A PREDICTIVE CORRELATIONAL STUDY OF COLLEGIATE EDUCATIONAL LEADERS’ CULTURAL ORIENTATIONS AND THEIR CULTURAL INTELLIGENCE SCORES

by

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Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
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ABSTRACT

A predictive correlational study was conducted to determine predictive capabilities between collegiate educational leader’s horizontal collectivism scores and their motivational cultural intelligence scores. While researchers have used cultural intelligence (CQ) and cultural orientations (CO) as theoretical frameworks in previous studies, this study relies heavily on Robert Bandura’s social learning theory (SLT). The differentiation in theoretical framework indicates that a group’s social norms, religious customs, and their cultural constructs are learned through direct experience within their communal upbringing or learned through observing others. Therefore, just as these cultural responses to external stimuli were learned, they can be unlearned, and relearned to fit appropriately to promote inclusivity in a setting that encompasses diversity. For this study, 62 participants were selected using judgement sampling through 22 different four-year colleges and universities within the Eastern region of the United States. Participants took part in one survey that contained two electronic instruments: Individualism and Collectivism Scale (INDCOL); and the Electronic Cultural Intelligence Scale (E-CQS). Following data collection, the researcher used a multiple linear regression to predict overall HC scores from intrinsic motivation (IM), extrinsic motivation (EM), and self-efficacy to adjust (SA) scores. Results revealed that overall EM was statistically significant to OHC scores. Further research is required with measuring CQ to CO within the context of higher education.

Keywords: cultural intelligence, cultural orientation, horizontal collectivist and vertical collectivism, collegiate educational leaders, higher education.
Copyright Page

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Dedication

I have saved this page to be the last that I write within my manuscript—as it is the most important of them all. The day I began this journey was the same day that my second child was born—Emmanuel (God is with us) Adelekon (an additional crown). It will be easy to keep up with this success over the years, as it will match the age of my little one. I cannot begin to name the sacrifices of my family, without mentioning my oldest baby—Ezekiel (God’s strength) Adepoju (the crown became plenty). It has been difficult speaking truth over my ‘mom-guilt’, as you were only a little over one when my attention had to be divided. It required also sharing my time with Emmanuel being born, healing, and the beginning of this degree. It was because of this, that my interactions with you became more important and intentional for me. I pray that God will give us this time back and ten-fold, in Jesus’ name.

Ezekiel and Emmanuel, depend on one another; knowing that when people see you, they see Christ. You are highly favored; prized among many; called; and chosen by God. Daddy and I adore you and we thank you for your sacrifices at an early age, so that we could spend more time together in the future. The rest of my time and attention is yours, in Jesus’ name.

To my Ademi (you are mine) Adedeji (there are now two kings on the throne) Oluwaloma (God who knows), my King on Earth and the peace in my home. I know how great God’s love is for me that he gave me you. Of all, you have sacrificed the most. We have changed over the years, but in a way that pleases God—and thus, one another. Thank you for breathing life into me, and helping me to see that I am both worthy and beyond
capable. For listening to all of late-night epiphanies, being both mom and dad so that I could escape for hours to work. May God give us this time back as well, in Jesus’ name.
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To Dave and Sharon Fields, our love for one another knows no bounds. Thank you for your unwavering support over the years. Because of you, I knew I still had a place to
call home in West Virginia. The next time I travel those country roads again, I will have a
hood and tam to show you. See you soon, in Jesus’ name.
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List of Abbreviations

Bartlett’s Test of Sphericity (BTS)

Collegiate Educational Leader (CEL)

Collective Self-Esteem (CSE)

Communal Orientation Scale (COS)

Conflict Management Styles (CMS)

Cultural Intelligence (CQ)

Cultural Intelligence Center (CIC)

Cultural Intelligence Scale (CIS)

Cultural Orientations (CO)

Dependent Variable (DV)

Emotional Intelligence (EQ)

Exploratory Factor Analysis (EFA)

Extended-Cultural Intelligence Scale (E-CQS)

Extrinsic Motivation (EM)

Higher Education (HE)

Horizontal Collectivism (HC)

Horizontal Individualism (HI)

Independent Variable (IV)

Individualism Collectivism Scale (INDCOL)

Intelligence Quotient (IQ)

International Entrepreneurs (IEI)

Institutional Review Board (IRB)
Intrinsic Motivation (IM)
Kaiser-Meyer-Olkin (KMO)
Kolmogorov-Smirnov (K-S)
Multiple Linear Regression (MLR)
Self-Efficacy to Adjust (SA)
Social Learning Theory (SLT)
Subject Norms (SN)
Vertical Collectivism (VC)
Vertical Individualism (VI)
Variance Inflation Factor (VIF)
CHAPTER ONE: INTRODUCTION

Overview

While cultural intelligence (CQ) and cultural orientations (CO) are the outcome of previous years of research on multi-loci intelligence, CQ and CO are the physical representations of learned norms and behaviors. Therefore, a more fitting and grounded theoretical framework for this study is Robert Bandura’s social learning theory (SLT). The need to learn how to communicate effectively (based on the diversity of those in the room) is a prevalent and unmet need in higher education research studies. Therefore, a quantitative, predictive correlational study was conducted to determine if there are predictive capabilities of collegiate educational leader’s horizontal collectivism scores (cultural orientations) and their motivational cultural intelligence scores.

Background

Challenges within an organization are often due to differing goals, values, and approaches to taking action (A. Chen et al., 2016; Kouzes & Posner, 2017; Kumar et al., 2018). Each culture emits different social, emotional and behavioral patterns that are guided through an individual’s experiences—and the way in which an individual expresses themselves is appropriate according to their culture (Kumar et al., 2018). When an individual increases their cultural awareness, they understand that social norms, religious customs, and cultural constructs of an individual are learned through direct experience within their communal upbringing or learned through observing others (Bandura, 1971). This means that they are more willing to adjust their own communicative output to produce more respectful and thus, successful interactions.
Historical

With the initial discovery of intelligence quotient (IQ), a growing interest in real-world intelligence blossomed, harvesting numerous types of intelligences that are geared toward specific content domains. These domains have gradually built upon the other, from social intelligence (Thorndike & Stein, 1937); to emotional intelligence (Mayer & Salovey, 1993); and then practical intelligence (Sternberg, 1997). Although useful, these previously defined intelligences do not take into account the capabilities required to function effectively in culturally diverse settings (Van Dyne et al., 2012). Therefore, the cultural intelligence (CQ) framework was born from the work of Sternberg and Detterman’s (1986) research on various intelligences residing within the person. The mental capabilities of metacognitive, cognitive; and overt behavioral attributes of motivational, and behavioral intelligence, conceptualized Earley and Ang’s (2003) CQ framework. Reflecting Sternberg and Detterman’s research, Earley and Ang also integrated the same four dimensions of metacognitive, cognitive, motivational, and behavioral; however, in specific relevance to culturally diverse environments.

Social Learning Theoretical Framework

The historical work of researchers has been pivotal in our understanding of human complexity; however, it is imperative to recognize the monumental and long-standing work of Albert Bandura’s social learning theory (1971), which truly captures the importance of this research topic. What separates cultural intelligence from other forms of intelligences is that it is a “malleable form of intelligence that can be developed through training, travel, and exposure to different cultural contexts” (Van Dyne & Raver, 2017, p. 407). At its simplest form, cultural intelligence and cultural orientations are learned norms and behaviors—and “most of the behaviors displayed are learned, deliberately or inadvertently, through the influence of example”
The social learning theory (Bandura, 1971) depicts that behavior is learned before it is performed. Direct experience or observing others are ways that we can learn. These measures of learning help people to produce more favorable outcomes and or learn from the consequences of others in various situations (Bandura, 1971).

Within the context of higher education, cultural growth can take place for the benefit of effective leadership (G. Chen & Yu, 2008; Van Dyne et al., 2012), employee satisfaction and performance (Ramzan & Amjad, 2017; Schockley et al., 2017), and faculty-student mentorship (Akosah-Twumasi et al., 2018). Fang et al. (2018) emphasized that training has been found to improve overall CQ and the dimensions of CQ. More specifically, that experimental training is the most effective form of training as it improves motivational and behavioral CQ. Therefore, this study will determine how accurately motivational cultural intelligence (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) can be predicted from a linear combination of horizontal collectivism scores of collegiate educational leaders.

Increasing interactions across cultures due to global migration has heightened the need for effective and productive interactions within intercultural spaces. Through learning about other cultures (and adjusting our approach in managing; communicating; and problem-solving) we can create an environment where everyone is respected. Reinforcing the notion that cultural intelligence can be learned, one of the many subdomains that ensures such a respected space for individuals to thrive is the CQ subdomain of self-efficacy. Self-efficacy (Bandura, 1971) is the confidence an individual has in the ability to exert reflective self-control over their own motivational, behavioral, and social environment. An individual’s belief of their ability to execute behaviors necessary to produce specific goals and behavioral achievements are contingent upon the circumstances surrounding the occurrence of behavior (Bandura, 1977).
Self-efficacy has been shown to positively relate to the overall CQ development and to various aspects of CQ (Fang et al., 2018).

College students in particular, explore their career goal options through the aid of guidance and planning. Shared across collectivist and individualist cultures, teachers are seen as significant figures of influence on student’s career decision-making (Akosah-Twumasi et al., 2018). Career development behaviors are influenced by three social cognitive processes—"self-efficacy beliefs, outcome expectations and career goals, and intentions which interplay with ethnicity, culture, gender, socio-economic status, social support, and any perceived barriers to shape a person’s educational and career trajectories” (Akosah-Twumasi et al., 2018, p. 2). The importance of the school environment can possess a valuable or detrimental impact on student self-efficacy in career decision-making. Studies reported that institutions that embrace the racial and academic identity of its students; validated student’s cultural diversity; and gave students a positive ethnic experience, by nurturing the confidence in their career aspirations (Akosah-Twumasi et al, 2018).

**Cultural Intelligence**

In recent years, research on cultural intelligence as a framework has shifted away from differences in culture to the need of being culturally competent in situations characterized by cultural differences (Van Dyne et al., 2019). Unlike that of emotional intelligence (EQ) and social intelligence, cultural intelligence (CQ) should be distinguished from other multi-loci intelligences (Fang et al., 2018)—as CQ permits individuals to “look beyond their own cultural lens” (Earley, 2002, p. 285). Through the four dimensions of cultural intelligence (metacognition, cognition, motivational, and behavioral CQ), and the understanding that learning and relearning are our focus (Bandura 1971), individuals can begin to increase their cultural
awareness through engaging in learning processes such as trainings, travel, and exposure to different cultural contexts (Van Dyne & Raver, 2017).

**Cultural Orientations**

Psychologist and professor Geert Hofstede (1980) published decades of research toward the field of social and economic research studies with the use of his cultural dimension’s model. It is important to first highlight Albert Bandura’s (1971) contributions of social research which paved the way for Geert Hofstede’s research on cultural orientations. Bandura’s work highlights the understanding that behaviors are socially influenced. That most behaviors that people display are learned, either intentionally or unintentionally, through the influence of example (Bandura, 1971). This can be explained further through social cues such as response observational learning (Bandura, 1971). Observational learning is the process of learning through watching others, absorbing information, and then later applying it through appropriate behaviors—this is how children learn. Therefore, Albert Bandura’s social learning theory (1971) supports the notion that children are products of their environment—whether that be an individualistic culture or a collectivist culture.

While other researchers were afraid to tackle the ambiguous construct of the term ‘culture’, Hofstede’s work shed light on how culture can be analyzed into independent dimensions (Minkov & Hofstede, 2011). Hofstede’s six dimensions of culture consist of the following cultural values: power distance index (high versus low); individualism versus collectivism; masculinity versus femininity; uncertainty avoidance index (high versus low); long versus short-term orientation (Hofstede & Hofstede, 2005); and the most recent addition, indulgence versus restraint (Hofstede et al., 2010). It is very important to note that the dimensions were initially constructed based on national culture, for the purpose of understanding
and comparing cultural behaviors of one country to another—not across individuals or organizations (Minkov & Hofstede, 2011). The United States of America, however, has numerous national and cultural interfaces, making Hofstede’s work appropriate to this topic. This research will look specifically at Hofstede’s work of horizontal collectivism model which provides coherence and predictive capabilities (Minkov & Hofstede, 2011); in addition to a brief mention of uncertainty avoidance and how it initiates or contributes to conflict.

Summary

While there is plenty of research on cultural intelligence and cultural orientations being assessed on a global scale, it has always been done independently of one another. There are several gaps in the literature that my study will seek to contribute to the field of both theoretical frameworks. One significant gap in the literature is that no study has addressed the relationship of CO (cultural orientations) to CQ (cultural intelligence). Though this is a great discovery, cultural intelligence and cultural orientations (independently of one another) have also never been measured in the context of higher education. A final gap in the literature that my study will contribute insight towards, is the use of collegiate educational leaders as participants.

There are many factors that can influence a collegiate educational leaders’ ability to effectively meet the diversity of their students’ needs. A leader whose CQ motivation aligns with their action, is unstoppable when advocated for, and making decisions with an awareness of students’ cultural norms, values and beliefs. Because collectivists are willing to have a higher concern for the group and its members over self, decision-makers must adjust their approach to resolving conflict—to ensure each student leaves a disagreement feeling that they have been respected; and true peace has been restored. A student should not have to abandon their cultural values as a way to advocate for themselves. For collectivists, being assertive and demanding is
not culturally appropriate; therefore, collegiate leaders must be aware of more than just the emotions of those involved—but evermore, understand the behaviors that are rooted within their culture. It is important to make evident that this research does not focus on conflict resolution, but will however be an extension of what this study yields. This research focuses primarily on the predictive capabilities of collegiate educational leader’s horizontal collectivism scores (cultural orientations) and their motivational cultural intelligence scores.

**Problem Statement**

Cultural intelligence has been used as an interpersonal skill to enhance the communication capabilities of participants in the field of business and economics (Gomez & Taylor, 2017). Research on cultural intelligence has also been conducted in various contexts including on a global scale (Froese et al., 2016); education (Jie & Harms, 2017; Presbitero, 2016); intercultural service encounters (Lorenz et al., 2017), and intercultural teamwork (Rosenauer et al., 2015). A specific study in Australia highlighted the mediating role of cultural intelligence (CQ) in both culture shock and reverse culture shock. Although this study does not focus on leadership, it does however confirm the need of developing cultural intelligence for managing psychological and sociocultural adaptation for international students studying abroad (Presbitero, 2016). A substantial amount of research has been conducted on an international basis, but very few have considered a multicultural organization within a singular country.

In addition to this, there is very little research on a leader's level of cultural intelligence within the context of higher education. Suleyman Goksoy (2016) sought to identify the relationship between school administrators’ view on school administrators’ cultural intelligence levels and cultural leadership behaviors. Through administrator perception, findings revealed that “administrators believe their cultural leadership roles increase when their cultural intelligence
levels rise. Similarly, they believe their cultural leadership roles and behaviors will decrease when their cultural intelligence levels decline” (Goksoy, 2016, p. 996). Therefore, the problem is that very little research on leaders’ level of cultural intelligence (within the context of higher education institutions) has been conducted. Even more so, no study has ever considered the relationship of cultural orientations (CO) to cultural intelligence (CQ) and thus the roles of collegiate educational leaders in the context of higher education.

**Purpose Statement**

The purpose of this quantitative, predictive correlational study is to determine how accurately motivational cultural intelligence (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) can be predicted from a linear combination of horizontal collectivism scores of collegiate educational leaders.

Collegiate educational leaders (participants) that interact with students will first take the INDCOL (Triandis & Gelfand, 1998) assessment to determine their horizontal collectivism scores. The second half of the survey will consist of the E-CQS assessment which will provide their motivational cultural intelligence scores (specifically intrinsic, extrinsic, and self-efficacy to adjust).

**Dependent Variable**

**Collectivism**

The dependent variable within this research study is the horizontal collectivism scores of participants. The entire E-CQS assessment will provide the collegiate educational leaders' individualism (horizontal and vertical) and collectivism (horizontal and vertical) scores; however, this study will rely primarily on the horizontal collectivism scores. Hofstede’s work of individualism versus collectivism model provides coherence and predictive capabilities (Minkov
& Hofstede, 2011). As such, participants that identify as collectivists, view themselves as part of a collective society—they are committed to what is best for the group, family or community (Vandello & Cohen, 1999), and are willing to sacrifice self for the betterment of the whole (Triandis, 1995).

The purpose of the horizontal and vertical individualism and collectivism scale was to assess one’s cultural orientation. Each of the four components of CO serve a different purpose in cultural orientation. In short, collectivism emphasizes interdependent, communal relationships, norms and in-group goals (Singelis et al., 1995). Individualism emphasizes independence, exchange relationships, attitudes, and personal aspirations (Singelis et al., 1995). Within cultural orientations there are four sub-scales: horizontal individualism (HI), vertical individualism (VI); horizontal collectivism (HC), and vertical collectivism (VC). Horizontal orientations place a heavy emphasis on equality; while vertical orientations emphasize hierarchy (Singelis et al., 1995). Horizontal Individualism (HI) assesses the degree to which a person strives to be distinct without desiring special status (Singelis et al., 1995). Horizontal Collectivism (HC) assesses the degree to which a person emphasizes interdependence but does “not submit easily to authority” (Singelis et al., 1995). Vertical Individualism (VI) assesses the degree to which a person strives to be distinct and desires special status (Singelis et al., 1995). Vertical Collectivism (VC) assesses the degree to which a person “emphasizes interdependence and competition with out-groups” (Singelis et al., 1995).

Understanding the terms should stir much curiosity for both the reader and researcher. It is important to mention that out of 68 participants, 61 scored as collectivists—specifically, horizontal collectivists. Horizontal orientations place a heavy emphasis on equality; while vertical orientations emphasize hierarchy (Singelis et al., 1995). Horizontal collectivism (HC)
assesses the degree to which a person emphasizes interdependence but does not “submit easily to authority” (Singelis et al., 1995). Among the 68 total participants, there were only 7 that scored as individualist—this is 10.3% of the total population sampled. Even more interesting, was that each of the seven scored the highest as horizontal individualist. Therefore, all participants have a cultural value of a ‘heavy emphasis on equality’, whereas horizontal individualist prefer to be left alone (to do things on their own) and do not desire special attention or recognition.

**Individualism**

In contrast to this, individualists’ function under complete autonomy and independence to self (Triandis, 1995; Vandello & Cohen, 1999). Individualists will reach success in any way possible, as long as it does not infringe on the rights of others (Vandello & Cohen, 1999). Their values consist of privacy, honesty, freedom, loose affiliations with groups; truth; a preference for discussing differences; and using personal persuasion to achieve ambitions and goals (Vandello & Cohen, 1999).

**Independent Variables**

**Motivational Cultural Intelligence**

There are three independent variables within this research study which are the three subdomains of motivational cultural intelligence. The motivational CQ dimension is based on the extent to which an individual is both willing and persistent in their approach to understanding different cultures. Motivational CQ does not stop here, it also reflects your level of self-confidence in your abilities as well as your sense of the benefits you will gain when interacting across cultures (Domestic CQ, 2020). These are typically influenced by the three sub-domains of intrinsic interest; extrinsic interest; and self-efficacy (Domestic CQ, 2020).
**Intrinsic Motivation (IM)**

Intrinsic Motivation (or intrinsic interest) is when individuals experience enjoyment as a result of engaging in culturally diverse experiences (Domestic CQ, 2020).

**Extrinsic Motivation (EM)**

Extrinsic Motivation (or extrinsic interest) are the benefits gained from engaging in culturally diverse experiences (Domestic CQ, 2020).

**Self-Efficacy to Adjust (SA)**

Self-efficacy to Adjust (also known as self-efficacy) is an individual’s level of confidence in being effective in culturally diverse situations (Domestic CQ, 2020).

Each of these three subdomains make up an individual’s overall motivational cultural intelligence score. Individuals with high motivational CQ are self-motivated to learn, reflect, and adapt to new and diverse cultural settings. Their confidence in their abilities to perform appropriately influences the way they perform in multicultural situations (Domestic CQ, 2020).

**Participants**

The participants for this study were drawn using a judgement sampling of collegiate educational leaders that interact with students on campus from twenty-two different four-year colleges and universities within the Eastern region of the United States. The states involved within this study included New Jersey, New York, Pennsylvania, and Delaware. The survey was pushed out the Fall semester of the 2021-2022 academic school year.

**Significance of the Study**

**Significance**

Although they may not be viewed as such, higher education institutions (HEI) function as a business and adding a differing context such as higher education will contribute to the
literature. This study has practical significance for HEIs, as having cultural awareness can assist collegiate leaders (administrators, deans of students, academic deans, faculty, and staff) in confidently adapting appropriately within differing cultural situations (Van Dyne et al., 2019). Collegiate educational leaders who have both a desire to learn (motivational CQ), and a willingness to immerse themselves within a culture (behavioral CQ), will absorb the benefits of adjusting their leadership approach to meeting the needs of their followers (Solomon & Steyn, 2017).

**Contribution**

Communities have held higher education institutions responsible for nurturing and developing citizens that will contribute back to their communities. However, for several decades, political and personal influences have skewed this initial intended purpose and expectation. Institutions of higher education must provide resources and training seminars on the topic of cultural intelligence (Ramsey & Lorenz, 2016). However, without knowing a need, the need goes unmet. This research seeks to show the need of both cultural intelligence and cultural orientations within the context of higher education; and how CO and CQ can create a more nurturing and inclusive experience for all who serve as members within an institutions’ community.

**Implications**

Being cognizant of the cultural norms of constituents will assist collegiate educational leaders in adapting their conflict management style to one that meets the cultural needs of a student involved in conflict (Gunkel et al., 2016). For example, when considering the cultural values of a student that identifies as a collectivist, we know that they do not respond positively to a dominating conflict management style (Gunkel et al., 2016). Collectivism is positively related
to integrating, avoiding, obliging, and compromising styles (Gunkel et al., 2016). Individualists on the other hand, prefer dominating more so than collectivistic cultures; and may be more assertive and forward when advocating for self.

Collegiate leaders that interact with students on campus can also promote cultural intelligence training initiatives for faculty that educate them on both cultural awareness and the significant correlation between students’ preferred learning styles—which are consistent with their cultural values (Fang et al., 2018).

**Research Questions**

The proposed quantitative predictive correlational research study, seeks to answer the following research question:

**RQ:** How accurately can the criterion variable (horizontal collectivism score) be predicted from a linear combination of the predictor variables (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) in collegiate educational leaders?

**Definitions**

Terms pertinent to the study are listed below, along with a definition. Readers should reference these as they are suggested throughout the text.

1. *social learning theory:* social learning theory assumes that modeling influences promote new patterns of learning through direct experience, or through observing others; therefore, behavior is learned before it is performed (Bandura, 1971).

2. *Culture:* the shared set of values, attitudes, and beliefs that distinguish one group from another (Hofstede, 2001).

3. *Cultural intelligence:* an individual’s ability to adapt appropriately to differing cultural contexts (Earley & Ang, 2003).
4. **Motivational CQ**: the extent to which an individual is both willing and persistent in their approach to understanding different cultures (Domestic CQ, 2020).

5. **Intrinsic Motivation (or intrinsic interest)**: is when individuals experience enjoyment as a result of engaging in culturally diverse experiences (Domestic CQ, 2020).

6. **Extrinsic Motivation (or extrinsic interest)**: are the benefits gained from engaging in culturally diverse experiences (Domestic CQ, 2020).

7. **Self-efficacy to Adjust (also known as self-efficacy)** — is an individual’s level of confidence in being effective in culturally diverse situations (Domestic CQ, 2020).

8. **Behavioral CQ**: the capability to display appropriate verbal and non-verbal actions when interacting with individuals from different cultures (Domestic CQ, 2020).

9. **Cultural orientations**: Cultural orientations is the collective of six dimensions of cultural intelligence developed by Geert Hofstede. These dimensions include: power distance index (high versus low); individualism versus collectivism; masculinity versus femininity; uncertainty avoidance index (high versus low; Hofstede, 1980); long versus short-term orientation (Hofstede & Hofstede, 2005); and indulgence versus restraint (Hofstede et al., 2010).

10. **Individualism** — an individual that perceives the self as completely autonomous; while believing that inequality exists, and that equality is the ideal (Triandis, 1995).

11. **Collectivism** — an individual that perceives the self as part of a collective; and believing that all members are equal, and accepting hierarchy (Triandis, 1995)

12. **Horizontal Collectivism (HC)**— assesses the degree to which a person emphasizes interdependence but does “not submit easily to authority” (Singelis et al., 1995).

13. **Educational leaders that interact with students** — the term collegiate educational leader is
used inclusively to represent various alternate titles that may be used throughout higher education institutions to represent the role of presidents, vice presidents, academic deans, student affairs, academic advisors, department chairs and the like. The role of a collegiate education leader may include managing students and faculty; serving as a liaison with senior management and others; policy planning, evaluating, revising, and implementing; allocation of resources; shares necessary information about housing, health services, the admissions process, and relevant programs; takes part in social groups and student activities; resides over reports of misconduct and resolutions to various conflict; directs enrichment programs; provides advice to undergraduates concerning degree selection and persistence; full-time administrative staff member; managing multiple members (faculty and staff).
CHAPTER TWO: LITERATURE REVIEW

Overview

A systematic review of the literature was conducted to determine if cultural intelligence and cultural orientations have been researched for predictive capabilities within the context of higher education. The chapter begins with the underlying theoretical framework of Robert Bandura’s social learning theory (1971). Using this theoretical framework as the foundation of the study, builds the understanding that social responses are learned behaviors. After reviewing the current literature, the related literature section will highlight common themes of cultural intelligence and cultural orientations on a global scale and the need for cultural reflexivity within the context of higher education. The chapter is then concluded with a summary.

Theoretical Framework

Two compatible theories will be used in this study; in which both serve as tools in discussing the importance that social responses are learned behaviors. This is achieved through the significant and underlying theoretical framework of Robert Bandura’s social learning theory (SLT). Cultural intelligence, specifically, is a tool that has been characterized as malleable, in that it can be learned and honed usefully through appropriate training and application. While this chapter depicts a review of literature specific to cultural intelligence and the independent variables related to previous research (deeming it their theoretical framework), a significant and underlying theoretical framework that grounds this research is Albert Bandura’s social learning theory (1971).

Social Learning Theory

The social learning theory has been a long-standing, grounded theory in the research of social theoretical frameworks. Bandura (1971) wrote that for conceptual structures of
psychodynamic theories to be reliable, they must have predictive power, and they must show accurately identified causal factors, which denotes the varying changes in behavior. The social learning theory assumes that modeling influences promote new patterns of learning through direct experience, or through observing others; therefore, behavior is learned before it is performed (Bandura, 1971). When individuals are confronted with situations with which they must respond one way or another, their responses prove to be successful or just the opposite. Spielberger and DeNike (1966) which measured participants’ awareness at various levels (through verbal conditioning) found that “learning cannot take place without awareness of what is being reinforced” (p. 4). Response patterns are not the cause of behavior that is found within the organism, but instead inflicted by the environmental forces (Bandura, 1971). Having greater insight into the underlying impulses of an individual’s behavioral changes, are more representative of a social conversion than a self-discovery process (Bandura, 1971). Therefore, social norms, religious customs, and cultural constructs are learned through direct experience or through observing others.

**Cultural Intelligence**

A description of cultural intelligence cannot take place without first acknowledging the continued work of Albert Bandura (1971) and the evolution of previously identified intelligences. Beginning with the work of Thorndike and Stein (1937) on social intelligence, to Mayer & Salovey (1993) on emotional intelligence, and Sternberg and Detterman (1986) multiple loci of intelligence framework, the conceptualization of Earley and Ang’s (2003) concept of cultural intelligence would not have come to fruition. Although an individual can be emotionally or socially intelligent within their culture, these innate abilities are not as transferable across a variety of contexts like that of cultural intelligence (CQ; Ang et al., 2007;
Fang, et al., 2018; Solomon & Steyn, 2017). Mimicking Sternberg and Detterman’s research, Earley and Ang (2003) integrated the same four interrelated capabilities: metacognition, cognition, motivational, and behavioral CQ—however, in specific relevance to culturally diverse environments.

**Overall CQ**

Empirical research on cultural intelligence has been scarce due to the newness of the conceptual framework (Ang et al., 2007). Despite its short history, CQ has “undergone a remarkable journey of growth” (Ng et al., 2009). An increase of interest in cultural intelligence has garnered numerous definitions. According to Earley and Ang (2003), it is the ability to function well in culturally diverse situations. A similar definition was suggested by Ng and Earley (2006) stating that CQ was the ability to adapt effectively to cultural settings that were new for an individual. Ang and Van Dyne (2008) saw fit to include behavioral CQ as the fourth dimension of CQ. As a result, its definition changed as well—“as the capability of an individual to function effectively in situations characterized by cultural diversity” (p.3). Dyne et al. (2012) determined that their use of CQ occurs when an “individual’s capability to detect, assimilate, reason, and act on cultural cues appropriately in situations characterized by cultural diversity” (p. 297). Nevertheless, CQ is a “multidimensional construct consisting of four interrelated capabilities, each with subdimensions” (Van Dyne et al., 2012); however, the antecedents and consequences of CQ differ across the dimensions (Ang et al., 2015; Ng et al., 2012).

**Metacognitive CQ**

Similar to CQ, each of the four interrelated dimensions of CQ have varying definitions. Solomon and Steyn (2017) defined metacognition as the ability to “source and grasp knowledge, and hence, reflect the ability of the leader to strategize when traversing cultures” (p. 3). Whereas,
others simplify metacognition as ‘thinking about thinking’. In essence, metacognition allows an individual to control a degree of their thoughts concerning cultural differences (Van Dyne & Raver, 2017). Metacognitive CQ reveals the mental processes that an individual utilizes to acquire and understand cultural knowledge (Ang et al., 2007). Individuals that score high in metacognitive CQ are “consciously aware of others’ cultural preferences before and during interactions. They also question cultural assumptions and adjust their mental models during and after interactions” (Ang et al., 2007, p. 338).

Research findings have revealed the impact of CQ on leadership effectiveness in metacognitive CQ. Those who identified as transformational leaders were able to have a more positive impact on motivating and improving employee performance (Khan et al., 2020). Their level of awareness, ability to adapt, and planning practices each accommodated the differences in culture—making a significant impact on sound decision-making in a global context (Van Dyne et al., 2012).

**Cognitive CQ**

Although not a higher-order cognitive function, cognitive CQ reflects an individuals’ knowledge of cultural norms, practices, and conventions across cultures—these are gained through educational and personal experiences (Ang et al., 2007). Knowledge and awareness of culture-specific (information about rules and norms in different cultures [Fang et al., 2018]) and culture-general (information about a complex and specific environment [Fang et al., 2018]) include economic, legal, and social systems within and across cultural contexts (Brislin et al., 2006; Hofstede, 2001). This dimension signifies at what degree a leader can comprehend how to effectively engage with others cross-culturally (Solomon & Steyn, 2017).

**Motivational CQ**
The third dimension of CQ is motivational intelligence. Motivational CQ is an individuals’ (or in this case, a leaders’) desire to “acclimate interculturally, that is, the energy expended in both acquiring knowledge about other cultures and immersing oneself in cross-cultural interfaces” (Solomon & Steyn, 2017, p. 3). Sub-domains of motivational CQ include intrinsic interest, extrinsic interest, and self-efficacy (dependent variables; Van Dyne et al., 2012). When an individual has high motivational CQ, they have confidence in their ability to function appropriately in diverse settings (Singelis et al., 1995; Van Dyne & Raver, 2012). Research has shown that those who score high in motivational CQ have performed effectively in globally diverse environments (Osman-Gani & Hassan, 2018).

**Behavioral CQ**

The final dimension of cultural intelligence is behavioral CQ. This dimension consists of an individual’s ability to adapt and adopt (through flexibility) appropriate verbal and nonverbal behaviors, as well as speech acts while interacting with people from differing cultures (Ang & Van Dyne, 2008). Studies found that leaders that practice behavioral flexibility tend to perform better (Osman-Gani & Hassan, 2018). Those with high behavioral CQ present situationally fitting behaviors based on their flexible repertoire of verbal and nonverbal capabilities. These behavioral capabilities can include language, tone, gestures, and facial expressions (Ang et al., 2007).

As indicated by the dimensions of cultural intelligence, and the knowledge that there is limited research on this topic in higher education, beginning this research with collegiate educational leaders as the participants appears to be the most logical start. Collegiate leaders must manage several responsibilities, placing them in unpredictable and continuously changing situations; in which sound judgements must be made based on who is in the room. Specifically
focusing on motivational CQ will determine collegiate leaders’ desire to meet the needs of others. Decision makers, such as collegiate leaders, are pivotal in the advancement and understanding of cultural intelligence and its role in higher education. Although mostly recognized in global businesses, institutions of academia must make hiring collegiate candidates’ cultural intelligence scores a pivotal part of the hiring process—given the increase in diversity among staff and student populations.

Cultural Orientations

Psychologist and professor Gert Hofstede (1980) was well-known for the discovery and development of his cultural dimensions model in the field of social and economic research studies. Though considered an abstract concept—‘culture’—Hofstede boldly analyzed culture through the use of independent dimensions (Minkov & Hofstede, 2011). Hofstede’s six dimensions of culture consist of power distance index (high versus low); individualism (horizontal and vertical) versus collectivism (horizontal and vertical); masculinity versus femininity; uncertainty avoidance index (high versus low); long-versus short-term orientation (Hofstede & Hofstede, 2005)—with the most recent addition being indulgence versus restraint (Hofstede et al., 2010). This study relies heavily on the dimension of horizontal collectivism, while addressing the active involvement of uncertainty avoidance when an individualist or collectivist is faced with conflict.

Rahim (1983) suggests that to resolve interpersonal conflict, there must be a concern for self, or the concern for others. The concern for self refers to the degree to which an individual attempts to fulfill or satisfy his or her own interests—an individualist approach (Caputo et al., 2018). Concern for others speaks to the degree an individual is willing to go to satisfy the needs of others—a collectivist perspective (Caputo et al., 2018). In the case of this study, despite a
leader’s preference for self, or for others, they must be willing to adjust their approach to conflict management to a style that best compliments an employee’s (or student’s) cultural values. If leaders are unwilling to adjust their conflict management style, it may leave employees and or students feeling dissatisfied, underappreciated, and thus, less motivated (Gunkel et al., 2016). Therefore, a concrete understanding of the values that influence staff and students as being more collectivist or individualist; and their preferences for both leadership style and conflict management approaches, are pivotal in an educational leader’s ability to implement effective decision-making.

Collectivist

As a result of Hofstede’s extensive research, a multitude of countries have participated in the assessment of identifying as individualist or collectivists. Countries that scored higher as collectivist, perceived themselves as part of a collective society. Their cultural preference is for a tight social network, in which individual values and norms are grounded in the commitment to the betterment of the group, family, or community (Benga et al., 2016; Minkov & Hofstede, 2011; Vandello & Cohen, 1999). In regards to relationships, they prefer harmony more than honesty; silence more than speech; and desire to maintain face (Vandello & Cohen, 1999). This can become a major concern when advocating for individuals whose cultural values and norms are rooted in a collectivistic approach.

Although not universal for all that engage in religious guidance, according to Benga et al. (2016) “collectivist societies value religion more as a socialization goal…[as] religious beliefs are used as a mechanism of social control” (p. 333). In “exchange for unquestioned loyalty, [they] can expect that members of their in-group will look after them” (Benga et al., 2016, p. 330; Minkov & Hofstede, 2011). Albert Bandura (1971) called this the socialization process in
which the “language, mores, vocational activities, familial customs, and the educational, religious and political practices of a culture are taught to each new member by selective reinforcement of fortuitous behaviors” (p. 5). It is because of such structural norms that collectivists consider the implications of their actions for wider collectives (Hui & Triandis, 1986).

Collectivist value interdependence to the degree that they believe the human race is so intricately woven together that one person’s misbehavior can affect the lot (Hui & Triandis, 1986). Therefore, those who engage in counter-cultural behaviors (or misbehavior according to a collectivist culture) are viewed as a failure or disgrace to the family. Other members within the collectivist community can observe the behaviors of others, and its consequences for them, without any adverse consequences. Furthermore, behavioral inhibitions can be induced by seeing others reprimanded for their unapproved actions (Bandura, 1971). Failure within an individualist culture is the complete antithesis. Failure here would be perceived as a bout of bad luck or at best receive a sympathetic comment (Hui & Triandis, 1986). Consequences within a society according to Bandura (1971) can “represent actual outcomes symbolically, future consequences can be converted into current motivators that influence behavior in much the same way as actual consequences” (p. 3). Religious and cultural norms serve as a guide for appropriate responses in any given situation—those who deviate from these, experience rewarding and punishing consequences, that others observing can learn from.

Collectivist societies value unselfishness as it supports the values of group harmony (Benga et al., 2016). In a collectivist culture, the small gesture of sharing resources can be seen as a network of relationships. Behaviors such as loaning, borrowing, and giving in a variety of ways builds and maintains a social network of reciprocation (Hui & Triandis, 1986).
Nonmaterial resources complicate this as they are less tangible and usually not returnable (Hui & Triandis, 1986). Within collectivist environments, collectivists will go to great lengths to maintain such social relationships (Hui & Triandis, 1986). A feeling of involvement in other’s lives is also a significant indication of someone having more collectivist tendencies. Collectivists take great joy in celebrating other’s successes, to the point that their involvement will also have direct or indirect consequences. The more concern one has towards another, the more bonds they have and are acted upon, the more collectivist the person. While collectivism garners a great deal of benefits, they are also judged to a higher degree than individualists in their relationships with all others (Hui & Triandis, 1986).

Collectivist cultures place high priority to in-group goals rather than personal aspirations, knowing that interpersonal relationships are more stable than individualist cultures (Hofstede & McCrae, 2004). Within collectivist cultures, people are interdependent with their in-group (family, nation, etc.) and give priority to the goals of their in-groups (Li et al., 2016). To give a clearer conception of collectivism, it can be broken down further into two separate sub-groups: vertical collectivism and horizontal collectivism. Horizontal orientations place a heavy emphasis on equality; while vertical orientations emphasize hierarchy (Singelis et al., 1995). Vertical collectivism (VC) is the extent to which individuals emphasize interdependence and competition with out-groups (Singelis et al., 1995). Horizontal Collectivism (HC) assesses the degree to which a person emphasizes interdependence but does “not submit easily to authority” (Singelis et al., 1995).

Within social groups, according to Bandura (1971), some members are likely to command more attention than others. Those who possess interpersonal attraction will garner interest; whereas those who lack pleasing characteristics may experience rejection or loneliness,
even if they excel in other ways. Members within a group serve as social cues that influence how others will behave within any moment. Through observational learning, model’s actions teach new behaviors while reducing inhibitions, because their behavior is socially sanctioned (Bandura, 1971).

Individualist or idiocentrics that find themselves within collectivist cultures feel dominated by the culture and desire to escape it (Triandis, 2004). Individualistic values (such as determination, responsibility and tolerance) challenge collectivist systems as they are not in alignment with the collective due to its emphasis on self-governing members as a separate yet distinct individual in individualistic cultures (Benga et al., 2016).

Li et al. (2006) found that at the cultural level, collectivism predicts deception; and at the individual level, vertical individualism predicts deception. Fang et al (2018) wrote that “it is reasonable to suggest that (under certain circumstances), people with higher CQ might take advantage of others with the help of their cross-cultural knowledge as a means to benefit themselves, thus likely reducing the total benefit of the group” (p. 166). When an individual is willing to engage in coercive methods to force desired actions from others (Bandura, 1971), we see that they are riddled with interpersonal difficulties. To fully understand this conceptual thinking, consider the unethical actions of masters and their slaves. That despite southern states being identified as collectivist, the individualist masters’ demonic decisions and actions against slaves were justified as they benefited the in-group. Therefore, engaging in the immorality of deception is forgiven when the outcomes are beneficial to the in-group (Li et al., 2006).

Based on the description above, we can see that slave owners practiced horizontal collectivism—and according to the Transparency International Corruption Perception Index, Li et al. (2016) revealed this is the most corrupt culture. Collectivist cultures are known for using
religion to maintain social control in exchange for their in-group to look after them” (Benga et al., 2016, p. 330; Minkov & Hofstede, 2011). Slave owners used religion to maintain social order, and “cooperation is maximal when allocentrics are in cooperative situations…allocentrics [however,] do not cooperate in noncooperative situations” (Benga et al., 2016, p. 200)—therefore, order was essential.

Referring back to Vandello and Cohen’s (1999) study, states that scored higher as collectivists each exhibited a common theme—a significant concentration of slavery due to the high demand of maintaining cash crops in the deep south. The article by Li, et al. (2006) titled “Cultural Orientations and Corruption” when understanding collectivists states and their willingness to participate in slavery for the benefit of agricultural success and familial wealth. Li et al. (2006) based their research on the Transparency International Corruption Perceptions Index reveals that collectivist cultures are more corrupt than individualist cultures because “…individualist within collectivist cultures may be more corrupt than those in individualist cultures when they are interacting with outgroup members” (p. 199). Although slave states were considered collectivists, their in-group was not inclusive to people-of-color. Masters could be viewed as individualist based on the following information that Li et al. (2006) provided us: “collectivists prefer methods of conflict resolution that do not destroy relationships, whereas individuals are willing to go to court to settle disputes” (p. 200). While religion brings together unity within collectivistic cultures; slave owners were willing to resort to inhumane acts to assert their dominance and hierarchical position over their property (Vandello, 1999).

Within collectivist societies, individuals can also be identified as in-group members that have allocentric tendencies. Both of these terms (in-group and Allocentrism) are used as identifiers of those who allow collectivistic practices to guide their decisions and actions.
Allocentri assesses the degree to which a person emphasizes interdependence but does “not submit easily to authority” (Singelis et al., 1995). Individuals are similar to collectivists in the way that they think, feel, and behave (Triandis, 2004). It is important to know that overgeneralizations for an entire population can be a misleading conception. Collectivist cultures can have anywhere between 30 to 100 percent allocentrics, and zero to 35 percent idiocentrics (those who think, feel, and behave like people in individualist cultures).

Tendencies toward allocentrism are more likely if an individual has experienced and or identifies as one of the following factors: has been financially dependent on an in-group; is of low social class; has had limited education; has taken part in little travel; has socialized in a unilateral family (one parental norms are present); comes from a traditionally religious upbringing that has been acculturated to a collectivist culture (Triandis, 2004, 2005). In response to such factors, allocentrics in individualist cultures feel the need to join groups such as associations, unions, social movements for a sense of security and community with the expectation of receiving a tight and simple social network (Triandis, 2004).

**Individualist**

As a reminder, over-generalizations of a society can easily misrepresent a person within a group; therefore, suspending judgement and gathering information prior to placing a person into a group is an essential skill for effective leadership. Unlike collectivists, individualists have a high *concern for self*. This does not mean that they do not care for others, it means that they function under complete autonomy and independence to self (Triandis 1995; Vandello & Cohen, 1999). Individualists’ primary focus is within their own personal lives; on the decisions that they must make; and the positive and negative outcomes of these decisions. Their decisions and actions are based on whether an action leads to personal gain. Therefore, their major concern is
for self, and at most, some loved ones (Hui & Triandis, 1986). Individualists will obtain success at any way possible, if it does not infringe on the rights of others (Vandello & Cohen, 1999). Their personal belief is that they are insulated from others, and what they do does not have an effect (positively or adversely) on others. In the same light, the decisions and actions of others do not have an effect (positively or adversely) on themselves—these are rugged individualists (Hui & Triandis, 1986).

Individualism is a preference for loose and complex social network (Benga et al., 2016; Triandis, 2004) —including “independence, self-expression and imagination and less frequently endorse obedience as socialization goals (Benga et al., 2016, p. 331). The individualist social world is segmented in that they feel involved in a small number of people’s lives, but even then, in a very specific way (Hui & Triandis, 1986).

Despite a collective of people being labeled individualistic, individualist cultures possess zero to 35 percent allocentrics, leaving 35 to 100% of the population as idiocentrics. Tendencies for idiocentrism include one or more of the following: “increases with affluence, when the person has a leadership role, much education, has done much international travel, and has been socially mobile” (Triandis, 2004, p. 90). Furthermore, Triandis (2004, 2006) continued these tendencies by also acknowledging that those who migrate to a culture (other than their cultural up-bringing and has been socialized in a bilateral family [where both parental relatives were influential]) will likely identify as idiocentrics. Furthermore, idiocentrism increases when a person has been significantly exposed to Western mass media or has been acculturated for many years within the Western culture (Triandis, 2004).

Triandis (2004) shares that idiocentrics are found to be “high in expressiveness, dominance, initiation of action, aggressiveness, logical arguments, regulation of flow of
communication, eye contact, tended to finish the task, and had strong opinion” (p. 90). As a result, the need to discuss differences to resolve conflict is very important (Vandello & Cohen, 1999)—this can be a challenge when working with collectivists who prefer conflict management styles like avoidance. On the opposite spectrum, individualists have a significant preference for dominating (forcing) conflict management style (Gunkel et al., 2016), making resolving conflict amongst two culturally different groups very difficult.

Research shows that allocentrics in collectivist situations are overly cooperative; whereas idiocentrics are not. Within organizations that are collectivist, members are more “ready to cooperate, and effective leaders are more likely to use warm supportive relationships when interacting with their subordinates in collectivist than in individualist cultures” (Triandis, 2005, p. 25). On the contrary, within more individualist cultures, neither collectivist or individualist are very cooperative within individualistic cultures (Triandis, 2004). Collectivist cultures' preference for tight and simple networks; and individualist preference for both loose and complex systems, can make mitigating traverse conflict a complicated obstacle for organizations. Understanding Hofstede’s uncertainty avoidance can assist leaders in becoming more aware of the need for tightness for those who desire connectedness (collectivists); while also providing a high sense of security for those who need structure and predictability—as these are highly valued (Triandis, 2004).

When the cultural norms of an individual are not represented and or respected within an organization, retention and job performance can decline as a result. Individuals who are allocentric in individualist organizations or idiocentrics in collectivist organizations are countercultural. Triandis (2006) shared that individuals who are countercultural are not only dissatisfied with their conditions in life but are also highly motivated to escape their social
environment in search of change. This thinking is supported in Albert Bandura’s (1971) social learning theory, which makes known that individuals that are aware of appropriate responses and who value the outcomes of what they produce, change their behavior in the reinforced direction. On the contrary, those who are equally aware, but do not value the required behavior or the reinforcements, “not only remain uninfluenced but may even respond in an oppositional manner” (Bandura, 1971, p. 4). These can be in the form of leaving the organization or desiring to change it.

Those who are countercultural reveal signs of low job satisfaction, do not engage in actions that benefit the organization, especially if such behaviors are not mandatory. When a person is culturally intelligent, they will select an organization that they know is compatible with their own personality prior to making the decision. When an organization is reflective of an individuals’ collectivist culture, loyalty and commitment are guaranteed. There are times in which people lack motivation even when associated with a collectivist community; however, if loyalty to the organization is important social loafing is not as prominent (like that of individualist cultures) and productivity is increased (Triandis, 2005).

Cultural intelligence is malleable in that it is something that can be fostered through training, researching, and application. Cultural orientations, however, are the values that guide our perceptions, reflections, and reactions. As such, collegiate educational leaders that interact with students must have a high level of awareness concerning their own identity; how this can affect their perceptions of conflict; and the influence it may have in resolving a conflict. More importantly, there is a need to understand how decision makers, like collegiate leaders, can resolve conflict in a way that both individualist and collectivist can walk away feeling as if their cultural values were not abandoned, but rather acknowledged and respected.
A culturally competent person knows that judgement must be suspended prior to associating an individual to a group they do not belong (Triandis, 2005). Judgement cannot be based upon available information of their ethnicity, because personality attributes to idiocentrism-allocentrism—as a great deal of biographical information is needed (Triandis, 2005). At the genesis of learning about individualism-collectivism, adjusting one’s leadership styles and conflict approaches can be exciting. However, a culturally competent person refrains from jumping to conclusions on the basis of one to two collected biographical information (Triandis, 2005). Therefore, avoiding over-generalizations of a society and suspending judgement while gathering information can be essential to selecting an appropriate leadership style and conflict management approach within cross-cultural environments.

**Related Literature**

The related literature section serves the purpose of revealing the significant gap in the literature, in addition to the need for additional research. While there has been extensive research regarding CQ’s predictive and moderating abilities, there is a present gap in assessing CQ to cultural orientations (CO). An outstanding amount of research has been conducted on a global scale; however, there is no study that assesses CQ to CO in the context of higher education. Furthermore, there is a void of research of assessing CQ to CO to collegiate educational leaders in higher education in America. Detailed below are several studies that highlight the use of cultural intelligence and cultural orientations on a global scale concerning international business and economics, international education; international educational leadership; intercultural encounters; and intercultural teamwork; but none satisfy the gap in the literature. As James A. Banks (1995) stated in his article on Multicultural Education and Curriculum Reform,

Although there is a significant gap between theory and practice within all fields of
education, the consequences of such a gap are especially serious within new fields that are marginal and trying to obtain legitimacy within schools, colleges, and universities. (p. 3)

**Personality Traits**

The most frequently researched topic in CQ literature is The Big Five personality dimensions (Fang et al., 2018). Of the five personality dimensions (openness, conscientiousness, extraversion, agreeableness, and neuroticism), openness to experience has shown the most positive response to the dimensions of CQ (Ang et al., 2006; Li et al., 2016), and to overall CQ (Depaula et al., 2016; Harrison, 2012). Agreeableness has also been positively linked to overall CQ (Harrison, 2012), and to behavioral CQ (Ang et al., 2006). Li et al. (2016) investigated the relationship of openness and agreeableness and found that when agreeableness is high, openness is significant to aspects of CQ—however, when agreeableness is low, the relationship is no longer significant. The researchers of this study suggest that individuals that are low on agreeableness have greater difficulty learning from those they differ in culture with—“due to their lower level of interpersonal competencies” (Li et al., 2016, p. 106). Triandis (2006) acknowledges this by writing that a sympathetic understanding of the other culture is necessary to increase the chances of improved interpersonal relationships. To do otherwise would make prevention of cross-cultural conflict in the workplace, and thus conflict resolution, an inevitable demise for an organization.

**International Business and Economics**

There are numerous research studies which address the use of cultural intelligence as an interpersonal strategy to enhance the communication capabilities of participants in the field of business and economics (Gomez & Taylor, 2017). Most studies have been conducted on a nation-to-nation basis, comparing one nation’s cultural norms, values, and beliefs to another.
Originators of cultural intelligence Earley and Ang (2003) provide an anecdote of an American manager located in Arizona (near the border of Mexico) who possessed great empathy (an attribute of emotional intelligence) and demonstrated this by continuously inviting two of his Mexican managers over for dinner as a gesture of appreciation. After much persistence, they eventually accepted, but the next day resigned from their job. Their reasoning stemmed from their reliance on cultural values of strong power and authority, which were undermined by mingling with the ‘boss’—they felt as if there was no other option except for leaving the company. This anecdote reveals the discrepancy between the use of emotional intelligence versus cultural intelligence in conflict. Although the American boss possessed great empathy and social intelligence within his own culture, he was not cognizant of the reoccurring cues provided by individuals from another culture (Solomon & Steyn, 2017).

Gomez and Taylor (2017) conducted very similar research to Earley and Ang (2003) but with the use of cultural orientations rather than cultural intelligence as their theoretical framework. Their research sought to compare the cultural differences in conflict resolution strategies between the United States and Mexico. Findings revealed that Mexican participants (compared to U.S. participants) had a greater preference for social influence ($p < 0.001$) and negotiating when confronted with a conflict ($p < 0.001$; Gomez & Taylor, 2017). It is also interesting to consider that collectivism was found to be a mediator between the relationship of country and the use of social influence ($p < 0.01$; Gomez & Taylor, 2017). These same findings were confirmed in Earley and Ang’s (2003) study with similar demographic related participants; however, with a differing cultural framework. While both of these research studies are very informative when interacting with individuals and groups of people on a global scale, there is no research that has been conducted within the context of higher education.
Froese et al. (2016) conducted a study to test whether previous study findings could be applied to the context of Korea given that it is the 15th largest economy in the world to better understand how language and cultural intelligence impact the retention of multinational economic corporations and their inpatriates. The study found that English use in the workplace and personal language proficiency were important predictors of intercultural effectiveness for individuals working outside of their host country. This reveals that if inpatriates are integrated socially within the organization, they will feel comfortable returning to their home country, or even a third world country taking with them the knowledge they have gained to expand the business on a grander (global) scale (Froese et al., 2016). While this study focuses on the generalizations of inpatriates working outside of their host country and the need to adapt to the local culture their organization functions within, this study does not provide empirical evidence about how inpatriates disseminate the values of a corporation; tacit corporate knowledge; nor how they contribute to the leveraging of corporate knowledge (Froese et al., 2016). It also neglects to fill the gap of how cultural intelligence and cultural orientations can be applied in a smaller yet distinctively, multi-cultural context like that of higher education.

International Education

While Jie and Harms (2017) study on cultural intelligence is based in entrepreneurial education, it is done so on an international level. Their study focused on two cross-cultural elements (global mindset and cultural intelligence) that are regarded as prerequisites for success in the international business context (Jie & Harms, 2017). Due to the nature of the field, international entrepreneurs (IEI) must be equipped to deal effectively across numerous cultures, as various cross-cultural issues can arise unexpectedly. Therefore, their study sought to identify predictor variables of students IEI, by analyzing two cross-cultural competencies. Findings
revealed that neither global mindset, nor cultural intelligence had a significant influence on IEI. Despite this, there was a moderating effect of cultural intelligence (CQ) to positive attitude (PA) (-.296, \( p < .05 \)), as well as CQ and subjective norms (SN) towards (IEI) as significant (-.244, \( p < .05 \)). A similar moderation effect was found regarding the negative impact of CQ on SN-IEI relationship. This positive relationship is lower for participants who have high CQ than those who have a low CQ. This suggests that students that have a low CQ are impacted more by their environment as they have limited knowledge of the cultural context they are in. Once again, while this study contributes to the field of education (specifically international entrepreneurship), it still presents a void in the literature that similar work has still yet to be done with deans of students in higher education.

A study conducted by Alfred Presbitero (2016) served as an extension of previous research on the role of cultural intelligence (CQ). Their goal was to assert that CQ acts as a moderator in lessening the negative effects of culture shock and reverse culture shock for international students’ adaptation. The results indicated a significant positive and negative correlation among the study variables \( (p < 0.05 \text{ and } p < 0.01) \) (Presbitero, 2016). Reliability of variables is evident in the study’s Cronbach’s Alphas (ranging from 0.80 to 0.89) (Presbitero, 2016). Analyzing the statistics, will inform the reader that students who have higher CQ were able to adapt more effectively (on both a psychological and sociocultural scale) compared to students who scored lower in CQ (Presbitero, 2016). This study is informative for universities that have students studying abroad, as they can provide orientation programs that can assist international students in reducing their culture shock; it still does not address the gap of very little research on leaders’ level of cultural intelligence within the context of higher education institutions. In addition, no study has ever considered the relationship of CO (cultural
orientations) to CQ (cultural intelligence) and the roles of collegiate in the context of higher education.

A specific study in Australia highlighted the mediating role of cultural intelligence (CQ) in both culture shock and reverse culture shock. Although this study does not focus on leadership, it does however confirm the need of developing cultural intelligence for managing psychological and sociocultural adaptation for international students studying abroad (Presbitero, 2016). A substantial amount of research has been conducted on an international basis, but very few have considered a multicultural organization within a singular country.

Hagger et al. (2014) tested the effects of individualism and collectivism group norms and choice on intrinsic motivation. Participants for this study included 210 undergraduate psychology students (female, n = 111; male, n = 99; M age = 23.23, SD = 6.60, range = 17 to 53) from British nationals that resided in the United Kingdom their entire lives. An organizational role-play scenario was used to manipulate individualist and collectivist group norms for participants from a homogenous cultural background. Participants were then asked to complete an anagram task under conditions of personal choice or when the task was assigned to them by an in-group (company director) or out-group (experimenter) social agent. Interestingly (and consistent with the hypothesis), when the group norm was prescribed individualism toward personal choice, intrinsic motivation was exhibited at a higher degree ($M = 207.63, SD = 196.63; p = .013$). When the group norm prescribed collectivism, participants assigned to the task by the company director were more intrinsically motivated ($M = 327.77, SD = 189.56$; Hagger et al., 2014).

**International Educational Leadership**

There is also very little research on a leader’s level of cultural intelligence within the context of higher education. Suleyman Goksoy (2016) in Turkey sought to identify the
relationship between school administrators’ view on school administrators’ cultural intelligence levels and cultural leadership behaviors. Through administrator perception, findings revealed that “administrators believe their cultural leadership roles increase when their cultural intelligence levels rise. Similarly, they believe their cultural leadership roles and behaviors will decrease when their cultural intelligence levels decline” (Goksoy, 2016, p. 996). Therefore, the problem is stemmed from there being very little research on leaders’ level of cultural intelligence within the context of higher education institutions; and even more so that no study has ever considered the relationship of CO (cultural orientations) to CQ (cultural intelligence) and the roles of collegiate educational leaders in the context of higher education.

**Intercultural Service Encounters**

It is important to mention a study that, while it is not conducted in higher education, it is done so in an intercultural environment. This study can be applicable to higher education because it comprises numerous cultures that must interact and produce outcomes on a regular basis. Lorenz et al. (2017) used restaurant service employees to evaluate their willingness to adapt their behavioral responses when faced with cultural differences within a group. They were also asked to reflect on what they believed to be their own level of metacognitive cultural intelligence—one of the four dimensions (Lorenz et al., 2017). Findings show that perceived cultural differences and out-group status positively affected service employee’s willingness to adapt their behavior. If service employees perceived their customers to be culturally different, they adjusted their interactions to meet their distinct needs ($B = 0.81, p < 0.01$). This was achieved by altering their voice, facial expression, and body language (Lorenz et al., 2017). This study also confirmed CQ’s ability to serve as a moderator in intercultural interactions (Lorenz et al., 2017). That if employees felt they were the cultural minority during an intercultural
interaction, they were more likely to adjust to their customer’s culture ($B = 0.65, p < 0.01$). This further presents the need of implementing cultural intelligence and orientations within higher education, to ensure that those who identify as minorities, do not feel the need to adapt in a manner that void’s their own cultural norms. Learning to be aware of our own culture, as well as how to co-interact with other cultures, is imperative to respecting everyone that is invited into the room.

**Intercultural Teamwork and Leadership**

In Amsterdam, The Netherlands, a study was conducted to determine the effects of nationality diversity to task interdependence and leaders’ cultural intelligence (Rosenauer et al., 2015). Using 63 work teams and their supervisors at a German facility management company showed a significant relationship between the three-way interaction ($b = 2.20, SE = 1.04, p = 0.04$). Nationality diversity proved to be positively related to diversity climate and performance only when team leaders’ cultural intelligence and task interdependence was high ($b = 1.83, SE = 0.72, p = 0.01$; Rosenauer et al., 2015). Furthermore, Rosenauer et al. (2015) highlights that when interdependence was lower, this could have contributed toward diversity being unrelated to both the climate and the leaders’ CQ ($b = 0.13, SE = 0.47, p = 0.78$). In contrast, in more interdependent teams, diversity was positively related to diversity climate and team performance when the leader's CQ was high ($b = 1.92, SE = 0.56, p = 0.001$). Nationality diversity did not show significance in more interdependent teams when the leaders’ CQ was low ($b = -0.49, SE = 0.66, p = 0.49$). Researchers predict that this could be due to the positive attitudes of team members toward diversity; as in such, they are able to enhance diversity, climate and team performance due to their proximity to others (Rosenauer et al., 2015).
Predictors of Cultural Intelligence

Cultural intelligence is known to be a predictor variable in research studies (Caputo et al., 2018; Fang et al., 2018; Goncalves et al., 2016; Gunkel et al., 2016; Presbitero, 2016). Thus, common themes of leadership cultural competence, leadership adaptability, leadership styles, and conflict management approaches are related to cultural intelligence. There is significance in highlighting these themes, as each of these facets contribute toward a leader’s ability to resolve conflict effectively in culturally diverse work environments.

Culturally Competent Leaders

In recent years, research on cultural intelligence has pivoted away from differences in culture, to how to function competently and effectively in environments and situations characterized by cultural differences (Van Dyne, Ang, & Tan, 2019). With the diversity of organizations growing exponentially, there is a critical need for leaders and employees that can navigate the complexities of intercultural interactions (Van Dyne & Raver, 2017). As mentioned before, an individual can be high functioning emotionally and socially, but these abilities are not easily transferred across cultural contexts (Ang et al., 2007; Fang et al., 2018; Solomon & Steyn, 2017). CQ must be set apart from other intelligences (Earley, 2002) as it is a “malleable form of intelligence that can be developed through training, travel, and exposure to different cultural contexts” (Van Dyne & Raver, 2017, p. 407). Interestingly, the connection of cultural intelligence can enable the enhancements of these forms of intelligence in cross-cultural settings (Brislin, Worthley, & MacNab, 2006). With experiential training provided by organizations, the development of motivational CQ can be achieved (Fang et al., 2018), but not without a leader’s willingness to adapt to the diversity of its employees and clients.
Leadership Adaptability

Challenges within an organization are often due to differing goals, values, and approaches to taking action (A. Chen et al., 2016; Kouzes & Posner, 2017; Kumar et al., 2018). Therefore, what is needed to be an effective leader? To be an effective leader, shared goals which motivate followers toward a common vision is imperative for organizational success (Kouzes & Posner, 2017). Leaders who possess high cultural intelligence are able to adapt to changes in cultural settings, and function appropriately and confidently (Domestic CQ, 2020).

Research suggests that individuals that scored higher in motivational CQ made adjustments more effectively and efficiently in general; when at work; when interacting with others; and both socioculturally and psychologically (Ang et al., 2007).

The overall CQ of a leader has an effect on both the performance of the leader as well as the team—even more so than EQ (Groves & Feyerherm, 2011). Being able to identify competencies as a form of mitigation can promote effective communication and interactions within culturally diverse settings (Fang et al., 2018). It is imperative that leaders and employees grow in their understanding that each culture emits different emotional and behavioral responses as a result of their individual experiences—each of these behaviors are innately rooted according to their culture (Kumar et al., 2018).

Conflict that arises as a result of cultural differences, must be absolved by the leader's ability to hone their interpersonal skills in dealing with the emotions of others (Gunkel et al., 2016). A study conducted by Li et al. (2016) on personality traits found that leaders who scored low on agreeableness have greater difficulty learning from those who differ in culture “due to their lower level of interpersonal competencies” (p. 106). This is concerning as agreeableness and openness are significant aspects of CQ (Ang, Van Dyne, & Koh, 2006; Li et al., 2016), and
Further, when faced with conflict in the workplace, displaced emotions stem from the disruption of a person’s cultural norms (Kumar et al., 2018). Oftentimes the greatest barrier of all, is a leader’s inability to perceive the world (or the conflict within it) through any other lens than through their own cultural prism (Solomon & Steyn, 2017). Therefore, collegiate educational leaders must have a level of awareness for their own cultural preferences, and acknowledge when they are not considering other cultures’ values and preferences. One way we can consider another person’s cultural norms, is in our willingness to adapt our approach to leadership (leadership style) or preference for resolving conflict. Without the development of each of the four dimensions of cultural intelligence (metacognitive, cognitive, motivational, and behavioral), resolving conflict in a manner that is restorative is nearly impossible.

Research studies have revealed a positive relationship with cultural intelligence and various leadership styles (Ramsey et al., 2017; Solomon & Steyn, 2017). Amongst the four prominent leadership styles, transformational leaders had the highest CQ scores, as CQ emphasizes vision through role modeling (Ramsey et al., 2017). On the contrary, Solomon and Steyn (2017) revealed that leaders’ metacognitive and motivational CQ were more predictive for empowering leadership than for directive leadership. The need for leaders to increase their awareness and understanding of cultural differences is essential to effectively mitigate conflict in the workplace (G. Chen & Yu, 2008).

Leadership Styles

According to Kouzes and Posner (2017), an effective leader is able to motivate their followers toward shared organizational goals through a common vision. It is important to make note that a leader’s overall CQ score has an impact not only on their individual performance, but
also the performance of their team—over and above emotional intelligence (Fang et al., 2018). A positive relationship between cultural intelligence and leadership styles (Ramsey et al., 2017; Solomon & Steyn, 2017) found significantly high scores for transformational leadership—as CQ emphasized vision through role modeling (Ramsey et al., 2017). Additionally, leader cultural intelligence had a stronger relationship with empower leadership than directive leadership (Solomon & Steyn, 2017). Nevertheless, the need for leaders to develop interpersonal skills, increase their level of cultural awareness, and exhibit culturally appropriate behaviors is essential to effectively mitigating conflict in the workplace (G. Chen & Yu, 2008).

**Conflict Management Style**

When people come together, differences will appear. Therefore, when leadership styles and conflict management approaches are not reflexive to the needs of those involved, the consequences can be significant. Negative outcomes as a result of unresolved conflict could include: low employee satisfaction, poor employee performance, low retention, animosity and resentment between colleagues and administrators, and organizational collapse. Ting-Toomey (2006) discusses the importance of understanding that conflict style is culturally grounded. Meaning that the role that an individual plays within conflict is culturally bound—predetermining their preference of conflict style. For example, interpersonal conflict can be mitigated by having a concern for self, or a concern for others (Rahim, 1983).

Similarly, to how emotions are culturally predisposed, an individual’s choice of conflict management style is also influenced by their level of cultural intelligence (Goncalves et al., 2016; Ting-Toomey, 2006). Whether a person chooses to have a concern for self or a concern for others, will be predicted by their cultural norms. There are five styles of conflict management approaches that assist in interpersonal conflict, these include: integrating, avoiding, dominating,
and obliging. Each of these forms can be successful if they coincide with the parties preferred CMS. Presbitero (2016) clarifies that CQ has been found to serve as a moderator of various relationships. As suggested by Goncalves et al. (2016), cultural intelligence has been found to be a predictor variable of conflict management styles (CMS). Even more specifically, his study demonstrated that the choice of conflict styles preference within culturally diverse organizations is driven by employees’ values and cultural orientations (Gunkel et al., 2016). This research yielded a positive relationship between CQ and CMS; with metacognition CQ (an individual’s cultural awareness and processing during cross-cultural interactions) predicting an integrating style. Integrating conflict style is an approach that is characterized by a high concern for self and for others. This is a strong approach to resolving conflict, as integrating styles promotes openness, an exchange of information, and an awareness of deferens. As these must be considered in order for each of the parties to feel respected.

Of the four dimensions of CQ, motivational CQ was more widely used as a mediator in recent research (Fang et al., 2018). As mentioned above, to be an effective leader, motivating others towards a common goal is essential (Kouzes & Posner, 2017). However, motivating constituents should be clearly delineated from motivational CQ, as motivational CQ pertains specifically to the intrinsic motivation of an individual. Motivational CQ is a person’s ability to show interest and direct efforts in understanding the cultural differences in order to function appropriately when necessary (Ang & Van Dyne, 2008). Unfortunately, there is very little research on the role of CQ in the relationship between cultural orientations and choice of conflict management style (Caputo et al., 2018) especially in the context of higher education.

On both a national and global scale, a shared societal expectation and need for culturally competent leaders is pivotal for organizational success. The cultural intelligence framework
detailed above highlights the interpersonal traits of leadership adaptability which calls for flexibility in leadership styles and conflict management approaches. To effectively mitigate conflict in the workplace as a result of cultural differences, leaders and employees alike must approach each conflict with an awareness and willingness to adapt their approach to best meet the diverse needs of all who are involved.

Predictors of Cultural Orientations

Cultural orientations, like that of cultural intelligence, has shown to be a prominent predictor variable as well (Choi & Suh, 2018; Suh et al., 2008; Vandello & Cohen, 1999). Most research on cultural orientations has been conducted on a nation-to-nation basis. Significant comparisons have been made of countries that identify more as individualist (such as America, Australia, and the United Kingdom) while other countries identify with more collectivist norms (like that of Singapore, China, and India) (Vandello & Cohen, 1999). Very little research has investigated the cultural orientations within a singular, multicultural country like the United States.

Research has alluded to a predictor of cultural orientations through the investigation of historical events. The work of Vandello and Cohen (1999) found that cultural orientations within America were influenced by historical events. Namely, a reliance on slavery; labor needed for maintaining the land; and on others due to rural geography. America is known for its horrific involvement with slavery, as the effects are prevalent still today. States that welcomed the use of slavery, scored higher in collectivism due to the high need for membership to meet the demands of maintaining cash crops.

Contrary to Vandello and Cohen’s (1999) hypothesis about New York and New Jersey identifying more closely with individualism (due to their generalized tendencies for being more
ambitious, economically-driven, and self-sufficient), New York and New Jersey scored higher as a collectivist community. The researchers believe that this was contributed toward the influences of immigration—and even more so the development of cultural tolerance and acceptance.

Unlike collectivist states mentioned above (which were dependent upon the need for large numbers of people to meet the needs of high demand goods and maintaining cash crops), Midwestern states and the Great Plains scored higher in individualism. This was due to the significantly lower population, the sparsity of its members, and the difficult terrain in which they lived (Vandello and Cohen, 1999).

Although America has been labeled an individualist country, the research from Vandello & Cohen (1999) reveal that on a state-by-state basis, America is comprised of both individualist and collectives due to the influences of slavery, immigration, and geography. There are many factors that contribute to a person identifying as individualist-collectivist, therefore, a wise leader should suspend judgment prior to assigning an individual to a group (Triandis, 2005).

Social Approval and Conflict

It is interesting to consider how the influences of cultural orientations for an individual can contribute to their view of self (Choi & Suh, 2018). In a study involving American and Korean participants, Suh et al. (2008) revealed that American’s “base their life satisfaction judgement quite heavily on others’ evaluations of their lives (the typical collectivistic pattern)” whereas, “Koreans primed on their unique aspects of self shifted their attention to inner emotions (individualistic pattern) during life satisfaction judgement” (Choi & Suh, 2018, p. 4). While the inner state of the self determines an individuals’ satisfaction in the West, for Eastern cultures (that mostly identify as collectivist) satisfaction can only be achieved through their self’s exterior and their value as a social member (Choi & Suh, 2018). This concern for self (individualist)
versus *concern for others* (collectivist), impacts the level of satisfaction that an individual can obtain. If an individual with collectivist values and norms, receives feedback concerning others’ approval or disapproval—despite their initial satisfaction with a highly personal experience—a transformation of their personal evaluation can be influenced (Choi & Suh, 2018). If satisfaction cannot be achieved due to differences in cross-cultural orientations, dissatisfaction within self can make way for potential conflict.

**Uncertainty Avoidance (High versus Low)**

Uncertainty avoidance is important to mention in this research study to have a more grounded understanding of why those who may score low in cultural intelligence, have a high score in uncertainty avoidance. Knowing that cultural intelligence is a “malleable form of intelligence that can be developed through training, travel, and exposure to different cultural contexts” (Van Dyne & Raver, 2017, p. 407)—without appropriate training, coping skills in culturally diverse contexts cannot be utilized—resulting in increased levels of stress (Brislin et al., 2006). According to Bandura (1971) to function effectively, an individual must be able to perceive probable consequences of different events, and courses of action—and as a result, regulate their behavior accordingly. “Without capacity for anticipation or foresight behavior, man would be forced to act blindly in ways that might eventually prove to be highly unproductive, if not perilous” (Bandura, 1971, p. 12).

While some are skillful at identifying behaviors that are influenced by culture, those with low cultural intelligence have greater difficulty. Individuals that are culturally competent, have a cognitive awareness of their cultural development, and realize that they will encounter differences (Brislin et al., 2006). However, if the CQ capabilities are not developed, individuals begin to retreat into what is known as uncertainty avoidance. Ineffective use of CQ across
cultural contexts can be especially difficult for individuals that are accustomed to being highly effective within their own cultural settings (i.e., people who possess high social and emotional intelligence within their own culture) (Brislin et al., 2006).

Hofstede strongly emphasized the importance that uncertainty avoidance is not the same as risk avoidance (Minkov & Hofstede, 2011). Uncertainty avoidance “relates to the level of stress in a society [or individual] in the face of an ambiguous figure” (Hofstede, 2001). Bandura (1971) called this aversive stimulus control. This can occur in the form of emotional learning, persons, places, and events when an individual becomes overcome with anxiety-arousing value through association with painful experiences (this does not have to be physical). Any threat that promotes defensive behavior, or is exceedingly difficult to eliminate, a person will reduce this stress by removing or avoiding discomfort, even though the fear may not be realistically justified (Bandura, 1971). Fearful and defensive behavior can be eliminated by observing others engage in the same activities without adverse consequences.

Those who possess low values of uncertainty avoidance have a predisposition to accept the uncertainty in their lives (Brislin et al., 2006; Caputo et al., 2018), they being to expect that they will encounter new behavioral responses within new cultural contexts (Brislin et al., 2006)—thus making coping with the unknown more manageable due to less stress and anxiety. Those who have lower levels of uncertainty avoidance are not uncomfortable with the idea of switching careers and prefer loose guidelines (Caputo et al., 2018), as it eliminates limitations of power imbalances. In essence, collectivist cultures are both tight knit and simple, while individualist cultures are both loose and complex. Triandis (2004) makes this distinction clearer in the following analysis: “Hofstede’s Uncertainty Avoidance is related to tightness. In cultures high in Uncertainty Avoidance, people want to have structure, to know precisely how they are
supposed to behave and what is going to happen next. Predictability is highly valued” (p. 92).

Persons with higher levels of uncertainty avoidance tend to perceive life as continuously threatened by uncertainty; feel higher levels of stress and anxiety; and express a need for clarity and structure (Caputo et al., 2018). An example of this could even be emotionally-arousing words (Bandura, 1971). Bandura wrote that words can also conjure up feelings of revulsion and dread that create new fears and hatred—while words that promote positive emotions can give pleasing qualities. Without the ability to draw on previous experiences and knowledge—more specifically, utilizing cultural intelligence as a tool when resolving conflict within a multicultural workplace—individuals that score high in uncertainty avoidance may resort to dominating and avoiding conflict management approaches, as a way to cope with their heightened levels of stress and anxiety (Bandura, 1971; Caputo et al., 2018) as well as to save face (Brislin et al., 2006).

Those who score high in cultural intelligence and provide space for adjusting and gaining new information within culturally diverse situations is called ‘suspending judgement’ (Triandis, 2005). When persons do not suspend judgement, and their uncertainty avoidance begins spiraling out of control, they may engage in confusion acceptance as a coping mechanism. Confusion acceptance takes place when one accommodates the not knowing, and as a result, decreases the disconfirmed expectancy (what they expected to happen in not what actually happened), and thus reduces the stress levels within the cross-cultural interactions (Brislin et al., 2006).

**Summary**

Cultural intelligence and cultural orientations have been used in business-related contexts as a tool for individuals to adjust their response output to produce more favorable outcomes for themselves and ultimately their company. By doing so, organizations have been able to experience great economic success and longevity in working on both a global and or domestic
scale despite the differences of its partnerships, employees, and customers. What is not known is how applicable cultural intelligence and cultural orientations can be in a multicultural business environment like that of a higher education institution. This study will specifically use collegiate educational leaders who interact with students to fill the gap of applying CQ and CO within the context of higher education.
CHAPTER THREE: METHODS

Overview

The purpose of this quantitative, predictive correlational study was to determine how accurately motivational cultural intelligence (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) can be predicted from a linear combination of horizontal collectivism scores of collegiate educational leaders. This chapter begins by introducing the design of the study, including full definitions of all variables. The research questions and null hypothesis follow. The participants and setting, instrumentation, procedures, and data analysis plans are presented.

Design

A quantitative, predictive correlational research design was used for this study. Predictive correlational research serves the purpose of examining the extent to which two or more variables relate to one another (Warner, 2013). Predictive research design was appropriate for this study as “prediction research has made a major contribution to educational practice” (Gall et al., 2007, p. 342). This study aimed to predict the association of collegiate educational leader’s horizontal collectivism scores (dependent variable) to their motivational cultural intelligence scores (independent variable [intrinsic motivation; extrinsic motivation; and self-efficacy to adjust]).

Correlational (or nonexperimental) research designs include both prediction studies and relationship studies. It is important to make clear what correlational research is not. Correlational research is not the same as causal research. While a researcher may see significant correlation amongst variables, we cannot make causal inferences with the data obtained from correlational or nonexperimental research designs (Warner, 2013). This type of research informs the researcher of any relationship that already exists between or among variables (Warner, 2013). It is through the use of prediction that one may be able to examine the possibility of causal correlations.
relationships between variables.

The variables for this study are the collegiate educational leader’s horizontal collectivism scores (dependent variable) their motivational cultural intelligence scores (independent variable [intrinsic motivation; extrinsic motivation; and self-efficacy to adjust]). It is important to note that the independent variables that are most effective in predictions are highly correlated with the dependent variables, but are not highly-correlated with other independent variables used within the study (Warner, 2013).

The dependent variable for this research is the horizontal collectivism scores of collegiate educational leaders. Horizontal collectivism is one of two subdomains that fall under collectivism. A collectivist is an individual that perceives the self as part of a collective; and believing that all members are equal, all the while accepting hierarchy (Triandis, 1995). Participants that score higher as horizontal collectivist (HC) (versus vertical collectivism) differ in that while they emphasize interdependence, they do “not submit easily to authority” (Singelis et al., 1995).

The independent variables for this study are the three subdomains of motivational cultural intelligence. Motivational cultural intelligence scores reveal the extent to which individuals are both willing and persistent in their approach to understanding different cultures (Domestic CQ, 2020). The motivational CQ score will provide three subdomain scores; these include: Intrinsic Motivation (IM); Extrinsic Motivation (EX); and Self-Efficacy to Adjust (SA). Intrinsic Motivation (or intrinsic interest) is when individuals experience enjoyment as a result of engaging in culturally diverse experiences (Domestic CQ, 2020). Extrinsic Motivation (or extrinsic interest) are the benefits gained from engaging in culturally diverse experiences (Domestic CQ, 2020). Self-efficacy to Adjust (also known as self-efficacy) is an individual’s
level of confidence in being effective in culturally diverse situations (Domestic CQ, 2020).

**Research Question(s)**

**RQ:** How accurately can the criterion variable (horizontal collectivism score) be predicted from a linear combination of the predictor variables (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) in collegiate educational leaders?

**Null Hypothesis**

\( H_0: \) There will be no significant predictive relationship between the criterion variable (horizontal collectivism score) and the linear combination of predictor variables (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) for collegiate educational leaders.

**List of Variables**

Table 1 represents the list of hypothesized variables in this study with their relative questions in the questionnaire survey. In this study, Overall Intrinsic Motivation (OIM), Overall Extrinsic Motivation (OEM) and Overall Self-Efficacy to Adjust (OSA) were set as the independent variables and Overall Horizontal Collectivism (OHC) was considered the dependent variable. While a multiple regression analysis is performed in order to establish the existence of a statistically significant multiple linear regression equation using the typical F-test, the primary focus of the research questions is on the statistically significant impact on Horizontal Collectivism (HC) as reflected in the \( t \) tests provided in SPSS multiple regression routine output.
Table 1

List of Variables

<table>
<thead>
<tr>
<th>Construct / Variable</th>
<th>Description</th>
<th>Items No.</th>
<th>Scale</th>
<th>Questions &amp; Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal Collectivism (HC)</td>
<td>DV</td>
<td>4</td>
<td>9-Point Likert-Scale</td>
<td>Q3 = HC1, Q7 = HC2, Q11 = HC3, Q15 = HC4</td>
</tr>
<tr>
<td>Intrinsic Motivation (IM)</td>
<td>IV1</td>
<td>3</td>
<td>7-Point Likert-Scale</td>
<td>Q17 = IM1, Q18 = IM2, Q19 = IM3</td>
</tr>
<tr>
<td>Extrinsic Motivation (EM)</td>
<td>IV2</td>
<td>3</td>
<td>7-Point Likert-Scale</td>
<td>Q20 = EM1, Q21 = EM2, Q22 = EM3</td>
</tr>
<tr>
<td>Self-Efficacy to Adjust (SA)</td>
<td>IV3</td>
<td>3</td>
<td>7-Point Likert-Scale</td>
<td>Q23 = SA1, Q24 = SA2, Q25 = SA3</td>
</tr>
</tbody>
</table>

Participants and Setting

Population

The participants for this study were drawn using a judgement sampling of collegiate educational leaders that interact with students, from twenty-two different four-year colleges and universities within the Eastern region of the United States. The states involved within this study included: New Jersey, New York, Pennsylvania, and Delaware.

Participants

The survey was pushed out the Fall semester of the 2021-2022 academic school year. Due to the vastness of such a sample, participants varied in both demographics, age, experience,
and years within the context. Participants were identified based on each university’s faculty and staff directory webpages. A list of collegiate educational leaders, their positions, and email addresses were accompanied with each participant’s name on the university’s webpage. For this study, the number of participants sampled were 62, which does not meet the “required minimum of 66 when assuming a medium effect size with statistical power of .7 at the .05 alpha level” (Gall et al., 2007, p. 145).

Setting

Participants took part in one survey that contained two electronic instruments. The first instrument was the INDCOL (Triandis & Gelfand, 1998) which provided four sub-domain scores for participants’ cultural orientations: individualism (horizontal individualism and vertical individualism) and collectivism (horizontal collectivism and vertical collectivism). The second instrument that participants took was the E-CQS (Domestic CQ, 2020). This tool produced the overall and four-domain scores of collegiate educational leaders’ cultural intelligence scores (metacognition, cognition, motivational, and behavioral cultural intelligence).

Instrumentation

This quantitative, predictive correlational research study used the Individualism and Collectivism Scale (INDCOL; Triandis & Gelfand, 1998) and the Extended Cultural Intelligence Scale (E-CQS; Domestic CQ, 2020) to determine how accurately motivational cultural intelligence (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) could be predicted from a linear combination of horizontal collectivism scores of collegiate educational leaders? (see Appendix A and B for instrument use).

INDCOL Instrument

The originally intended purpose of the Individualism and Collectivism (Triandis &
Gelfand, 1998) instrument was to measure distinctions between vertical and horizontal individualism and collectivism in 268 undergraduates (18–55) from various ethnic backgrounds. The instrument was created as a result of previous works on social psychology. The first instrument that persuades the social relationship of an individual’s needs and feelings was the Communal Orientation Scale (COS; Clark et al., 1987). The purpose of the COS scale was to “measure how much an individual believes that other’s needs and feelings are important in social relationships, as well as how much one believes that people should help others and care for one another’s welfare” (Clark et al., 1987). From here, the Collective Self-Esteem (CSE) Scale (Luhtanen & Crocker, 1992) was created. The CSE scale measured the collective self-esteem of a person which included their membership esteem (how good or worthy a member of the group one is); private collective self-esteem (how good one’s social group are); public collective self-esteem (how one believes others evaluate one’s social groups); and importance to identity (how important one’s group is to one’s self concept; Luhtanen & Crocker, 1992). After seeing the outcomes of collective self-esteem on an individual, the INDCOL (Triandis & Gelfand, 1998) was created. The scale was created to measure four dimensions of collectivism and individualism (vertical collectivism; vertical individualism; horizontal collectivism, and horizontal individualism). The study sought to make distinctions between vertical and horizontal individualism and collectivism in 268 undergraduates (18–55) from various ethnic backgrounds. The Individualism and Collectivism Scale (Triandis, 1995) was revised in 1998 when Triandis and Gelfand reduced their 32-item scale to a 16-item scale as a converging measurement of horizontal and vertical individualism and collectivism. The INDCOL (Triandis & Gelfand, 1998) instrument has been used in numerous studies (Choi & Suh, 2018; Germani et al., 2020; Liao et al., 2015; Zeffane, 2020).
The INDCOL scale is a 16-item scale that measures four dimensions of collectivism and individualism: horizontal individualism, vertical individualism, horizontal collectivism, and vertical collectivism. Vertical collectivism is when an individual sees themselves as part of a collective and are willing to accept hierarchy and inequality within that collective (Triandis & Gelfand, 1998). Vertical individualism is when an individual sees themselves as fully autonomous, but recognizes that inequality will exist among individuals, and accepts this inequality (Triandis & Gelfand, 1998). Horizontal collectivism is when a person sees themselves as part of a collective but perceives all of its members of that collective as equal (Triandis & Gelfand, 1998). The horizontal individualist sees themselves as fully autonomous, while believing that equality between individuals is the ideal (Triandis & Gelfand, 1998).

The INDCOL (Triandis & Gelfand, 1998) is composed of 16 questions that have been equally distributed under each of the four domains. The instrument used a 9-point Likert scale, ranging from 1 = never or definitely no, to 9 = always or definitely yes. Each dimension’s items are summed up separately to create a VC, VI, HC, and HI score (Triandis & Gelfand, 1998). The INDCOL (Triandis & Gelfand, 1998) will be delivered to collegiate educational leaders via email, in which they will click on a SurveyMonkey link. Collegiate leaders will have 5 months to complete both the instruments within the singular SurveyMonkey. While the INDCOL (1998) scores each dimension (collectivism and individualism), items are summed up separately to create a VC, VI, HC, and HI score. Due to the instruments significant use in research, its Cronbach α reveals the following reliability: .81 (horizontal individualism), .82 (vertical individualism), .80 (horizontal collectivism), .73 (vertical collectivism; Triandis & Gelfand, 1998). See Appendix C for permission to use the instrument.
E-CQS Instrument

The second instrument is the Expanded Cultural Intelligence Scale (E-CQS) (see Appendix B for instrument use). The purpose of the E-CQS is to measure an “individual’s capability to relate and work effectively in culturally diverse situations” (Cultural Intelligence, 2020). Sternberg and Detterman (1986) created the instrument based on their previous work of multi loci framework on intelligence. Other forms of intelligences, such as interpersonal intelligence (Gardner, 1993), emotional intelligence (Goleman, 1995; Mayer & Salovey, 1993), and social intelligence (Cantor & Kihlstrom, 1985), each researcher believed that culture and contexts guide an individual’s thoughts and social behaviors, but not when individuals have different cultural backgrounds (Ang et al., 2006). Earley and Ang (2003) believed that intelligence must extend beyond only cognitive abilities. Therefore, Ang and Van Dyne (2008) created the four dimensions of cultural intelligence: motivational CQ (the level of a person’s interest, persistence, and confidence to function in culturally diverse settings); cognitive CQ (the level of a person’s understanding about how cultures are similar and how they are different); metacognitive CQ (the degree to which a person plans for, remains aware during, and checks after multicultural interactions) and behavioral CQ (the extent of a person’s flexibility and appropriate use of a broad repertoire of behaviors and skills during multicultural encounters) (Domestic CQ, 2020).

The E-CQS instrument did not exist without first the many revisions made to the Cultural Intelligence Scale (CQS). Initially the CQS had 40 items but several revisions led to deleting numerous items due to “high residuals, low factor loadings, small standard deviations or extreme means, and low item-to-total correlations” (Ang et al., 2007, p. 21). After several revisions, a 20-item CQS consisted of four meta-cognitive CQ, six cognitive CQ, five motivational CQ, and five
behavioral CQ (Ang et al., 2007). While the CQS provided a plethora of studies in regard to validity and reliability, there was still “an important gap in the literature because a more nuanced model that identifies sub-dimensions would serve a number of valuable scientific functions, most notably providing a theoretical and coherent synthesis heretofore not available in the multicultural competency literature” (Van Dyne et al., 2012). Therefore, the Expanded Cultural Intelligence Scale (E-CQS) came to fruition. There are now 11 sub-dimensions located under each of the four previously defined dimensions. The new framework includes three sub-dimensions for metacognitive CQ (planning, awareness, and checking); two for cognitive CQ (culture general knowledge: values, business and sociolinguistics; culture specific knowledge: leader); three for motivational CQ (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust); and three for behavioral CQ (speech acts, verbal behavior, and non-verbal behavior) (Domestic CQ, 2020). This tool has been used extensively in numerous peer-reviewed studies (Azevedo & Shane, 2019; Bücker et al, 2015; Engle et al., 2020; Goda et al., 2019; Gozzoli & Gazzaroli, 2018; Sharma, 2019).

The E-CQS is a 39-item questionnaire that is divided into four sections (five questions each). Participants will rate the response that best describes their capabilities using a 1-7 Likert scale. They will do so by selecting the answer that “BEST describes you AS YOU REALLY ARE”, with 1 = strongly disagree, to 7 = strongly agree (see Appendix B for instructions). For each of the four domains, as well as the overall CQ score, participants will receive a score of 0-100. The E-CQS will be delivered to collegiate educational leaders via email, in which they will click on a link that will give them access to the assessment. Collegiate leaders will have five months to complete both the INDCOL and the E-CQS. Due to the instruments significant use in research, its Cronbach α reveals the following reliability: .77 (metacognitive CQ), .84 (cognitive
CQ), .77 (motivational CQ), .84 (behavioral CQ), and overall CQ (.70; Ang et al., 2007). (See Appendix C and D for permission to use the instrument).

**Procedures**

Prior to collecting data, the researcher requested and received Institutional Review Board (IRB) approval; (see Appendix C for IRB approval). The researcher then accumulated a list of four-year colleges and universities within the states of New Jersey, New York, Pennsylvania and Delaware. Collegiate educational leaders were listed under each institution’s faculty and staff directory webpages. Using this list of contact information provided, the researcher was able to use judgment sampling to accumulate participants for this study.

Once participants were identified (based on the university’s public webpage), the researcher then received approval from the university for which they wished to include in their study (see Appendices D through X for universities’ approval). Once IRB approval or department consent was obtained, a consent form was sent to all participants (see Appendix Z for participant consent form). After consent was given, both instruments (INDCOL and E-CQS) were accessible via a live hyperlink within SurveyMonkey email. Participants clicked on the SurveyMonkey link provided within the email in order to take the INDCOL and E-CQS. After participants had taken the E-CQS, the SurveyMonkey website provide the researcher with an Excel file or SPSS export consisting of individual participant responses to the items in both the INDCOL and E-CQS. This information was secured in a password-protected laptop device. After three years, the researcher will permanently delete all research files containing data from their laptop device.

**Data Analysis**

Once all data had been gathered, the researcher ran a multiple regression using the SPSS
software. A multiple regression is the best statistical analysis technique, as it “is used to determine the correlational between a criterion variable and a combination of two or more predictor variables” (Gall et al., 2007, p. 353). Even more so, multiple regressions are the most widely used statistical techniques used in educational research (Gall et al., 2007). Their popularity stems from both their versatility and ability to produce information specific to relationships among variables (Gall et al., 2007).

To ensure readiness, visual screening of the data took place. Data screening is necessary to ensure that data of the variables are correctly entered, free from large missing values, outliers and to confirm that the distribution of data for variables is normal. Identifying missing data points and inaccuracies were essential before continuing. Scatterplots between all pairs of independent variables and also the predictor and criterion variables ensured that the assumption of bivariate was met and that extreme bivariate outliers were found. The treatment of outliers was an imperative step in the data screening method. Outliers refer to observations with a unique combination of characteristics identifiable as distinctly different from the other observations (Hair et al., 1998). Checking for outliers was important as outliers could affect the normality of the data, which could then distort the statistical results (Hair et al., 1998; Tabachnick & Fidell, 2007).

The next assumption to be met, when using a multiple linear regression, was the assumption of linearity and bivariate normal distribution. This assumption was executed by looking for a linear relationship between each pair of variables. If the variables are not linearly related, the power of the test is reduced. A scatter plot for each pair of predictor variables and between the predictor variables and the criterion variable should reveal a classic “cigar shape”.

The final assumption that must be met is the assumption of non-Multicollinearity (also
known as the absence of multi-collinearity) among the predictor variables. The researcher should see if a predictor variable is highly correlated with another predictor variable. If this were to occur, this would mean that each variable provides the same information about the criterion variable. The researcher would then need to look to see if the Variance Inflation Factor (VIF) is too high (greater than 10); if so, than multicollinearity exists; therefore, the assumption has been violated. Acceptable values are between 1 and 5. The null hypothesis would be rejected at the 95% confidence level.
CHAPTER FOUR: FINDINGS

Overview

The purpose of this quantitative, predictive correlational study was to see how accurately can the overall horizontal collectivism scores be predicted from a linear combination of motivational cultural intelligence scores in collegiate educational leaders. The criterion variable was the horizontal collectivism scores of collegiate educational leaders. The predictor variables are the three sub-dimensions of motivational cultural intelligence (intrinsic motivation; extrinsic motivation; and self-efficacy to adjust). A multiple regression was used to test the hypothesis. This chapter includes the research question, null hypothesis, data screening, descriptive statistics, assumption testing, and results.

Research Question

RQ: How accurately can the criterion variable (horizontal collectivism score) be predicted from a linear combination of the predictor variables (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) in collegiate educational leaders?

Null Hypothesis

H₀: There will be no significant predictive relationship between the criterion variable (horizontal collectivism score) and the linear combination of predictor variables (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) for collegiate educational leaders.

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.
Descriptive Statistics

Descriptive statistics were obtained on each of the variables. The sample consisted of 62 participants. The mean scores for horizontal collectivism are the sum of four items ranging from 1.00 to 8.00. The mean scores for the three sub-dimensions of motivational cultural intelligence (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) are the sum of three items per sub-dimension ranging from 1.00 to 7.00. Descriptive statistics can be found in Table 2.
Table 2

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OHC</td>
<td>62</td>
<td>5.75</td>
<td>9.00</td>
<td>7.7540</td>
<td>.70346</td>
</tr>
<tr>
<td>OIM</td>
<td>62</td>
<td>4.00</td>
<td>7.00</td>
<td>5.7527</td>
<td>.83619</td>
</tr>
<tr>
<td>OEM</td>
<td>62</td>
<td>2.00</td>
<td>7.00</td>
<td>5.2097</td>
<td>1.15822</td>
</tr>
<tr>
<td>OSA</td>
<td>62</td>
<td>4.00</td>
<td>7.00</td>
<td>5.8978</td>
<td>.82887</td>
</tr>
</tbody>
</table>

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. See Figure 1 for 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 Inflation Factor (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. See Table 3 collinearity statistics.
Table 3

Collinearity Statistics

<table>
<thead>
<tr>
<th>Model</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OIM</td>
<td>.756</td>
</tr>
<tr>
<td></td>
<td>OEM</td>
<td>.843</td>
</tr>
<tr>
<td></td>
<td>OSA</td>
<td>.754</td>
</tr>
</tbody>
</table>

a. Dependent Variable: OHC

Results

A multiple regression was conducted to see if there was a relationship between horizontal collectivism scores of collegiate educational leaders and their motivational cultural intelligence scores. The criterion variable were the horizontal collectivism scores of collegiate educational leaders. The predictor variables were intrinsic motivation; extrinsic motivation; and self-efficacy to adjust. The researcher rejected the null hypothesis at the 95% confidence level where $F(3, 58) = 3.542, p = .020$. The multiple regression model shows statistical significance; however, only one of the three predictor variables were a significant predictor. See Table 4 for regression model results.

Table 4

Regression Model Results

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>4.674</td>
<td>3</td>
<td>1.558</td>
<td>3.542</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>25.513</td>
<td>58</td>
<td>.440</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30.186</td>
<td>61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: OHC
b. Predictors: (Constant), OSA, OEM, OIM
The model’s effect size was small where \( R = .393 \). Furthermore, \( R^2 = .155 \) indicating that approximately 15% of the variance of criterion variable can be explained by the linear combination of predictor variables. See Table 5 for model summary.

Table 5

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.393(^a)</td>
<td>.155</td>
<td>.111</td>
<td>.66323</td>
<td>2.079</td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), OSA, OEM, OIM  
\(^b\) Dependent Variable: OHC

Because the researcher rejected the null, analysis of the coefficients was required. Based on the coefficients, it was found that the horizontal collectivism scores of collegiate educational leaders were the best predictor of overall extrinsic motivation scores (OEM) where \( p = .048 \). See Table 6 for coefficients.

Table 6

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant) 5.737</td>
<td>.712</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OIM .102</td>
<td>.117</td>
<td>.121</td>
<td>.874</td>
</tr>
<tr>
<td></td>
<td>OEM .161</td>
<td>.080</td>
<td>.265</td>
<td>2.016</td>
</tr>
<tr>
<td></td>
<td>OSA .100</td>
<td>.118</td>
<td>.118</td>
<td>.849</td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: OHC
CHAPTER FIVE: CONCLUSIONS

Overview

Chapter Five will include a discussion section which will detail the purpose of the study and a brief overview. This overview will rely on the review of literature to determine whether the results support or contradict other studies and theories. The implications section will highlight how this study adds to the existing body of knowledge; and furthermore, how it aids in improving the experiences of stakeholders within the context of higher education. Chapter Five will conclude with a limitations section (for both internal and external validity); and recommendations for future research studies (including consideration of different population groups within the context of higher education).

Discussion

The purpose of this quantitative, predictive correlational study is to determine how accurately can the criterion variable (horizontal collectivism score) be predicted from a linear combination of the predictor variables (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) in collegiate educational leaders. The results of the study indicate that overall extrinsic motivation is a significant predictor of horizontal collectivism scores. While this does not show causation, it does show correlation among the two variables.

Researchers have relied heavily on cultural intelligence and or cultural orientations as their theoretical framework—this study however, utilized these two compatible theories as tools in discussing that social responses are learned behaviors. The idea that social responses are learned behaviors was achieved through the long-standing and underlying theoretical framework of Robert Bandura’s social learning theory (SLT). The social learning theory assumes that modeling influences promote new patterns of learning through direct experience, or through
observing others; therefore, behavior is learned before it is performed (Bandura, 1971).

Bandura (1971) wrote that for conceptual structures of psychodynamic theories to be reliable, they must have predictive power, and they must show accurately identified causal factors, which denotes the varying changes in behavior. Regarding CQ’s predictive and moderating abilities, there is a present gap in assessing CQ to cultural orientations (CO)—this study addresses this need of adding to the literature.

The research question of the study was, “How accurately can the criterion variable (horizontal collectivism score) be predicted from a linear combination of the predictor variables (intrinsic motivation, extrinsic motivation, and self-efficacy to adjust) in collegiate educational leaders? Based on the results of the multiple linear regression, overall extrinsic motivation (OEM) had a significant positive effect on horizontal collectivism (HC) with a p-value of 0.048. Therefore, OEM is a significant predictor of OHC. The null hypothesis H₀ is rejected with a p-value of 0.020. The p-value of overall intrinsic motivation (OIM) in predicting horizontal collectivism (HC) were 0.386. The null hypothesis H₀ is rejected with a p-value of 0.020. The p-value of overall self-efficacy to adjust (OSA) in predicting horizontal collectivism (HC) were 0.399. The null Hypothesis H₀ is rejected with a p-value of 0.020.

The social learning theory assumes that modeling influences promote new patterns of learning through direct experience, or through observing others; therefore, behavior is learned before it is performed (Bandura, 1971). When individuals are confronted with situations with which they must respond one way or another, their responses prove to be successful or just the opposite. Spielberger and DeNike (1966) study which measured participants’ awareness at various levels (through verbal conditioning) found that “learning cannot take place without awareness of what is being reinforced” (p. 4). Response patterns are not the cause of behavior
that is found within the organism, but instead inflicted by the environmental forces (Bandura, 1971). Having greater insight into the underlying impulses of an individual’s behavioral changes, are more representative of a social conversion than a self-discovery process (Bandura, 1971).

Therefore, social norms, religious customs, and cultural constructs are learned through direct experience or through observing others.

Based on the findings of the first research question and considering the roles of collegiate educational leaders in higher education (as well as them identifying specifically as horizontal collectivists), leaders can deduce from previous research (Hagger et al., 2014), that these scores confirm that when an environment meets a horizontal collectivist’s cultural norm needs, members will be more extrinsically motivated. The E-CQS (motivational CQ) questions that extrinsic motivation stems from shares that participants value the reputation they would gain from living and working in a different culture; participants value tangible benefits that could be gained from an intercultural interaction more than a same culture interaction; and value the credibility they would gain from developing global networks and culturally diverse connections. This positive correlation between extrinsic motivation to horizontal collectivism could be due to the fact that participants are considering their role within the context of higher education, and those that they are engaging with (as all stakeholders would be considered in-group members based on their affiliation with the university for which they interact) (Benga et al., 2016; Hofstede & McCrae, 2004; Li et al., 2016; Singelis et al., 1995).

Within collectivist societies, individualist can also be identified as in-group members that have allocentric tendencies. Both of these terms (in-group and Allocentrism) are used as identifiers of those who allow collectivistic practices to guide their decisions and actions. Allocentri assesses the degree to which a person emphasizes interdependence but does “not
submit easily to authority” (Singelis et al., 1995)—this is the definition of horizontal collectivism. Collectivist cultures place high priority to in-group goals rather than personal aspirations, knowing that interpersonal relationships are more stable than individualist cultures (Hofstede & McCrae, 2004). Within collectivist cultures, people are interdependent with their in-group (family, nation, etc.) and give priority to the goals of their in-groups (Li et al., 2016. To give a clearer conception of collectivism, it can be broken down further into two separate subgroups: vertical collectivism and horizontal collectivism. Horizontal orientations place a heavy emphasis on equality; while vertical orientations emphasize hierarchy (Singelis et al., 1995). Vertical collectivism (VC) is the extent to which individuals emphasize interdependence and competition with out-groups (Singelis et al., 1995). Horizontal Collectivism (HC) assesses the degree to which a person emphasizes interdependence but does “not submit easily to authority” (Singelis et al., 1995). Therefore, the positive correlation of extrinsic motivation to horizontal collectivism for collegiate educational leaders could stem from their role within higher education and their priority to in-group interdependence and in-group goals.

Extrinsic Motivation refers to the benefits gained from engaging in culturally diverse experiences (Domestic CQ, 2020). Previous research (Lorenz et al., 2017) revealed the benefits of one adjusting their cultural interactions to meet the needs of their interactions across cultures. Albert Bandura’s SLT makes known that individuals that are aware of appropriate responses and who value the outcomes of what they produce, change their behavior in the reinforced direction. On the contrary, those who are equally aware, but do not value the required behavior or the reinforcements, “not only remain uninfluenced but may respond in an oppositional manner” (p. 4). The results of this study revealed that there was a statistically significant relationship between OEM and OHC for collegiate educational leaders in higher education with p < 0.05. Thus,
collegiate educational leaders are motivated by external goods such as: reputation gained from living or working in a different culture; increase in pay, promotion, or perks as a result of working within an intercultural interaction; and or seek no interest in developing global networks and culturally diverse connection. In a collectivist culture, the small gesture of sharing resources can be seen as a network of relationships. Behaviors such as loaning, borrowing, and giving in a variety of ways builds and maintains a social network of reciprocation (Hui & Triandis, 1986).

Therefore, the literature supports extrinsic motivation question two, which reads, “Given a choice, I would value the tangible benefits (pay, promotion, perks) that could be gained from an intercultural interaction more than a same culture interaction” (Domestic CQ, 2020). Nonmaterial resources complicate this as they are less tangible and usually not returnable (Hui & Triandis, 1986).

Within collectivist environments, collectivists will go to great lengths to maintain social relationships (Hui & Triandis, 1986). Extrinsic motivation question one and three supports the collectivist need to maintain social relationships. Question one reads, “I value the reputation I would gain from living or working in a different culture”; and question three, “I value the credibility I would gain from developing global networks and culturally diverse connections” (Domestic CQ, 2020). A feeling of involvement in other’s lives is also a significant indication of someone having more collectivist tendencies. Collectivists take great joy in celebrating other’s successes, to the point that their involvement will also have direct or indirect consequences. The more concern one has towards another, the more bonds they have and are acted upon, the more collectivist the person. Research supports that within collectivist societies, individuals can also be identified as in-group members that have allocentric tendencies (Hofstede & McCrae, 2004). While horizontal collectivists may extrinsically motivated to engage with culturally
differing individuals within the context of HE; these motivations may change as soon as the intercultural interactions shifts away from within in-group interactions to out-group interactions (Hagger et al., 2014; Lorenz et al., 2017; Singelis et al., 1995). The results of the multiple linear regression indicated that there was a significant direct relationship between Overall Extrinsic Motivation (OEM) and Horizontal Collectivism (HC); standardized coefficient = 0.048, t-value = 0.003, p > 0.05. Therefore, the null hypothesis was rejected.

**Implications**

This study added to the existing body of knowledge as it not only confirms the cultural norms of horizontal collectivists but adds to the literature by including participants from the context of higher education—more specifically collegiate educational leaders. Furthermore, this study begins to fill the gap as cultural intelligence has never been assessed to cultural orientations in any context. We know that both cultural intelligence and cultural orientations have been used as theoretical frameworks within research and that both have predictive capabilities; however, none have used Robert Bandura’s social learning theory as the theoretical framework to better understand the assessment of cultural intelligence to cultural orientations within the context of higher education.

The results of this study support the understanding that collegiate educational leaders who identify as horizontal collectivists value reputation and credibility as it maintains social relationships within in-groups; and value tangible benefits as the small gesture of sharing resources can be seen as a network of relationships and relational reciprocity. Collegiate educational leaders that identified as horizontal collectivists are not intrinsically motivated nor socially influenced by self-efficacy to adjust, as this too would go against their cultural norms for interdependence for in-group reliance and loyalty, as well as in-group goals. This study confirms
previous research findings of cultural orientations specific to horizontal collectivism and adds to existing literature by including the context of higher education; uses SLT as the theoretical framework and assesses cultural intelligence to cultural orientations.

The results of this study yield evidence that institutions of higher education—while they can also be perceived as a business—function as a collectivist society itself. As such, the lived experiences of all stakeholders will be most improved if they follow the cultural norms of such a collectivist society. This can be achieved by observing the behaviors of those who already know and understand the cultural norms of the university. It is important to be aware that because universities and their staff already have a cultural practice, that those who go against the grain may experience significant resistance, as anything other than what is expected would be considered a threat—even if intentions are for good. This could disrupt the experiences of those who do not identify as collectivist, but may feel pressure to function as such in order to experience professional success.

Through this research, I have come to realize that a leader must increase their cultural awareness, knowing when to adjust their approach to communication and conflict resolution. Knowing who is in the room and how to integrate appropriately within multicultural contexts can make for more shared profitable outcomes. Therefore, the idea “I’ve always done things this way”; or “you can’t teach a dog old tricks” is not acceptable. Just as our cultural responses to external stimuli were learned, they can be unlearned, and relearned to fit appropriately to promote inclusivity in a setting that encompasses diversity.

Finally, this research study adds to the literature by including participants from the context of higher education; by beginning the long journey of filling the gap of assessing cultural intelligence to cultural orientations; and affirming Robert Bandura’s social learning theory as the
theoretical framework to better understand the assessment of cultural intelligence to cultural orientations within the context of higher education.

**Limitations**

Internal validity relates to how well a study is conducted. To say that there was not a threat to internal validity would be a disservice to furthering the research on assessing cultural intelligence to cultural orientations. While there is not much threat to external validity, this study does show several threats to internal validity. Participants were selected using judgement sampling. Judgement sampling is the process of selecting a sample carefully by choosing each individual to be included in the sample. Judgement sampling was utilized by searching through twenty-two university’s (located on the East Coast) faculty and staff webpages. The public information made including a specific population possible for this study. While the study added to the literature, there are a few limitations due to the population group, sample size, and research design.

Judgement sampling could pose a limitation, as participants were only pulled from universities located on the East Coast. Previous research has already deemed many of the states involved in the study as already identifying as collectivists (Vandello & Cohen, 1999) even despite the potential for universities functioning as a collectivistic society—further research is needed to include other regions of the United States.

Furthermore, the call for participation included an over-generalization of ‘collegiate educational leaders’ that were both a leader and interacted with students on campus. Collegiate educational leaders that interact with students on campus could take on a wide variety of positions in higher education. The span of collegiate educational leaders could include presidents, vice presidents, academic deans, student affairs, student engagement, athletic
directors, diversity and inclusion personnel, department chairs and even more. Further research will need to be conducted on a more specific role within higher education to determine if occupational titles may have had any influence on the results of this study. This is important to determine, as majority of the participants scored as collectivists, and even more so as horizontal collectivists.

An additional threat to internal validity is the sample size. The number of participants sampled was 62, which does not exceed the “required minimum of 66 when assuming a medium effect size with statistical power of .7 at the .05 alpha level” (Gall et al., 2007, p. 145). Effect size informs a reader of how meaningful the relationship between variables were. A large effect size indicates that the research findings have practical significance, while a small effect size indicates limited practical applications. This study is just short of a medium effect size. It is recommended that this same study be replicated using the same model, but with a larger sample to improve reliability.

External validity relates to how applicable the findings are in the real world. The results of the study show a possible threat of external validity due to the research design. There can be no practical real-world application as correlational research is not causation research. While this study reveals the strength of association between variables, the researcher cannot assume that this also means causation (cause-and-effect relationships). Predictive correlational research design allows the researcher to provide insights about real-world relationships and then develop possible theories and predictions. Predictive correlational research is not able to conclude that one variable caused the other as that would require controlled experiments.

**Recommendations for Future Research**

“Although there is a significant gap between theory and practice within all fields of
education, the consequences of such a gap are especially serious within new fields that are
marginal and trying to obtain legitimacy within schools, colleges, and universities” (Banks,
1995, p. 3). Both cultural intelligence and cultural orientations are in their young in comparison o
that of the social learning theory. In such, there is a great deal of work still to be done. Therefore,
recommendations for further research stem from the reflections found in the limitations section,
as well as extended research based on the researcher’s interests and passions. These research
recommendations will be numbered for ease:

1. Additional research assessing cultural intelligence (CQ) to cultural orientations (CO);
2. Assessing cultural intelligence to cultural orientations within the context of higher
   education;
3. Assessing CQ to CO using participants from different regions across the United States;
4. It would be interesting to consider the CQ scores of institutions that identify as more
   individualist and their willingness to interact with out-groups versus the CQ scores of a
   collectivist institution and their willingness to interact with out-groups;
5. Further research could include identifying a more specific leadership role within HE to
   determine if occupational titles may have had an influence on the result of the study;
6. Including a larger sample size is necessary to confirm the findings of CQ to CO in HE;
7. Using a different research design (experimental) to uncover possibilities for causation;
8. Assessing CQ to CO and conflict management styles (CMS);
9. Assessing CQ to CO and leadership style preferences;
10. Assessing CQ to CO and teaching style preferences.
REFERENCES


[http://doi.org/10.4135/9781849208604](http://doi.org/10.4135/9781849208604)


[https://www.researchgate.net/publication/283085643_Measuring_Cultural_Intelligence_A-New_Test_of_the_CQ_Scale#fullTextFileContent](https://www.researchgate.net/publication/283085643_Measuring_Cultural_Intelligence_A-New_Test_of_the_CQ_Scale#fullTextFileContent)


https://doi.org/10.3389/fpsyg.2018.01183

https://doi.org/10.1016/j.jwb.2016.02.001


https://ramakertamukti.files.wordpress.com/2008/07/658_marketing_research.pdf


[http://doi.org/10.1037/h0027421](http://doi.org/10.1037/h0027421)


[http://doi.org/10.1007/BF02291575](http://doi.org/10.1007/BF02291575)


https://www.researchgate.net/publication/329417360_Workplace_Conflict_Resolution_through_Emotional_Intelligence_EI


http://doi.org/10.1111/1467-8551.12131

http://doi.org/10.4135/9781412961288.n149


http://doi.org/10.1016/j.intman.2019.01.002

https://doi.org/10.1177/106939719502900302


https://doi.org/10.1037/h0023454


http://doi.org/10.1093/OBO/9780199846740-0115


https://doi.org/10.33151/ajp.8.3.93

APPENDIX A

[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

Dear Erica,
Approved! Best of luck with your work! Thanks for your kind words about [BLANK].
Best,
Dear Erica,

Thank you for your patience!

You have our permission to use the cultural intelligence scale in your research.

There are two easy ways you can use our scales in your research.
September 20, 2021

Erica Badru  
Leldon Nichols

Re: Modification - IRB-FY20-21-767 Causal Comparative Study of Collegiate Deans of Students’ Cultural Orientations and Their Cultural Intelligence Scores

Dear Erica Badru, Leldon Nichols:

The Liberty University Institutional Review Board (IRB) has rendered the decision below for IRB-FY20-21-767 Causal Comparative Study of Collegiate Deans of Students’ Cultural Orientations and Their Cultural Intelligence Scores.

Decision: Exempt

Your request to expand your participant population to include "all educational leaders who interact with students on campus" has been approved. Thank you for submitting your revised study documents for our review and documentation. Your revised, stamped consent form and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study in Cayuse IRB. Your stamped consent form 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 should be made available without alteration.

Thank you for complying with the IRB’s requirements for making changes to your approved study. Please do not hesitate to contact us with any questions.

We wish you well as you continue with your research.

Sincerely,
Hi Erica,

Please see our attached Policy on External Requests for Research. In general we deny such requests but if you contact the deans via public info on Bucknell’s website, it will then be their choice whether to participate.

Best,
APPENDIX E

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Dear Erica,
Thanks for reaching out to us about this multi-university project.

I confirmed with our IRB Director that this morning. This project does not require IRB review/approval.

By way of this email, I'm connecting you with [Name], Vice President for Student Affairs and Dean of Students, who can advise you further.

Thank you, and good luck with your project!
APPENDIX F

DELAWARE STATE UNIVERSITY

Institutional Review Board – Human Subjects Protection Committee

July 12, 2021

Ms. Erica Badru
School of Education
Liberty University
1971 University Blvd
Lynchburg, VA 24515

Greetings,

Delaware State University’s Institutional Review Board (IRB)-Human Subjects Protection Committee has reviewed your project “Casual Comparative Study of Collegiate Deans of Students’ Cultural Orientations and Their Cultural Intelligence Scores”. After review of application, the Committee has granted an exemption from the IRB as it meets Category 2 of Exempt Research specified in 45 CFR 46.101(b).

Contact [redacted] in the Office of Sponsored Programs at [redacted] if you have any questions or concerns.

Sincerely,
APPENDIX G

[ EXTERNAL EMAIL. Do not click any links or open attachments unless you know the sender and trust the content. ]

Hi Enca- I hope all is well. I’m willing to participate if you are still looking to collect more data.
Best,

Goldey-Beacom College
achieve greater.
APPENDIX H

HAVERFORD COLLEGE

Institutional Review Board for Human Subject Research

July 11, 2021

Erica Badru
Leldon Nichols
Liberty University

Dear Erica and Leldon,

Thank you for submitting a request for exemption from IRB review for your project titled Causal Comparative Study of Collegiate Deans of Students’ Cultural Orientation and Their Cultural Intelligence Scores (original submission received June 29, 2021). Your research is exempt according to 45 CFR §46.104 Exempt research, however distribution of your survey is at the discretion of our Dean of the College, John McKnight, who oversees the Haverford employees you wish to collect data from. Please contact [redacted] for his approval before contacting any members of his staff to solicit their participation.

If you have any questions about these or other policies affecting human subject research at Haverford, please contact me [redacted].

A copy of this letter will be filed in the Provost's Office.

Sincerely,
APPENDIX I

[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

Hi Enca,

As I suspected, as long as you have valid IRB approval from Liberty, our IRB has no objection to you contacting the Dean’s office. It is up to them if they want to participate.

Best of luck with the research.
APPENDIX J

Thanks Epica! Given that you will be conducting a fully anonymous survey using publicly available contact information for recruitment, and there are no Lehigh personnel involved in your research project as collaborators, this does not require our approval at this time. You are free to conduct your study seeking the voluntary permission of our staff.

Thanks,
APPENDIX K

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Dear Enca Badru,

NYU does not require IRB approval to recruit deans of students for a research study.

Sincerely,

IRB Staff
APPENDIX L

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Good afternoon,

Thank you for your message. If Penn State is not engaged in this study in any way (PSU affiliates are not investigators, PSU monies are not funding your study in any way, etc.), and you are only hoping to involve PSU students as participants in your study which has IRB approval at your own institution, then separate IRB submission to the PSU IRB office is not warranted.

It is highly recommended that you obtain permission from the Unit or Department from which you intend to recruit students or VP of Student Affairs/VP of Undergraduate Education if you wish to involve students across disciplines. As the PI of this study, it is your responsibility to locate this information. See the PSU website at [blank].

Regards,
APPENDIX M

[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

Dear Eric Badru,

Thank you for your inquiry. Given that the Dean of Student's email is publicly available on the Widener website and that he is over 18 years of age and not in a vulnerable population, Widener's IRB does not need to grant you permission to send him a survey. That would be his choice to complete it or not.

Best wishes with your research,
APPENDIX N

[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

Hello Erica,

The Penn IRB has no purview over staff or faculty acting as research subjects for studies conducted at other institutions. If you plan on contacting staff in the dean of students' office for participation I would recommend reaching out to their office separately beforehand to let them know, but otherwise we would neither approve nor deny including members of the Penn community as subjects.

Thank you

Institutional Review Board
University of Pennsylvania
Date: July 16, 2021

Researcher: Erica Badru

Prgm/Unit: Doctoral candidate, Liberty University

RE: Project Title: *Causal Comparative Study of Collegiate Deans of Students' Cultural Orientations and Their Cultural Intelligence Scores*

Dear Erica,

I am writing to confirm that your project is EXEMPT from Ramapo College’s Institutional Review Board review process. I hope that your project goes well!

Sincerely,
APPENDIX P

Erica, I have copied our Dean of Students. If he wants to participate in your study, we will enter into a reliance agreement based on your IRB approval.
Hi Erica,

Thank you for the email. Stockton’s IRB does not grant site approval. If you wish to use our campus as the site for your research, you should contact the office directly to determine if they are willing to participate in your study.

Best of luck in your study!
APPENDIX R

Hello. It was nice talking with you too. Yes...as we are not engaged in research and email is publicly available, are are free to contact individuals and invite them to complete your study documents. Best to you.
July 22, 2021

Office of Research Integrity and Protections
Syracuse University
214 Lyman Hall
Syracuse, NY 13244

To whom it may concern:

Erica Badru has requested permission to collect research data from Dean of Students Office staff members through a project entitled *Causal Comparative Study of Collegiate Deans of Students’ Cultural Orientation and Their Cultural Intelligence Scores*. I have been informed of the purposes of the study and the nature of the research procedures. I have also been given an opportunity to ask questions of the researcher.

As a representative of the Syracuse University Dean of Students Office, I am authorized to grant permission to Erica Badru to recruit and conduct data collection.

If you have any questions, please contact me at [redacted]

Sincerely,
Hi Erica,

Thanks for reaching out about this project. Our IRB does not provide approval for these types of requests, but that is not to say it is a disapproval. I would suggest reaching out to the Dean of Students staff about this document and the project. Please let us know if you have any other questions and best of luck with the project!

Best,
APPENDIX U

[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

Hi Erica,

We don't offer approval of other people's research on campus. Their address is public information, you can always send them your research if you wish.

Best,
APPENDIX V

[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

Dear Erica,

You are welcome to contact UB personnel for your study.

Good luck,
Dear Erica:

Thank you for reaching out regarding your study. IRB review by the William Paterson IRB is not needed for this study. However, permission from the WP Provost is needed for you to contact our University Deans. I am waiting to hear back from our provost if he will permit this activity.

Kind regards,
APPENDIX X

Consent

Title of the Project: A Predictive Correlational Study of Collegiate Educational Leaders’ Cultural Orientations and their Cultural Intelligence Scores
Principal Investigator: Erica Badru, doctoral candidate, Liberty University

<table>
<thead>
<tr>
<th>Invitation to be Part of a Research Study</th>
</tr>
</thead>
</table>
You are invited to participate in a research study. To participate, you must be 18 years of age or older and work as an educational leader at a college or university. This includes presidents, vice presidents, academic deans, student affairs, dean of students, department chairs and the like. 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.

<table>
<thead>
<tr>
<th>What is the study about and why is it being done?</th>
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</thead>
</table>
The purpose of the study is to understand the relationship between collegiate educational leaders who interact with students and identify as collectivists versus those who identify as individualists (independent variable) and whether their scores differ in their overall cultural intelligence, motivational cultural intelligence, and behavioral cultural intelligence scores (dependent variable).

<table>
<thead>
<tr>
<th>What will happen if you take part in this study?</th>
</tr>
</thead>
</table>
If you agree to be in this study, I will ask you to do the following things:
1. Complete the Individualism and Collectivism Scale online through SurveyMonkey. It will take approximately 5 minutes to complete.
2. Following the first assessment is a second assessment titled the Expanded Cultural Intelligence Scale. It will take approximately 8 minutes to complete.

<table>
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<tr>
<th>How could you or others benefit from this study?</th>
</tr>
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</table>
Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include collegiate educational leaders gaining a better understanding about their level of cultural awareness, their strengths, and areas in need of growth. This has significant potential to increase the overall experiences of stakeholders within institutions of higher education.
### 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, faculty sponsor, and methodologist will have access to the records.

- Participant responses will be anonymous.

- Data will be stored on a password-locked computer and in a secure database. The data may be used in future presentations. After three years, all electronic records and data on SPSS software will be deleted from the researcher’s computer.

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

The first 100 participants to complete both the INDCOL and E-CQS surveys will receive a $5 Amazon gift card. After completing both surveys, please send an email to the researcher notifying her that you have completed both surveys (INDCOL and E-CQS) and a $5 Amazon gift card will be sent to your email address.

### Is study participation voluntary?

Participation in this study is voluntary. Your decision whether 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 Erica Badru. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at ehayes16@liberty.edu. You may also contact the researcher’s faculty sponsor, Dr. Leldon Nichols, at lwnichols@liberty.edu.

### 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.

<table>
<thead>
<tr>
<th>Your Consent</th>
</tr>
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<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>