Zhu, 2016)**.**

Research on EI in the higher education sector has been growing over the years. Studies have been conducted on EI as it relates to faculty, students, learning, etc. (Alward & Phelps, 2019; Gerken et al., 2016; Gilar-Corbi et al., 2018; Itzkovich & Dolev 2017; Li et al., 2015; Majeed et al., 2019; Parrish, 2015). There have been studies that focused on academic leadership (Baba et al., 2021; Chen & Guo, 2018; Wirawan et al., 2018; Zurita-Ortega et al., 2019). Yet there have been minimal studies that have focused on administrative leadership in the higher education setting.

Leadership in higher education is not always established through the conventional manner of recruitment. Often faculty members are elevated to a leadership position based upon scholarly or scientific accomplishments with little regard to their managerial or leadership abilities (Parish, 2015). Staff members may be elevated due to their tenure and loyalty to the institution. While both practices are laudable, higher education institutions often fail to train and develop these leaders. EI is viewed as being the most appropriate and a necessity for leaders in academia (Parish, 2015). Higher education leaders' awareness of EI is crucial to improving effectiveness within their departments and across the institution (Alward & Phelps, 2019). As an

academic leader, EI is important in terms of establishing norms and creating or influencing the culture of their area of responsibility (Alward & Phelps, 2019). It is important to explore the relationship between this apparent lack of EI in higher education leaders and the impact on their leadership skills and their ability to navigate their institution through the constantly changing environment of higher education. The problem is the literature has not fully addressed the relationship of EI of administrative leadership in the higher education setting (Baba et al., 2021).

Purpose Statement

The purpose of this quantitative predictive correlational study is to explore the relationship of EI in administrative leaders and their associated level of a transformational leadership style, and to additionally explore the role gender plays, in a higher education setting. The variables in this study are the independent variables, EI and gender and dependent variable, level of transformational leadership style. Emotional intelligence is the ability to effectively identify and manage the emotions of oneself and others (Goleman, 1995; Mayer, Salovey & Caruso, 2002). Leadership style can be defined as the ability to inspire others to work collaboratively towards a shared goal or vision (Almutairi, 2020; Thrash, 2015). Leadership styles can be classified as transformational, transactional, and laissez-faire. A transformational leader is one who is capable of changing the values of others to align with goals and values that are in the best interest of the organization (Dabke, 2016). Transactional leadership involves leader-follower relations, where the leader monitors and controls their team through reward/punishment exchanges (Bono & Judge, 2004; Zareen, Razzaq & Mujtaba, 2015). The laissez-faire leader is thought to avoid leadership responsibilities by delegating all of their authority to their subordinates (Bono & Judge, 2004; Kellner et al., 2018; Zareen et al., 2015). For the purpose of this study, transformational leadership will be the focus. In correlation with

EI, transformational leaders are thought to have high EI and laissez-faire leaders are believed to demonstrate low EI (Apore & Asamoah, 2019; Karasneh & Al-Momani, 2019; Wirawan et al., 2018; Zurita-Ortega et al., 2019). Gender is typically considered to be the male or female biological sex, although it is more accurately defined as the feminine or masculine behavioral differences of the sex (Holmes, 2007; Udry, 1994). The study population will consist of non-academic (administrative) leaders with titles in the job class families of Directors, Deans, Vice-Presidents, and Chancellors. The study will solicit participants employed by institutions of higher education, e.g., colleges and universities, from across the United States.

Significance of the Study

This study is important as it will strengthen the body of knowledge related to EI in the arena of higher education. It will also provide insight on higher education leaders and the relationship with EI and effecting change. The study addresses the need for a closer inspection on the cause for difficulty when facilitating change in higher education institutions. It is hoped that this study will be the catalyst for additional research on the topic of EI in the higher education realm, specifically with academic leadership.

The role of higher education is significant in the scope of the world's socio-economic development (Majeed et al., 2019). Higher education is not just for the affluent, it is crucial to the development of a global sustainable workforce (Majeed et al., 2019). Ironically, academic scholars have ignored or are oblivious to the uniqueness and complexities that exist within the higher education structure (Majeed et al., 2019). Higher education requires strategic and transforming leaders to guide institutions through continuous growth (Yang, 2020).

Emotional intelligence is believed to be the key to developing a strong team and organization (Alward & Phelps, 2019). It is beneficial to analyze the EI attributes of higher

education leaders to increase leadership effectiveness (Alward & Phelps, 2019; Yang, 2020). The current promotional process that is standard in higher education often results in leaders who are not prepared for their new role and in many instances gain learning by on-the-job training (Parish, 2015; Yang, 2020).

In academic leadership, the key desired EI traits are empathy, ability to inspire others, and self-awareness/self-management (Ellis, 2020; Parish, 2015). Other emerging areas of importance were high integrity and cultivating an environment of trust (Parish, 2015). A study revealed leaders with both high EI and higher levels of education were viewed with more respect; that translated into their ability to perform as a more effective leader (Parish, 2015; Yang, 2020). An additional stressed importance for leaders to accurately assess themselves and determine areas that require improvement and to seek improvement (Ellis, 2020; Parish, 2015)

Research Question

RQ: How accurately can higher education leaders' level of transformational leadership style be predicted from a linear combination of ability-based emotional intelligence scores and gender?

Definitions

1. *Emotional Intelligence* – the ability to identify and manage your own emotions and the emotions of others (Psychology Today, 2009).
2. *Higher Education* – Education beyond the secondary level, provided by a college or university (Merriam-Webster, 2021)
3. *Laissez-faire Leader* – a leadership approach where the leader abdicates all responsibilities to their subordinates, e.g., decision-making, guidance, communications, etc. (Birkeland-Nielsen, Skogstad, Gjerstad, Valvatne-Einarsen, 2019)

4. *Self-Awareness* – The concept of having a complete understanding of one's emotions as well strengths, weaknesses, values, goals, and drivers (Goleman, 2019).
5. *Transformational Leader* - a leadership approach that focuses on consideration, stimulation, motivation, and influence (Kellner, Chew & Turner, 2018).
6. *Transactional Leader* – a leadership approach where tasks are accomplished based upon a reward-punishment exchange between the leader and subordinates (Bass, 1997).

CHAPTER TWO: LITERATURE REVIEW

Overview

A systematic review of the literature was conducted to explore the relationship of Emotional Intelligence (EI) on effective leadership in higher education. This chapter will present a review of the current literature related to the topic of study. In the first section, the four primary theories relevant to EI will be discussed. It will be followed with a synthesis of recent literature regarding EI, its relationship with gender and effective leadership. Additional literature, related to transformational, transactional, and laissez-faire leadership styles, will be synthesized. Lastly, literature surrounding the application of EI to leadership in a higher education setting will be addressed. In the end, a gap in the literature will be identified, presenting a viable need for the current study.

Theoretical Framework

There are several theories, or variations of theories, related to EI. However, there are four basic theories that are widely discussed. They are the ability model, the competencies model, the trait model, and the performance (mixed) model.

Ability Model

The ability model was developed in 1990 by John Mayer and Peter Salovey. They defined EI as "the capacity to reason about emotions, and of emotions to enhance thinking" (Mayer, Salovey & Caruso, 2004, p. 197). From their perspective EI is "a form of pure intelligence consisting of cognitive ability only" (Dhani & Sharma, 2016, p. 193). EI is a compilation of bits of information, all important, within each person that helps one interact in a social setting. Individuals process emotions differently as such there is a variance in a person's ability to recognize and understand those emotions.

The theory is labeled the four-branch model and focuses on four abilities: 1) perceiving emotion, 2) using emotions, 3) understanding emotions and 4) managing emotions (Mayer et al, 2004). It is noted that although the four abilities are separate, they are all linked together (Mayer et al., 2004). The constructs behind these aptitudes are:

1. perceiving emotions – the ability to recognize and understand emotions in others,
2. using emotions – the ability to use emotions to facilitate the thought processes leading to problem solving, planning and decision making,
3. understanding emotions – the ability to grasp or understand emotions and how they may vary over time and
4. managing emotions – how one uses those emotions for personal knowledge and gains (Mayer & Salovey, 1993).

The ability model was more recently updated and clarified (Mayer, Caruso, Salovey, 2016). Increased ranges of problem solving, and reasoning have been integrated into the original model. For example, within the 'understanding emotions' branch, the ability to appraise and forecast emotions has been added to further define these abilities. Mayer et al. (2016) recognize the theorists who have suggested the elimination of branch two, using emotions or facilitating thought. The reliability of research in that regard has not developed. However, they believe it is still a valid construct. An individual's ability to use emotions to process information is a part of one's total EI (Salovey, Mayer & Caruso, 2004). There has been criticism regarding the research related to this model and the belief that it lacks predictive validity (Bradberry & Su, 2003).

The ability model is measured using the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Mayer et al., 2003). This test measures EI via a series of questions that identify how well the individual operated under the identified constructs. The test is comparable to that of

an intelligence quotient (IQ) test, which aligns with the concept of EI being a type of intelligence (Caruso, n.d.).

Trait Model

Konstantinos V. Petrides developed the trait model of EI (Petrides & Furnham, 2000). The trait model represents a theoretical difference from the “ability” model of EI. Trait EI is "a lower-order construct that comprehensively encompasses the emotion-related facets of personality" (Petrides et al., 2007, p. 287). Trait EI refers to a person’s self-awareness of their own emotional aptitude. This includes behavioral characteristic and the individual’s self-perception of their skills in regard to managing their emotions (Petrides & Furnham, 2001). Trait EI is examined within a personality context. Since this theory views EI as a personality trait, it is external to the purview of one’s intelligence (Petrides & Furnham, 2000).

Trait EI is measured via self-report mechanisms (Petrides, 2011). Self-report measures are thought to be resistant to scientific measurement since it is subjective the honesty and/or comprehension of the person completing the survey or questionnaire (Warner, 2013). Trait EI consists of 15 trait facets that are grouped under four factors, 1) wellbeing, 2) self-control, 3) emotionality, and 4) sociability. The fifteen traits are happiness, optimism, self-esteem, emotional control, impulsiveness, stress management, perception, expression, relationships, empathy, emotion management, assertiveness, social awareness, adaptability, and self-motivation (Petrides & Furnham, 2001).

Competencies Model

Early in Reuven Bar-On’s career he began exploring EI, and the role the brain plays in the development of EI, as well as social characteristics (Bar-on, 2006). He dubbed this model of EI as the ‘Bar-on Model of Emotional-Social Intelligence (ESI)’ (Bar-On, 2006). The model

defines EI as “an arrangement of interconnected behavior driven by emotional and social competencies that influence performance and behavior” (Faltas, 2017, p. 1). Bar-On combined the constructs of EI and social intelligence and dubbed it “Emotional-Social Intelligence (ESI)” (Bar-On, 2006, p.2).

ESI represents “competencies, skills and facilitators” (Bar-On, 2006, p.3) that determine how we comprehend and share our emotions as well as how we communicate with those around us as we tackle our daily responsibilities. The theory speaks in terms of intrapersonal and interpersonal skills and abilities (Bar-On, 2006). Intrapersonal ability is described as being self-aware, comprehending your strengths and weaknesses and to be able to converser and express yourself in a positive manner (Bar-on, 2006; Dhani & Sharma, 2016; Faltas, 2017). Interpersonal ability is described as being aware of the emotions and needs of others, being able to function socially allowing the building of positive production relationships (Bar-on, 2006; Dhani & Sharma, 2016; Faltas, 2017).

Bar-On considers cognitive abilities and EI to be of equal importance in terms of a person’s overall intelligence and success. Bar-on is credited with coining the phrase ‘emotional quotient’ (Dhani & Sharma, 2017, p. 192). The Bar-On model provides the theoretical basis for the EQ-I (Emotional Quotient-Inventory), a self-report measure (Dhani & Sharma, 2016).

Mixed-Model

Daniel Goleman (1995) introduced the mixed-model of EI. He expounded on the definition previously provided by Mayer and Salovey (1990) by demonstrating the importance of EI to one’s professional life and its role with leadership effectiveness. Goleman defined EI as “the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships” (Goleman, 1998, p. 312).

With the mixed-model EI, it is believed that individuals are born with natural abilities as related to intellectual function, as well as personality characteristics. In the mixed model theory (Goleman, 1998) it is thought that the natural personality characteristics, intrinsic to each person, will assist in determining ultimate success via the development of one's EI (Dhani & Sharma, 2016; Goleman, 1998). EI is essentially a set of skills and abilities, a "learned capability" (Kewalramani et al., 2015, p.179), that can be sharpened and developed for greatness.

Mixed-model emotional intelligence views EI to be equally as important as one's intellectual abilities (Goleman, 1998; Mayer, Salovey & Caruso, 2004). An individual's high emotional quotient (EQ) intertwined with their intelligence quotient (IQ), allows them to use their thinking and feeling minds to create great success both personally and professionally (Goleman, 1995; Goleman, 1998). Goleman believes that the most effective leaders are similar in that they have a high degree of EI (Harvard Business Review, 2015). He goes to further emphasize the importance of EI by identifying one's intelligence and technical skills as being primarily "threshold capabilities" or "entry-level requirements for executive positions" (Harvard Business Review, 2015, pg. 1).

When managing one's EI, a person must be able to recognize, understand and control their emotions. To be an effective leader, Goleman (1998) believes it is not satisfactory to just Dr. manage your own emotions, you must also be able to assess the emotions of others and adapt accordingly. The theory operates under the following constructs (Goleman, 1998; Dhani & Sharma, 2016):

- Emotional self-awareness — knowing what one is feeling at any given time and using that knowledge to understand how that behavior or emotion is impacting those around you and possibly decisions you are making.

- Self-regulation — being able to control one's emotions and adjust; accordingly, being consciously aware of the repercussions of your actions otherwise and not allowing your emotions to interfere in sound decision-making.
- Motivation — utilizing feelings as a driver in meeting one's highest goals; as an inspiration to learn and develop in spite of any problems or difficulties that may arise in the process.
- Empathy — recognizing and understanding the emotions of others; recognizing the value of different perspectives and their contributions to the process.
- Social skills — understanding and interacting appropriately in social settings; Using that opportunity to manage and build relationships; leading by example to foster teamwork.

The Emotional Intelligence Appraisal and the Emotional Competency Inventory are two measurement tools based upon the mixed model theory (Dhani & Sharma, 2016).

Although there are additional theories of EI, my research revealed these four theories to be the most widely referenced. Although there are some differences in the theories, or in how the data is measured, commonalities join them as the basis of one understanding the ideology of EI. The scope of all focus on an individual's ability to understand self, understand others, manage self, and manage others (Kewalramani et al., 2015; Mansel & Einion, 2019). It is this common thread that necessitates my having an appreciation for how the different constructs impact leadership in higher education.

Related Literature

Emotional Intelligence

While EI feels likes a relatively new construct, made prominent by the research of Mayer and Salovey (1990) and popularized and placed in the mainstream of society by Goleman (1995);

its origins can be traced back centuries. Some in the Hindu culture finds similarities with Mayer and Salovey's 'Emotionally Intelligent' person and the Sthithapragnya in the Bhagavad-Gita (Dhani & Sharma, 2016). The Sthithapragnya translated means 'Emotionally stable person' (Dhani & Sharma, 2016). Dhani and Sharma (2016) and Mukherjee (2020) also remind us of the work of Plato's belief that any type of learning will have an emotional base.

When thinking of emotions, the relationship with learning is not self-evident. The concept of emotions is characteristically considered outside the realm of education (MacLaren, 2008). Emotions are viewed to be a psychological phenomenon, e.g., temperament, personality, mood, motivation, etc. (MacLaren, 2008). However, Plato believed learning that leads to knowledge gained involved an emotional response from the learner (Hinchliffe, 2006). Emotions are the inspiration that leads to one's yearning to acquire new knowledge (Hinchcliffe, 2006).

Throughout the twentieth century, researchers continued in their exploration of the construct. In 1937, Thorndike and Stein spoke of the importance of social intelligence which focused on the construct of managing and understanding people (Law et al., 2004; Stoller, 2020; Wong & Law, 2002). Later in 1940, Wechsler discussed "non-intellective" intelligence (Stoller, 2020). In 1983, Gardner discussed multiple intelligences (Law et al., 2004; Stoller, 2020; Wong & Law, 2002).

Academics have engaged in much discussion on the topic of emotions and its effect on human behaviors. Some of that discussion has also focused on emotions and its inappropriateness in the work environment (Dhani & Sharma, 2016; Volker, 2020). At one time emotions were thought to be obstacles that stops one from viewing things clearly and making sound decisions (Dhani & Sharma, 2016). However, research has demonstrated emotions are

important indicators that allows one to endure the obstacles of life and flourish (Ayub et al., 2021; Cabello et al., 2021: Davis et al., 2020; Dhani & Sharma, 2016; Faltas, 2017; Goleman, 1995: Goleman, 1998; Gong & Jiao, 2019; Hogeveen et al., 2016; Mayer et al., 2016; Prentice et al., 2020). Understanding one's emotions and the emotions in oneself and others is the key to a satisfying life (Cabello et al, 2021; Faltas, 2017; Gong & Jiao, 2020). People who are self-aware and sensitive to others manage their affairs with wisdom and grace, even in adverse circumstances (Kewalramani et al., 2015; Prentice et al., 2020).

In the work environment, academics have been researching to validate the impact of EI (Faltas, 2017; Fernandez-Berrocal et al., 2017). From government settings, to hospitals, corporate settings and academia, studies have examined the impact of EI on professional well-being and success (Al-Motlaq, 2018; Alward & Phelps, 2019; Clapp & Town, 2015; Dabke, 2016; Fernandez-Berrocal et al., 2017; Li et al., 2015; Majeed et al., 2019; Moeller & Kwantes, 2015**;** Newton et al., 2015**;** Parish, 2015). It is believed that EI increases productivity as well as job satisfaction (Faltas, 2017; Miao et al., 2016; Neil et al., 2016; Yang & Zhu, 2016). EI has also been contributed to the cohesiveness of an effective team (Neil et al., 2016).

Over time there have been numerous EI theories and models developed (Ayub et al., 2021; Cabello et al, 2021; Climie et al., 2017; Itzkovich & Dolev, 2017; Mansel & Einion, 2019; Megias et al., 2018; Stoller, 2020; Volker, 2020). Mayer and Salovey are credited with coining the phrase in 1990 with their article entitled 'Emotional Intelligence' where they introduced the ability theory (Alonso-Ferres et al., 2019; Cabello et al., 2021; Dhani & Sharma, 2016; Faltas, 2017; Jauk, et al., 2016; Kewalramani et al., 2015; Lowicki et al., 2019; Mayer & Salovey, 1990; Megias et al., 2018; Prentice et al., 2020; Stoller, 2020; Volker, 2020). Petrides viewed EI has a construct of personality traits that focuses on performance (Jauk et al, 2016; Lu & Fan, 2017;

O'Conner et al., 2019). Bar-On introduced the competency model and coined the term 'Emotional Quotient' which was similar to the intelligence quotient (Dhani & Sharma, 2016; Faltas, 2017; Kewalramani et al., 2015; Law et al., 2004). Inarguably, it was Goleman who popularized the topic of EI and brought the phrase to the mainstream with his best-selling book, "Emotional Intelligence: Why It Can Matter More than IQ (1995) and his discussion of the mixed model theory (Dhani & Sharma, 2016; Faltas, 2017; Goleman, 1995; Itzkovich & Dolev, 2017; Kewalramani et al., 2015; Stoller, 2020). It is thought that having the multiple theories allows for further clarity on the different facets of an intricate construct (Dhani & Sharma, 2016; Volker, 2020).

Along with several theories of EI there are also several definitions. The definition that is widely accepted defines EI as an ability to recognize and express emotions, understand emotion in thought and reason, and regulate emotion in self and others (Alonso-Ferres et al., 2019; Ayub et al., 2021; Baudry et al., 2018; Cabello et al., 2021; Cherry et al., 2017; Climie et al., 2017; Dhani & Sharma, 2016: Hogeveen et al., 2016; Martinez-Marin et al., 2020; Stoller, 2020). Faltas (2017) defines EI as cognitive and non-cognitive skills and abilities that are linked to human behavior in all occupations, which adroitly combines the concepts of the aforementioned theorists.

The differences in the various models can be credited to the breadth of definition of EI and the areas where the respective theorist chose to focus (Kewalramani et al., 2015). Mayer et al. (2016) believe EI represents an intelligence structure that processes emotional data being similar to essential components of a traditional intelligent system that can be assessed similarly to other intelligence tests (Alonso-Ferres et al., 2019; Climie et al., 2017; Gong & Jiao, 2019; Lowicki et al., 2020; Kewalramani et al., 2015; Megias et al., 2020; Prentice et al., 2020).

According to Mayer et al. (2016), EI represents a broad intelligence that is performance based (Cabello et al., 2021; Hogeveen et al., 2016; Mayer et al., 2016). Individuals employ this intelligence to recognize both verbal and non-verbal emotional signals from others which can enhance problem solving skills and collaborative group work (Ayub et al., 2021; Davis et al., 2020; Prentice et al., 2020).

Petrides et al. (2016) believed EI was a trait that embodied personality characteristics (Baudry et al., 2018; Climie et al., 2017; Lowicki et al., 2020; Stoller, 2020; Volker, 2020). In comparison to the ability model, Climie et al. (2017) described the comparison of the EI trait model to the ability model, as the doing versus the knowing in terms of conduct. In trait EI self-report assessments, individuals relay how they would actually perform in various daily situations (Alonso-Ferres et al., 2019; Baudry et al., 2018; Climie et al., 2017; Davis et al., 2020; Lowicki et al., 2020).

Bar-on believed EI was a collection of non-cognitive competencies and skills that impacted how an individual successfully managed the daily demands and pressures of life (Behera, Pani & Patra, 2017; Climie et al., 2017; Gong & Jiao, 2019; Hogeveen et al., 2016; Itzkovich & Dolev, 2017; Wirawan, Tamar & Bellani, 2018). Bar-on developed the initial instrument where measures were relayed as an emotional quotient (EQ) (Climie et al., 2017).

Goleman, on the other hand provided a broad definition with the goal of understanding the emotions of oneself and others and to problem solve using this knowledge for enhanced performance (Climie et al., 2017; Dhani & Sharma, 2016; Gong & Jiao, 2019; Kewalramani et. al., 2015). Goleman believed EI was a combination of ability and trait that can be developed, a mixed model (Alonso-Ferres et al., 2019; Gong & Jiao, 2019; Karasneh & Al-Momani, 2019; Ruiz & Carranza-Esteban, 2018). Goleman (1995, 1998) stressed the importance of EI from the

perspective of an effective leader (Stoller, 2020; Wirawan et al., 2018). Where Mayer and Salovey viewed EI from a scientific perspective, Goleman was less concerned with the science (Kewalramani et al., 2015). However, they both agree that EI touches and influences all facets of an individual's personal and professional life (Goleman, 1995; Mayer & Salovey, 1990). Bar-on (2006) questioned why a person of high intelligence was often unsuccessful in life. Goleman (1995) theorized that being high in EI does not guarantee a person will have learned the emotional competencies, it only means they will have great potential to learn them.

Looking at the four primary theories, while there are differences there are commonalities (Mansel & Einion, 2019). All of the models fall under the purview of three schools of thought: trait approach, ability approach and mixed approach (Dhani & Sharma, 2016; Kewalramani et al., 2015). Although Mayer, Salovey and Caruso (2000) have shared their opinion that two models of EI exist, trait and mixed (Kewalramani et al., 2015). Petrides and Furnham (2000) also believe there are two models of EI, trait and information processing. In response to Petrides and Furnham (2000), Kewalramani, Agrawal and Rastogi (2015) point out that trait is comparable to the mixed model and information processing is comparable to the ability model. The scope of all focus on an individual's ability to understand self, understand others, manage self, and manage others (Kewalramani et al., 2015). They all also focus on one's ability to identify and express emotions (Dhani & Sharma, 2016). Furthermore, all are theorized from the perspective of a mental ability or skill; or a combination of mental ability and personality traits. The models talk about similar areas using different terminologies (Kewalramani et al., 2015).

The ability model of EI is most widely researched and cited (Ayub et al., 2021; Climie et al., 2017; Hogeveen et al., 2016; Leonidou et al., 2019; Megias et al., 2018; Prentice et al., 2020; Wirawan, Tamar & Bellani, 2018). It is the most promoted in academia (Prentice et al., 2020).

Therefore, it has demonstrated the superior empirical support (Megias et al., 2018). The differences in the various model are tied to how EI is measured and subsequently applied.

A consistent viewpoint of the theorists is the belief that EI is a knowledge or ability that can be developed (Climie et al., 2017; Kewalramani et al., 2015; Ruiz & Carranza-Esteban, 2018; Stoller, 2020; Volker, 2020). In fact, it has been noted having high EI does not automatically ensure one will actually have all of the learned skills; it just indicates the individual has high probability of learning the competencies (Cabello et al., 2021; Goleman, 1995; Kewalramani et al., 2015).

EI's Negative Influence

Although we often here of the positive facets of EI, some researchers have expressed concern regarding the negative aspects of EI. Some have expressed concern that a person with high EI may have the propensity to manipulate others to obtain a desired outcome (Bechtoldt & Schneider, 2016; Davis & Nichols, 2016; Moeller & Kwantes, 2015). It has been found that high EI has been associated with higher acute stress and poor mental health (Bechtoldt & Schneider, 2016: Davis & Nichols, 2016). Davis and Nichols (2016) believe there is theoretical support for the negative perspectives of EI. They found "the way in which EI is deployed (i.e., for better or worse) appears contingent upon other underlying pre-dispositions and competencies of the Individual" (Davis & Nichols, 2016 p. 7). Although EI is considered to benefit prosocial behavior, Moeller and Kwantes (2015) believe that high levels of EI can also produce undesirable or antisocial behavior.

In contradiction, the research of others has noted it is reduced EI that is connected to two of the dark triad traits, psychopathy, and narcissism (Jauk et al., 2016). On the other hand, men who have displayed Machiavellianism have been found to have high EI (Jauk et al., 2016). It has

been found that high levels of EI tends to impede negative behaviors (Alonso-Ferres et al., 2019; Itzkovich & Dolev, 2017; Kundi & Badar, 2021; Martinez-Marin, Martinez & Paterna, 2020; Ruiz & Carranza-Esteban, 2018).

Application of Theories

Ability Model

The ability model of AI is the most tested as many believe it best depicts EI (Leonidou et al., 2019). The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is the most widely used measure of EI. A study performed Dabke (2016) explored the linkage of emotional intelligence and leadership. Using the MSCEIT, Dabke studied performance based-EI and transformational leadership with a sample of 200 managers. The study focused on perceived leadership effectiveness as observed by supervisors and subordinate of the participants. The study revealed a difference in a subordinate's perspective or expectation on effective leadership and the supervisor's perspective. The subordinates believed EI contributed to the participant's effectiveness as a leader, while the supervisors didn't place much importance on EI. The study found that both EI and transformational leadership were positively associated with perceived leadership effectiveness.

Herbst and Maree (2008) studied the impact emotional intelligence had on thinking style preference and leadership effectiveness. The participants consisted of 138 managers, at various organizational levels, in a higher education setting. Using the MSCEIT, Herbst and Maree (2008) the researchers identified a correlation between EI and thinking style preference at all levels. A relationship also exists between EI and leadership effectiveness. Furthermore, the data indicated high EI scores may be a predictor of transformational leadership behaviors.

Examining the impact of a short-term intervention on the improvement of a college freshman's EI, Puffer et al. (2021) conducted a feasibility study. This was a quasi-experimental study designed with a pre and post-test (Puffer et al., 2021). The 75 students participated in a 55-minute training focused on the ability EI model. The training was a compilation of material from authors who supported the ability EI model. Using the MSCEIT, Puffer et al. (2021), an improvement was realized in two of the four scores for perception and facilitation of emotion.

Gomez-Leal et al. (2021) studied the correlation of ability EI and psychopathic traits in imprisoned males. This study involved 63 incarcerated males with a median age of 37.51 (Gomez-Leal et al., 2021). Gomez-Leal et al. (2021) administered the MSCEIT and the Self-Report Psychopathy Scale-III (SRP-III) to the prisoners. The data was compared to non-incarcerated males for comparison. The findings revealed an inverted relationship between EI and psychopathy traits. The sample of prisoners who scored high on the SRP-III were revealed to have deficiencies in EI (Gomez-Leal et al., 2021). Megias et al. (2018) later confirmed this relationship in a subsequent meta-analysis.

Mixed-Model

Gilar-Corbi et al. (2018) designed a study to identify if EI could be taught in a higher education setting. The study involved 192 college students divided evenly into a control group and three experimental groups. The experimental groups were randomly distributed across the three modalities for learning, 1) classroom with e-learning platform, 2) exclusively on-line and 3) coaching mediated combined with e-learning. The training was conducted over a seven-week period consisting of a weekly one-hour course. To measure the EI at the end of the study, Gilar-Corbi et al. (2018) used Bar-On's EQ-I which demonstrated adequate validity and internal

consistency of its subscales ranging from 0.65 to 0.86. The study confirmed EI could be taught effectively in higher education via all three modalities.

Boyatzis et al. (2016) studied EI skills in engineers and the correlation to their success and engagement. Acknowledging that engineers are typically individual contributors in their work setting, the study was designed to investigate if EI could foresee their effectiveness (Boyatzis et al., 2016). The studied utilized Goleman's Emotional and Social Competence Inventory (ESCI). This instrument was completed by peers who evaluated how often the participants exhibited the emotional and social intelligence (ESI) scales (Boyatzis et al., 2016). The study found the effectiveness of the participants were substantially related to ESI competencies (Boyatzis et al., 2016). In contrast to intelligence and personality, ESI was a better predictor of the engineers' success (Boyatzis et al., 2016).

Trait Model

In 2018, Farnia et al. studied impediments in career decision-making and the correlation to trait EI and positive and negative emotions. The authors desired to identify if trait EI could foresee those who will experience difficulties when making career related decisions (Farnia et al., 2018). This prediction going beyond the personality traits of openness, conscientiousness, extraversion, agreeableness, and neuroticism (Farnia et al., 2018). The Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) was administered to a participant sample of 600 undergraduate students. The results implied Trait EI accounted for a substantial percentage of the disparity in career hesitancy that could not be attributed to the personality traits.

Looking at the job performance of teachers, Li et al. (2018) studied the impact of trait EI with job satisfaction and organizational trust. The study examined the teacher's trait EI, and their happiness as prompted by confidence in the organization and their principal's EI (Li et al., 2018).

The study participants consisted of 881 teachers and 37 principals in a primary school setting (Li et al., 2018). Using the TEIQue-SF, the findings revealed the teachers' enjoyment of their jobs was directly correlated to trait EI (Li et al., 2018). This confirmed the importance of trait EI in teacher job performance (Li et al., 2018). The findings of the study did not demonstrate a correlation with principals' trait EI and teacher job performance (Li et al., 2018).

Relationship of Gender and EI

Research on the relationship of EI and gender has been limited but is slowly developing (Hassan & Ayub, 2019). There are a few studies that believe gender does not have a factor in levels of EI (Martinez-Marin et al., 2020; Sk & Halder, 2020). However, it is believed that women possess a greater level of EI than their male counterpart (Alonso-Ferres et al., 2019; Fernandes-Berrocal et al., 2012; Hassan & Ayub, 2019; Human Resources Management International Digest, 2020; Martinez-Marin et al., 2020; Petrides & Furnham, 2000; Singh, 2015; Sk & Halder, 2020). Research on interpersonal social skills found women to be more perceptive, adaptive, and empathetic than men (Hassan & Ayub, 2019; Human Resources Management International Digest, 2020; Itzkovich & Dolev, 2017; Ruiz & Carranza-Esteban, 2018). It is thought EI in women is augmented by inherent personality traits that attribute to greater levels of EI (Hassan & Ayub, 2019).

This belief can be contributed to the thought of women being more connected and better able to manage and regulate their emotions (Hassan & Ayub, 2019; Itzkovich & Dolev, 2017; Martinez-Marin et al., 2020; Sk & Halder, 2020). In contrast, men have been developed to suppress their emotions, e.g., fear, vulnerability, sadness, etc. (Hassan & Ayub, 2019; Human Resources Management International Digest, 2020). Others believe there is a biological difference in the brains of males and females and how emotions are processed (Hassan & Ayub,

2012; Itzkovich & Dolev, 2017). This difference contributes to females having greater emotional knowledge and being more prepared to process and understand emotions (Hassan & Ayub, 2012; Sk & Halder, 2020).

Other research has varied based upon the assessment methodology. For example, performance-based assessments have indicated a higher level of EI in women (Alonso-Ferres, 2019). While self-report assessments have shown no difference in EI between the genders (Alonso-Ferres, 2019). Sk and Halder (2020) indicate some studies have identified higher levels of EI in men. Studies have demonstrated that men score higher in areas of self-regard, independence, and stress management (Itzkovich & Dolev, 2017). Some studies have been split where women were found to have higher EI in social skills and no gender differences for self-awareness and self-control (Ruiz & Carranza-Esteban, 2018). Based upon the varying supporting data, research on gender differences in EI has been inconclusive (Itzkovich & Dolev, 2017).

The Relationship of Leadership and EI

Goleman (1995, 1998) often speaks of EI in the realm of leadership effectiveness. Goleman believes the most effective leaders have the commonalty of having high levels of EI (Harvard Business Review, 2015; Karasneh & Al-Momani, 2019). Clapp and Town, (2015) agree with the premise of Goleman's best-selling book (1995) that IQ is not enough. Higher levels of EI is believed to separate typical leaders from exceptional leaders (Clapp & Town, 2015; Karasneh & Al-Momani, 2019). This thought process has resulted in several research studies being conducted on the impact of EI on leadership; as well as the connection of EI with various leadership styles, i.e., transformational, authentic, charismatic, laissez-faire, etc. (Dabke, 2016; Kellner et al., 2018; Majeed et al., 2019; Miao et al., 2018; Yang & Zhu, 2016). The research supports the thought of EI being a necessary requirement for effective leadership

(Apore & Asamoah, 2019; Awwad et al., 2020; Barrett et al., 2019; Dabke, 2016; Edelman & van Knippenberg, 2018; Karasneh & Al-Momani, 2019; Kellner et al., 2018; Mansel & Einion, 2019; Miao et al., 2018; Stoller, 2020).

A leader must use EI effectively, being self-aware of their emotions and how they impact themselves and others; furthermore, a leader should be aware of those around them, and the various emotions being exhibited (Apore & Asamoah, 2019; Awwad et al., 2020; Clapp & Town, 2015; Edelman & van Knippenberg, 2018; Wirawan et al., 2018). This interpersonal skill allows the leader to ascertain the appropriate emotion or action for any given situation (Apore & Asamoah, 2019; Dabke, 2016; Edelman & van Knippenberg, 2018; Miao et al., 2018; Wirawan et al., 2018). The ability to perceive can facilitate a leader's ability to build effective relationships and increase their influence (Apore & Asamoah, 2019; Dabke, 2016; Kellner et al., 2018; Miao et al., 2018; Wirawan et al., 2018). In addition, the leader's perspective will be broadened by those that surround them resulting in a deepened trust between themselves and their followers (Dabke, 2016; Kellner et al., 2018; Miao et al., 2018).

A leader with high EI can use their abilities to create a strong, cohesive, and high performing team (Alwar & Phelps, 2019; Edelman & van Knippenberg, 2018; Karasneh & Al-Momani, 2019; Neil et al., 2016). This in turn will increase employee job satisfaction and reduce attrition and turnover (Miao et al., 2016; Neil et al., 2016; Yang & Zhu, 2016). This is advantageous when working on special projects or going through any change initiative (Apore & Asamoah, 2019; Neil et al., 2016). A leader, seeking to inspire, must be able to connect with their team, use effective communications, acknowledge works of others, be always considerate and self-aware (Neil et al., 2016).

Neil et al. (2016) found that the way a team uses their EI to achieve goals was directly correlated to their overall performance. Yang and Zhou (2016) believe a team's EI will directly impact their ability to comprehend the scope of, and implement, a project or task. Those team members with high EI will have the ability to detect the emotions of their fellow team members and become 'leaders' compelling project completion (Clapp & Town, 2015; Yang & Zhou, 2016).

Team Effectiveness

A leader's EI is believed to contribute to an effective and cohesive team (Lee & Wong, 2019; Mysirlaki & Paraskeva, 2020; Neil et al., 2016). A team is defined as a group of two or more who work together to achieve common organizational goals (Lu & Fan, 2017). Assembling an effective team is a major challenge for leaders and necessitates thoughtful and progressive consideration (Hughes & Albino, 2017). The team is deemed successful if they are able to work in partnership and demonstrate a committed effort to reach those goals and meet performance expectations (Lu & Fan, 2017; Mysirlaki & Paraskeva, 2020). The cohesion of a group relates to the desire of the members to remain as a part of the team (Lu & Fan, 2017; Mysirlaki & Paraskeva, 2020). To attain this cohesiveness, the team must develop interpersonal trust with one another and the leader (Lu & Fan, 2017).

EI has the ability to strengthen the relationship among all team members and the leader (Lu & Fan, 2017; Mysirlaki & Paraskeva, 2020). Lee et al., 2018, indicate EI is the precursor to teamwork. Druskat et al., (2017) notes as a team collaborates, they naturally generate emotions. EI and an encouraging work environment haves a positive motivating impact on a team and their collaboration skills (Druskat et al., 2017; Lee et al., 2018). Lee et al., 2018, indicate these non-technical skills are vitally important for a successful team.

The EI of the leader and followers are believed to positively impact the job performance and disposition of the team (Mysirlaki & Paraskeva, 2020; Wong & Law, 2002). For the follower, the result is loyalty to the organization and employment retention (Wong & Law, 2002). The leader who demonstrates high EI has a positive influence on their team member's job satisfaction and performance (Druskat et al., 2017; Lee & Wong, 2019; Wong & Law, 2002). The leader's EI is reflective in their ability to demonstrate compassion, appreciation, and respect to their followers (Wong & Law, 2002). Team members view leaders with high EI to be more impactful. Mysirlaki & Paraskeva (2020) found a positive relationship between leader EI and team effectiveness.

Those team members with high EI can effectively control their interactions with others and assist in the guiding of team members with low EI (Lee & Wong, 2019; Wong & Law, 2002). As indicated by Druskat et al., (2017), this management of emotions by the team allows the interpersonal collaborations to be of greater quality. Just as properly managed emotions can have a positive impact on a team, emotions that are not properly managed can be detrimental to the success of a team (Druskat et al., 2017). Druskat et al., 2017 proposes the creation and implementation of EI norms for the team. Mysirlaki & Paraskeva, 2020 recommend, given the importance of EI for team success, human resources departments add EI training in their leadership development curriculum. Lee & Wong, (2019) believe this leader EI training should include developing team emotional intelligence.

Leadership Styles

Leadership is the ability to guide and influence a team to accomplish shared goals. Apore & Asamoah (2019) indicate leadership is about identifying a manner in which individuals can add to the process of making great things happen within an organization. To be an effective

leader, individuals must possess specific qualities (Apore & Asamoah, 2019). All manners of intelligence are deemed important, e.g., cognitive, emotional, and social (Apore & Asamoah, 2019). Leadership style can impact the attitude and job performance of a team (Wirawan et al., 2018). The effectiveness of a leader can be gauged by their ability to inspire and motivate their teams (Edelman & van Knippenberg, 2018). There are a variety of leadership styles that have been researched in terms of effectiveness. The next few paragraphs will explore three specific styles: laissez-faire, transactional and transformational.

Laissez-Faire Leadership. Laissez-faire leadership is a passive and effortless leadership style where the leader avoids all responsibilities resulting in harm for subordinates and the organization (Birkeland-Nielsen et al., 2019: Breevaart & Zacher, 2019; Chen et al., Zhu & Liu, 2019; Robert & Vandenberghe, 2020). This abdication of responsibilities includes a failure to make decisions, provide guidance, communicate, and provide inspiration (Birkeland-Nielsen et al., 2019; Legood et al., 2018; Robert & Vandenberghe, 2020). It is believed to be the most ineffective and negative leadership style (Birkeland-Nielsen et al., 2019; Breevaart & Zacher, 2019; Legood et al., 2018; Robert & Vandenberghe, 2020). Some have deemed the laissez-faire leadership to be destructive, as it is the only negative predictor of job dissatisfaction (Birkeland-Nielson et al., 2019; Robert & Vandenberghe, 2020).

This leadership behavior results in negative consequences operationally as the leader neglects the needs and concerns of the team and the individual subordinate (Birkeland-Nielsen et al., 2019; Breevaart & Zacher, 2019; Chen et al., 2019; Robert & Vandenberghe, 2020). All of the team's leadership expectations are unrealized (Birkeland-Nielsen et al., 2019; Robert & Vandenberghe, 2020). This leads to the creation of a stressful work environment triggering poor performance and job dissatisfaction amongst their employees (Birkeland-Nielsen et al., 2019;

Breevaart & Zacher, 2019; Robert & Vandenberghe, 2020). Employees begin to believe their leader lacks any concern for the team's, or their individual's, well-being (Birkeland-Nielsen et al., 2019). Additional repercussion includes role ambiguity, mental exhaustion, interpersonal conflicts, etc. (Breevaart & Zacher, 2019; Robert & Vandenberghe, 2020).

Transactional Leadership. A transactional leader achieves task completion utilizing a reward-punishment transactional exchange with their subordinates (Aboramadan & Kundi, 2020; Anderson, 2018; Bass, 1997; Lan, Chang, Ma, Zhang & Chuang, 2019; Yizhong, Baranchenko, Lin, Lau & Ma, 2019; Nielsen et al., 2019). This negotiation process places the emphasis on "contractual" commitments versus performance standards (Lan et al., 2019; Young et al., 2021). Transactional leadership is thought to be the most common in organizations and follows the ideology of the traditional manager (Young, Glerum, Joseph & McCord, 2021).

The relationship of the transactional leader with subordinates is based upon reciprocity where rewards are offered when objectives are met, e.g., praise, raise, promotion, and punishments are administered when objectives are not met, e.g., corrective action (Lan et al., 2019; Nielsen et al., 2019; Young et al., 2021). This type of leadership can be demotivating to staff and hinder personal growth and development (Aboramadan & Kundi, 2020; Young et al., 2021). It can cause a competitive environment which transcends the subordinates to individualists harming the collaborative atmosphere and hindering a positive team environment (Aboramadan & Kundi, 2020; Nielsen et al., 2019). It creates an environment ruled by the self-interest of the leader and the subordinate (Aboramadan & Kundi, 2020).

Transactional leadership is considered to being beneficial to employees allowing the individual development and pursuit of goals (Lan et al., 2019). This supportive journey to personal achievement can lead to job satisfaction for that individual (Lan et al., 2019). There is

also the belief that transactional leadership can be effectively combined with transformational leadership to create a highly effective leader (Nielsen et al., 2019).

Transformational Leadership. The transformational leader is one who focuses on understanding the needs of the organization, and their team, to influence and inspire all to meet organizational goals (Aboramadan & Kundi, 2020; Anderson, 2018; Apore & Asamoah, 2019; Kellner et al., 2018; Faupel & Süß, 2019; Kim & Park, 2019; Kwan, 2019; Yizhong, et al., 2019). Transformational leadership (TL) is cited as being the most effective, successful, and desired leadership style as they inspire others to change behaviors to meet the mission of the organization while performing at an optimal level (Aboramadan & Kundi, 2020; Apore & Asamoah, 2019; Birkeland-Nielsen et al., 2019; Breevaart & Zacher, 2019; Faupel & Süß, 2019; Kim & Park, 2019; Wirawan et al., 2018; Yizhong et al., 2019). It is deemed to be an active and inspiring form of leadership that empowers that individual to affect change in both the organization and within the individual (Anderson, 2018; Apore & Asamoah, 2019; Birkeland-Nielsen et al., 2019; Faupel & Süß, 2019).

A transformational leader is intuitive and recognizes the needs of both the organization and their team while operating in a manner that inspires mutual trust (Anderson, 2018; Birkeland-Nielsen et al., 2019: Breevaart & Zacher, 2019; Faupel & Süß, 2019; Kim & Park, 2019). The transformational leader has a strong and positive influence over their team that inspires and motivates the highest level of performance (Aboramadan & Kundi, 2020; Apore & Asamoah, 2019; Birkeland-Nielsen et al., 2019; Rajesh et al., 2019). They have a positive impact on their subordinates creating a positive and pleasant work environment (Birkeland-Nielsen et al., 2019; Faupel & Süß, 2019; Rajesh et al., 2019; Yizhong et al., 2019). This leader demonstrates a sincere concern for their team's needs motivating all to simultaneously develop

and grow on the personal level (Anderson, 2018; Birkeland-Nielsen et al., 2019; Breevaart & Zacher, 2019; Faupel & Süß, 2019; Kim & Park, 2019; Yizhong et al., 2019). This results in positive outcomes for their team members, e.g., high productivity, high job satisfaction and innovative behavior, which benefits both the individual and the organization (Anderson, 2018; Breevaart & Zacher, 2019; Faupel & Süß, 2019; Kim & Park, 2019; Rajesh et al., 2019; Yizhong et al., 2019).

Of the three leadership styles, the transformational leadership style is perceived to be the most successful and impactful on an organization (Apore & Asamoah, 2019). It is also the leadership style that has demonstrated a direct relationship with emotions and EI (Apore & Asamoah, 2019; Karasneh & Al-Momani, 2019; Zurita-Ortega et al., 2019). In addition, research indicates high EI is a predictor and antecedent of transformational leadership behavior (Apore & Asamoah, 2019; Karasneh & Al-Momani, 2019; Wirawan et al., 2018).

Leadership Styles – Gender

Research is increasing on the relationship of leadership styles across gender (Begum et al., 2018). Some attribute the slow progression of research to the delayed movement of women into leadership positions (Garcia-Solarte, 2018; Sims et al., 2021). As noted by Garcia-Solarte (2018) and Sims et al. (2021), leadership in the past was defined by masculine connotations. The introduction of women into this spectrum has challenged the masculine ideology of gender and leadership (Begum et al., 2018; Garcia-Solarte, 2018).

Some research studies have indicated gender has no bearing across leadership styles (Engen et al., 2001; Martinez-Leon et al., 2020; Miranda, 2019; Sims et al., 2021). At best the research has produced mixed results (Begum, et al., 2018; Martinez-Leon et al., 2020; Miranda; 2019; Mroz et al., 2018). On the other hand, it has been found that women tend to lead in more

of a participatory or democratic manner (Begum et al., 2018; Garcia-Solarte, 2018; Martinez-Leon et al., 2020; Miranda, 2019; Mroz et al., 2018; Sims et al., 2021). A democratic or participative leader is more inclusive of their followers in decision-making actions (Maamari & Saheb, 2017). This leader is viewed to be more sincere and knowledgeable (Mroz et al., 2018). A participatory leader directs their efforts on interpersonal relationships (Mroz et al., 2018).

In comparison, men tend to display an autocratic or directive style of leading (Begum et al., 2018; Garcia-Solarte, 2018; Martinez-Leon et al., 2020; Miranda, 2019; Mroz et al., 2018; Sims et al., 2021). In this type of style, the leader maintains total control of all decision-making (Maamari & Saheb, 2017). The directive style leader is not compelled to solicit the opinion of their team (Mroz et al., 2018). They have an expectation of full compliance of their directives (Mroz et al., 2018). To maintain control, this leader will use rewards and punishments to manage their subordinates (Mroz et al., 2018).

These findings are consistent with the research that has shown women tend to demonstrate a higher level of transformational leadership qualities than their male counterpart (Bass and Avolio, 1994; Begum et al., 2018; Garcia-Solarte, 2018; Martinez-Leon et al., 2020; Miranda, 2019; Sims et al., 2021). While males are more apt to exhibit a transactional leadership style (Begum et al., 2018; Martinez-Leon et al., 2020). Relational competencies and interpersonal skills favor the female leader (Maamari & Saheb, 2017). Mroz et al. (2018) and Sims et al. (2021) relay the importance of demonstrating flexibility by utilizing varying leadership styles when appropriate across gender.

The Relationship of EI and Leadership in Higher Education

Higher education is an essential part of the world's infrastructure in terms of socio-economic development (Majeed et al., 2019). Leadership in higher education is dynamic and has

a different vantage point from what is typically found in most organizational structures. Leadership positions in academia, are often filled by faculty and staff who are elevated to new roles based upon scholarly or scientific accomplishments, or tenure with the organization, and not based upon managerial or leadership skills and abilities (Parish, 2015). As noted by Parish (2015) this often results in institution's employing leaders who are not prepared for these roles and unsure of what the new role entails. In many instances these individuals are learning via on-the-job training. Compounding this problem is a deficiency in soft skills, Parish noted "there is a seeming lack of emotion intelligence amongst higher education leaders (2015, p. 824)."

As noted earlier, the popularity of the topic of EI has resulted in research in all sectors of society including higher education institutions (Al-Motlaq, 2018; Alward & Phelps, 2019; Clapp & Town, 2015; Dabke, 2016; Ellis, 2020; Fernandez-Berrocal et al., 2017; Li et al., 2015; Itzkovich, & Dolev, 2017; Kellner et al., 2018; Majeed et al., 2019; Moeller & Kwantes, 2015**;** Newton et al., 2015**;** Parish, 2015; Stoller, 2020). Emotional Intelligence is viewed as being the most appropriate and a necessity for leaders in academia (Parish, 2015). The importance of EI in higher education is on the rise (Behera et al., 2017). A higher education leader's awareness of EI is crucial to improving effectiveness within their departments/divisions/units and across the institution (Alward & Phelps, 2019). For an academic leader, EI is also important in terms of establishing norms and creating or influencing the culture of their area of responsibility (Alward & Phelps, 2019). Parish (2015) noted the key desirable EI traits, as it related to academic leadership, were empathy, the ability to inspire others and self-awareness/self-management. Other emerging areas of importance are high integrity and cultivating an environment of trust (Parish, 2015). A study revealed leaders with both high EI and higher levels of education were viewed with more respect; that translated into their ability to perform as a more effective leader

(Parish, 2015). There was also a stressed importance for leaders to accurately assess themselves and determine areas that require improvement and to seek improvement (Parish, 2015).

Limited resources exist on the general topic of leadership in the context of higher education administration (Behera et al., 2017; Parish, 2015). There are resources that provides insight on academic leadership, e.g., academic deans, chairs, program directors, etc. (Parish, 2015). In addition, literature on the topic of EI in the higher education setting is typically student focused, e.g., learning enhancement, faculty relationships, etc. (Alward & Phelps, 2019; Bar-On, 2007; Fernandez-Berrocal et al., 2017; Itzkovich & Dolev, 2017). In the realm of higher education administrative leadership and EI, the research is limited and presents a research gap. This study will attempt to narrow the gap by providing higher education leaders, both academic and administrative, with an awareness of how EI impacts effective leadership.

Summary

The introduction of EI as a scientific construct is relatively new. In this short span of time several theories have been developed and researched. This attention brought on a flurry of research which has led to the development of many theories. This literature review focused on four theories of EI: ability model, trait model, competencies model and performance (mixed) model.

The four widely referenced theories are: ability model, trait model, competencies model and mixed-model. Mayer and Salovey (1990) are credited with coining the phrase ‘emotional intelligence” and developing the ability model of EI. The ability model views EI as a form of absolute intellect that consists of cognitive ability (Dhani & Sharma, 2016). Mayer and Salovey (1990) theorized the processing of emotions is individualized by a person’s ability to recognize and understand emotions.

With the trait theory, Petrides (2000) theorized EI was a construct related to personality traits. His trait theory views EI as being separate and external to an individual's cognitive intelligence (Petrides & Furnham, 2000). Trait theory focuses on the individual's self-perception of their own emotional aptitude, including their behavioral characteristics and their effective use of skills to manage those emotions (Volker, 2020). The distinguishment between trait EI and ability EI is the varying methods to measure, e.g., performance vs. self-report (O'Connor et al., 2019; Volker, 2020).

Goleman (1995, 1998) introduced the mixed model theory of EI. He expounded on Mayer and Salovey's (1990) original definition by conveying the importance of EI as applied to an individual's career and the role EI plays with effective leadership. With the mixed-model theory it is believed individuals contain inherent intellectual abilities and personality characteristics which contribute to their overall EI (Goleman, 1995, 1998). Goleman's theory views EI to be equally as important as an individual's cognitive ability (Goleman, 1998; Mayer, Salovey & Caruso, 2004). Goleman is credited with mainstreaming the topic of EI with the publishing of several best-selling novels (Dhani & Sharma, 2016; Faltas, 2017; Goleman, 1995; Itzkovich & Dolev, 2017; Kewalramani et al., 2015; Stoller, 2020).

Bar-On (2006) explored the role of the brain in the development EI and the relationship with social characteristics. He coined his competencies model the "Bar-On Model of Emotional-Social Intelligence" and defined it as an array of interrelated behavioral characteristics motivated by emotional and social competencies that impacted how a person performed (Bar-On, 2006). Bar-On's theory speaks in terms of intrapersonal and interpersonal skills and abilities. He is credited with coining the term "Emotional Quotient" (Dhani & Sharma, 2017, p. 192).

The construct of EI and development of the various theories has garnered much attention and subsequent research. There has been identification of historical references prior to Mayer and Salovey including the Bhagavad-Gita's Sthithapragnya, "emotionally stable person" and Plato who believed all learning had an emotional foundation (Dhani & Sharma, 2016; Mukherjee, 2020). There has also been earlier work in the twentieth century that aligns with the construct, e.g., Thorndike and Stein, Wechsler, Gardner, etc. (Law et al., 2004; Stoller, 2020; Wong & Law, 2002).

The literature has questioned the appropriateness of discussing emotions in the context of the work environment (Dhani & Sharma, 2016; Volker, 2020). In contrast, research has demonstrated the importance of emotions in helping one withstand the hurdles and obstacles of life and thrive (Ayub et al., 2021; Cabello et al., 2021: Davis et al., 2020; Dhani & Sharma, 2016; Faltas, 2017; Goleman, 1995: Goleman, 1998; Gong & Jiao, 2019; Hogeveen et al., 2016; Mayer et al., 2016; Prentice et al., 2020). Overwhelmingly the literature has supported the value and impact of EI on the everyday lives of individuals from both a personal and professional perspective (Faltas, 2017; Kewalramani et al., 2015; Miao et al., 2016; Neil et al., 2016; Prentice et al., 2020; Yang & Zhu, 2016). The literature supports the concept that those who are emotionally intelligent are better equipped to live a happy and fulfilling life (Cabello et al, 2021; Faltas, 2017; Gong & Jiao, 2020).

With the mainstreaming of the topic, research has touched on a multitude of sectors including governmental settings, hospital, corporate settings, academia, etc. (Al-Motlaq, 2018; Alward & Phelps, 2019; Clapp & Town, 2015; Dabke, 2016; Fernandez-Berrocal et al., 2017; Li et al., 2015; Majeed et al., 2019; Moeller & Kwantes, 2015**;** Newton et al., 2015**;** Parish, 2015). Each theory, and corresponding measuring instruments, have been subjected to continuous

research that has supported, criticized, validated, etc. Mayer and Salovey's ability theory has been the most widely researched and cited (Ayub et al., 2021; Climie et al., 2017; Hogeveen et al., 2016; Leonidou et al., 2019; Megias et al., 2018; Prentice et al., 2020; Wirawan et al., 2018). This can be contributed to the greater degree of promotion of this theory in the academic setting (Prentice et al., 2020). Several believe the theories are connected and differ based on the measuring instrument (O'Connor et al., 2019; Volker, 2020). Theorists and researcher are consistent in the belief EI is a skill or ability that can be developed (Climie et al., 2017; Kewalramani et al., 2015; Ruiz & Carranza-Esteban, 2018; Stoller, 2020; Volker, 2020).

Other researchers have sought to explore the negative implications of EI. These researchers believe EI can be used to manipulate and control others (Bechtoldt & Schneider, 2016; Davis & Nichols, 2016; Moeller & Kwantes, 2015). Some researchers have attempted to link EI to the dark triad traits of psychopathy, narcissism, and Machiavellianism. To challenge this ideology, researchers have noted it is the reduced levels of EI that link with these dark traits (Jauk et al., 2016).

Goleman's (1995, 1998) work brought the connection of EI to leadership to the forefront. As a result, EI has been researched based upon the relationship with the various leadership styles (Dabke, 2016; Kellner et al., 2018; Majeed et al., 2019; Miao et al., 2018; Yang & Zhu, 2016). This includes transformational, authentic, charismatic, laissez-faire and others. Researchers believe there is a natural correlation between EI and transformational leadership (Apore & Asamoah, 2019; Karasneh et al., 2019; Zurita-Ortega et al., 2019). Studies have indicated the positive correlation with EI and effective leadership (Apore & Asamoah, 2019; Awwad et al., 2019; Dabke, 2016; Edelman & van Knippenberg, 2018; Karasneh & Al-Momani, 2019; Kellner et al., 2018; Mansel & Einion, 2019; Miao et al., 2018; Stoller, 2020).

Emotional intelligence is believed to a necessary factor for an effective and cohesive team (Lee & Wong, 2019; Mysirlaki & Paraskeva, 2020; Neil et al., 2016). EI is equally as important for the leader as well as the team members (Druskat et al., 2017; Lee & Wong, 2019; Lu & Fan, 2017; Mysirlaki & Paraskeva, 2020; Wong & Law, 2002). The ability to manage the emotions of the team leads to better overall performance in terms of meeting organizational goals and objectives (Druskat et al., 2017; Lee et al., 2018). High team EI that is properly manage increases job satisfaction and retention (Druskat et al., 2017; Lee & Wong, 2019; Wong & Law, 2002).

Knowledge pertaining to the impact of EI on gender is still limited (Hassan & Ayub, 2019. While most research points to females have an advantage over their male counterparts in terms of EI level (Alonso-Ferres et al., 2019; Fernandes-Berrocal et al., 2012; Hassan & Ayub, 2019; Human Resources Management International Digest, 2020; Martinez-Marin et al., 2020; Petrides & Furnham, 2000; Singh, 2015; Sk & Halder, 2020), several researchers have indicated there is not a difference based upon gender (Martinez-Marin et al., 2020; Sk & Halder, 2020). Others have explored the topic in detail and identified where both genders have advantages depending on the characteristic or trait being explored (Alonso-Ferres, 2019; Hassan & Ayub, 2012; Itzkovich & Dolev, 2017; Human Resources Management International Digest, 2020; Martinez-Marin et al., 2020; Ruiz & Carranza-Esteban, 2018; Sk & Halder, 2020).

The application of EI construct in an academic setting has been limited (Behera et al., 2017; Parish, 2015). What has been studied is in the context of student success, learning delivery, and faculty/student relationships (Alward & Phelps, 2019; Bar-On, 2007; Fernandez-Berrocal et al., 2017; Itzkovich & Dolev, 2017). In the context of administrative leadership in the higher education setting, sources are limited. Higher Education is a complex organizational

setting that is slow to change. Understanding the value of EI in the context of higher education administrative leadership is vital in this dynamic and constantly evolving setting.

CHAPTER THREE: METHODS

Overview

The purpose of this quantitative, predictive correlational study is to explore the plausibility of a relationship between emotional intelligence levels, gender, and the transformational leadership style of higher education administrators. Chapter three begins by introducing the design of the study, including full definitions of all variables. The research questions and null hypotheses are defined. The participants and setting, instrumentation, procedures, and data analysis plans are presented.

Design

The study utilized a predictive correlational research design. This non-experimental approach was selected to determine if a predictive relationship exist between levels of transformational leadership style and ability emotional intelligence and gender. Correlational research is advantageous when attempting to determine if multiple variables are linked (Gall, et al, 2007). It allows the researcher to analyze the magnitude of which two or more variables are correlated (Warner, 2016). The results can identify the degree to which the criterion variable can be predicted (Gall et al., 2007). These studies investigate the direction and nature of the correlation between the variables (Gall et al., 2007). The relationship amongst the variables can be determined to be positive or strongly related, negative or adversely related, or void of any relationship (Gall et al., 2007). This design is non-experimental given that the groups, gender, and scores for transformational leadership style and emotional intelligence in this study are naturally occurring (Gall et al., 2007).

Prediction research has played a key role in improving the quality of education and training (Gall et al., 2007). Use of this design is important when the goal is to predict an existing

phenomenon (Gall et al., 2007). Prediction studies are similar to causal studies in that they both assess the correlation between criterion and predictor variables (Gall et al., 2007). However, causal assumptions should not be made from the results of the data (Gall et al, 2007; Warner, 2016). Identifying a correlation between variables does not provide explanation pertaining to the cause of the relationship (Gall et al., 2007). Prediction studies are typically more focused on increasing the predictor and criterion variables relationship (Gall et al., 2007).

In prediction studies, there are two or more predictor variables and the criterion variable. It is vital to accurately define the criterion (Gall et al., 2007). To not properly define the criterion can result in a failed study (Gall et al., 2007).The predictor variables are the independent variables. The criterion variable is dependent. The relationship between these variables are considered to be ex post facto, meaning the relationships amongst the variables are pre-existing (Gall et al., 2007). To measure criterion and predictor variables, various methods can be employed, e.g., self-report instruments, standardized tests, interviews, observations, etc. (Gall et al, 2007). The results of a predictive study can define the extent to which the criterion variable can be predicted (Gall et al., 2007).

The role of educational research is vital to the expansion of the body of knowledge in the various pedagogies (UKEssays, 2015; Umstead & Mayton, 2018). As with this study, it is often complex due to the evaluation of the interaction of multiple variables. The purpose of this study is to identify the role EI has in relationship to the leadership style and gender of leaders in a higher education academic setting. The dependent variable for this study is transformational leadership style. Leadership style can be defined as the ability to inspire others to work collaboratively towards a shared goal or vision (Almutairi, 2020; Thrash, 2015). A transformational leader focuses on consideration, stimulation, motivation, and influence (Kellner

et al., 2018). A transactional leader accomplishes tasks based upon a reward-punishment exchange with their subordinates (Bass, 1997). A Laissez-faire leader relinquishes all responsibilities to their subordinates (Birkeland-Nielsen et al., 2019). This study will focus solely on the transformational leadership style and the average sum of the five (5) subscales for Transformational Leadership. The two independent variables are emotional intelligence and gender. Emotional intelligence is the ability to effectively identify and manage the emotions of oneself and others (Goleman, 1995; Mayer, Salovey & Caruso, 2002). Gender is the male or female biological sex and their masculine or feminine behavioral differences (Holmes, 2007; Udry, 1994).

Research Question

RQ: How accurately can higher education leaders' level of transformational leadership style be predicted from a linear combination of ability-based emotional intelligence scores and gender?

Hypotheses

The null hypothesis for this study is:

$H_0$1: Emotional intelligence scores, as measured by the Wong and Law Emotional Intelligence Scale (WLEIS), and gender do not significantly predict higher education leaders' level of transformational leadership style as determined by the Multifactor Leadership Questionnaire (MLQ-5X).

Participants and Setting

The target population for the study was higher education administrative leaders across the United States. Higher education leaders are defined as individuals working in post-secondary education serving in an administrative capacity.

Population

The participants for the study were drawn from a random sample of leaders currently employed by a higher education institution (HEI) during the academic year of 2021-2022. The researcher sought to obtain data from a full population. An HEI is any accredited institution providing post-secondary education. All participants are identified as leaders by serving in capacities in the job families of Directors, Deans, Vice-President, and Chancellor. Other acceptable leadership titles included, Chief Information Officer, Chief Human Resources Officer, Chief Financial Officer, Controller, etc.

Participants

For this study, the number of participants sampled was 190 higher education leaders, which, according to Gall et al. (2007) exceeds the required minimum of 30 for a multiple regression study when assuming a medium effect size with statistical power of .7 at the .05 alpha level. As research studies are typically generalized to larger populations, the goal for researchers is to have an adequate sample that will allow for a satisfactory statistical power level (Norouzian, 2020). In multiple regression studies, Gall et al., 2007, recommends having at least 15 participants for each predictor variable. For this study, the total participants far exceed the recommended number of 30. Moreover, Warner (2016) recommends a study population where N >104 + 2, where 2 = # of predictors. The current study's sample meets this standard as well. The dataset should be large enough to accurately reflect patterns (Fugard & Potts, 2015). Kraemer & Blasey (2016) and Kraemer & Thiemann (1987) indicate a smaller population size increases the chance for failure.

Setting

The sample for this study came from various institutions of higher education across the United States. The participants served in different leadership capacities at their institutions. The study participants were not limited from the perspective of age or time in position. The sample consisted of 56 males and 134 females serving in a leadership capacity. The participants leadership experience in a higher education institution varied with 20.5% serving in a leadership capacity five (5) years or less; 27.4% serving 6 to 10 years; 20% serving 11 to 15 years; 14.7% serving 16 to 20 years; and 17.4% serving 20 years of more. In terms of type of higher education institutions, 19.5% of the participants were employed at predominantly undergraduate institutions; 63.7% were employed at institutions that confer undergraduate, graduate and professional degrees; 15.8% were employed at academic medica schools; and 1.1% were employed at a two-year community college.

Instrumentation

Two instruments were employed to gather data for this study. For the dependent (criterion) variable, transformational leadership style, the Multi-Factor Leadership Questionnaire (MLQ-5X) was used. For the independent (predictor)variable, EI, the Wong and Law Emotional Intelligence Scale (WLEIS) was used.

Wong and Law Emotional Intelligence Scale (WLEIS)

The Wong and Law Emotional Intelligence Scale (WLEIS) was developed by two management professors at the Chinese University of Hong Kong (Ma, Peng & Pan, 2021; Wong & Law, 2002, Law, Wong & Song, 2004). Wong and Law (2002) developed the scale to evaluate the correlation of EI on the performance and attitude of both leaders and followers (Law et al., 2002). Wong and Law (2002) believe their scale is better suited for research in the work

environment. They were seeking a valid measure of greater simplicity and practicability (Wong & Law, 2002).

The WLEIS is a self-report tool that was designed applying the Mayer and Salovey (1993) definition of EI and their ability model of EI (Nguyen et al., 2019; People Matters, 2019; Wong & Law, 2002). The WLEIS measures the four (4) dimensions of (a) Self-Emotions Appraisal (SEA) (b) Regulation of Emotion (REO) (c) Use of Emotion (UOE) and (d) Others-Emotion Appraisal (OEA) (Law et al., 2004; Samul, 2020; Wong & Law, 2002). The dimensions represent characteristics of an individual with high EI (Wong & Law, 2002). The scale also provides a total EI score (Law et. al., 2004).

The Self-Emotion Appraisal (SEA) indicates an individuals' ability to understand and express their deep emotions in a genuine manner (Wong & Law, 2002). The Other-Emotion Appraisal (OEA) signifies the ability of one to identify and accurately appraise emotions in others (Wong & Law, 2002). The Regulation of Emotion (ROE) is the ability of the individual to control their emotions (Wong & Law, 2002). Lastly, the Use of Emotion (UOE) references the ability of an individual to utilize their emotions in a manner that enhances personal performance (Wong & Law, 2002).

The WLEIS consists of sixteen (16) total questions. There are four questions evaluating each dimension, with the total score providing a 'Total Emotional Intelligence' assessment. The instrument uses a seven-point Likert scale that ranges from 'Strongly Disagree' to 'Strongly Agree". These ranges are given a corresponding numerical value of 1- strongly disagree, 2- disagree, 3- slightly agree, 4- neither agree nor disagree, 5- slightly agree, 6- agree and 7- strongly agree. Total scores for each dimension will result in a minimum score of 4 and maximum score of 28. The total overall score for EI has a maximum value of 112. This study

will focus on the overall score. It is estimated that the scale will take fifteen minutes to complete.

Wong and Law (2002) engaged in a laborious process to develop the WLEIS. Three independent groups were utilized to develop and cross-validate the instrument (Law et al., 2004; Wong & Law, 2002). This validation occurred through a series of exploratory factor, hierarchal regression, and correlation analyses (Wong & Law, 2002). In addition, each item was tested for convergent, discriminant, and incremental validity (Wong & Law, 2002). The initial 36-item questionnaire, nine (9) for each dimension, was reduced to the sixteen (16) questions with the largest eigenvalues (Wong & Law, 2002). The WLEIS demonstrated a reliability that ranged from .83 to .90 across the four dimensions (Wong & Law, 2002).

The popularity of the measure can possibly be contributed to its brevity and ease of use, in comparison to the more widely used Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Nguyen et al, 2019). The WLEIS and the MSCEIT are both broadly used in research (Nguyen et al., 2019; People Matters, 2019). The WLEIS is gaining worldwide popularity and has exhibited similar success in research studies (Bono et al., 2021; Ma et al., 2021; Nguyen et al., 2019; People Matters, 2019; Samul, 2019). The measure has been tested and validated in various cultural and demographical settings (Ma et. al., 2021; Nguyen et al., 2019; People Matters, 2019)

The American Psychological Association (APA) permits non-commercial usage of the WLEIS. APA allows usage of the scale at no cost for those engaged in research and teaching. The qualifiers of research and teaching also negates the need to obtain permission from APA. See Appendix C for permission to use instrument.

Multifactor Leadership Questionnaire (MLQ-5X)

The MLQ was created by Avolio and Bass in 1995 and designed to evaluate the

transformational, transactional, and passive-avoidant leadership styles of individuals (Bass & Avolio, 1995; Kasemaa & Suviste, 2020; Okere & Olorunfemi, 2018). The MLQ-5X measures leadership behaviors that are thought to be linked to effective leadership skills and the ability to effect organizational change (Bass & Avolio, 1995). It is following the theory of full-range leadership (FRLT) (Kasemaa & Suviste, 2020). FRLT has three components, transformational, transactional, and laissez-faire (Avolio & Bass, 1995; Kasemaa & Suviste, 2020; Okere & Olorunfemi, 2018). From this theory birthed the Multifactor Leadership Questionnaire (MLQ) (Kasemaa & Suviste, 2020).

The MLQ-5X has been broadly accepted in the spectrum of management and leadership (Kasemaa & Suviste, 2020; Okere & Olorunfemi, 2018). Significant research has been conducted on the instrument to prove validity (Bass & Avolio, 1995; Kasemaa & Suviste, 2020; Okere & Olorunfemi, 2018). Bass and Avolio (2004) conducted an extensive validation study to address criticisms of the instrument and to make refinements. This data was later cross validated with the original validation study (Bass & Avolio, 2004). The studies have confirmed the MLQ-5X's reliability, validity, and internal consistency (Bass & Avolio, 1995; Okere & Olorunfemi, 2018; Kasemaa & Suviste, 2020; Xu et al., 2016). The reported Cronbach alpha scores, for the six leadership factor scales, ranged from .64 to .92 (Bass & Avolio, 2004). The MLQ-5X has been used in thousands of dissertations and theses. Reliability scores ranges from moderate to good. The trustworthiness of the MLQ-5X has led to its usage in research, leadership development and recruitment strategies (Okere & Olorunfemi, 2018).

The MLQ-5X consists of 45 items allowing the participant to self-evaluate (Kasemaa & Suviste, 2020; Xu et al., 80 2016). The MLQ-5X has nine factors forming the three components (Kasemaa & Suviste, 2020; Xu, Wubbena & Stewart, 2016). These nine (9) factors include five

(5) transformational, three (3) transactional, and one (1) laissez-faire subscale. For the purpose of this study, the researcher used only the five (5) transformational leadership subscales. The MLQ-5X uses a five-point behavioral scale with responses ranging from 0 – not at all, 1 – once in a while, 2 – sometimes, 3 – fairly often, and 4 – frequently, if not always (Bass & Avolio, 1995). The scoring range is high, 9-12; moderate, 5-8; low, 0-4 (Bass & Avolio, 1995). Completion time for the questionnaire averages fifteen minutes (Bass & Avolio, 1995).

The licenses to use the instrument are purchased through Mind Garden. The license permitted replication in an on-line survey tool external to Mind Garden. The survey was administered as an on-line survey using Qualtrics. To administer the MLQ-5X for this study, the product was purchased at a discounted research rate of $1.75 for each participant. In addition, the manual was purchased for an additional $50, and the licenses were purchased at a 20% student discount. See Appendix D for permission to use instrument.

Procedures

Upon receiving approval to proceed with study, the researcher obtained authorization to engage in human subject research through Liberty University's Institutional Review Board (IRB). See Appendix A for IRB approval. Using various higher education on-line communities and list serves for which the researcher is a member, e.g., NACUBO, NCURA, AAMC, AAUW, etc. (complete listing in appendix), a distribution list was created. Using this distribution list, higher education leaders were solicited via email for participation.

The solicitation explained the purpose of the study and communicated the various components of the participation requirements. In addition, expected time commitment and study timeline was shared. The researcher used Qualtrics to host the informed consent, demographical questions, and both survey instruments. This was accomplished via an anonymous link to

Qualtrics within the solicitation. The advantage of using Qualtrics was the ability to have both surveys in one webhost avoiding the need for participants to utilize multiple sites to complete the two surveys.

In addition to demographic information related to gender, additional information was requested. This information included type of higher education institution, e.g., predominantly undergraduate institution (PUI), institution that confers undergraduate/graduate/professional degrees, academic medical school, or community college. The final demographic related to years of serving in a leadership capacity in a higher education setting. This question was broken into years of five, spanning from zero (0) to twenty (20) or more years.

Having obtained permission to use the MLQ-5X instrument, via their remote on-line survey license, the survey was administered via Qualtrics. The WLEIS does not require permissions and is free to use for research and teaching purposes. The WLEIS was also replicated in Qualtrics and disseminated to all participants. The informed consent and both instruments were incorporated into one single Qualtrics survey. Qualtrics allowed the user to complete the questionnaire anonymously. The study participants were asked to complete the surveys over a four-week period. The researcher was able to monitor progress and send weekly reminders to the participants. At the conclusion of the fourth business week, the researcher closed the survey. The researcher has access to the data via Liberty University's Qualtrics website and reports.

Given that the survey was distributed through an anonymous link, data was not collected that could identify the participants. Data was stored securely through Liberty University's website requiring username and password authentication to access the information. Data was also stored on the researcher's password protected personal computer and backed up to a

password protected cloud storage. The data will be retained for a period of five years after the completion of this research study.

Data Analysis

A standard multiple regression (SMR) was used to test the hypotheses. A standard multiple regression allows you to predict a dependent (criterion) variable, (level of transformational leadership style), based upon multiple independent (predictor) variables, (gender and EI scores) (Gall et al., 2007). Multiple regression is used extensively in educational research due to the capability of analyzing two or more predictor variables and identifying the statistical significance of the variable's relationship (Gall et al, 2007). The appeal of SMR analysis is its flexibility and the capability of being utilized for any of the key research designs including predictive correlational (Gall et al., 2007). In SMR, all independent variables are entered into the regression equation at the same time. The set of variables added to the SMR is referred to as a model. This study has one dependent (criterion) variable, transformational leadership style, and two independent (predictor) variables, EI and gender. It is appropriate for this study as the researcher sought to explore the relationship of transformational leadership style, criterion variable, to the predictor variables of EI and gender.

Prior to engaging in data analysis, the data received from both instruments was reviewed to identify any missing data. Those surveys with missing data were reviewed to evaluate the feasibility of inclusion in the study. With the MLQ-5X, Avolio provides a solution for addressing missing data depending on the nature of the omissions. However, the WLEIS guidance does not address missing data. To be included in the study, completion of both instruments was required. As a result, 38 study participants were eliminated leaving a total of 190 study participants.

The finalized population from the data set was entered into SPSS25. Another level of data screening was conducted on each variable. A matrix scatter plot was used to detect bivariate outliers between predictor variables and the criterion variable (Gall et al, 2007; Warner, 2016). As shared by Gall et al. (2007), the decision to eliminate an outlier is of great concern in a research study. The researcher needs to ensure the outlier will not distort the results (Gall et al., 2007).

Descriptive statistics were computed in SPSS 25 on the criterion and predictor variables. The multiple regression requires several assumptions to be met to determine if the data is suitable for analysis. The first test conducted was to ensure the assumption of linearity was met (Warner, 2016). The assumption of linearity is done to determine if a linear relationship exists between the criterion variable and the predictor variables collectively (Warner, 2016). The assumption of linearity was analyzed using a scatter plot. Next, the assumption of bivariate normality distribution must be met with the SMR (Warner, 2016). The assumption of bivariate normality distribution was also analyzed with a scatter plot. Finally, the assumption of multicollinearity must be met in SMR. A Variance Inflation Factor (VIF) test was conducted to ensure the absence of multicollinearity. This test was run because if a predictor variable (x) is highly correlated with another predictor variable (x), they essentially provide the same information about the criterion variable. If the VIF is too high (greater than 10), then multicollinearity is present. Acceptable values are between 1 and 5. The assumption of multicollinearity is not violated as VIF values are lower than 10.

After completing the testing for assumptions, the SMR was conducted in SPSS 25 for the criterion variable, transformational leadership level style and predictor variables, ability EI and gender. The influence of the linear combination of predictor variables (EI and gender) as it

correlated to levels of transformational leadership style was analyzed. The results reported includes the descriptive statistics, and assumptions evaluation. The results of the study are reported in Chapter Four.

CHAPTER FOUR: FINDINGS

Overview

This purpose of the quantitative, predictive correlational study was to determine if ability emotional intelligence or gender could predict levels of transformational leadership style. The predictor variables were emotional intelligence and gender. The criterion variable was levels of transformational leadership style. A multiple linear regression was used to test the hypothesis. The results section includes the research question, null hypothesis, data screening, descriptive statistics, assumption testing, and results.

Research Question

RQ: How accurately can higher education leaders' level of transformational leadership style be predicted from a linear combination of ability-based emotional intelligence scores and gender?

Null Hypotheses

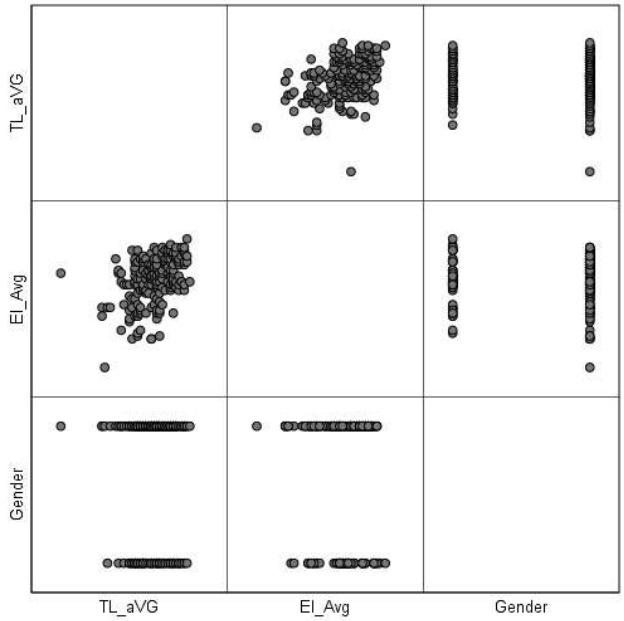
$H_0$1: Emotional intelligence scores, as measured by the Wong and Law Emotional Intelligence Scale (WLEIS), and gender do not significantly predict higher education leaders' level of transformational leadership style as determined by the Multifactor Leadership Questionnaire (MLQ-5X).

Data Screening

The researcher sorted the data and scanned for inconsistencies on each variable. No data errors or inconsistencies were identified. A matrix scatter plot was used to detect bivariate outliers between predictor variables and the criterion variable. No bivariate outliers were identified. See Figure 1 for the matrix scatter plots.

Figure 1

Matrix Scatter Plots



Descriptive Statistics

Descriptive statistics were obtained on each of the variables. The sample consisted of 190 participants. Table 1 provides the descriptive statistics for each variable.

Table 1

Descriptive Statistics

Variable	*M*	*SD*
[Dependent/Criterion Variable] Transformational Leadership	3.1900	.36512
[Independent/Predictor Variables]		
Emotional Intelligence	5.9059	.50509
Gender	*n*	*%*
Male	56	29.5
Female	134	70.5

Assumption Testing

Assumption of Linearity

The multiple regression requires that the assumption of linearity be met. Linearity was examined using a scatter plot. The assumption of linearity was met. See Figure 1 for the matrix scatter plot.

Assumption of Bivariate Normal Distribution

The multiple regression requires that the assumption of bivariate normal distribution be met. The assumption of bivariate normal distribution was examined using a scatter plot. The assumption of bivariate normal distribution was met. Figure 1 provides the matrix scatter plot.

Assumption of Multicollinearity

A Variance Inflation Factor (VIF) test was conducted to ensure the absence of multicollinearity. This test was run because if a predictor variable (x) is highly correlated with another predictor variable (x), they essentially provide the same information about the criterion variable. If the Variance VIF is too high (greater than 10), then multicollinearity is present. Acceptable values are between 1 and 5. The absence of multicollinearity was met between the variables in this study. Table 2 provides the collinearity statistics.

Table 2

Collinearity Statistics

Model		Collinearity Statistics VIF
1	(Constant)	
	EI_Avg	1.000
	Gender	1.000

a. Dependent Variable: TL_aVG

Results

A multiple regression was conducted to see if there was a relationship between emotional intelligence, gender and levels of transformational leadership style. The predictor variables were emotional intelligence and gender. The criterion variable was transformational leadership style. The researcher rejected null hypothesis, **$H_0$1:** Emotional intelligence scores, as measured by the Wong and Law Emotional Intelligence Scale (WLEIS), and gender do not significantly predict higher education leaders' level of transformational leadership style as determined by the Multifactor Leadership Questionnaire (MLQ-5X), at the 95% confidence level where $F(2, 187) = 19.254$, $p < .001$. Table 3 provides the regression model results.

Table 3

Regression Model Results

Model		*SS*	*df*	*MS*	*F*	Sig.
1	Regression	4.302	2	2.151	19.254	.000[b]
	Residual	20.894	187	.112		
	Total	25.196	189			

a. Criterion Variable: TL_aVG
b. Predictors: (Constant), Gender, EI_Avg

The model's effect size was extremely large where R = .413. Furthermore, $R^2 = .171$ indicating that approximately 17% of the variance of criterion variable can be explained by the linear combination of predictor variables. Table 4 provides a summary of the model.

Table 4

Model Summary

Model	*R*	R^2	Adjusted R^2	SEM
1	.413[a]	.171	.162	.33426

a. Predictors:(Constant), EI, Gender

Because the researcher rejected null hypothesis 1, analysis of the coefficients was required. Based on the coefficients, it was found that emotional intelligence was the best predictor of level of transformational leadership style where $p < .001$. For the predictor variable, gender, where p = .952, gender did not contribute to explaining the variance in levels of transformational leadership style. Gender does not significantly predict higher education leaders'

level of transformational leadership style as determined by the Multifactor Leadership Questionnaire (MLQ). Table 5 provides the coefficients.

Table 5

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	*SE*	B	*t*	Sig.
1	(Constant)	*1.423*	.288		4.939	.000
	Emotional Intelligence	*.299*	.048	.413	6.205*	>.001
	Gender	*.003*	.053	.004	.060	.952

a. Dependent Variable: transformational leadership style

CHAPTER FIVE: CONCLUSIONS

Overview

This chapter discusses the results of this study. It will demonstrate how the findings are consistent with prior research regarding the relationship between emotional intelligence and transformational leadership. Implications of the study are discussed to exhibit the manner in which this study contributes to the body of knowledge and provides insight on the benefits of EI and TL in the higher education spectrum. This is followed by a discussion regarding the limitations of the study. Lastly, recommendations for future research will be provided.

Discussion

The purpose of this quantitative, predictive correlational study was to identify the relationship between EI and the transformational leadership style in a higher education setting. The researcher looked for predictive relationship between levels of transformation leadership style (TL) and emotional intelligence (EI) for higher education leaders. Furthermore, the researcher sought to identify if gender had a predictive relationship as well. The research question was "How accurately can higher education leaders' level of transformational leadership style be predicted from a linear combination of ability-based emotional intelligence scores and gender?" The research question was answered utilizing the MLQ-5X and the WLEIS. The research revealed EI was a predictor of TL in higher education leaders. However, gender did not have a predictive relationship with EI or TL.

Null Hypothesis

The null hypothesis, **$H_0$1:** Emotional intelligence scores, as measured by the Wong and Law Emotional Intelligence Scale (WLEIS), and gender do not significantly predict higher education leaders' level of transformational leadership style as determined by the Multifactor

Leadership Questionnaire (MLQ-5X), was rejected by the researcher. The regression model containing both EI and gender did significantly predict level of TL, where $R^2 = .171$ (adjusted $R^2 = .162$) , $F(2, 187) = 19.254$, $p < .001$.

The findings related to null hypotheses support recent research and literature regarding the relationship between emotional intelligence and the transformational leadership style. In a recent study, Hajncl and Vucenovic (2020) conducted a study of 177 middle and lower-level leaders in both for profit and non-profit organizations. The goal of the study was to clarify EI's role regarding varying levels of transformational leadership style, controlling for personality traits and cognitive ability (Hajncl & Vucenovic, 2020). The researchers utilized multiple instruments to measure EI. Their study demonstrated that EI, measured as an ability, contributed significantly to TL variances, $\Delta R=4.89$; $p<.01$ (Hajncl & Vucenovic, 2020). Furthermore, when both EI and TL were measured by self-report tools, they demonstrated an increased correlation between the two variables, (Hajncl & Vucenovic, 2020).

A study conducted by Rinfret et al., 2020, researched the impact of different leadership styles in a health care or social service setting. The case study sought to explore the relationship between EI and TL. Employees, 171, were requested to evaluate the EI and TL of their respective executive director as they led their organizations through major change (Rinfret et al., 2020). The results indicated EI was positively related to TL (Rinfret et al., 2020). The researchers referenced the existing body of research that support the premise that EI could trigger expressions of transformational behavior, $p=.001$ (Rinfret et al., 2020).

Potter et al., 2018, researched the EI and TL behavior of project managers in the construction industry. The study sought to identify the leadership style most frequently displayed by project managers (Potter et al., 2018). In addition, the researchers examined the data for a

possible correlation to EI and leadership style (Potter et al., 2018). The researchers used the WLEIS & MLQ 5X to assess 73 participants. Their findings revealed the TL style was the most common leadership style of the project managers (Potter et al., 2018). A significant relationship existed between EI and probability of adopting a TL style (Potter et al., 2018). EI was identified as a significant predictor of TL where r^2=0.570 (Potter et al., 2018).

Baba et al., 2021, conducted a study across ten universities in India. The goal of the study was to examine the EI and TL of academic leaders in a higher education setting (Baba et al., 2021). The researchers were seeking to understand the current status of EI and TL amongst the leaders. In addition, they sought to analyze the correlation between EI and TL among the academic leaders (Baba et al., 2021). The study garnered the perspective of full-time faculty members regarding their specific academic leader (Baba et al., 2021). The study found a direct correlation between EI and TL of the academic leaders as perceived by their faculty, β=0.249; p<.05 (Baba et al., 2021.

Brown and Nwagbara, 2021, reviewed the relationship between EI and TL while working during the challenges of COVID-19. The authors coined the mixture of EI and TL as "leading with the heart" (Brown & Nwagbara, 2021, p. 2). Brown and Nwagbara, 2017, assert that leadership is an emotional process. Leaders must be able to recognize and manager the emotions of their followers as well as arouse the emotions of their followers (Brown & Nwagbara, 2021). The authors emphasized the importance of having both high emotion intelligence and levels of transformational leadership to navigate through turbulent times (Brown & Nwagbara, 2021).

Finally, in a review of empirical studies, Kim and Kim (2017), reviewed 118 different studies, conducted globally, focusing on the relationship between EI and TL. There was not a time restriction to the studies; however, the studies needed to be peer reviewed, empirical, and

English publication (Kim & Kim, 2017). An extensive process was used to evaluate the 118 study for inclusion in the analysis, e.g., title focused on EI and TL, identified research methodology, instruments utilized were intended for EI and TL measures (Kim & Kim, 2017). A total of twenty (20) surveys were selected for review. The results of the review demonstrated that the majority of studies, fifteen (15), provided empirical support of the relationship between EI and TL (Kim & Kim, 2017). The remaining studies, five (5), were doubtful of the relationship; however, they did not reject the idea of a possible relationship (Kim & Kim, 2017). Most of these studies had concerns with the instruments being used to measure EI and the need for more reliable and valid tools (Kim & Kim, 2017).

The findings for the predictor variable gender is consistent with prior research that believe gender does not have a bearing across leadership styles (Engen et al., 2001; Martinez-Leon et al., 2020; Miranda, 2019; Sims et al., 2021). However, research has been limited perhaps due to women transitioning into leadership roles at a more delayed pace compared to their male counterparts (Garcia-Solarte, 2018; Sims et al., 2021). As a result, research has produced mixed results (Begum, et al., 2018; Martinez-Leon et al., 2020; Miranda; 2019; Mroz et al., 2018).

As noted, the findings from this study supports the current literature. There is a positive relationship between EI and TL. Furthermore, the findings as it relates to gender, is also consistent with the current literature. There is insufficient data to confirm if transformational leadership has a positive or negative relationship with gender. Nor was there a correlation between EI and gender, which is also consistent with the current literature.

Implications

This study demonstrates there is a significant correlation between levels of transformational leadership style and emotional intelligence. The study revealed as EI increased

in higher education leaders, so did their levels of transformational leadership style. This study adds to the body of work because it provides further context regarding the impact of emotional intelligence on a specific leadership style. In addition, it provides context to how EI and TL impacts leadership in a higher education setting. Due to the limited research available in this context, this is significant information for the setting. The study failed to identify a correlation between TL and gender, nor did it find a correlation between EI and gender.

Possible policy implication is the development of a more structured approach in the development of higher education leaders. In the higher education setting, there is a need for leaders who are both transformational and emotionally intelligent. As noted by Yang (2020) continuous growth of our institutions require strategic and transforming leaders. This requires leaders with greater levels of emotional intelligence to effectively lead and guide organizations through major change and challenges. Many argue that assessing the EI of leaders is a viable method to identify those leaders who are transformational (Goleman et al, 2002). It is important for institutions, and leaders, to understand the abilities and limitations of those guiding their organization. It is arguably more important to take that knowledge and develop a plan for IHE leaderships' continuous growth and improvement.

Limitations

There were several limitations with this research study. Beginning with the instruments, the two chosen surveys, MLQ-5X and the WLEIS are both self-report tools. Both instruments have been demonstrated to be reliable and valid. However, with self-report tools there is the risk that the respondent will record responses that are either self-biased or socially biased. This could potentially threaten the validity of the measurement.

The second limitation is the ratio of male to female participants. The study had 56 males and 134 females, a ratio of 29.5% to 70.5%. To evaluate the impact gender has on EI and TL a more balanced distribution would have been beneficial. Research has shown that males are less likely to respond to on-line surveys (Smith, 2008). Had the researcher been aware of the tendency for low male response rates to on-line surveys (Smith, 2008), the pool of potential male respondents could have been increased.

The third limitation is related to the survey population. The researcher queried higher education leaders across the United States. However, due to the low response rate, it is not possible to generalize the findings and apply to all higher education leaders within the United States. To limit this threat would require a significantly larger study, with responses from all regions of the country.

Recommendations for Future Research

Based upon the results of the study and the review of the literature, the following recommendations for further research are presented regarding emotional intelligence and transformational leadership of higher education leaders.

1. Reproducing the study with a more gender balanced group of study participants. By having a more balanced ratio of male/female participants, the third null hypothesis could have been further explored and possibly rejected. A solution could be to increase the potential pool of male respondents by a proportionate rate to gain more responses from this gender group
2. Replicating study with different instruments. For this study self-report tools were utilized to increase the participants willingness to complete both surveys in a timely manner. There are other instruments that require an increased time commitment from

the participants. A new study could be launched to include an EI ability-based test, e.g., MSCEIT. In addition, the MLQ can also be administered with the inclusion of raters for each participant. The data from the raters is compiled and compared to the participants' self-report. Both instruments require a time commitment of 30-45 minutes not including the additional time commitment of the raters for the MLQ. To garner sufficient participants would require an expansive participation pool and an extended period of time to conduct the study. Also, this study was administered via an anonymous link. It may not be feasible to maintain anonymity if the study includes the raters.

3. Replicating study with a broader population. The participants of this study were identified via membership databases of higher education related professional organizations. A different approach could be utilized to approach institutions directly to request permission to conduct survey with their leaders. This would be time intensive prepping for the study, as it would require obtaining multiple IRB approvals. However, the study would produce results that are more representative of higher education leaders within the United States.
4. Replicating the study with specific target groups in higher education, e.g., Deans or Vice-Presidents. This would allow a more focused study on a specific leadership level.
5. Replicating the study to include a focus on specific demographics. For example, type of higher education institution, e.g., medical schools, predominantly undergraduate institutions, etc. Or, specific years of experience, e.g., 20 years or more. This level of

detail will allow the researcher to identify if behavior varies in a specific demographic.

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APPENDIX A

IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

January 21, 2022

Tamara Hill
Shanna Akers

Re: IRB Exemption - IRB-FY21-22-565 A Causal Comparative Study of the Emotional Intelligence of Higher Education Leaders Based Upon Leadership Style and Gender

Dear Tamara Hill, Shanna Akers,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording). The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP *Administrative Chair of Institutional Research*
Research Ethics Office

Appendix B

Consent

Title of the Project: A Causal Comparative Study of Higher Education Leaders' Emotional Intelligence Based Upon Leadership Style and Gender.
Principal Investigator: Tamara Hill, MA, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must serve in a leadership capacity at an institution of higher education. This includes anyone holding a title of Director, Asst/Assoc Dean, Asst/Assoc Vice President, Dean, Vice President. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to explore the relationship of emotional intelligence in higher education administrative leaders and the association of their leadership style and gender. This study will strengthen the body of knowledge related to emotional intelligence in the higher education setting. It can provide insight on higher education leaders and the relationship with emotional intelligence and effecting change.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following things:

1. Complete the Wong Law Emotional Intelligence Scale (WLEIS). This scale is estimated to require fifteen (15) minutes to complete.

2. Complete the Multifactor Leadership Questionnaire (ML 5X). This survey is estimated to require fifteen (15) minutes to complete

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include a strengthening of the body of knowledge on the relationship, and importance, of emotional intelligence in the higher education sector. The research findings can provide insight on the cause for difficulty when facilitating change in higher education institutions.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be anonymous.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Tamara Hill. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted] and/or [redacted]. You may also contact the researcher's faculty sponsor, Shanna W. Akers, at [redacted].

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You can print a copy of the document for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

APPENDIX C

Wong Law Emotional Intelligence Scale (WLEIS) – APA permits free use of the instrument when used for research.

PsycTESTS®

Wong and Law Emotional Intelligence Scale

PsycTESTS Citation:
Wong, C.-S., & Law, K. S. (2002). Wong and Law Emotional Intelligence Scale [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/t07398-000

Instrument Type:
Rating Scale

Test Format:
Items are rated on a 7-point Likert-type scale ranging from strongly agree to strongly disagree.

Source:
Supplied by author.

Original Publication:
Wong, Chi-Sum, & Law, Kenneth S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. The Leadership Quarterly, Vol 13(3), 243-274. doi: https://dx.doi.org/10.1016/S1048-9843(02)00099-1

Appendix D

Multifactor Leadership Questionnaire 5X

Multifactor Leadership Questionnaire™

Instrument (Leader and Rater Form)

and Scoring Guide
(Form 5X-Short)

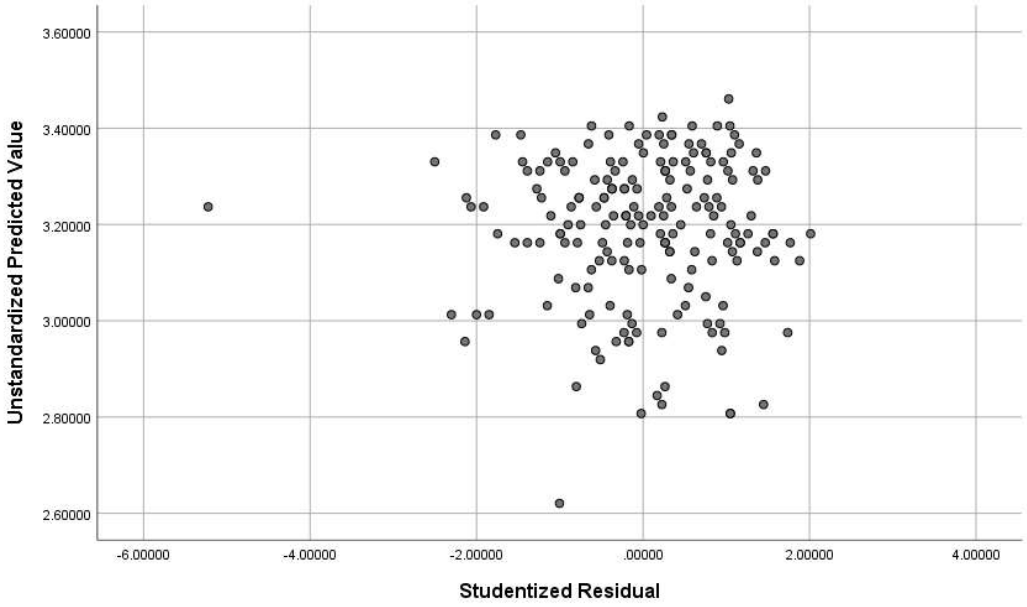
by Bruce Avolio and Bernard Bass

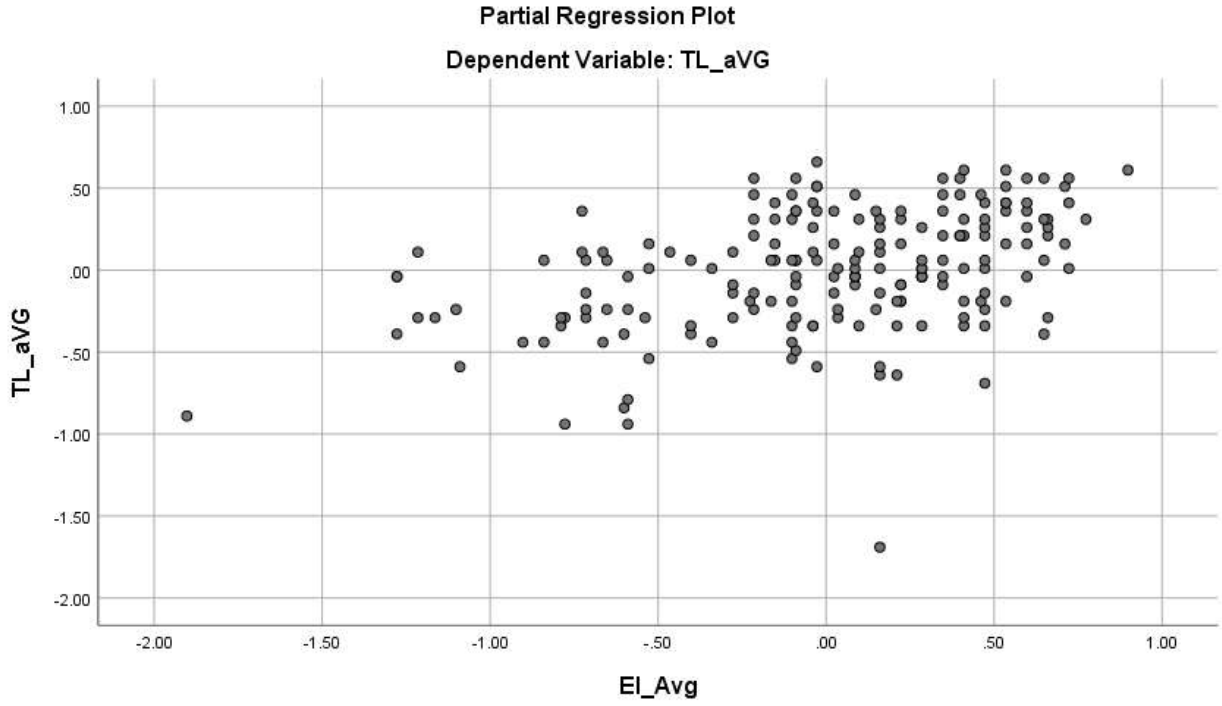
Published by Mind Garden, Inc.

info@mindgarden.com
www.mindgarden.com

Appendix E

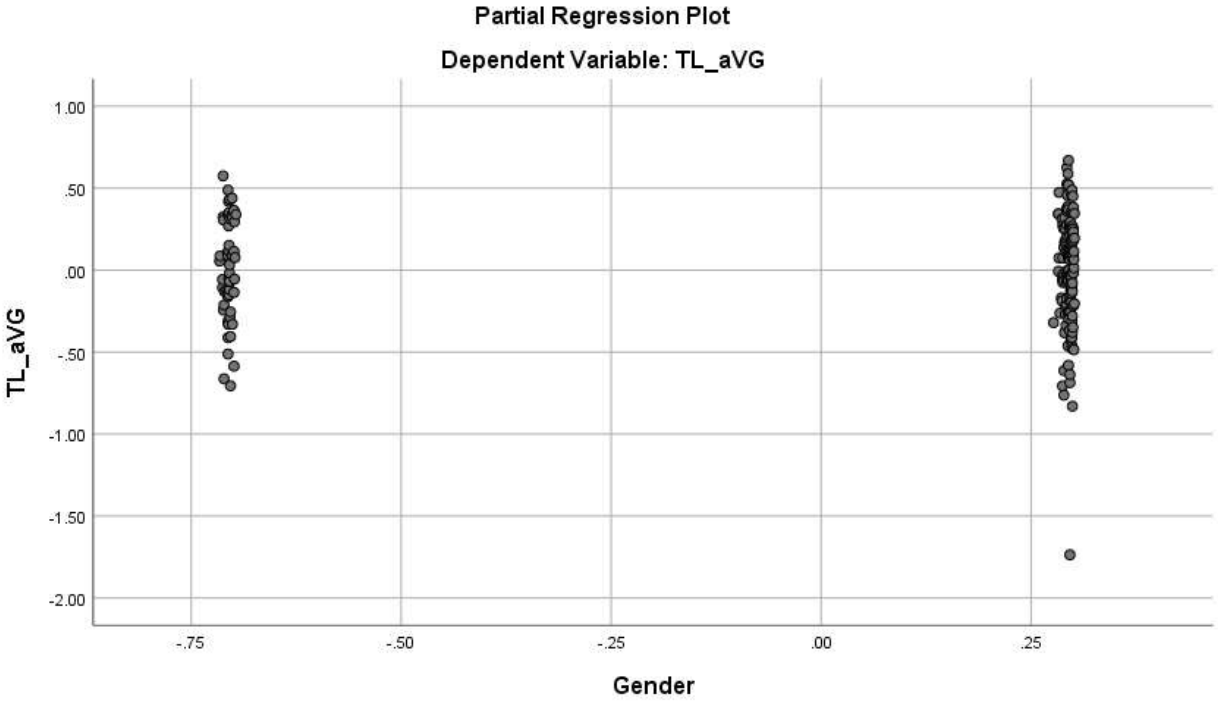
SPSS Data

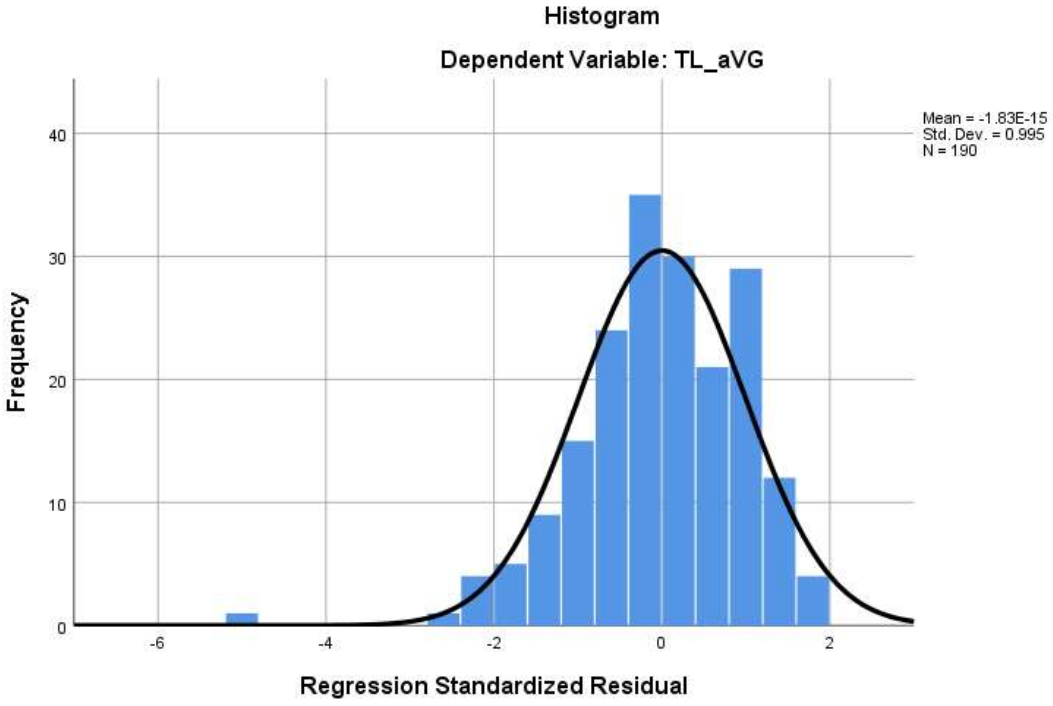




Appendix E

SPSS Data





Appendix E

SPSS Data