

A STUDY OF AUTHENTIC LEADERSHIP AND CULTURAL INTELLIGENCE IN
HIGHER EDUCATION ACADEMIC LEADERS

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A STUDY OF AUTHENTIC LEADERSHIP AND CULTURAL INTELLIGENCE IN HIGHER
EDUCATION ACADEMIC LEADERS

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Abstract

Demographic changes within the field of higher education have generated growing interest for the study of cultural intelligence and authentic leadership among academic leaders. The relationship between cultural intelligence (CQ) as a moderator to authentic leadership (AL) was examined through a quantitative study that included two surveys, the Expanded Cultural Intelligence Scale (E-CQS) and the Authentic Leadership Questionnaire (ALQ). Hypotheses were formulated to assess relationships between CQ and AL, and specific components of each set of data. The study's findings were directed toward academic leaders being equipped with both cultural intelligence and authentic leadership to effectively interact and support diverse multicultural populations within higher educational institutions.

Keywords: Authentic leadership, cultural intelligence, academic leaders, higher education, motivational CQ, cognitive CQ

Dedication

There are always people we remain grateful to for their guidance, patience, understanding, and support. I am thankful for my parents, Bud and Shirley, who encouraged me with unconditional love, discipline, and laughter to persevere in whatever

I was doing.

To my wife, Karen, who understood why I wanted to pursue a doctoral degree and provided love and support from start to finish.

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Chapter One: Introduction

Nature of the Problem

The status of higher education continues to expand as global opportunities—such as stronger competition in the profit and not-for-profit sectors, more study abroad programs, international recruitment of students, international recruitment of faculty, and partnerships with universities outside of the United States—create demographic shifts and new challenges in the education of multicultural students. Betts, Urias, and Betts (2009) described a growing need for higher education administrators who are replacing retired academic leaders, faculty, and staff to evaluate the direction in which higher education is now moving relative to cultural population shifts, commitment to cultural diversity, and the overall leadership within higher education in the United States.

There have been recent demographic changes that continue to transform the culture of higher education in both the ranks of academic leaders and the student population. The study examines the reality of today's university that must consider rising costs, increased competition, student retention challenges, and trends toward multicultural student populations. As the student population has shifted to include a growing number of students from multicultural settings, the demographic of the higher educational academic leader has not changed. For today's academic leader to understand the opportunities and realize the benefits cultural diversity presents to the academic community and global market, there must be changes in the way academic leaders are educated and prepared.

Brustein (2007) opined that the United States is confronting a changing economic and political world—one in which institutions of higher learning often fail to exploit opportunities to generalize its findings to a broader worldview. Those who administer intercultural studies programs can also neglect the integration of critical learning into other cultures due to faulty analysis, synthesis, and evaluation of various cultural disciplines (Brustein, 2007). Dedoussis (2007) suggested that organizations that create and disseminate knowledge—including universities as primary examples—will consider the accommodation of cultural diversity including intercultural backgrounds and experience as an organizational resource. Vogelgesang, Clapp-Smith, and Palmer (2009) asserted that when a leader combines an authentic type of leadership with cultural intelligence, the outcome can lead to morally grounded, cultural adaptation and an increase in cultural intelligence.

Livermore (2008) theorized that psychological underpinnings of cultural intelligence (CQ) and the CQ framework can creatively develop interventions which can challenge ethnocentric tendencies. The ethnocentric worldview is also found in cultural settings where there is prejudice toward specific groups, separation from cultures that may be different, and distinctions which identify groups as inferior (Pusch, 2009). Oliver, de Botton, Soler, and Merrill (2011) inferred when an ethnocentric orientation is embraced differences of ethnic groups can be viewed negatively as deficient and ethnic identities as being unequal. Bhawuk, Sakuda, and Munusamy (2008) reported that in an intercultural setting, an individual's lack of reflective observation can lead to an acknowledgment where the individual is not culturally accepting, and potential reality that learning will not occur.

Jiang (2006) theorized that universities, particularly in the West, have experienced a proliferation of multicultural students with diverse backgrounds, which is challenging leaders to widen their outlook and to look for ways to reach cultural consensus. Bryman (2007) theorized that higher education's leadership can further the university's causes and address its needs with regard to both internal and external constituencies.

Problem Statement

During the 21st century, the ethnic and racial composition of students attending universities and colleges has changed to include more ethnic minorities and first generation college students. This change in enrollment has been based on the demographic population shifts in the U.S. as well as the intentional recruitment of international students. In a report published by the U.S. Department of Education (2011), the following increases were noted in the American college population from 1976 to 2010: The Hispanic student population increased from 3% to 13%, and the African-American student population increased from 9% to 14%. The Asian/Pacific Islander student population increased from 2% to 6%. During this same timeframe, there was a noticeable decrease in the Caucasian student population, which fell from 83% to 61%. These numbers do not account for "nonresident aliens who made up 2% and 3% of the total enrollment in 1976 and 2010 respectively" (U.S. Department of Education, 2011, p. 280). The majority of academic leaders in traditional university settings is Caucasian and has had little interaction with minority groups (U.S. Department of Education, 2010). The U.S. Department of Education (2010) reported that university executives, academic leaders, and managerial staff in 2009 consisted of 19% ethnic minorities (African-

Americans, Hispanics, Asian/Pacific Islanders, or American Indian/Alaska Natives) and 81% Caucasian.

The changing ethnic demographics of college and university campuses are a catalyst for cultural intelligence and for authentic leaders. The problem this study will examine is whether the cultural intelligence level of administrative leaders in higher education relates to their level of authenticity. The research question is: To what extent does CQ serve as a moderator to the authentic leadership (AL) behaviors of academic leaders?

Hypotheses

H1₀: There is no statistically significant relationship between the averages of CQ as measured by the Expanded Cultural Intelligence Scale (E-CQS) and the averages of AL as measured by the Authentic Leadership Questionnaire (ALQ).

H1_A: There is a statistically significant relationship between the averages of CQ as measured by the E-CQS and the averages of AL as measured by the ALQ.

H2₀: There is no statistically significant relationship between an academic leader's metacognitive capability, as measured by the E-CQS and an academic leader's authentic leadership factor, as measured by the ALQ.

H2_A: There is a statistically significant relationship between an academic leader's metacognitive capability, as measured by the E-CQS and an academic leader's authentic leadership factor, as measured by the ALQ.

H3₀: There is no statistically significant relationship between an academic leader's cognitive capability, as measured by the E-CQS and an academic leader's authentic leadership factor, as measured by the ALQ.

H3_A: There is a statistically significant relationship between an academic leader's cognitive capability as measured by the E-CQS and an academic leader's authentic leadership factor, as measured by the ALQ.

H4₀: There is no statistically significant relationship between an academic leader's motivational capability as measured by the E-CQS and an academic leader's authentic leadership factor, as measured by the ALQ.

H4_A: There is a statistically significant relationship between an academic leader's motivational capability as measured by the E-CQS and an academic leader's authentic leadership factor, as measured by the ALQ.

H5₀: There is no statistically significant relationship between an academic leader's behavioral capability as measured by the E-CQS and an academic leader's authentic leadership factor, as measured by the ALQ.

H5_A: There is a statistically significant relationship between an academic leader's behavioral capability as measured by the E-CQS and an academic leader's authentic leadership factor, as measured by the ALQ.

H6₀: There is no statistically significant relationship between an academic leader's motivational CQ sub-dimensions, as measured by the E-CQS and an academic leader's ethical factor as measured by the ALQ.

H6_A: There is a statistically significant relationship between an academic leader's motivational CQ sub-dimensions, as measured by the E-CQS and an academic leader's ethical factor as measured by the ALQ.

H7₀: There is no statistically significant relationship between an academic leader's behavioral CQ sub-dimensions, as measured by the E-CQS and an academic leader's transparency factor as measured by the ALQ.

H7_A: There is a statistically significant relationship between an academic leader's behavioral CQ sub-dimensions, as measured by the E-CQS and an academic leader's transparency factor as measured by the ALQ.

H8₀: There is no statistically significant relationship between the averages of CQ as measured by the E-CQS and an academic leader's authentic leadership factors (self-awareness, balanced processing, relational transparency and moral perspective) as measured by the ALQ.

H8_A: There is a statistically significant relationship between the averages of CQ as measured by the E-CQS and an academic leader's authentic leadership factors (self-awareness, balanced processing, relational transparency, and moral perspective) as measured by the ALQ.

H9₀: There is no statistically significant relationship between an academic leader's cognitive CQ capabilities, as measured by the E-CQS and an academic leader's authentic leadership factors of balanced processing and self-awareness, as measured by ALQ.

H9_A: There is a statistically significant relationship between an academic leader's cognitive CQ capabilities, as measured by the E-CQS and an academic leader's authentic leadership factors of balanced processing and self-awareness, as measured by ALQ.

H10₀: There is no statistically significant relationship between an academic

leader's motivational CQ capabilities, as measured by the E-CQS and an academic leader's authentic leadership factors of balanced processing and self-awareness, as measured by ALQ.

H10_A: There is a statistically significant relationship between an academic leader's motivational CQ capabilities, as measured by the E-CQS and an academic leader's authentic leadership factors of balanced processing and self-awareness, as measured by ALQ.

The study examined CQ as a moderator to AL and if the CQ primary dimensions of metacognitive, cognitive, motivational and behavioral are moderators to authentic leadership. It also explored the relationship between the sub-dimensions of motivational and behavioral CQ to specific factors of authentic leadership. Additionally, the dimensions of cognitive and motivational CQ were examined as a moderator to the balanced processing and self-awareness factors of authentic leadership. The study used both the expanded cultural intelligence scale (E-CQS) and the authentic leadership questionnaire (ALQ) to assess academic leaders at four-year universities with a multicultural student population. This study hypothesized that academic leaders who score high on the cultural intelligence scale (as measured by the E-CQS) will also score high on the authentic leadership questionnaire (as measured by the ALQ), thus being more motivated and action-oriented to support and adapt to the increase in multicultural student populations, as well as a more diverse faculty and staff, throughout U.S. institutions.

The study is informed by early work done by Vogelgesang et al. (2009). Their work suggested there is a correlation between the dimensions of authentic leadership and

cultural adaptation (see Figure 1). Vogelgesang et al. (2009) further contended that authentic leaders are more likely to understand cultural differences if they are culturally intelligent. Drawing from an established model of the linkage between authentic leadership and CQ (see Figure 1), this study will further the application of this model by statistically analyzing the capabilities of cultural intelligence to the capabilities of authentic leadership, and exploring various combinations of CQ as a moderator to AL in the context of higher education.

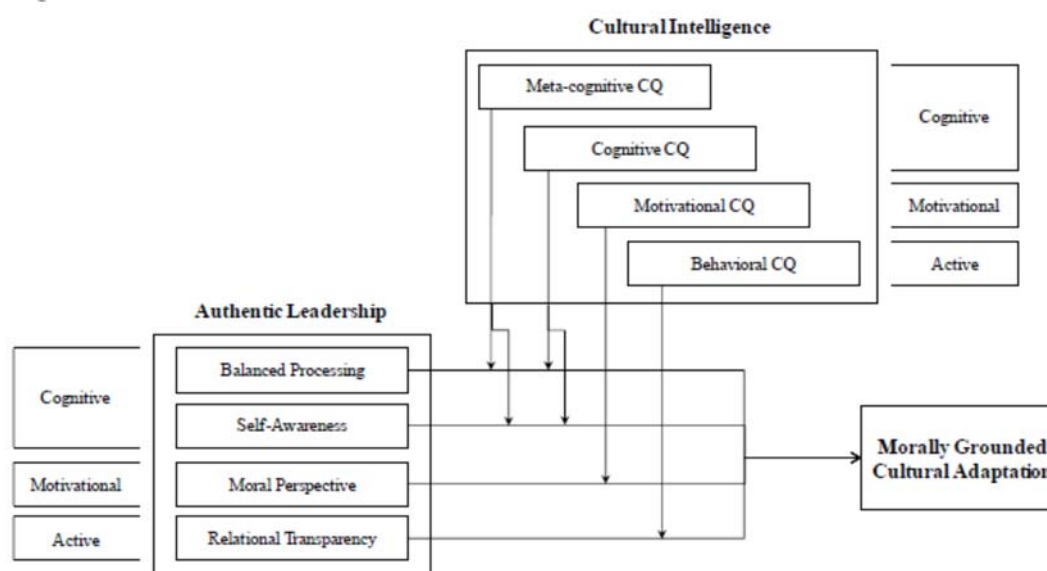


Figure 1. Cultural intelligence as a moderator of authentic leadership. Used with permission. The Role of Authentic Leadership and Cultural Intelligence in Cross-cultural Contexts: An Objectivist Perspective. G. Vogelgesang, R. Clapp-Smith, and N. Palmer, 2009, International Journal of Leadership Studies, 5, p. 109.

Key Terms

The following definitions will guide this study:

Academic leaders – Individuals of a higher education institution who hold a full-time position of department chair, associate or assistant dean, dean, associate or assistant vice president, vice president, associate or assistant provost, provost, or president.

Authentic leadership –

A pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers.

(Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008, p. 94)

Cultural intelligence – “An individual’s capability to function and manage effectively in culturally diverse settings” (Ang & Van Dyne, 2008, p. 3). There are four capabilities of CQ which reflect current views of intelligence as being complex and multifaceted.

Metacognitive CQ – “refers to an individual’s level of conscious cultural awareness during cross-cultural interactions” (Ang & Van Dyne, 2008, p. 5). This level links with mental processes that allow individuals to deepen their cultural knowledge and help drive one’s adaptation to new cultural surroundings (Ang & Van Dyne, 2008).

Cognitive CQ – focuses on cultural norms, values, and practices of specific cultures and reflects one’s knowledge of cultural environments (Ang & Van Dyne, 2008).

Motivational CQ – reflects the energy and interest an individual possesses toward knowing more about cultural settings and learning about its people (Ang & Van Dyne, 2008).

Behavioral CQ – refers to one’s capability to demonstrate proper verbal and non-verbal actions while communicating with people from different cultures. “Because behavioral expressions are especially salient in cross-cultural encounters, the behavioral

component of CQ may be the most critical factor that observers use to assess others' CQ" (Ang & Van Dyne, 2008, p. 7).

Cultural Integration – "To create a new set of norms and respond with collaboration to find solutions acceptable to both (or all) cultures affected, but not over representing either (or any one) culture" (Caligiuri, 2012, p. 29).

Faculty – "those having position descriptions with more than 50% of their time spent in research and teaching" (Ruedy, MacDonald, & MacDougall, 2003, p. 1126). An influx of international students creates the need for new teaching approaches by faculty who consider contextual factors such as global cultures, institutional priorities, available institutional funding resources, relevance to student vocational choices, and personal faculty academic interests (Stone, 2006).

Higher educational institutions – For the purpose of this study, higher education institutions are four-year colleges or universities that provide post-secondary degree programs and/or degree completion programs to individuals who have completed their secondary education.

Multicultural faculty/students – For the purpose of this study, multicultural faculty/students are identified based on ethnicity, nationality, and culture. It does not include generational diversity (e.g., Boomer, Generation X, or Millennial). Additionally, ethnicity, for the purpose of this study is defined as the shared cultural practices, perspectives, and distinctions that set apart one group of people from another. That is, ethnicity is a shared cultural heritage.

Delimitations of Study

This study will only include institutions which have four-year programs or more, a traditional student body, and are located in the United States. The academic leaders participating in this study hold the position of department chair, associate or assistant dean, dean, academic director, and senior international officer. Additionally, these academic leaders have a minimum of two years' experience as a leader at their current or previous institution.

Assumptions Guiding the Study

Assumptions guiding this study are: (a) participants hold a position of leadership that includes specific titles of academic standing within a higher education institution (b) each research participant will provide honest feedback for each assessment; (c) the higher education institutions have an ethnically diverse faculty and student population; (d) the participating colleges or universities are four-year co-educational degree granting institutions; (e) social, economic, and cultural changes have created shifts in higher education throughout the United States.

Brief Review of the Literature

Bass and Bass (2008) believed theories and models of leadership can help the social scientist to make better predictions while improving control in the application of leadership. The definition of leadership has evolved from earlier theories of commanding obedience through sheer will of the leader, to a leader's persuasion or influence, and currently, an ability to orchestrate real change which reflects common purpose among followers (Bass & Bass, 2008). Northouse (2010) presented multiple theories and models of leadership which demonstrate the personality perspective of a leader as well as group

processes and effective leadership skills that can be learned and transferred to others.

Yip and Wilson (2010) described how leadership is learned through one's experiences and how it helps cultivate versatility and mastery of skills which can be transferred to new learning.

Raelin (2005) presented four processes of leadership which were considered to be precursors for effective organizations. The four processes involved setting the mission, actualizing goals, maintaining commitment, and possessing the resources to respond to change (Raelin, 2005). Boga and Ensari (2009) viewed contemporary organizations as experiencing continuous change and unpredictable dynamics regarding domestic and global markets. Leadership is presented in three phases. The first phase involves a new strategy mapped out conceptually, with the second and third phases concentrating on communicating optimism while distributing resources to employees (Boga & Ensari, 2009).

Mendenhall, Osland, Bird, Oddou, and Maznevski (2008) furthered the discussion about leadership by including the global perspective and identifying trust development and organizational structures within a context that includes global cultures. Northouse's (2013) description of authentic leadership as one of leadership's newest areas of research resulted from cultural upheavals and financial failures that have created uncertainty and apprehension among people who desire trustworthy leadership. Gardner, Cogliser, Davis, and Dickens (2011) believed that deeply-held societal concerns about ethical conduct of leaders also promoted the scholarly attention toward the topic of authentic leadership.

Authentic Leadership

Authentic leaders conduct themselves in harmony with “deep personal values and convictions, to build credibility and win the respect and trust of followers by encouraging diverse viewpoints and building networks of collaborative relationships” (Avolio, Gardner, Walumbwa, Luthans, & May, 2004, p. 806). Authentic leadership can be defined in multiple ways that enhance one’s understanding of this practical theory. Harvey, Martinko, and Gardner (2006) defined authentic individuals as aligning their actions and behaviors with their core beliefs and values while being cognizant of the developmental process of alignment with one’s internal values. Walumbwa et al. (2008) explained authentic leadership as being grounded in social psychological theory while realizing a central role in the moral distinctive of the individual along with self-awareness and self-acceptance. Caza and Jackson (2011) believed two components of authenticity to involve the self-knowledge of the true self and the acting out of that true self. Kernis (as cited in Caza & Jackson, 2011) defined the concept of authenticity as possessing self-relevant information within full awareness of one’s true self in an atmosphere of open and trusting relationships and personal unbiased processing.

Four factors of authentic leadership.

The construct definition of authenticity involves an individual’s personal experiences where one acts in harmony with one’s true self (Gardner, Avolio, Luthans, May, & Walumbwa, 2005). A leader’s personal history and any critical events that have accompanied one’s life are often viewed as precursors for authentic leadership (Gardner et al., 2005). George and Sims (2007) discussed the authentic leader as one who draws upon early life experiences which will later help construct an inspirational life story. An

individual's life story constantly changes and becomes part of a deeper understanding of life's meaning and personal authenticity (George & Sims, 2007). There exist four key factors that contribute to authentic leadership development. The first key factor is the self-awareness of the leader which can involve the sense of personal insight and introspective reflection (Gardner et al., 2005). The second is self-regulation which reflects a balanced processing of information in an unbiased manner and one in which the leader obtains more of an accurate perception of themselves and of others (Gardner et al., 2005, p. 347.) The third factor of authentic leadership includes the feeling of openness or transparency on the part of the leader who "displays high levels of openness, self-disclosure and trust in close relationships" (Gardner et al., 2005, p. 347). The authentic leader also possesses a fourth factor which is the commitment to ethical core values (Gardner et al., 2005). This factor can produce high levels of trust in followers and creates an open atmosphere in which followers become engaged with the goals and values of the authentic leader (Gardner et al., 2005).

Avolio and Gardner (2005) defined a leader as authentic if behaviors are motivated by personal convictions rather than the need to conform to others' expectations. Begley (2001) proposed that authentic leadership infers a "hopeful, open-ended, visionary" perspective (p. 354), and suggested authentic leaders respond to changing social circumstances and legitimate needs of people through a values-informed, knowledge-based leadership model. Avolio et al. (2004) further suggested authentic leaders value the diversity of individuals and will motivate and inspire followers based on their skills. Novicevic, Harvey, Buckley, Brown-Radford, and Evans (2006) argued that authenticity is especially pertinent during periods of radical social change as freedom,

autonomy, and social responsibility interact with community standards of conduct. Authentic leadership when perceived as being genuine leads stakeholders to respond in a positive manner by instilling trust and organizational commitment (Zhu, May, & Avolio, 2004). Earley, Ang, and Tan (2006) viewed effective leaders as initially learning their own cultural markers, which include an understanding of their view regarding power distance, time orientation, motivation, and communication. Leaders who possess these cultural markers further extend their ability to develop global leadership capabilities. A finding from the research of Vogelgesang et al. (2009) asserted that by coupling authentic leadership with CQ, a leader can adjust to various cultures, be perceived as genuinely helpful to those with culturally different backgrounds, and still maintain personal values and beliefs.

Cultural Intelligence

Individuals can improve their personal level of cultural intelligence by learning about global cultural groupings that share similar core patterns of thought and behavior (Livermore, 2013). When one enters into new cultural surroundings, Livermore (2013) encouraged an understanding of comparative differences regarding leadership styles, value dimensions, and cultural symbols which vary among cultures. Kezar and Eckel (2008) forwarded the assumption that deep change occurs only when the individual undergoes a process where personal values are thought about and restructured.

Earley and Ang (2003) defined cultural intelligence as “a person’s capability to adapt effectively to new cultural contexts” (p. 59). Cultural intelligence is also referred to as “a multidimensional construct targeted at situations involving cross-cultural interactions arising from differences in race, ethnicity and nationality” (Ang et al., 2007,

p. 336). According to Schwartz (2010), leaders' cultural values "shape the common beliefs, practices, symbols, social norms and personal values in a society" (p. 117). Van Dyne, Ang, and Livermore (2010) explained CQ as focusing on one's capacity to adapt to multiple cultural contexts by internalizing the cultural and individual dynamics that take place within cross-cultural environments. Kim (2001) explained cultural assimilation as the process of a major change in which the visiting individual becomes absorbed into the cultural values and social mainstream. Adaptation is viewed as one's response to new environments and psychological adjustments as a result of being dislocated from a familiar culture which can cause confusion and unhappiness (Kim, 2001). Schwartz further labeled this experience as "the press of culture" (p. 118) and effective leaders "must not only know and understand the presses of our own culture, but also the presses of those cultures that we work in or work with" (p. 118). One potential way to address interacting with and understanding other cultures is through CQ.

Balogh, Gaal, and Szabo (2011) believed CQ helps to discover why some people can effectively work in diverse organizational cultures. Dedoussis (2007) explained a university is an original example of an organization which encourages and accommodates cultural diversity—including backgrounds, individual experience, and expectations regarding how students learn. The applied definition "calls for the ability to identify and solve problems sensitively and effectively in cross cultural situations" (Dedoussis, 2007, p. 99). Ang et al. (2007) included the four dimensions of CQ as metacognitive, cognitive, motivational, and behavioral. Metacognitive CQ includes the mental processes that help an individual to become acquainted with and communicate cultural knowledge. Cognitive CQ ruminates upon the cultural norms, rituals, practices, and beliefs as a result

of education and social experience. Motivational CQ describes the opportunities that are afforded when one focuses toward learning and navigating in different cultures.

Behavioral CQ reflects an ability to demonstrate proper verbal and non-verbal proceedings when interacting with members of different cultures (Ang et al., 2007).

Ang et al. (2007) examined CQ, intercultural competency, and cultural domains—which include legal, economic, and social systems in the development of the CQS. The instrument incorporated the metacognitive, cognitive, motivational, and behavioral dimensions with the objective being to integrate literature on intercultural competencies and CQ with the ultimate goal to advance CQ research. Ward, Fischer, Lam, and Hall (2009) opined that CQ may have the potential to increase one's knowledge of adaptation and acculturation, while contributing to the individual's psychological well-being and appropriate cultural skills. Thomas et al. (2008) provided general descriptions of CQ which involved the ability to make effective adjustments, develop interpersonal relationships with people of different cultural backgrounds, and accomplish goals in a cross-cultural environment. Thomas et al. (2008) defined CQ as “a system of interacting knowledge and skills, linked by cultural metacognition that allows people to adapt to, select, and shape the cultural aspects of their environments” (p. 127).

Higher Education and Leadership

Regarding the relationship between leadership and higher education, Bryman (2007) posed questions about the causality of effective leadership and its influence upon higher educational departments (Bryman, 2007). The concept of leadership involves various definitions that can have one meaning in higher education but mean something different in non-academic organizations (Bryman, 2007). In a study reviewing 20 years

of peer-reviewed journal articles related to leadership in higher education, Bryman (2007) posited there were 13 common leadership behaviors associated with leadership effectiveness within departmental levels. These 13 behaviors were identified with personal vision, integrity, consideration for others, and sense of direction. Eddy and VanDerLinden (2006) stated that “conceptualizations of college presidents’ approach to leadership have changed from the ‘take charge,’ ‘great man’ approach to decision making which emphasizes participatory and shared decision making...” (p. 10). Within higher educational environments, Randall and Coakley (2007) reported that colleges and universities are constantly competing for ways to attract new student populations and face increased accountability from regulatory agencies and funding sources. Organizational leaders are seeking new models that will connect leaders with authentic leadership and CQ for purposes of successful interaction in multicultural environments (Vogelgesang et al., 2009). Williams (2005) opined that in the changing world of higher education, there exists an increased globalism on campuses and organizations in which college students must receive the type of education that allows them to be successful in a global market.

Brunstein (2007) considered challenges of cultural adaptability, perceptions, and effective communication across global parameters along with global competence in North American higher education. While many academic environments value cooperation among multicultural students, classroom interaction and social dynamics remain largely monocultural (Otten, 2003). Livermore (2009) acknowledged that many Americans do not engage in understanding cultural history but are only interested in the existential moment. This worldview extends into areas that include perceptions toward social equality, individualism, pragmatic problem-solving, and attitudes toward helping

cultures. Algera and Lips-Wiersma (2012) theorized that authentic leadership draws upon academic disciplines such as ethics and leadership theory and provides a scholarly approach to the concept of authenticity.

Similar Studies Related to Authentic Leadership and Cultural Intelligence

There have been studies that involve similar relationships between leadership styles and CQ but which emphasize differing elements of leadership. For example, Earley and Ang (2003) discussed charismatic leaders as communicators of myth and symbols to followers which help establish a “group ego and conscience” in which a shared vision provides cultural guidance while decreasing follower anxiety (p. 3). Mendenhall et al. (2008) examined empirical work of global leaders from 10 corporations within eight nations that linked transformational leadership with global competencies. Competencies included one’s ability to initiate and maintain cultural and strategic change, empowering followers, and practicing customer responsiveness. The list according to Mendenhall et al. (2008) “describes a transformational leadership style and a strong performance orientation” (p. 40).

Smith, Bond, and Kağitçibaşı (2006) inferred there are elements of effective leadership which possess universal components while others are more specific to varying cultures. Charismatic or value-based leadership styles have been promoted by recent U.S. leadership researchers with the expectation that certain universal aspects would surface in the research. Smith et al. (2006) discovered that while U.S. leadership theorists influence global thinking, there is also knowledge that certain international cultures practice leadership styles that are more situational in practice and less universal.

Kim and Van Dyne (2012) considered CQ as being a critical element which influences the potential for global leadership.

Research Methods

Avolio and Gardner (2005) opined that authentic leadership will produce a “fundamental difference in organizations by” supporting individuals in their desire to become more confident through leaders being more transparent (p. 331). Further supporting the need for cultural intelligence and authentic leadership, Triandis (2006) proffered a “culturally intelligent person suspends judgment until information becomes available beyond ethnicity of the other person” (p. 21). Additionally, Vogelgesang et al. (2009) put forward the proposition that leaders who possess the behavioral skills of an authentic leader will also be culturally intelligent leaders that are able to “adapt to new cultures while remaining morally grounded” (p. 114).

The purpose of this study is to examine whether there is a relationship between CQ and authentic leadership as it exhibited to higher education administrators. This study employed a quantitative design to determine the relationship between authentic leadership behaviors (dependent variable) and CQ capabilities (independent variable) as demonstrated by academic leaders who serve in a four-year institution. Quantitative research, as defined by Creswell (2009), is “a means for testing objective theories by examining the relationship among variables” (p. 233). Leedy and Ormrod (2013) further examined correlational research to involve a “statistical investigation of the relationship between two or more variables” (p. 100). Correlational research is a study of surface relationships but does not necessarily seek to explain a causal relationship.

Description of the Population

The population for this study consisted of academic leaders working in four-year higher education institutions in the United States that have a diverse student and faculty population of at least ten percent ethnicity. These academic leaders have the title of department chair, associate or assistant dean, dean, or equivalent and have served in an administrative role at their current institution for a minimum of two years. The population was chosen because it represents a university's highest level of administrative decision making of those who have the most interaction with faculty and students in matters of higher educational leadership, cultural diversity, and student enrollment.

Selection of Participants

The researcher used a combination of convenience and snowball sampling for the purpose of selecting participants. The researcher is a member of the Association of International Education Administrators (AIEA) and has access to multiple listservs. A combination of convenience and snowball sampling was selected based on Bryman's (2008) assertion that "snowball sampling is a form of convenience sample" (p. 184) and noted "the researcher makes initial contact with a small group of people who are relevant to the research topic and then uses these to establish contacts with others" (p. 184). After the study is complete, the researcher will provide each institution a summary of their results upon request. Participation in the study is voluntary and the number of participants will vary depending on the organizational structure of each participating university.

Data Collection Methods and Procedures

Instrumentation. Data for the study will be subdivided into two instruments, the Expanded Cultural Intelligence Scale (E-CQS) and the Authentic Leadership Questionnaire (ALQ). The ALQ assesses four behaviors of authentic leadership; (a) self-awareness, (b) balanced processing, (c) relational transparency, and (d) moral perspective (Walumbwa et al., 2008). The E-CQS measures the four capabilities of CQ: (a) metacognitive, (b) cognitive, (c) motivational, and (d) behavioral (Ang & Van Dyne, 2008). The ALQ is available through Mind Garden© in a multi-rater or self-rater format. The ALQ instrument was selected based on the research that has been conducted to date using the ALQ. According to Caza and Jackson (2011), since the development of authentic leadership theory, little empirical research has been conducted, and of the studies they reviewed, all used the ALQ to measure authentic leadership at the individual level. Therefore, since the majority of empirical research to date has used the ALQ, it was chosen based on its reliability, validity, use in other studies, and accessibility.

The E-CQS is available through the Cultural Intelligence Center, LLC© and offers both a multi-rater and self-rater format. Additional demographic information was collected as it relates to the participants' degree of experience in other countries or interacting in an intercultural, multicultural, or diverse environment. Recently, other instruments for measuring CQ have been discussed in the literature (Thomas et al., 2008). However, the most prominent and widely used instrument for assessing the four factors of CQ is the E-CQS. The web-based instrument developed by Thomas et al. (2008) was specifically designed to measure cultural knowledge, cultural skills, and cultural meta-cognition as it relates to CQ, and was not considered appropriate for this study.

Individuals invited to participate in the study were contacted using the information provided from the AIEA listserv and through independent networks. Demographic questions were added to ensure each person completing the assessments met the criteria. By using SurveyMonkey® the two instruments were combined (with permission from the authors) and sent to selected participants.

Analysis of Data

Descriptive statistics was used to analyze the demographic data. The demographic data was analyzed using frequency distribution, mean, and standard deviation. The results from the ALQ and E-CQS involved a correlational study to analyze whether a relationship existed. The data was tested for normality using the Kolmogorov-Smirnov test. The data was not normally distributed; therefore, the Spearman rho was used to analyze the strength of the relationship between the variables. The data was analyzed using Statistics Package for Social Sciences, version 11 to test for significant findings that might yield a relationship between cultural intelligence and authentic leadership behaviors.

Contribution to the Field of Organizational Leadership

There are many studies which examine leadership in various contexts. Cultural intelligence maintains a close alliance with multiple leadership contexts and provides a language which enables the organizational leader to understand differences and to invest in multiple learning possibilities for the good of the organization (Ismail, Reza, & Mahdi, 2012). However, in a brief review of the literature, most studies that examined leadership in higher education focused on transformational or transactional leadership. This study added to the existing body of literature by studying cultural intelligence and its

relationship as a moderator to authentic leadership as it relates to higher education academic leaders working in culturally diverse campus settings. The study does not only consider the demographics of the student population, but also the demographics of faculty and staff who are followers of the academic leaders. It is important to examine the total population of higher education institutions when studying academic leaders' level of CQ and authenticity; however, this study will represent a stratified population.

The study was important to the academic leader in that it incorporates contingencies into leadership theory that can influence cultural differences, characteristics of followers, and overall context (Avolio, 2007). The field of higher education considers minority enrollment and retention as critical elements that may impact an institution's attractiveness. Strong retention rates can serve to attract incoming students. By increasing one's level of support and awareness towards multicultural student populations, positive intellectual and social development will occur (Anderson, 2008). Otten (2003) theorized that diversity plans within the boundaries of higher education must be institution-wide initiatives which carefully examine student access, retention, and success factors of multicultural students. Figures from the Consortium for Student Retention Data Exchange (2013) showed the graduation rate within a six-year timeframe for African-American undergraduate students to be 37%. Hispanic undergraduate student graduation rate was 41.5%. Higher educational institutions can incorporate new understandings and meanings to the importance of retention as it impacts multicultural student populations.

Another factor that adds to the importance of this study includes relationship development which encourages human connections in order to help build trust and long-

range commitment among people (Caldwell, Hayes, & Long, 2010). Tan (2004) included adaptation, collective performance, and an ability to make cultural adjustments as three leadership components enhanced by one's study of cultural intelligence.

To assist academic leaders in preparation for multicultural opportunities, this study contributed to the body of existing literature by determining the relationship between cultural intelligence and authentic leadership. Academic leaders will also benefit from the study by assessing their institution's current cultural status and future strategies for integrating multiculturalism in their respective campuses (Anderson, 2008). Also, the importance of productive intercultural relations depends upon leaders displaying sensitivity toward different cultures as a way of increasing the potential for intercultural competence (Hammer, Bennett, & Wiseman, 2003). Within the higher education arena, academic leaders provide direction for faculty, who in turn, provide direction for students.

Summary

Social, economic, and political changes are altering the global experience while presenting new and complex challenges to multicultural citizens. Among these changes are the growing ethnic and racial composition of students who are attending higher education institutions and the readiness level of academic leaders to be equipped for providing leadership and support. This initial chapter provided an overview of the research problem, assumptions, and limitations of the study. A review of the literature is included which defined authentic leadership and cultural intelligence as phenomenon that influence the process of multiculturalism and its integration with higher education.

Chapter Two: Literature Review

This chapter will provide information that supports the study of CQ and AL in the context of higher education. Forces exist within that context, which influence the directions that redefine the field of higher education. Eddy and VanDerLinden (2006) identified resource scarcity, changing trends in learning modalities, technology, and shifting student demographics as reasons for new leadership responses. Other leadership styles that emphasize participation and consensus building are replacing the more traditional approaches to leadership in ways that accentuate relationships and fluid cultures (Eddy & VanDerLinden, 2006). Bryman (2007) explained the need for more research to be conducted on leadership effectiveness within universities.

Specifically, this literature review will identify seminal and current research that contributes to the investigation of cultural intelligence as it relates to authentic leadership. Within this context, the literature review will examine higher education academic leaders and their response to the growth of culturally diverse students who are enrolling in higher educational institutions. The literature review investigates general concepts of leadership and leadership styles; this includes an in-depth description of authentic leadership and each associated dimension. Secondly, the literature review examines types of intelligences, with a primary focus on CQ.

Higher Education

Among the number of academic, social, and operational trends impacting the landscape of higher education, a growing interest in multiculturalism is shaping new directions as a response to diversity and cultural pluralism in the academy (Otten, 2003). Kalargyrou and Woods (2009) viewed the academic leader as responsible for the ongoing enhancement of staff performance as well as institutional diplomacy, communication, and a collaborative style of leadership. Within the system of American higher education, Anderson (2008) stressed that during the previous two decades, no issue has been discussed more than diversity. Cushner and Mahon (2009) opined that while the concept of intercultural education is not new within the field of education, it remains on the edge of the academic institution rather than an integral part of its mission.

The ability for an individual to be flexible and maintain an open mind is considered to be a notable characteristic when engaged in multicultural experiences (Williams, 2005). White and Ali-Kahn (2013) discussed the importance of knowing the various norms of discourse that create feelings of power and participatory status as minority students seek assimilation into higher education. The question of how academic leaders in higher education can be role models who encourage trust, purpose, and relational skills becomes a crucial point in overall student outcomes (Opatokun, Hasim, & Hassan, 2013). Ruggs and Hebl (2012) discussed methods which can increase cultural awareness, and inclusion within classroom settings. This includes a culturally diverse curriculum, a culturally responsive teaching-learning focus, and outreach programs that engage racial and ethnic group members with financial support and academic/social resources (Ruggs & Hebl, 2012).

In today's global environment, there remains a critical need for college and university stakeholders to develop academic leaders capable of reflecting upon demographic shifts and ensuing enrollments (Betts et al., 2009). Fralinger and Olson (2007) spoke to university culture when discussing the increase of information and communication technology that is changing the role of higher education and aligning it more with organizational decision-making. Ultimately higher education's success in developing academic cross-cultural competencies for an increasingly global student population will depend upon how institutions choose to create positive learning environments and value cultural diversity (Jayakumar, 2008).

Information that supports the essence of demographic change within higher education and the demographic information collected in this study are reflected in Keller's (2001) earlier work on forthcoming demographic changes in higher education. In his study, Keller invited academic leaders to think about the impact multicultural enrollments will have on admissions, academic programs, faculty appointments, and university fund raising. Garrick (2013) viewed the contemporary academic leader as one who is learning to react to the growing multicultural influence through a discussion method that is concerned with the aims and objectives of multicultural student recruitment and retention. Kezar and Eckel (2008) conveyed that diversity must be a campus-wide priority engrained into the culture and initiated from the top academic leaders in order to support multicultural students.

Leadership

Leadership development involves the improvement of self-knowledge and one's capabilities to influence the potential of others while confronting persistent changes in

technology, economics, and society (Kakabadse, Kakabadse, & Lee-Davies, 2005).

According to Bass and Bass (2008), there are over 100 definitions for leadership, which add to the complexity of a diverse field of study and one which encompasses major leadership theories and models. Sternberg (2008) proposed a leadership approach that includes wisdom, intelligence, and creativity, that when synthesized creates highly influential leaders. Tate (2008) asserted that researchers examine the nature of perceptions regarding individuals as leaders for both theoretical and pragmatic purposes. The examination is theoretical from the perspective of the individual's social and psychological constructs and where cultural connectivity with phenomenon leads to analysis of those constructs (Triandis, Bonempo, Villareal, Asai, & Lucca, 1988). Frank and Fahrback (1999) extended the study of social and psychological constructs by examining how one uses complex systems to gage the linkage of information with models of influence at the individual levels. Eagly and Chin (2010) believed that today's leaders are more dependent upon others for support and knowledge as society has changed in its demographic make-up and intellectual identity.

Bass (1985) introduced a new paradigm of leadership research which emphasized the need to promote change and encourage a participative and relational definition of leadership. Leaders who developed an informal manner and who were accessible to others were also viewed as individuals who were likely to support subordinates and change employee motivations (Bass, 1985). Begley (2006) emphasized that a leader needs to develop an understanding of human nature and what drives human motives.

One of the practical definitions in this study emanates from Yukl's (2011) leadership research in which he described leadership as a set of contingency behaviors

that influences subordinates particularly during periods of organizational change. His broader definition of leadership includes multiple processes of influence that impact followers' interpretations, motivations, and maintenance (Yukl, 1994). Yukl, Chavez, and Seifert (2005) inferred the ability to influence both internal and external stakeholders to be of special importance when a structure changes from authoritarian to a more cooperative and empowered philosophy. Flexible and adaptive behaviors by the leader during times of significant change help drive effective responses in a timely manner (Yukl, 2008). Metcalf and Benn (2013) acknowledged the multiple definitions of leadership but considered Yukl's (2008) premise of leadership capturing the process of influence to be the consistent definition.

Tate (2008) theorized that leadership perceptions are involved where influence and status relationships become developed and where there is an understanding as to the likelihood that one will gain influence and status over others within the organization. McKenna, Rooney, and Boal (2009) explained leadership as possessing principles of intuition and organizational learning in which flexibility and thoughtful action are guiding principles. Leadership also plays a key role in the growth of individuals and in guiding others toward their goals by helping them understand the need to implement changes (Nixon, Harrington, & Parker, 2012).

Bass and Bass (2008) viewed one role of leadership as a communication tool in managing group conflict by emphasizing the benefits and future opportunities through an integrative effort and resolution. Novicevic et al. (2006) described the idea of leaders today making choices that assist in constructing themselves as moral individuals who balance responsibility for personal freedom and in meeting organizational obligations

toward those they lead. Maner and Mead (2010) reported that throughout human history, groups have expressed a need for leaders to emerge who promote group welfare and help individuals manage their challenges. Within a flexible leadership model, organizational leaders are capable of influencing others by adapting their behaviors to fit the situation and to think about aligning their futures with performance (Gordon and Yukl, 2004).

Relationships between leaders and followers reflect a social contract of trust in which the leader “provides a stable strategy for effective group functioning” (Maner & Mead, 2010, p. 1).

Macik-Frey, Quick, and Cooper (2008) proposed that a leader is one who transfers positive emotion to followers and other stakeholders by extending hope, resilience, and an optimism that may go beyond performance to a positive self-regard and personal meaning. Sorenson, Goethals, and Haber (2011) described a leader as one who focuses upon a challenging vision and who promotes a collaborative workforce. Marques (2013) asserted that current leadership perceptions indicate that organizational members tend to have greater achievement when they perceive a leader is actively engaged with and supportive of others. When answering the question about the relevance of leadership, Ulrich and Smallwood (2012) viewed the leader as maintaining accountability toward identifying problems and in finding solutions.

Maak and Pless (2006) used the relational perspective within an interconnected environment to emphasize the leader’s need to reduce complexity and uncertainty for others while providing a desirable view of one’s future. The leader can be described as a “coordinator and a cultivator of relationships towards different stakeholder groups,” which promotes an ethical environment where standards are respected and applied by and

toward the business partners (Maak & Pless, 2006, p. 100.) Alvesson (2011) and Hernandez (2008) believed the extent of one's understanding of leadership depends upon the social context in which leaders and followers interrelate and interpret meaning. Between the leader and follower, a social agreement exists that suggests the follower's vulnerability needs social protection by the leader, who in turn, demonstrates concern and respect for the individual in a manner which avoids embarrassment (Hernandez, 2008). Collinson (2006) opined that leadership and individual identity are mutually connected with the life of the group and which leadership depends upon for endorsement from the group. Grojean, Resick, Dickson, and Smith (2004) explained how organizational values can be directly affected by leaders who are aware of their own values and can shape the direction of the organization's overall climate.

Messick (2006) affirmed the need for moral courage as a conviction for a leader to make the right decision "despite the risk of unpleasant consequences" (p. 106). Brown and Trevino (2006) believed a leader's attractiveness and credibility as a role model assist the leader in being willingly followed and emulated by others who possess positive perceptions of the leader as an ethical person. Ciulla (2005) cautioned that because of leadership's range of influence, those in positions of leadership are capable of choices which have greater impact upon the lives of those who follow. Useem (2010) believed that when a leader becomes overly confident in his or her position, that becomes an obstacle to making good choices and often the outcome reflects the practice of under-preparation.

Leadership Styles

Most leaders use a variety of styles that fit a specific situation and population (Bass & Bass, 2008). Boga and Ensari (2009) theorized that leadership style exercised a critical amount of importance when assessing leader influence upon a workforce. Sarros and Santora (2001) included a leader's role of modeling proper behaviors with the ways symbols, metaphor, and language are utilized in the practice of leadership. Youssef and Luthans (2005) believed the mediating role of the leader's hope and resiliency creates a leadership style that fosters personal meaning and which views risk factors and an absence of full control as cultural expectations and not as any personal failure. The impact of individual leadership style and the determination of how judgment is carried out can enhance or harm an organization (Kakabadse et al., 2005). Avolio (2007) furthered the argument of potential benefits by viewing the effectiveness of leadership style in relation to contingencies and requisitions that confront both leaders and followers.

There are multiple leadership styles that utilize different behavioral patterns in order to influence followers (Boga & Ensari, 2009). The most common discussions on leadership styles are transactional, transformational and situational. Prior to Avolio's research on authentic leadership, transformational leadership was considered to be the most prevalent of styles. Banerji and Krishnan (2000) viewed transformational leadership as providing considerable promise "because it can cause fundamental change, answer deeper issues and create new paradigms" (p. 405). McKenna et al. (2009) considered transformational leadership as impacting an organization's sense of values and where a leader chooses to alter the conventional beliefs. Diaz-Saenz (2011) inferred

that a transformational leadership style was a process in which a leader enhanced individual and group performance beyond what might have been perceived as possible. Bass and Steidlmeier (1999) believed transformational leadership was a distinct style containing four components: (a) idealized influence, (b) inspiring motivation, (c) intellectual stimulation, and (d) consideration toward the individual person. Yukl (1994) perceived follower perceptions toward the transformational leader as an important consideration when describing influence between the leader and followers. Transformational leadership extends beyond the satisfaction of follower needs and self-interest to focus upon followers' development which heightens their own leadership potential and performance (Yammarino, 1994).

When comparing transformational with transactional leadership, Kuhnert and Lewis (1987) considered transactional to involve an exchange between two entities in which a superior and subordinate influence each other and which results in each obtaining something of value. While transformational leaders concentrate upon change within the institution, there is also an interest in group learning flowing back to the institution (Dusya & Crossan (2004). Sarros and Santora (2001) viewed transactional leadership as an economic conversion where specific needs of the follower are satisfied in exchange for the expectation of job performance. Bass (1997) inferred transformational leadership as portraying moral principles, while a definition of transactional included self-interest and a weaker participant.

The charismatic style of leadership is one of inspiration in which leaders demonstrate emotional oratory regarding goal attainment, alternative decisions, and the promotion of intensity toward individual focus on goal achievement (Wallis, Dollery, &

Cruse, 2009). Conger (2011) and Yukl (1994) considered the term *charisma* as signifying divine attention, a gift, or type of supernatural abilities which connected both a relational and perceptual position between the leader and followers. Greenleaf's (1977) servant leadership model was less oratorical and more of an initiative by the servant-leader to serve the interests of others. When comparing servant leadership to other leadership models and theories, the leader may be viewed as one who possesses persuasive skills to convince and encourage others to grow rather than to use one's self-reliance to perform (van Dierendonck, 2011).

Avolio and Gardner (2005) examined several leadership theories which presented diverse and original viewpoints offering a broad range of leadership initiatives, and discovered relationships among various theories including charismatic, servant, transformational, and authentic. Dent, Higgins, and Wharff (2005) discussed the emergent development of spirituality and its link with organizational leadership as a way to find common definitions among leadership research. Klenke (2005) integrated the constructs of authentic leadership with antecedents that reflect a spiritual, cognitive, and behavioral aspect of theories that includes a transformational framework. Whetstone (2002) considered the benefits of servant-leadership to include the act of self-awareness, with an emphasis on moral concern for others, and a reduction of personal desire in favor of mutual influence toward a shared vision with other individuals.

Both self-awareness and a moral compass are two elements that help guide authentic leadership and which are also represented in other leadership literature that explores ethical, spiritual, servant, and transformational leadership (Harvey et al., 2006). They further viewed authentic leadership as a developmental process whose evolution

can be partially described according to attributions that help shape the cultural context. Bass (1997) integrated the concepts of authentic and transformational behaviors in leaders who inspire followers to work toward goals that transcend self-interests. This integration along with other leadership constructs previously mentioned presents authentic leadership as an effective approach to advance the goals of the human enterprise while achieving effective organizational outcomes (Walumbwa et al., 2008).

Authentic Leadership

There are multiple definitions regarding authentic leadership, prompted by concerns of ethical conduct with leaders, and interest in a values-based leadership that can effectively guide leader-follower relationships (Gardner et al., 2011). Walumbwa et al. (2008) focused upon a theory of authentic leadership that has developed as a result of the convergence of leadership, ethics, and positive organizational behavior. Novicevic et al. (2006) analyzed the philosophical and psychological beginnings that helped to articulate authentic leadership in terms of ethical choices and meaning. Avolio and Gardner (2005) inferred the concept of authenticity as having roots within the humanistic psychological field and included the concept of a fully functioning individual who views himself as possessing a consistent basic nature.

Rogers (1961) theorized that the act of self-awareness permits man to decrease distortions and experience who he is as a socialized human being functioning freely and fully. The developmental format is what Rogers called *non-directive* and is centered on the individual who added to his life experience through a genuine awareness of self without conceptual filters (Rogers, 1961). The fully functioning individual is particularly open to new evidence from various sources and accepts consequences of personal

activity. He remains engaged in his self-awareness while in the experiential process of becoming himself (Rogers, 1969).

Novicevic et al. (2006) viewed one's authenticity psychologically as an expression of one's innermost beliefs and with the acceptance of personal accountability for one's decisions. Gardner et al. (2011) declared that the earliest philosophical ideas regarding authenticity contained in the leadership literature occurred in the 1960s with assumptions about leadership and its relationship with organizational authenticity. Chan, Hannah, and Gardner (2005) viewed Sartre as one who advocated authenticity as something to be earned, and which is under the direction of one's moral conscience. White and Portman (2005) believed that Sartre's major philosophical theme revolved around the influence of good faith in which the individual embraces honest communication with others and incorporates an authentic self-perception.

There is a growing amount of scholarly literature being written on personal authenticity and authentic leadership style. While both constructs involve an awareness of the self and being open to objectively assessing oneself, the authentic leadership style extends toward fostering positive self-development with associates and followers (Gardner et al., 2011). Authenticity includes a set of behaviors through reflective thoughts and individual virtue while the authentic leadership style focuses upon a process that captures the organizational context for purposes of self-determination among followers (Novicevic et al., 2006). Authenticity is more private while the authentic leadership style includes public participation in aiding the leader to reduce sentiments of doubt regarding the leadership role (Novicevic et al., 2006).

Klenke (2005) opined that Heidegger and Sartre represented philosophers who stressed the sense of “*verstehen*” (understanding) as belonging to the fundamental moment of immediacy (p. 160). Heidegger (1968) considered truth as non-concealed and able to reveal itself in the essence of one’s being while in the moment. The awareness of one’s being in the world is a foundational definition of the authentic human being which Heidegger believed initiated one’s study of philosophy (Koenig, 1992). Heidegger (1968) also championed the relevance of authenticity especially during turbulent times of social change in which change emphasizes a moral interval between individual responsibility and collective norms (Novicevic et al., 2006). Solomon (1987) described Kierkegaard’s conversation about objective and subjective truth as transferring the argument from a logical position to that of actual living, from the scientific to a life of ethical decision. Latourette (1953) portrayed Kierkegaard’s subjectivity as including the inner decisions of the individual to define his existence and “to abandon the pose of a spectator on the ultimate issues and to act” (p. 1142). Kierkegaard (1965) referred to Socrates as being subjective in his inward self-reflection. Through self-knowledge, Kierkegaard believed the individual gains a sense of “authentic freedom” which includes a surge of new thought possibility (Kierkegaard, 1965, p. 189).

At the level of individual leadership, a growing body of literature suggests that an authentic approach to leading others will offer desirable outcomes and help advance human institutions in positive ways (Walumbwa et al., 2008). Hannah, Lester and Vogelgesang (2005) believed standards of conduct are developed mainly through cultural influence and socialization. Avolio et al. (2004) visualized the authentic leader as someone who knows and accepts himself and is perceived by others as owning a

consistent moral perspective. Relationships between the authentic leader and followers open up opportunities to serve others and expand upon the development of both the leader and those who follow. Avolio et al. (2004) considered the concept of credibility as being vital in the authentic leader's ability to win the respect and trust of followers.

According to Avolio and Gardner (2005) the exploration of most leadership theory can often lack a focus on the critical core processes that help in leadership development. One complication toward a development of core processes involves each individual having the autonomy and desire to create and shape his or her own reality (Diddams & Chang, 2012). Algera and Lips-Wiersma (2012) challenged the ethical reality of authentic behaviors by inferring the possibility that individuals may seek to attain certain purposes that do not necessarily have moral suggestion or whose idea of what constitutes ethical conduct may not be shared by societal norms. Casa and Jackson (2011) theorized that much of earlier research on authentic leadership focused merely on negative outcomes promoted by a lack of authentic behavior, rather than a concentrated study on authentic leadership's origin and motives.

To further the discussion, Peus, Wesche, Streicher, Braun, and Frey (2012) suggested that exploration of authentic leadership is still in an introductory stage and there remains a limit of empirical evidence. Chan et al. (2005) used as part of their framework on authentic leadership the belief that self-clarity and self-regulation can still be practiced socially and cognitively, with leadership performance being an extension of the authentic person. The study of authentic leadership as a theoretical construct unites around multiple dimensions (Walumbwa et al., 2008). Khan (2010) portrayed an authentic leader as one who builds commitment and a sense of loyalty through

relationships that emphasize trust between the leader and the follower. Peterson, Walumbwa, Avolio, and Hannah (2012) opined that individuals possess a strong interest in forming stable affiliations while attaching themselves to those with whom they feel safe and united. When this support occurs, the individual experiences positive emotional feelings, increases a sense of control, and extends job performance (Peterson et al., 2012). Authentic leaders lead with purpose and care about stakeholders' interests (Khan, 2010).

Recent work has occurred with the purpose of integrating the individual leader, followers, and context in which authentic leadership can be developed and used to influence organizational climates where leadership development can take place (Avolio, 2007). The structure of authentic leadership was explained by Luthans and Avolio (as cited in Avolio and Gardner, 2005) "as a process that draws from both positive psychological capacities and a highly developed organizational context which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development" (p. 321). Gardner et al. (2005) advanced the framework of authentic leadership development as part of a larger self-based model with emphasis on self-awareness and self-regulation. The four components which contribute to the development of authentic leadership are self-awareness, self-regulation, moral perspective, and relational transparency (Gardner et al., 2005). Each of the four components includes multiple competencies which help build both a theoretical and practical framework for scholarly interest (Gardner et al., 2011). There is, however, ambiguity due to various definitions of authentic leadership and a lack of prudence in regulating the scholarly interest regarding accurate depictions of this field of leadership (Gardner et al., 2011).

Internalized Moral Perspective. The study of authentic leadership includes the belief that authentic leaders are guided by a set of deeply held moral convictions that impact behaviors of those who follow. Moral convictions of a leader can be influential on the collective behavior of an organization, including choices that reflect the overall mores of a culture (Grojean et al., 2004). Brown and Trevino (2006) advanced the idea that strong ethical contexts support cultural conduct which correlates with ethical leadership models. One of the goals of authentic leadership involves encouragement of organizational followers to execute decisions based upon their individual moral beliefs (Peterson et al., 2012).

Avolio and Gardner (2005) asserted that authentic leaders actually extract from their moral reserves, which include courage and resiliency to confront ethical dilemmas and lead in the moral development of an organization. According to Zhu et al. (2004), ethical leaders create conditions that involve a consistency with words and actions necessary for the development of trust. Zhu et al. (2004) theorized that an ethical leader does not seek self-interest but bases behaviors and decisions on moral principles that include benevolence and the potential development of followers. Caldwell et al. (2010) opined that trust occurs when a leader surrenders personal control through a reframing of traditional ideas of leadership. Hannah et al. (2005) advanced the belief that moral knowledge through a leader's social learning is an important element of stored moral content which can be activated as it is consistent with the leader's self-concept.

There is a possibility that some individuals may consider themselves to always behave morally in situations regardless of their emotional response or the stress that may occur (Diddams & Chang, 2012). There may also be a tendency to interpret one's

behavior as moral or morally superior to others, which may cause an individual to rationalize behavior (Diddams & Chang, 2012). Chang and Diddams (2009) added the importance of humility as a virtue of authentic leadership, which presents the individual as being open about limitations, knowledge gaps, and human frailties.

Self-awareness. Among various developmental components that support authentic leadership, personal self-awareness is considered to be one of the antecedents. Peterson et al. (2012) considered self-awareness as involving the frequency in which a leader demonstrates an understanding of the impact his or her actions have upon others. Gardner et al. (2005) linked self-awareness with an individual's personal history which may include trigger events such as death or injury, cultural catastrophe, or an event which alters the individual's development either negatively or positively. Novicevic et al. (2006) and Klenke (2005) viewed the social context of authentic behavior involving childhood experiences, feedback from significant others, and moments of rejection, as a critical motivator of self-worth and consistent positive behavior. Self-awareness is the act of assessing one's values and persuasions in order for a leader to align those convictions with personal behavior that is consistent and viewed as authentic (Peus et al., 2012).

Avolio and Gardner (2005) believed a leader's self-awareness was an ongoing process of understanding and recognition of one's talents, core values, and purposes as they developed and changed over time. Khan (2010) theorized that as a leader increases self-awareness, the strengths and weaknesses of the leader become identified by followers in ways that deepen his or her own leadership potential. Van Dierendonck (2010) described authentic behavior in terms of one's consistent involvement with inner

thoughts and feelings that are honest and vulnerable. Chan et al. (2005) opined that when individuals possess a focus upon their self, their core values become heightened and prominent to others.

While these values may not necessarily be popular or represent cultural norms, Shamir and Eilam (2005) explained that authentic leaders internalize their values as they reflect upon their personal experiences and interpret their experience as representing truth. Avolio and Luthans (2006) cautioned that self-awareness is developed in degrees and is connected with human insights on values, attitude, personality, and efficacy. The individual and his relationship to self-awareness can be viewed as emergent in that a continuing alignment is pursued between the presentation of self which the public views and the individual's growing awareness of an authentic true self (Chan et al., 2005; Sparrowe, 2005).

Balanced Processing. The various roles of an authentic leader include the ongoing process of the leader to regulate personal values, beliefs, goals, behaviors, and attitudes for consistent application and reflection of the leader's genuine self (Chan et al., 2005). The authentic leader's self-concept must continuously seek clarification through the leader's behaviors and actions, while the leader maintains a high level of involvement toward the followers being served (Avolio et al., 2004; Shamir & Eilam, 2005). Caldwell et al. (2010) theorized an ethical connection exists when a leader's behavioral performance is consistent with what the leader claims to believe while gaining the trust and reputation of others.

Brown and Trevino (2006) described leaders' attention to the manner in which they control themselves and are perceived by others as representing an activity of self-

monitoring. Goleman (1995) viewed one's self control as the ability to regulate actions "in age-appropriate ways; a sense of inner control" (p. 194). Collinson (2006) linked one's self-regulation with the motivation of those being led as well as with the influence of the leader to shape behavioral and identity processes of others. Chatman and Kennedy (2010) theorized that a leader's consistent behavior toward others imparts more of a genuine reality regarding priorities and organizational values than policy or vision statements. Due to the power of cultural values in promoting acceptable conduct and standards, a leader may be inclined to set a high personal standard, while at the same time establish that same standard for subordinates and judge their behavior and performance accordingly (Chatman & Kennedy, 2010). Lorsch (2010) hypothesized that followers have a greater likelihood to embrace leadership when a leader's goals and expectations of others are consistent with those of the subordinates. Casa and Jackson (2011) inferred that the regulation of the individual self tends to be an ongoing endeavor that is behavioral in its construction, rather than in an announced state of arrival where the presentation of one's self is shown as refined and finished authentically. Merriam, Caffarella, and Baumgartner (2007) theorized that rational reflection and self-restraint provide a foundation that helps individuals to think independently.

Sternberg's (2008) approach to leadership included the proper use of intelligence, creativity, and knowledge by the individual leader's ability to balance intrapersonal interests and adapt to life's uncertainties. Klenke (2005) proposed that authentic leaders tend to exhibit higher levels of self-motivation, and through challenging goal setting, will exhibit more self-regulatory styles of leadership. Avolio et al. (2004) portrayed authentic leaders as "those individuals who are deeply aware of how they think and behave and are

perceived by others as being aware of their own and others' values/moral perspective, knowledge, and strengths, aware of the context in which they operate . . ." (pp. 803–804). Maak and Pless (2006) summarized qualities that responsible leaders need in the current age of technology, information management, and diverse cultural backgrounds. Qualities include reflection skills in which leaders acquire a deeper understanding of themselves through a critical self-appraisal and the recognition of new values to incorporate into their moral behavior (Maak & Pless, 2006).

Relational Transparency. In today's organizations, leaders make decisions based upon information which is collected, analyzed, and distributed among stakeholders. Hughes (2005) described current leaders as being called upon to navigate turbulent organizational waters that require character and transparency. Hosking (2011) inferred that leadership is relational when the leader moves from a point of separation to that of connectivity and desires to serve others through a discipline of dialogue. Relational transparency has been defined as openness to new ideas and information that is activated by external episodes (Hughes, 2005). Avolio and Gardner (2005) included relational transparency in their discussion on the development of authentic leaders—positing that leaders and followers, through ongoing practice, enact transparent relationships that are genuine and contribute to trust. Raelin (2005) maintained the importance of collaborative dialogue in which leaders openly share personal beliefs and ideas and welcome critical review of others.

Relational transparency is also viewed as appropriate emotional expression in which the leader openly allows others to capture their true selves (Hughes, 2005). Gardner et al. (2005) maintained that as the leader becomes more aware and comfortable

with the self-expression of true emotions and feelings, higher levels of openness and self-disclosure will occur. Caldwell et al. (2010) regarded relational behaviors as outcomes of a leader's desire to create connections that are personal and shared. Novicevic et al. (2006) presented the concept of authentic meanings, which includes a leader's relational orientation and identity attached in self-referenced claims and behavioral discrepancies noticed by others. Northouse (2013) viewed relational transparency as the uncovering of one's motivations and core feelings that includes both positive and negative expressions being presented to others. Casa and Jackson (2011) included the concept of "close personal relationships" when discussing openness used by the authentic leader (p. 353).

The model of authentic leadership according to Avolio (2007) contains an integrative core in which an engaged organizational culture can help develop transparency among its leaders. George and Sims (2007) acknowledged the vulnerabilities which lie beneath one's superficial layers that surround the core of the self. Using the analogy of an onion, George and Sims removed the layers through feedback and reflection in order to share weaknesses and practice transparency.

Each of the four components helps build the structure of authentic leadership and guides future studies regarding the influence upon attitudes, values, and behaviors of followers toward their organizational leaders (Avolio et al., 2004). Chan et al. (2005) believed that by identifying components which help define operations of authentic leadership, one can better build a lasting foundation where performance cycles and learning opportunities exist for all stakeholders within an organization. Gardner et al. (2011) viewed the four components as being useful in awakening the curiosity of scholars

who are interested in defining authentic leadership as an instrument of utility in forming future organizational leadership.

Intelligences

There are various forms of intelligences in which the individual can adapt and cope with changing circumstances. The most common view of intelligence conceptualizes it as an attribute either at the biological, mental, motivational, or behavioral level (Earley & Ang, 2003). Ng and Earley (2006) included cultural and contextual factors as influencing the components of intelligence and its impact between different environments. Merriam et al. (2007) stated that the essence of contextual factors lies in its correlation with adaptive components of intelligence in which the individual is able to adapt intellectually to various situations. Gardner and Hatch (1989) utilized their earlier studies in the development of human cognitive capabilities to further understanding of seven intelligences, and whose core components identified specific characteristics of the seven forms of intelligence. The seven intelligences include the following: (a) logical-mathematical, (b) linguistic, (c) musical, (d) spatial, (e) bodily-kinesthetic, (f) interpersonal, and (g) intrapersonal.

Crowne (2013) examined the components of social, emotional, and CQ, noting that a greater understanding of each of these forms of intelligence is needed in the support of organizations and its leaders. Antonakis (2011) and Bass and Bass (2008) included general intelligence as defining one's ability to process information, to think abstractly, and as a precursor to leadership and other supervisory assignments. Crowne (2013) explained social intelligence as an ability to understand different groups of people and manage the communication process and behavioral cues while supporting a

relationship between social and emotional intelligence. Moon (2010) noted that due to certain norms involving social interaction between cultures, it is rare that emotional, social, or general intelligence can be transferred into adaptation and engagement with multicultural groups. Douglas, Ferris, and Perrewe (2005) acknowledged the continuous development of emotional intelligence, social intelligence, and social competence as building one's interpersonal structure.

There exist theoretical frameworks which help to explain the practical aspects of intelligence. Kayworth and Leidner (2002) considered factors such as knowledge workers, who are not confined to office structures, and communication technologies as creating new linkages to cultural settings and reshaping work environments into global teams. Wakefield and Bunker (2010) described the sensitivity of brain neurons which creates a deeper understanding and empathy toward others, furthering the impact of emotional intelligence between individuals. The reality also exists where individuals encountering unfamiliar cultural environments may become consumed with fear and uncertainty as a result of being in contact with others who suffer similar emotional insecurities (Wakefield & Bunker, 2010). Douglas et al. (2005) examined the need for the social, emotional, and general conceptual structures of intelligence to depict areas of individual uniqueness while assessing relationships among them.

Using the cognitive resources theory by Fiedler and his associates, Yukl (1994) studied the relationship between intelligence and experience to gain insight into how group members interact with one another and achieve group performance. Hosking (2011) used a relational approach within a construct of epistemology when discussing current social themes which may impede or at least alter the way in which relational

processes work. Current themes include global communication, cultural connectivity, financial inequalities, and world economics (Hosking, 2011). Kim's (2001) research involving social competence demonstrated one's ability to integrate with others in ways that "comprise the cognitive, affective, and operational (or behavioral) capabilities by which individuals organize themselves in and with their sociocultural milieu" (p. 48). Gardner (1993) recommended that one suspends judgment regarding a common definition of intelligence and allow individual thinking to become liberated toward human capability involving talent and mental discernment. Anabestani, Kadkani, and Bagheri (2012) described CQ as a new scope of intelligence which involves the concept of adaptability with diverse work situations and may contain internal character that is nurtured from generational influence.

Cultural settings will often determine the effectiveness of different forms of intelligence and those attributes they have in common (Thomas, 2006). For instance, social and emotional intelligence may effectively influence a particular cultural setting but may not have meaning in a different culture where diverse rules and norms exist (Thomas, 2006). Mendenhall et al. (2008) linked components such as emotional stability, resilience, and hardiness, with emotional intelligence and believed these factors were critical in demonstrating interpersonal skills cross culturally. Brislin, Worthley, and MacNab (2006) pointed to a key element of emotional intelligence that involves a leader creating a feeling of inclusion toward others and admitting the possibility of this element breaking down during a cross-cultural encounter where cultural sensitivity may be involved. Brislin et al. (2006) presented the possibility that while an individual may possess quantities of social intelligence in familiar settings, a lack of CQ may cause

moments of indecision and unexpected outcomes where he or she is perceived as ineffective.

Ng and Earley (2006) proposed that research on intelligence and its relationship with culture can further explain various meanings that both constructs have when integrated—questioning whether in today’s multicultural environment, research can disregard the influence of culture. Allaire and Firsirotu (1984) inferred that culture can be described as systems of ideas in which knowledge is continually perceived, evaluated, and transmitted. Thomas (2006) believed that for one to possess CQ there needs to be an awareness of the effect culture can have on both the cognitive and motivational behavior of individuals. Gudykunst et al. (1996) theorized that one’s cultural rearing influences the socialization of the individual and disposition regarding rules and values of cultures which focus on the individual but also with those which emphasize memberships of the group. Ang and Van Dyne (2008) discussed the increased interest in emotional, social, and general intelligence and suggested that CQ assists an individual when confronting circumstances of diversity and different cultural environments.

Cultural Intelligence

In their writings about forms of intelligence, Earley and Ang (2003) and Rose, Ramalu, Uli, and Kumar (2010) considered cross-cultural adaptability as requiring a cognitive and behavioral capability much different than abilities needed in one’s own culture, and one in which the individual learns to interact with members in diverse cultural contexts. This form of intelligence is known as CQ and considers an individual’s ability to work with and adjust to those of different cultural backgrounds and experiences (Rose et al., 2010). Diao and Park (2012) described CQ as incorporating a higher level

understanding where an individual can effectively approach various cultural situations, values, and mores.

Fowers and Davidov (2006) theorized that a social, ethical, and epistemological movement is occurring, introducing a deeper understanding of moral and social relationships that strengthen diverse cultural possibilities while influencing the power of a dominant culture. Ang et al. (2007) explained that in response to a need for more research on cultural effectiveness, a framework of CQ was created to help an individual learn to self-manage and adapt in different cultural surroundings. Earley and Ang (2003) defined CQ as “a person’s capability for successful adaptation to new cultural settings, that is, for unfamiliar settings attributable to cultural context” (p. 9). Creque and Gooden (2011) presented the study of CQ to be fundamental as organizations seek to attract associates who understand the challenges of working with individuals from diverse environments and who possess abilities to form relationships with multicultural people. Rehg, Gundlach, and Grigorian (2012) inferred that CQ may partially be decided by a basic level of intelligence, but also can be developed through training and skill enhancement. Kim and Van Dyne (2012) theorized that CQ can also be advanced through intercultural contact in which a leader can gain knowledge and cultural skills in order to manage successfully through various cultural settings.

The definition of CQ implies that when an individual has multiple experiences interacting with those of different cultures, the more positive future intercultural encounters that person will likely have (Tarique & Takeuchi, 2008; Thomas et al., 2008). Tarique and Takeuchi (2008) inferred that a large number of studies which compared experience and cultural competencies have been deficient in well-grounded theory, since

the studies on CQ are relatively new. Thomas (2006) employed as an aspect of CQ the concept of mindfulness, which accesses an active processing of knowledge and conglomerates new categories of memory with an interest in multiple viewpoints. Ang et al. (2007) examined CQ as focusing on the domain of intercultural settings while acquiring competencies in reason and behavior within the scope of cultural diversity.

There have been various studies which investigate the importance of adaptation in order for individuals to have positive experiences when living and working in multi-cultural situations. Davis and Finney (2006), and Montagliani and Giacalone (1998) viewed adaptation in the context of readiness levels as a result of prior experiences that contribute to one's abilities, social skills, and overall cultural preparation. An individual with a higher level of CQ is cognizant of specific behavioral patterns demonstrated by different groups of people and possesses the ability to respond effectively (Vedadi, Kheir, & Abbasalizadeh, 2010). Specific characteristics listed include flexibility, resilience, mental discernment, and a personal identity that seeks out new experiences (Davis & Finney, 2006). Balogh et al. (2011) inferred that application to the theory of CQ includes sensitivity when identifying and solving problems cross-culturally, and an understanding of the ambiguities of different cultures when dealing with norms, values, and religious traditions.

The ability to control one's frustrations and disappointments when managing difficult cultural interactions partially depends upon the integration of knowledge, communication skills, and conflict-resolution capabilities (Ting-Toomey, 2009). Cultural challenges remain on behalf of an individual's personal beliefs/values and overall socialization when confronted with differing norms and values of a different cultural

environment. Perceptions of an individual's preconceived ideas about how the world should work and behave often conflict with one's struggle to gain a sense of personal integrity when experiencing other cultures with diverse values (Steers, Sanchez-Runde, & Nardon, 2010; Vogelgesang et al., 2009). Dixon and Dougherty (2010) adduced that organizational culture uses symbols in its interplay and remains unimpaired when manipulated or as a result of a traumatic situation confronting the organizational members. Deardorff (2009) described a strong sense of self-awareness and a secure identity as critical components when engaging in intercultural relationships.

A fundamental question concerns the extent to which an individual practices adaptation within the confines of another culture and what boundaries exist which prevent the individual from crossing (Deardorff, 2009). Yoon, Lee, and Goh (2008) viewed social connectedness as comprising of distinct variables which help provide support and integration along with social acceptance. Fu and Liu (2008) attributed part of cross-cultural effectiveness to be found in one's ability to understand cultural variations while influencing interpersonal groups and cultural networks. By concentrating on making favorable impressions and displaying proper behaviors toward those of different cultures, one can practice modifying behaviors while learning how to effectively interact with multicultural groups and individuals (Mendenhall et al., 2008; Montagliani & Giacalone, 1998). When culturally diverse communities seek to build upon new learning through innovative activities, collaboration and facilitation of social interaction remain key components for mutual success (Leinonen, Jarvela, & Hakkinen, 2005).

A multicultural social environment provides opportunity for individuals to learn how to navigate through ambiguous and complex situations by employing theoretical principles of CQ to address various environmental conditions (Ismail et al., 2012). Kim (2001) considered CQ as a combination of communication competency, cultural identity, and adaptation, by making sense of and integrating toward different cultural settings. Earley and Ang (2003) considered CQ as a component of one's personal history with learning and which involved individual determination to help form a commitment to seek adjustments in order to develop relationships with those from other countries. Ang et al. (2007) viewed CQ as distinct from other personality traits in that the nature of cultural intelligence includes a set of pliable capabilities which over time can be augmented and enhanced. Van Dyne et al. (2012) theorized that CQ as a specific form of intelligence embraces individual capabilities to comprehend, reason and acquire different behaviors to fit new cultural situations. Critical to the cross-cultural relational experience is in the motivational aspect of CQ which reflects the interest and energy one may have toward learning about new cultural contexts, differences, and new cultural approaches (Chen, Liu, & Portney, 2011).

Working and living with members of unfamiliar cultures requires new and experimental skill sets of knowledge and behaviors. Pusch (2009) viewed intercultural competency as the ability to conciliate cultural worldview with behavior in light of a culture's origin and reconciled differences. Trompenaars and Woolliams (2009) described the typical framework, however, as one of bias which mainly focuses on the differences between cultures rather than upon strategies to develop cultural competence for bridging cultural gaps.

Kim and Van Dyne (2012) admitted research which explores the notion there are predictors of cultural leadership ability is scarce; however, cultural competence—which includes the management of diverse cultural situations—is considered to be a precursor for successful cultural leadership. Bird, Mendenhall, Stevens, and Oddou (2010) listed an innate fascination about cultural differences as helping to shape a person's willingness to be flexible when dealing with different cultures while suspending judgment regarding differences. An individual's interest in demonstrating openness to cross-cultural experiences and in accepting alternative viewpoints with those of dissimilar backgrounds is considered to be a critical component of multicultural cooperation (Erez & Shokef, 2008). Shannon and Begley (2008) determined the proficiency and validity of CQ is in its ability to develop and expand over a period of time through various cross-cultural experiences and variables such as language skills, global work experience, and social connections. Factors which influence an individual's willingness to learn new information involve complex human dynamics that challenge the individual and both internal/external environments (Madsen, John, & Miller, 2006).

The need exists for one to gain knowledge which will increase the ability and willingness to form and maintain positive relationships in multicultural situations. Fischer (2011) discussed the individual's multi-cultural preparation to include role play, simulation, and experiential training that engaged the learner in situations where practice of sensitivity, behavioral adjustment, and shared perceptions and feelings take place. Williams (2005) engaged learners to seize upon the availability of international travel, which broadens one's experiences to adapt to new surroundings and practice a higher tolerance of ambiguity while encountering new cultural opportunities. Earley and Ang

(2003) utilized the importance of both integration and application when examining ways to blend talent and backgrounds of culturally diverse stakeholders.

Among the various questions surrounding the theory, origin, and application of cultural intelligence is the question that investigates the readiness level and comfort in which some leaders effectively adapt to and manage new cultural surroundings, while others do not (Van Dyne et al., 2010). Moon (2010) discussed the importance of cross-cultural studies in assisting with misconceptions and dissension that result from complex cultural differences and conflict. The study of CQ is multidimensional in scope and contains multiple skill categories that can be measured in different ways (Thomas et al., 2008). A major difference between CQ and other forms of intelligence entails its focus upon settings and interplay characterized by diverse cultural interactions (Van Dyne, Ang, & Koh, 2008).

Current research involving CQ draws upon the significance of four foundational factors: (a) metacognitive, (b) cognitive, (c) motivational, and (d) behavioral (Vogelgesang et al., 2009). Van Dyne et al. (2012) included sub-dimensions of the four factors of CQ as expanded concepts of a second order for purposes of a refined understanding of different cultural contexts. The research-driven approach toward the inventory of sub-dimensions provides a response to a gap in the literature which needs a more concise articulation of theoretical underpinnings of CQ (Van Dyne et al., 2012).

An example of this approach is found in Tan and Chua's (2003) research on CQ development where the recognition of metacognitive competencies fitting the description of sub-dimensions helps build one's critical thinking and adjustment skills when interacting with different cultures. Earley and Ang (2003) believed that a metacognitive

model needs to contain two interrelated levels where cognitive events can disseminate the information flow. The two levels, controlling and monitoring, provide a mechanism to interpret incoming information while reflecting upon the events that unfold (Earley & Ang, 2003). Livermore (2009) noted the metacognitive factor helps an individual to use intuition to better understand the reality of cross-cultural experiences. Both the knowledge CQ and the interpretive CQ remain mutually dependent upon each other (Livermore, 2009).

A discussion on CQ is complex due to the social nature of man, his self-awareness, complicated cultural situations, knowledge of one's social environment, and the interpersonal skills of people involved (Earley & Ang, 2003). Cultural intelligence portrays intelligence in a multidimensional construct using the four foundational factors which combine both process and cognitive aspects (Ward et al., 2008). An important objective when studying CQ surrounds the integration of the literatures in the areas of intelligence and cultural competency and the promotion of further cultural predictions (Ang et al., 2007). Each of the four factors of cultural intelligence contains sub-dimensions which provide a more refined theorizing of the meaning of the four factors (Van Dyne et al., 2012).

Metacognitive CQ. Metacognitive CQ is the combination of a distinct method of reasoning with self-awareness that occurs while the individual is culturally active and contains a higher level of cognitive intelligence and awareness (Rehg et al., 2012). Metacognition is explained as a mental process used for the acquisition of a deeper cultural knowledge including cultural priorities on a higher level of understanding and which provides the potential for understanding complex cultural universals (Amiri,

Moghimi, & Kazemi, 2010; Earley & Ang, 2003). Thomas and Fitzsimmons (2008) viewed the metacognitive component as a focus upon one's attention to deeper cultural skills which will enable one to interact culturally in diverse environments where universal cultural constructs exist. Ang et al. (2007) included the practice of questioning one's cultural assumptions and maintaining a willingness to adjust worldviews when culturally engaged as a description of metacognitive CQ.

The emphasis upon individual cultural consciousness where one's intercultural knowledge is extensive enough for the person to assume a deep awareness of a different culture, summarizes metacognitive CQ (Tay, Westman, & Chia, 2008). Osland and Bird (2008) described a global mindset as possessing a complex intellectual component which involves cultural discernment, self-awareness, cross-cultural understanding, and ability to adjust to new circumstances. Balogh et al. (2011) included the comprehension of knowledge with one's willingness to build adaptive skills as representing the essence of the metacognitive factor. The metacognitive factor according to Van Dyne et al. (2008) promotes critical thinking regarding one's assumptions, promotes active thought regarding self-management skills in different cultures, and encourages ongoing evaluation of the individual's worldview.

The study of cross-cultural interactions and CQ framework by Van Dyne et al. (2012) included the identification of eleven sub-dimensions as part of the four-factor model of CQ. The sub-dimensions of the metacognitive factor which serve as mental processes are planning, awareness, and checking (Van Dyne et al., 2012). The planning sub-dimension consists of preparation for short and long term consequences with focus on a proper strategy for each cultural context. The awareness sub-dimension consists of

self-awareness, cultural influence, and the interactions that occur among people with diverse perspectives and knowledge bases. The checking or review sub-dimension assesses deeply held traditions and values while studying current ways in which cultures interact and differ (Van Dyne et al., 2012). Amiri et al. (2010) listed the sub-dimensions as capabilities to reflect a deliberation of one's cultural thinking, the control of personal models of cognition, and the challenge of personal habits and assumptions regarding cultural priorities.

The planning sub-dimension involves deliberate thinking about both short-term and long-term objectives (Van Dyne et al., 2012). This process includes the practice of deep thinking about a culture and what activities needed to be prepared in advance of a cultural encounter (Van Dyne et al., 2012). The second sub-dimension of the metacognitive factor is awareness which is a conscious realization of how culture influences one's mental processes, behaviors, and cultural habits (Van Dyne et al., 2012). Awareness occurs as one heightens an understanding of what is going on within the individual and with others (Van Dyne et al., 2010). The third sub-dimension of the metacognitive factor is called checking and this is defined when one tests and reviews assumptions as part of cultural evaluation while making adjustments to one's knowledge base (Van Dyne et al., 2012). Metacognitive CQ accentuates strategy and seeks to gain a deeper understanding of cultural experiences and one's response to new settings (Van Dyne et al., 2010).

Cognitive CQ. The second factor of CQ involves the cognitive construct which reflects an individual's knowledge of cultural mores, customs, and practices including cultural universals and ways in which culture influences multicultural business and

interactions (Van Dyne et al., 2008; Van Dyne et al., 2010). Kodwani (2012) declared the cognitive factor of CQ to help with the individual's thought process as it is influenced by new information acquired about different cultures. Van Dyne et al. (2012) drew upon the discipline of anthropology and cross-cultural training when looking for patterns of cultural interactions to better understand structures of knowledge within cultures. Thomas (2006) claimed that cultural perceptions of different events and identification of forces which might contribute to causation vary among cultures. Sternberg (2004) earlier examined the influence of cross-cultural dissimilarities involving mental processes linked with cultural adaptation.

As cognitive CQ assesses general knowledge of a culture, it also foretells cultural judgments and the use of coping strategies (Ang, Van Dyne, & Koh, 2006; Ng & Earley, 2006). An overall level of knowledge regarding a specific cultural setting helps define an individual possessing a high amount of cognitive CQ (Tay et al., 2008). The facet of cognitive CQ summons an appreciation of cultural similarities but also an understanding of differences and recognition that various cultures share universal features and human needs (Alidoust & Homaei, 2012). Moon (2010) viewed the cognitive approach to CQ as involving one's view of cultural religious worldviews, commerce, legal systems, and interactions among people indigenous to specific areas.

Sub-dimensions of cognitive CQ include two aspects of cultural knowledge that impact one's ability to effectively interact in different cultural settings; (a) culture-general knowledge, and (b) context-specific knowledge (Van Dyne et al., 2012). The Expanded Cultural Intelligence Scale (E-CQS) examines both of the two sub-dimensions of cognitive CQ (Van Dyne et al., 2012). Culture-general knowledge considers

knowledge that is described as universal and contains general components of a cultural framework which differentiates and compares various populations (Van Dyne et al., 2012). An example of this sub-dimension would be the study of capitalism versus a socialist economy where exploration of daily monetary exchange systems occur that demonstrate different communication norms, group behaviors, and role expectations (Van Dyne et al., 2012). Kanten (2014) asserted that one who possesses a higher cognitive CQ will more easily recognize the economic, legal, political, social, and religious institutions and the values of those cultural structures.

The other sub-dimension of the cognitive factor is known as context-specific knowledge (Van Dyne et al. (2012). This sub-dimension refers to the understanding of cultural universals within a specific domain and how people can be effective to the domain. Knowledge of this type is also referred to as emic and can extend one's exposure to and understanding of subcultures within an individual domain which may lead to insider information (Van Dyne et al. (2012). Specific information about cultural expectations and anticipated outcomes that are consistent within a specific context provides knowledge that helps one to work across borders even when confronted with natural disasters and intercultural conflict (Van Dyne et al. (2012). One of the most critical parts of cognitive CQ is an understanding of systems and cultural norms that are connected with multiple societies (Van Dyne et al. (2010).

Motivational CQ. A third component of CQ refers to the interest an individual displays toward new cultural surroundings and opportunities for cultural interaction (Templer, Tay, & Chandrasekar, 2006). Ang and Van Dyne (2008) recalled the direct energy one feels when motivated toward interacting with others in unique and different

settings. Dagher (2010) included the motivational concept of self-efficacy as occurring when an individual selects activities that one feels capable of achieving. When an individual expects a certain measure of success and values how that success feels inwardly, there exists a higher level of motivational CQ that enables one to be more attentive and display more energy in unfamiliar cultural settings (Ang et al., 2007; Vedadi et al., 2010). Regarding self-efficacy and its relationship with motivation, there is evidence suggesting the critical role culture plays in the level of sensitivity and empathy in how individuals read the emotions of others (Brislin et al., 2006).

Bennett (2009) determined one's intrinsic motivation to be an effective starting point in the development of intercultural confidence by asking questions that challenged reasons why people are inspired to explore and learn about others. Van Dyne et al. (2010) described intrinsic motivation as a degree to which individuals experience enjoyment while being in the presence of those from different cultures. Livermore (2009) viewed motivational CQ as involving stability and endurance while one thinks about what drives the individual but also what decreases one's energy and determination. A strong correlation exists between intrinsic motivation and one's effectiveness in unfamiliar cultural settings (Van Dyne et al., 2010). Kodwani (2012) theorized that an individual's curiosity about experiencing different cultures and learning about cultural differences plays a role in one's motivational (CQ).

The three sub-dimensions of motivational CQ are (a) intrinsic interest, which is self-driven and important for reason of self-satisfaction; (b) extrinsic interest, which desires material gain or whose perception of reputation or personal value is increased; and (c) self-efficacy, which occurs when one is self-confident of personal ability and

capable of adjusting to new learning (Van Dyne et al., 2012). The sub-dimension referred to as intrinsic interest occurs when an individual places value on experiencing diverse cultures due to internal satisfaction (Van Dyne et al., 2012). With this particular sub-dimension, there is personal interest in discovering similarities and differences when working in diverse groups of people (Van Dyne et al., 2012). The importance of intrinsic interest is in its self-generation and non-dependence (Van Dyne et al., 2012). Kanten (2014) believed motivational CQ is a powerful factor in that it is a reflection of a person's interest to grow and improve oneself.

The sub-dimension known as extrinsic interest maintains a reliance upon tangible rewards given to the individual through various cultural experiences or may be a job promotion such as an invitation to a higher level of responsibility (Van Dyne et al., 2012). Extrinsic sub-dimensions perform a function of providing specific incentives for employees as cross-cultural challenges occur and employee confidence is uncertain (Van Dyne et al., 2012). The third sub-dimension known as self-efficacy is defined as the possession of task-specific confidence the individual enjoys while working through new cultural experiences in unfamiliar surroundings (Van Dyne et al., 2012). Individual self-efficacy connects with one's personal drive to be equipped with new learning in order to navigate through untested cultural experiences while being effective in new cultural contexts (Van Dyne et al., 2010). When possessing an effective level of self-efficacy, a person's confidence may also be heightened when thinking about interacting with those who have different backgrounds and diverse cultural experiences (Van Dyne et al., 2012). When one feels capable of working through the stressors of unfamiliar cultural situations, the person is eager to adjust to new and different cultures (Van Dyne et al., 2012). Kim

and Van Dyne (2012) theorized that channeling direct energy toward learning about new cultures is an effective way to control stress while increasing one's ability to handle complex demands of global assignments.

Behavioral CQ. The fourth component of CQ involves the modification of one's behavior in order to adapt to diverse situations and appropriately interact with and respond to different cultural settings (Creque & Gooden, 2011). Hammer et al. (2003) acknowledged the increased complexity of cultural differences which can challenge one's sense of intercultural sensitivity. Both verbal and non-verbal cues and their interpretations represent the most prominent feature of social experiences (Ang & Van Dyne, 2008). Shannon and Begley (2008) considered the subjective examination of coping behaviors and its relationship to behavioral outcomes as defining two critical aspects of cultural behavior.

There is much written about organizational citizenship behavior as it refers to the methods and style of doing business across national and international borders (Fahr, Hackett, & Chen, 2008). Sensitivity to individual pressures and social roles vary across cultures, as do psychological influences that alter social situations (Fahr et al., 2008). Thomas et al. (2008) warned against cultural imitation, which may be interpreted as being insincere or deceptive to the host culture. When using prudent communication in diverse cultural settings, an individual learns new rules which guide cultural understanding while modifying old habits of speech capable of forming personal impressions (Rockstuhl, Hong, Ng, Ang, & Chiu, 2010).

There exists in higher levels of behavioral CQ, an ability for one to alter verbal and non-verbal behaviors depending upon the cultural situation and leadership styles

(Mannor, 2008; Vogelgesang et al., 2009). Sub-dimensions of CQ include one's flexibility to enunciate words and phrases in a way which comforts, and to demonstrate respect toward the values and backgrounds of others (Van Dyne et al., 2012). The three sub-dimensions of behavioral CQ include the following: (a) verbal behavior, (b) non-verbal behavior, and (c) speech acts (Van Dyne et al., 2012). An individual possessing effective verbal behavior demonstrates flexibility in speech patterns including tone and vocal accent (Van Dyne et al., 2012). Behavioral CQ provides an action environment for individuals to engage in flexible communication with diverse populations (Van Dyne et al., 2010). The verbal behavioral sub-dimension uses flexibility to change the amount of warmth, excitement, silence, and expressions of formality and informality (Van Dyne et al., 2012).

The non-verbal behavioral sub-dimension is imparted through gestures, facial gestures, and through a person's body language instead of verbal expression (Van Dyne et al., 2012). Kim and Van Dyne (2012) opined that people with high CQ in verbal and non-verbal behavior become proficient in word choice, tone, gestures, and expressions to fit a variety of different cultural settings. Non-verbal sub-dimensions include physical contact, standing, and moving toward and away as gestures that convey meaning in formal and non-formal settings (Van Dyne et al., 2012). Some cultures remain neutral or tend to be stoic while other cultures are expressive and utilize hands, arms, and facial gestures to accentuate cultural cues (Van Dyne et al., 2012).

The third behavioral sub-dimension involves the speech act which is a manner of communication, associated with certain requests, invitations, apologies, or gratitude directed towards local standards (Van Dyne et al., 2012). Dynamics such as directness,

or force of one's speech, the reality of cultures that honor the notion of saving face and those who use public apology are included in this sub-dimension (Van Dyne et al., 2012). For example in Japan, an apology may be expected in order to maintain a sense of peace among those gathered but in Anglo countries, an apology is extended only as an admission of fault (Van Dyne et al., 2012). Behavioral flexibility toward different cultural populations shows a universal respect toward others and demonstrates the importance of behavioral actions as being accessible to other people (Van Dyne et al., 2012).

Awareness of Diversity

The study of cultural diversity includes multiple aspects of demographic differences and similarities of people at home and throughout the world. Schwartz (2010) maintained the understanding of cultural differences among various cultural groups can help explain cultural expectations, differences, and behaviors that may accompany conflict as a result of differences. Cultural values are often considered to be a central feature of cultural identity and may serve to instruct proper behaviors and functions (Schwartz, 2010). Ng, Van Dyne, and Ang (2012) described the international experience as an antecedent to CQ which can establish social contexts to manage cross-cultural variations and added that those possessing divergent cultural experiences practiced a stronger relationship to CQ.

Specific forms of cultural diversity include age differences among employees and supervisors. Lundrigan, Tangsuvanich, Yu, Wu, and Mujtaba (2012) considered the differences between traditional examples where younger employees would seek coaching from a more seasoned older manager and current examples where younger employees

lead others. Choy's (2007) categories of diversity included age, gender, ethnicity, and nationality and were considered as part of an organization's behaviors, values, personal characteristics, and hierarchical considerations. Gender equality demands a leadership commitment where training and systemic accountability connect with an overall enhanced workplace that helps define an organization's social responsibility (Grosser & Moon, 2005).

Carli and Eagly (2011) asserted how gender stereotypes continue to impact the number of females participating in higher-level leadership positions. Gender workplace equality issues include organizational policies on recruitment, promotions, flexible contracts, childcare, and harassment (Grosser & Moon, 2005). Lundrigan et al. (2012) reported that today's organizations tend to be heterogeneous and considered to be a melting pot for various religions, genders, ethnic groups, and races. The mixture of multiple skills and perspectives that connect a diverse workplace, often translates into satisfying employee relationships, better retention, greater productivity and a continuation of innovative ideas (Lundrigan et al., 2012). Bleijenbergh, Peters, and Poutsma (2010) noted an increase in diversification within workgroups can help foster strategic goals of an organization while promoting a sense of social justice by practicing inclusion and long-term employment opportunities. Krishnamurthi (2003) opined while multicultural assessment is a necessary component when initiating multiculturalism in higher educational institutions, the topic can be sensitive and political with university leaders becoming nervous about public perceptions.

Authentic Leadership and Cultural Intelligence

The role of cross-cultural leadership continues to influence multiple cultural relationships, as well as individual and cultural identities (Guthey & Jackson, 2011). Authentic leadership is regarded as being beneficial to organizations whose followers become active citizens, increase work performance, and become more trusting toward leadership (Alvesson & Sweningsson, 2013). Kolditz and Brazil (2005) discussed the importance of legitimate leadership, especially when dangerous circumstances arise and extreme situations promote a high risk probability for the leader and followers who find themselves in unfamiliar settings. Jones and Grint (2013) asserted that being considered authentic has ceased to be a condition where one is true to oneself, and that being central to a new and broader meaning of the concept *authentic* implies a more universal code of conduct and a greater consistency of leadership that reflects cultural norms. When one speaks of a high level of ethical conduct or high level of transparency toward followers, the idea of what constitutes a high level remains ambiguous and difficult to explain (Jones & Grint, 2013).

A growing body of knowledge exists in which researchers are exploring leadership skills within multi-cultural settings that depict congruency between the leader and cultural values, norms, and organizational citizenship (Wendt, Euwema, & van Emmerik, 2009). The exploration also looks at how individual differences in cognitive thinking and different backgrounds influence problem solving and adaptation and ultimately one's CQ (Diao & Park, 2012). Kanter (2010) cautioned that past assumptions regarding simple and homogeneous theories involving isolated and constant structures are no longer relevant, and instead one's cultural studies should address the following

occurrences: (a) uncertainty, (b) complexity, (c) diversity, and (d) transparency.

Deardorff (2009) described multiple cultural perspectives in which an individual's self-identity becomes known through the community, with emphasis upon the collective adaptation which can result in a multicultural identity.

Global identity is aligned with the level of involvement one has with people from different cultural backgrounds and with one's willingness to embrace the identity of a host culture (Kim, 2001; Shokef & Erez, 2008). Authentic leadership is a genuine expression of self-knowledge and drives commitment within an organization through proper selection and development of talent (Khan, 2010). Caza and Jackson (2011) conveyed the idea that authentic leadership leads to a more positive culture in terms of trust, organizational learning, higher employee commitment, and moral development. Creque and Gooden (2011) pointed to a higher level of relationship promoted by cultural diversity and theorized that as one learns about and practices global leadership skills, multicultural partnerships are formed.

In a leadership model that promotes flexibility, leaders can influence performance antecedents including the reliability of processes, interest in innovation, and adaptive behaviors that fit specific situations (Gordon & Yukl, 2004). Multicultural organizations prefer individuals who possess transferable skills, who like to think about diversity, and who have a propensity to learn new information (Trompenaars & Woolliams, 2009). Matsumoto and Hwang's (2013) understanding of CQ included one's capability to function and learn in cross-cultural environments and to apply general knowledge about diverse cultures in an energetic manner.

Higher Education and Leadership Styles

The growth of cultural diversity in the United States' higher educational academy helps to build an inclusive academic community and leads to the practice of civil treatment among multicultural groups (Aguirre & Martinez, 2002). Begley (2006) believed that authentic leadership was a metaphor which represented reflective thinking, and an ethical approach to sound decision-making by higher education leaders sensitive to social change. Brustein (2012) imagined the inevitability of both challenges and opportunities in the quest for institutions of higher learning to face a different cultural landscape from only a decade ago.

The past 30 years have witnessed the overall educational scheme as increasing in its diversity of minority students and in the overall socio-economic composition from various racial and ethnic groups (Ruggs & Hebl, 2012). Jayakumar (2008) asserted that in the United States between 2004 and 2005, the population increased by 2.8 million and people of racial and ethnic composition attributed 81% of the overall growth. Brustein (2012) declared that within the United States the demand exists for globally competent employees with the skill set to challenge cultural barriers and who possess a sense of community and teams. Betts et al. (2009) described the U.S. population as reaching 301.6 million people with 34% being minorities. The Hispanic population, for example, is estimated to represent 30% of the U.S. population by 2050 (Betts et al., 2009).

As a country, the United States is no longer isolated from its neighbors and its people cannot exist as insulated from cultural differences as it was in the past (Olson & Kroeger, 2001). Pusch (2009) used key phrases such as intercultural competence, worldview shift, cultural origin, and a motivation to explore, when expanding upon the

intercultural environment that requires a multicultural skill set. Davis (2002) discussed the growing body of literature in the previous decade that links diversity with higher education, but focused upon affirmative action programs and its effect upon the cultural composition of students and the faculty demographic as a result. Guthey and Jackson (2011) studied cross-cultural leadership and societal differences which contribute to the growing interest in leadership research as it helps to develop leaders in other parts of the world. There is an educational theme to this approach and one which integrates higher education with cultural intelligence and authentic leadership.

Leadership styles express specific behaviors which communicate a task-oriented approach or a relational access that considers the welfare of people (Wendt et al., 2009). In higher education, the leadership style becomes critical in creating the social environment of the classroom interaction and tolerance to different viewpoints and cultural experiences (Otten, 2003). Oliver et al. (2011) explored CQ and egalitarianism as part of their research on access to educational quality and student motivation through school/family coordination. Being open-minded toward others' point of view and adaptive to cultural differences allows for effective and sensitive feelings toward multiple ethnic and cultural backgrounds (Olson & Kroeger, 2001; Stone, 2006). White and Ali-Khan (2013) conveyed the importance of academic discourse and social communication when one academically assimilates into a classroom setting.

In the past decade, there has been a shortage of effective leaders who are knowledgeable about multicultural leadership and the development of global talent (Oliver, Church, Lewis, & Desroiers, 2009). Spendlove (2007) acknowledged that while universities have conversed about the need for academic and social competencies as a

framework to benefit students, there has been a lack of evidence that suggests which specific competencies are needed for university leaders to engage with today's students. When considering the number of multicultural students eligible to enroll in universities, the practice of cultural awareness and an engaged leadership style become critical components in promoting positive views about diversity (Ruggs & Hebl, 2012). Ramirez (2010) asserted that with more individuals interacting with people from different cultures, there is also increased opportunity for conflict to occur. The university can encourage cooperation among cultures and promote academic preparation which will help students equip themselves for deeper global experiences in the 21st century (Ramirez, 2010).

McElroy (2000) studied the elements of organizational success at the turn of the 21st century and stated that a new breed of leader is emerging where knowledge and continuous learning are important antecedents to organizational success. CQ and its focus upon relational skills such as motivation and self-efficacy include the new leader's emphasis on professional development and cross-cultural integration of thought and action (Tan & Chua, 2003). There is much work to be done in the creation of diversity programs, building inclusive academic environments, and in developing conditions for students of all cultures to succeed (Kezar & Eckel, 2008). Leadership that is supportive and driven to create leadership conditions for others is needed, especially at a time in which research is lacking on the subject of higher educational leadership (Kalargyrou & Woods, 2008). Randall and Coakley (2007) furthered the idea of challenging more traditional models of leadership which exist at many higher educational institutions and expand upon a broader population of university stakeholders at a time of greater expectations and decreased resources.

Summary

There is a growing interest in the literature of both cultural intelligence and authentic leadership, including institutions where multicultural populations interact. Each measures capabilities of both CQ and AL as they influence individual behaviors, motivations, and cultural awareness within multicultural environments. The examination of cultural adaptation inspires a sense of global identity and social involvement with people from different backgrounds and worldviews. The increased population of multicultural students in higher educational institutions contributes to the need for academic leaders to create and support learning environments that encourage acceptance and inclusion.

Questions abound concerning the future of higher education in the United States and its ability to meet the needs of an increasingly global and diverse society (Jayakumar, 2008). Among the growing number of theories regarding higher education and ethnic diversity is Anderson's (2008) idea that change which is influenced by ethnic diversity can collide with unprepared academic leaders who remain unaware of the complexities associated with multicultural populations. According to Bennett (2009) a gap between knowledge and cultural competence exists and may partially be an outcome of the individual's indifference toward his/her own culture as well as an unwillingness to explore backgrounds and cultural contexts of others. Dedoussis (2007) asserted the notion that the internationalism of higher education as it is influenced by the U.S. model of higher education falls short in addressing various challenges of accommodation as it impacts a growing diverse academic society.

Chapter Three: Methodology

Methodology depends upon the nature of the study and describes those procedures used while interpreting the problem (Krathwohl & Smith, 2005). This study explored the relationship between cultural intelligence and authentic leadership and the impact these phenomenon have upon higher educational academic leaders' culturally diverse agendas. There are both social and psychological reasons which cause higher educational leaders to evaluate cultural population shifts when considering ways to meet the increased number of culturally diverse students entering universities. The research question addressed by the study was to what extent does CQ serve as a moderator to the AL behaviors of academic leaders? By including the prodigy of the higher educational academic leader and a cultural shift in population enrollments, the research question extends into the authentic behavior of the academic leader while reflecting the level of CQ within the academic leader.

The study of authentic leadership is contextual and not a question of an either/or proposition (Gardner et al., 2005). The Authentic Leadership Questionnaire (ALQ) was used to identify a respondent's level of authentic leadership using four subscales: (a) self-awareness, (b) balanced processing, (c) relational transparency, and (d) moral perspective (Gardner et al., 2011). To demonstrate the level of CQ, the E-CQS was used to identify four CQ capabilities and the sub-dimensions of academic leaders within the context of higher education: (a) meta-cognitive, (b) cognitive, (c) motivational and (d) behavioral.

The study statistically analyzed each of the four capabilities of cultural intelligence to authentic leadership and specific sub-dimensions of CQ to specific dimensions of AL in the higher educational context.

Review of Literature

There remain various cultural obstacles which impede the success of many culturally diverse students in universities at a time when much work remains toward the promotion of inclusive academic environments (Kezar & Eckel, 2008). Bird et al. (2010) believed that more clarity is needed in the depiction of the relationship between cultural competency and global leadership. The researcher is cautioned not to make the assumption that just because an organization may train an employee to add knowledge toward multi-cultural awareness and competence, its own values and motivations will always be consistent toward promoting community justice and peace among people (Thomas et al., 2008). The intended outcome of CQ by its own definition is more effectiveness as one interacts with multi-cultural populations (Thomas et al., 2008).

Ramirez (2010) examined the impact of CQ on resolving conflict and found that predictor variables such as bilingualism, forgiveness, and peer mediation training can be effective in predicting appropriate interventions. While the research helped in the identification of predictors, a gap in the literature revealed a lack of testing had occurred in the determination of what preferred strategies were proper when used in conflict resolution (Ramirez, 2010). Kezar and Eckel (2008) studied university diversity agendas and considered the race of the president, campus demographics, and salient relationships to be key components within the university structure. Oliver et al. (2009) believed that organizations need to develop global talent internally and used the identify-develop-move

model to use internal assessment tools involving senior level leadership. Their findings discovered that most of their processes that developed global leadership talent could not have been implemented without the engaged sponsorship of senior-level leadership (Oliver et al., 2009).

Osland and Bird (2008) examined the global leadership expertise development (GLED) model which focused upon multicultural expertise of a global leader. The study was conceptual and was not empirically validated. According to the researchers, the (GLED) model is represented by four categories of precursors which include the following: (a) individual characteristics, (b) cultural exposure, (c) global education, and (d) project novelty such as multicultural teams. The precursors create a relationship with four dependent variable outcomes that are mediated through a series of interviews that suggest levels of personal experience, multicultural contacts, and decision making (Osland & Bird, 2008). Two of the findings from the study indicated the benefit of learning global lessons as a developmental strategy, and those components of the developmental strategies can be costly, complex, and uncertain as to the outcome (Osland & Bird, 2008).

The basic assumption of Bennett's developmental model of intercultural sensitivity (DMIS) explored by Hammer et al. (2003) was that as an individual experiences more complicated cultural differences, the greater the possibility will be that the individual will increase his personal competence regarding intercultural relationships. The model according to Hammer et al. (2003) is a model of change and comprised of six orientations that individuals move through as they acquire various intercultural competencies. Two phases included one 60-item version of an earlier framework which

measured cultural orientations entitled the Intercultural Development Inventory (IDI), and a 50-item paper-and-pencil questionnaire which measured one's competence with intercultural contact (Hammer et al., 2003). Analysis of the revised data supports an initial worldview that one's parochial or minimal view of culture is aligned with instances of denial/defense but not yet ready to recognize any shift toward acceptance (Hammer et al., 2003).

The study of authentic leadership involves research which connects the leader with those who follow. Peterson et al. (2012) used the ALQ to study leadership/followership emotions regarding individual job performance. The study concluded that positive emotions partially impact the positive relationship between authentic leadership and individual job performance. It furthered the theory that negative feelings demonstrated by respondents do not necessarily correlate with individual job performance (Peterson et al., 2012). Peus et al. (2012) acknowledged that authentic leadership is still considered to be new research and noted that empirical evidence regarding the relationship between authentic leadership and work attitudes of followers is still in the formation stage.

The research topic of authentic leadership has been studied with scholarly interest for many years and with renewed enthusiasm since the year 2003. Caza and Jackson (2011) discussed authentic leadership's dramatic outcomes on the part of followers whose level of trust toward their leaders and demonstration of greater commitment toward their participation increased. Tate (2008) asserted that follower perceptions are developed when a leader's behavior is consistent with personal beliefs and values which over time will help promote long-term relationships and mutual trust. When followers

understand the meaning of authentic leadership, their expectations will help followers' prioritize authentic leadership attributes that they find attractive (Owusu-Bempah, 2012). Klenke (2005) discussed a contextual factor within the development of authentic leadership where both leaders and followers over time accrue various experiences that enhance authenticity in both. In recent years, authentic leadership has been critically reviewed as a theory and for its practical approach to organizations; however, to date, there has been little to no research which has examined authentic leadership in the context of higher education. Jones and Grint (2013) believed that the 16-point ALQ might not be an effective measure to determine authentic leadership, as it carried with it the notion that social engagement could be minimized, and promoted the four dimensions of authentic leadership to declare the essence of a true leader with a definition of ideal leadership. Gardner et al. (2011) noted that the field of AL is considered to be in an early stage of implementing the AL measures and opined that there is a lack of attention given to assessment of the validity of the measures. According to Gardner, standardized and validated measures of authenticity and AL are increasing as many studies now utilize the ALQ.

Klenke (2005) presented an integrated model of authentic leadership which used theory from the cognitive, affective, motivational, and spiritual factors. The framework for her study included data collection on authentic leaders/groups being led with an emphasis on responses by the group members. According to Klenke, her model is emergent and based upon cultural context that explores antecedents of authentic leadership that help to shape interactions between leaders and followers. Shamir and Eilam (2005) studied the development of authentic leaders by examining life-stories of

leaders and the clarity such stories communicate regarding personal values and life purposes. A narrative method was used and individual accounts of leadership development were organized around four central themes: (a) as a natural process, (b) as an outcome of struggle, (c) as discovering a cause, and (d) as a process of learning (Shamir & Eilam, 2005).

Tate's (2008) research on authentic leadership and self-monitoring included data collection from 115 undergraduate university students and involved 18 true/false items from George's five dimensions of authentic leadership measurement. Those dimensions included the following: (a) demonstration of self-discipline, (b) leading with heart, (c) establishing enduring relationships, (d) practicing solid values, and (e) passion for purpose (Tate, 2008). According to Tate, the student responses were on a 5-point Likert-type scale and self-reporting was used for responses. Regression analysis determined respondents who scored high in authentic leadership indicated a more realistic assessment of their own leadership capabilities and perceptions of followers than did those who scored lower in authentic leadership.

The acknowledgement of moral failure on the part of leaders by Novicevic et al. (2006) led to their study of authentic leadership which utilized Barnard's classic ideas and interpretations of executive authenticity and the identity of circumstances that contributed to specific consequences. The researchers used a four-compartment matrix to gauge a leader's ability to manage with self-confidence tensions between personal values and the moral requirements of the role of leader.

The four compartments include (a) leadership failure, which is initiated internally by the leader and exhibits a false sense of leadership; (b) leadership crisis, which is

caused when a leader lacks confidence and becomes inactive in a response to a moral situation; (c) leadership tragedy, in which a leader's behavior is self-serving with the result being a lack of engagement by the leader regarding proper moral outcomes; and (d) leadership success, in which the leader's values are aligned with expectations of moral convictions and a secure self-esteem (Novicevic et al., 2006). While the study provided insights into authentic leadership and its relationship to both the psychological and philosophical meanings pertaining to values, the authenticity matrix (see Figure 1) demands future exploration into individual factors and organizational context that help to differentiate authentic leadership from other leadership structures (Novicevic et al., 2006).

Rehg et al. (2012) studied the motivational level of CQ and sampled both military and government civilians involved in overseas assignments. Surveys were distributed through three different training sessions to volunteer respondents and to one training class which repeated monthly. The researchers used pre- and post-training surveys that measured multiple facets of CQ using 16 items from the CQS. The training class #3 and the training which repeated monthly were not pre-tested, while training classes #1 and #2 were pre-tested. Results indicated that there were no significant differences found in the post-test scores between the post-test only samples and the samples which were both pre- and post-tested.

Another study examined the behavioral and motivational factors of the CQS in relation to cross-cultural adjustment of Arabs who are working in the United States (Dagher, 2010). Cultural intelligence was measured with the 20-item scale with results indicating behavioral CQ was important to one's general sense of adjustment but did not

positively relate to one's work adjustment (Dagher, 2010). One explanation according to Dagher (2010) is that the culture of an organization is influential in determining what behaviors are acceptable and which can be identified as unacceptable behaviors in a work place. The development of CQ as a way to increase competitive advantage is a topic of Dagher's study which is also useful for organizational assessment.

Hypotheses

H1₀: There is no statistically significant relationship between the averages of CQ as measured by the Expanded Cultural Intelligence Scale (E-CQS) and the averages of AL as measured by the Authentic Leadership Questionnaire (ALQ).

H1_A: There is a statistically significant relationship between the averages of CQ as measured by the E-CQS and the averages of AL as measured by the ALQ.

H2₀: There is no statistically significant relationship between an academic leader's metacognitive capability, as measured by the E-CQS and an academic leader's authentic leadership capability, as measured by the ALQ.

H2_A: There is a statistically significant relationship between an academic leader's metacognitive capability, as measured by the E-CQS and an academic leader's authentic leadership capability, as measured by the ALQ.

H3₀: There is no statistically significant relationship between an academic leader's cognitive capability, as measured by the E-CQS and an academic leader's authentic leadership capability, as measured by the ALQ.

H3_A: There is a statistically significant relationship between an academic leader's cognitive capability as measured by the E-CQS and an academic leader's authentic leadership capability, as measured by the ALQ.

H4₀: There is no statistically significant relationship between an academic leader's motivational capability as measured by the E-CQS and an academic leader's authentic leadership capability, as measured by the ALQ.

H4_A: There is a statistically significant relationship between an academic leader's motivational capability as measured by the E-CQS and an academic leader's authentic leadership capability, as measured by the ALQ.

H5₀: There is no statistically significant relationship between an academic leader's behavioral capability as measured by the E-CQS and an academic leader's authentic leadership capability, as measured by the ALQ.

H5_A: There is a statistically significant relationship between an academic leader's behavioral capability as measured by the E-CQS and an academic leader's authentic leadership capability, as measured by the ALQ.

H6₀: There is no statistically significant relationship between an academic leader's motivational CQ sub-dimensions, as measured by the E-CQS and an academic leader's moral capability as measured by the ALQ.

H6_A: There is a statistically significant relationship between an academic leader's motivational CQ sub-dimensions, as measured by the E-CQS and an academic leader's moral capability as measured by the ALQ.

H7₀: There is no statistically significant relationship between an academic leader's behavioral CQ sub-dimensions, as measured by the E-CQS and an academic leader's transparency capability as measured by the ALQ.

H7_A: There is a statistically significant relationship between an academic leader's behavioral CQ sub-dimensions, as measured by the E-CQS and an academic leader's transparency capability as measured by the ALQ.

H8₀: There is no statistically significant relationship between the averages of CQ as measured by the E-CQS and an academic leader's authentic leadership capabilities (transparency, moral, balanced processing, and self-awareness) as measured by the ALQ.

H8_A: There is a statistically significant relationship between the averages of CQ as measured by the E-CQS and an academic leader's authentic leadership capabilities (transparency, moral, balanced processing, and self-awareness) as measured by the ALQ.

H9₀: There is no statistically significant relationship between an academic leader's cognitive CQ capabilities, as measured by the E-CQS and an academic leader's authentic leadership capabilities of balanced processing and self-awareness, as measured by ALQ.

H9_A: There is a statistically significant relationship between an academic leader's cognitive CQ capabilities, as measured by the E-CQS and an academic leader's authentic leadership capabilities of balanced processing and self-awareness, as measured by ALQ.

H10₀: There is no statistically significant relationship between an academic leader's motivational CQ capabilities, as measured by the E-CQS and an academic leader's authentic leadership capabilities of balanced processing and self-awareness, as measured by ALQ.

H10_A: There is a statistically significant relationship between an academic leader's motivational CQ capabilities, as measured by the E-CQS and an academic leader's authentic leadership capabilities of balanced processing and self-awareness, as measured by ALQ.

The study examined CQ which acts as an independent variable and a moderator to authentic leadership, acting as a dependent variable (AL). Attention was directed toward the CQ primary dimensions of metacognitive, cognitive, motivational and behavioral as moderators to authentic leadership. The study also explored the relationship between the sub-dimensions of motivational and behavioral CQ to specific dimensions of authentic leadership. Additionally, the dimensions of cognitive and motivational CQ were examined as a moderator to the balanced processing and self-awareness dimensions of authentic leadership.

The study used both the expanded cultural intelligence scale (E-CQS) and the authentic leadership questionnaire (ALQ) to assess academic leaders at four-year universities with a multicultural student population. Vogelgesang et al. (2009) theorized that academic leaders in higher education who score high on the cultural intelligence scale (as measured by the E-CQS) will also score high on the ALQ, thus being more motivated and action-oriented to support and adapt to the increase in multicultural populations.

Each dimension of cultural intelligence has sub-dimensions that have an impact on one's level of cultural intelligence. This study examined meta-cognitive CQ (also referred to as strategy) and cognitive CQ (referred to as knowledge) at a macro level, not exploring the sub-dimensions. However, the study did examine the sub-dimension of

motivational (also referred to as Drive) and behavioral (also referred to as Action) CQ as they pertained to the ethical and transparency dimensions of authentic leadership, respectively. Motivational CQ is exhibited in individuals who are intrinsically motivated, have an extrinsic interest which comes from gaining benefits from culturally diverse experiences, and self-efficacy, where they have confidence to be effective in culturally diverse situations. Those individuals who are high in motivational CQ will score in the upper 25% of the worldwide norm (Cultural Intelligence Center, n.d.). Behavioral CQ is exhibited in individuals who modify their non-verbal behaviors, their tone and accent when communicating, and their speech acts, which includes modifying the manner and content of communications (either direct or indirect). An individual who is high in behavioral CQ will score in the upper 25% of the worldwide norm (Cultural Intelligence Center, n.d.).

The dimensions of authentic leadership that were examined at a macro level were self-awareness balanced processing, relational transparency, and moral perspective. At a micro level, the dimensions of balanced processing and self-awareness were explored with cognitive CQ acting as a moderator. Casa and Jackson (2011) described authentic leadership as being enhanced by high levels of personal concern for others' emotional well-being. As new information is processed, the authentic leader will internalize different viewpoints which will enable her/him to develop new meanings and gain better understanding of multiple situations (Novicevic et al., 2006). Chan et al. (2005) included a cognitive structure of the leader's self-system which organizes memory and perceptions to help identify a current self-view and a future image of one's possible self. Avolio (2007) stated that while all four dimensions of authentic leadership were shown to relate

to the measures of ethical leadership, they were also self-reliant and represented refined theories.

Significance of Study

The study which explored the relationship between cultural intelligence and authentic leadership is significant because it examines two critical sets of phenomenon, CQ and AL. Each demonstrates effectiveness with higher educational academic leaders. The study adds to the literature at a time when the number of ethnically diverse college and university students is increasing in the United States. Sternberg (2004) theorized that intelligence can be interpreted differently depending on the culture and how people may view those who live and work in different cultures. The study examined the role of academic leaders in higher education to help educate multiple stakeholders in areas of cultural interpretation, adaptation, sensitivity, and influence.

Another reason for the importance of this study involves the accelerated nature of multiculturalism as it interacts with and influences global business and cultural change. Paige and Goode (2009) advocated cultural mentoring at a time in which there is global demand for graduates of higher educational institutions to possess multicultural competence and acquire a global skill set for effective interaction among different cultural settings. Stone (2006) believed that university attention toward multicultural competence can assist with the creation of progressive educational programs and present a more global identity with the student learning experience. Ruggs and Hebl (2012) added that negative stereotypes and discrimination as a result of prejudice can cause perceptions and build barriers for multicultural students in higher educational institutions. Furthering the research into multicultural inclusion that integrates with cultural

intelligence and authentic leadership will help build a framework in which academic leaders in higher education can meet the opportunities and challenges associated with multicultural growth in the United States.

Sample of Participants

For the study, participants were comprised of academic leaders in four-year institutions of higher education in the United States who work with an ethnically diverse student and faculty population. Titles of the academic leaders include the following: (a) department chair, (b) associate or assistant dean, (c) dean, (d) academic director, and (e) senior international officer. The population for this study consisted of academic leaders working in four-year higher education institutions in the United States that have a diverse student and faculty population of at least ten percent ethnicity. The percentage of ethnicity reflects national figures that demonstrate percentages in recent decades for both ethnic student enrollment and the percentage of ethnically diverse faculty. According to the National Center for Education Statistics (U.S. Department of Education, 2011), from 1976 to 2010, the percentage of African American students enrolled in U.S. colleges/universities increased from 9% to 14%. The percentage of Hispanic students increased from 3% to 13% with the percentage of Asian/Pacific Island students increasing from 2% to 6%. According to the U.S. Department of Education, the national percentage of full-time ethnic faculty in 2011 was 19% of faculty employed by universities/colleges in the United States.

These academic leaders have served in an administrative role at their current institution for a minimum of two years. The researcher contacted the academic leaders at five institutions; these leaders agreed to be a part of the study and constitute the

convenience sample. For the snowball sample, individuals who were invited to participate in the study were contacted using information that is provided by the Association of International Education Administrator's (AIEA) listserv and through independent academic networks. The (AIEA) is an international educator's network and scholarly group that includes the researcher as a member of the organization. Only the listserv for members who reside in the United States was accessed. Participation in the study was voluntary and the number of participants varied depending on the individual university's structure. Bryman (2008) asserted that convenience sampling is often used when researching the field of organizational studies and that snowball sampling is an expanded form of convenience sampling.

Data Collection Instruments and Procedures

Institutional Review Board (IRB) approval of this study was obtained prior to the process of data collection. The data collection used in the study was obtained from two instruments, the E-CQS and the ALQ. The ALQ assessed the four dimensions of authentic leadership: (a) self-awareness, which includes the personal introspection of the leader regarding purpose in life; (b) relational transparency, which means a commitment toward trust and intimacy with others through being open to both negative and positive features of the individual self; (c) internalized moral perspective, which is demonstrated consistently by the leader and in a manner which promotes trust, fairness, respect, and overall integrity; and (d) balanced processing, in which the leader is open to self-examination of previous beliefs and values while being open to critically reviewing information that might present divergent viewpoints (Gardner et al., 2005).

The E-CQS measured the four capabilities of CQ and its sub-dimensions: (a) metacognitive, (b) cognitive, (c) motivational, and (d) behavioral (Ang & Van Dyne, 2012). The ALQ instrument was obtained through Mind Garden in a multi-rater or self-rater format. For this study, the self-rater format was used by permission of Dr. Lynn Van Dyne. The E-CQS is available through the Cultural Intelligence Center, LLC.

Demographic information was collected as it related to a participant's multicultural experiences in different countries and to the amount of interaction with people from diverse cultural backgrounds. Questions asked of participants included the number of years worked in his/her current position, and their current title (e.g., (a) associate dean or equivalent, (b) dean or equivalent, (c) program director or equivalent, (d) department chair and (e) senior international officer). Participants were also asked the number of countries lived in other than the United States and also the approximate percentage of time spent interacting with ethnically diverse faculty and/or students. A question was asked regarding the number of languages in which the participant believes he/she is proficient. General demographic information related to age, gender, and ethnicity/race was also collected.

Data Analysis

Descriptive statistics were used in the analysis of demographic data. The purpose for the analysis was to determine if each participant who completed the assessments met the criteria for this study. Statistics Package for Social Science (SPSS) was used to run the descriptive statistics. There were 86 responses to the demographic questions. Based on the number of universities participating in this study, the researcher targeted a minimum of 50 usable assessments. If 50 useable assessments were not returned at the

end of the second week, a reminder would have been sent out the third and fourth week of data collection. At the end of the first week, there were a total of 64 surveys returned. However, the survey link remained open for four weeks to ensure there would be a minimum of 50 useable surveys.

The study focused upon a correlation between the E-CQS and the ALQ including sub-components with the data being analyzed using SPSS. The findings of the study will contribute to determining whether a relationship exists between cultural intelligence and authentic leadership. The data examined the measures of central tendency (mean, mode, and median). To determine if the data were normally distributed; the Kolmogorov-Smirnov test was run. Data were initially reviewed to determine practical use by examining demographic data to recognize if criteria for participation were met. Data were protected from alteration and confidentiality and were adhered to regarding individual identifying information.

The study examined the relationship between CQ and AL. The Kolmogorov-Smirnov was run to determine the distribution of the data. If the data were normally distributed and parametric, the Pearson r measurement would be used (Cronk, 2008). According to Cronk (2008), the Pearson correlation coefficient is used when variables are interval or ratio-scaled and a linear relationship exists between them. The Pearson correlation coefficient, also known as the Pearson r , determines the strength of the linear connection between two different variables (Cronk, 2008). Bryman (2008) explained that the Pearson r examines the coefficient as lying between 0 which indicates no relationship between two variables and 1 which indicates a perfect relationship that also demonstrates relational strength. The coefficient shows a relationship to be either a positive one or a

negative one which is an indicator of the relationship's direction (Bryman, 2008). If this distribution occurs, a parametric analysis, beginning with a Pearson correlation coefficient would be conducted.

If the data were not normally distributed, Spearman rho would be used. Spearman rho is used when the data are nonparametric. Cronk (2008) asserted the Spearman correlation coefficient operates with determining the rank of data and requires ordinal and either interval or ratio data when viewing the strength of the relationship between two variables. The following terms were based upon a heuristic formula involving statistical significant correlations. The terms were used to describe each correlation: 0.8 – 1.0 very strong, 0.6 – 0.8 strong, 0.4 – 0.6 moderate, 0.2 – 0.4 weak, and 0.0 – 0.2 very weak or no relationship (Howell, 2008). Leedy and Ormrod (2013) reported that an ordinal scale is capable of expanding the range of statistical techniques that can be applied to data. A researcher can also determine the extent of a relationship between two characteristics by using Spearman's rank order correlation (Leedy & Ormrod, 2013). A scatter plot containing the data was used in the study and provided a graphic representation for non-linear distribution of the data.

Additional demographic questions included whether the participant met the criteria as a subject for this study. Questions include academic position at current university, length of time at current university, and length of time in current position. The study used SurveyMonkey™ to survey its targeted population of academic leaders. The data were analyzed using Statistical Package for Social Sciences for purposes of testing for any significant findings which contribute to produce a relationship between cultural intelligence behaviors and authentic leadership behaviors.

Summary

This chapter reviewed the cultural intelligence and authentic leadership in the context of higher education academic leaders. The focus was to provide hypotheses that would be analyzed after data collection and to provide a review of potential methods for data analysis. This chapter explained how the dimensions of CQ and AL will be used in the analysis of the academic leaders and their ability to interact with and support a growing number of culturally diverse students entering higher education. The chapter provided an overview of statistical tests for demographic data analysis and also for parametric and non-parametric analysis.

Chapter Four: Findings

This chapter discusses the nature of cultural intelligence and authentic leadership using two quantitative surveys, the Expanded Cultural Intelligence Scale (E-CQS) and the Authentic Leadership Questionnaire (ALQ). The quantitative surveys were used to investigate whether cultural intelligence was a moderator of authentic leadership. The research explored whether a relationship exists between cultural intelligence by using the E-CQS and authentic leadership by using the ALQ. Each component of CQ was tested to see if primary dimensions were related to the average of ALQ outcomes, and to examine if academic leaders who are authentic as measured by ALQ demonstrate a higher level of CQ in specific capabilities as measured by CQS than those scoring low on CQ.

The study used descriptive statistics to describe and summarize the demographic data from 107 respondents who answered questions pertaining to their backgrounds and specific characteristics relative to their cultural experience. Of the 107 surveys returned, 85% were usable for data collection. Data were collected through the convenience and snowball methods.

The demographic data responses are shown below.

Responses to questions about race, age, and gender indicated a majority of respondents to be Caucasian (82.5%) (see Figure 2) and over 50 years of age (see Figure 3). Respondents who indicated they were African-American totaled 4.9% while 1.9% of respondents stated they were Hispanic (see Figure 2). The percentage of those indicating

they were at least 50–59 years of age was 36% while 29% stated they were at least 60 years of age (see Figure 3). Of the respondents who answered the question of gender, 49.5% stated they were male and 50.4% answered female (see Figure 4).

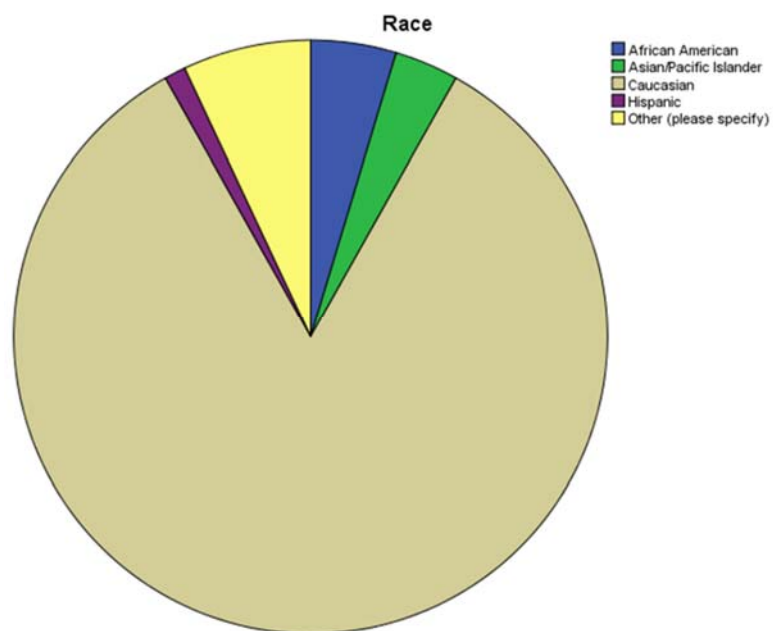


Figure 2. Race of respondents.

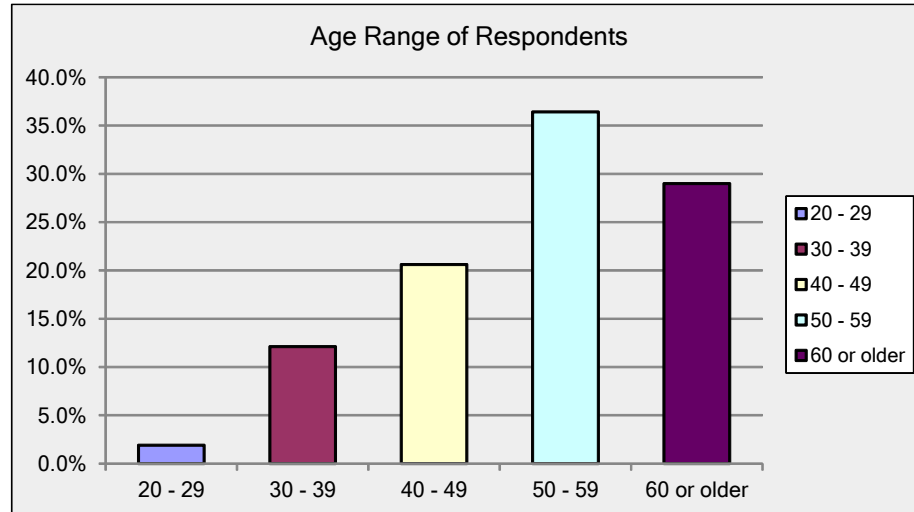


Figure 3. Age of respondents.

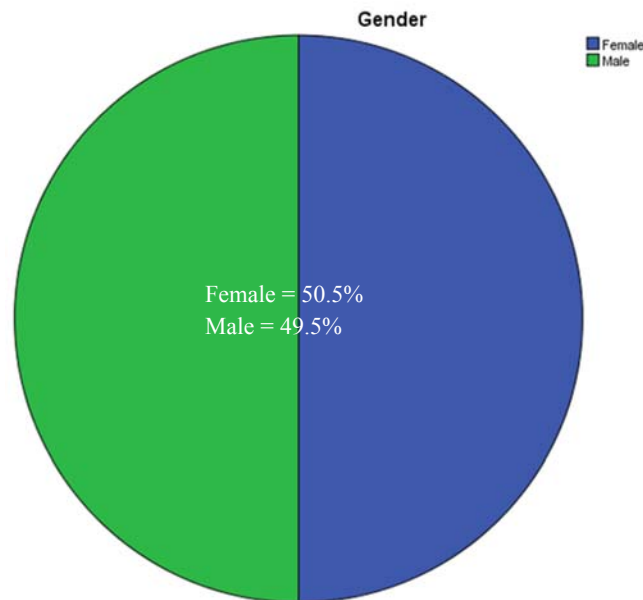


Figure 4. Gender of respondents.

There was a narrow difference in the number of years worked in the participants' current position. Twenty-three percent answered between five to seven years, while 27% had worked eight or more years in their current position (see Figure 5). The

administrative positions/titles reported showed 29.1% were a dean or equivalent, while 29.1% also reported they were program directors or equivalent. There were 4.7% of respondents who stated they were a department/division chair, and 12.8% were senior international officers (see Figure 6). Respondents who stated they were proficient in speaking one language totaled 53% while 45% of respondents indicated they were proficient in speaking two to three languages (see Figure 7). Respondents answering the question regarding the percentage of time they spent interacting with ethnically diverse faculty and/or students, 29% stated they spent 0%–20% of their time in this activity, 27% stated they spent 21%–40% of their time interacting with ethnically diverse students and/or faculty, while 13% of respondents indicated they spent 81%–100% of their time interacting with ethnically diverse students and/or faculty (see Figure 8).

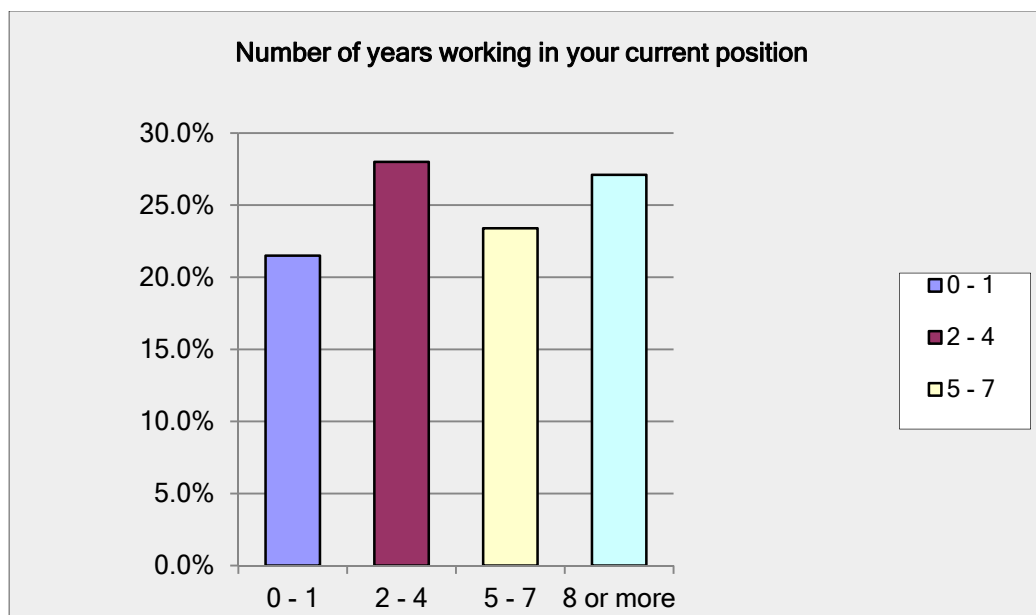


Figure 5. Years in current position.

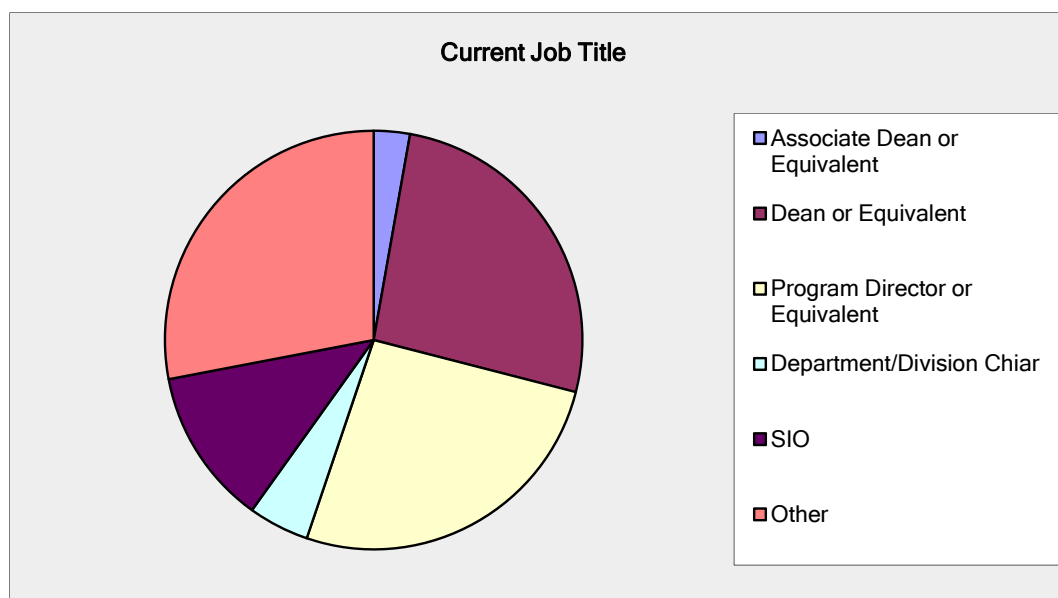


Figure 6. Current job title.

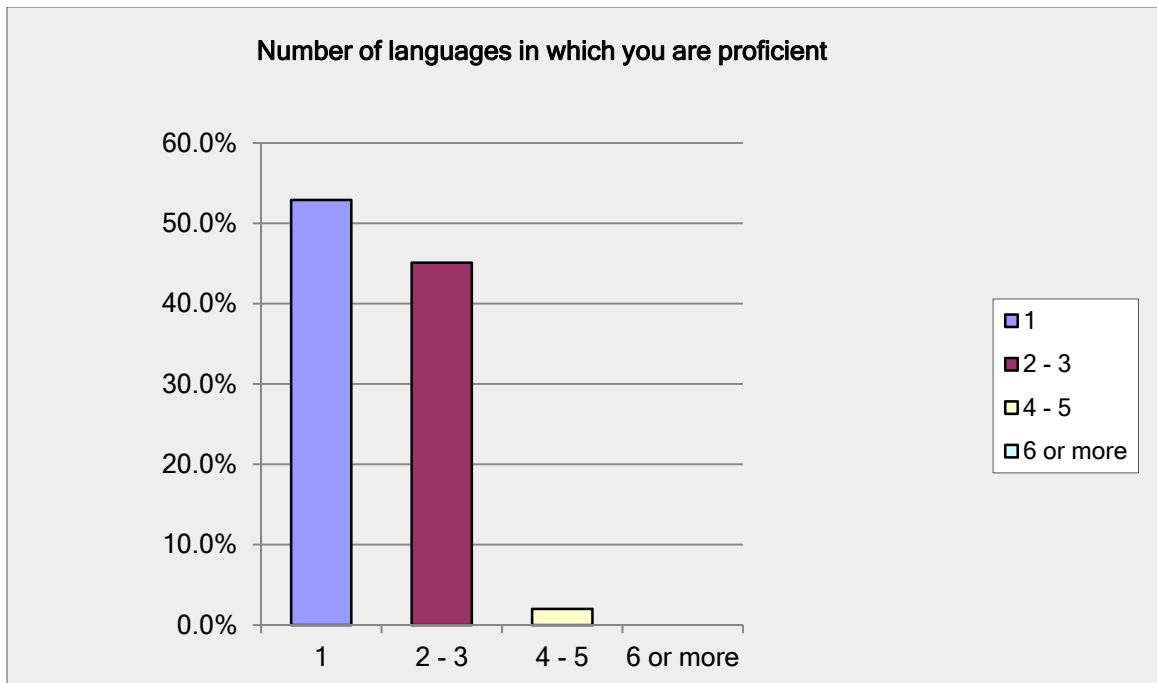


Figure 7. Languages spoken.

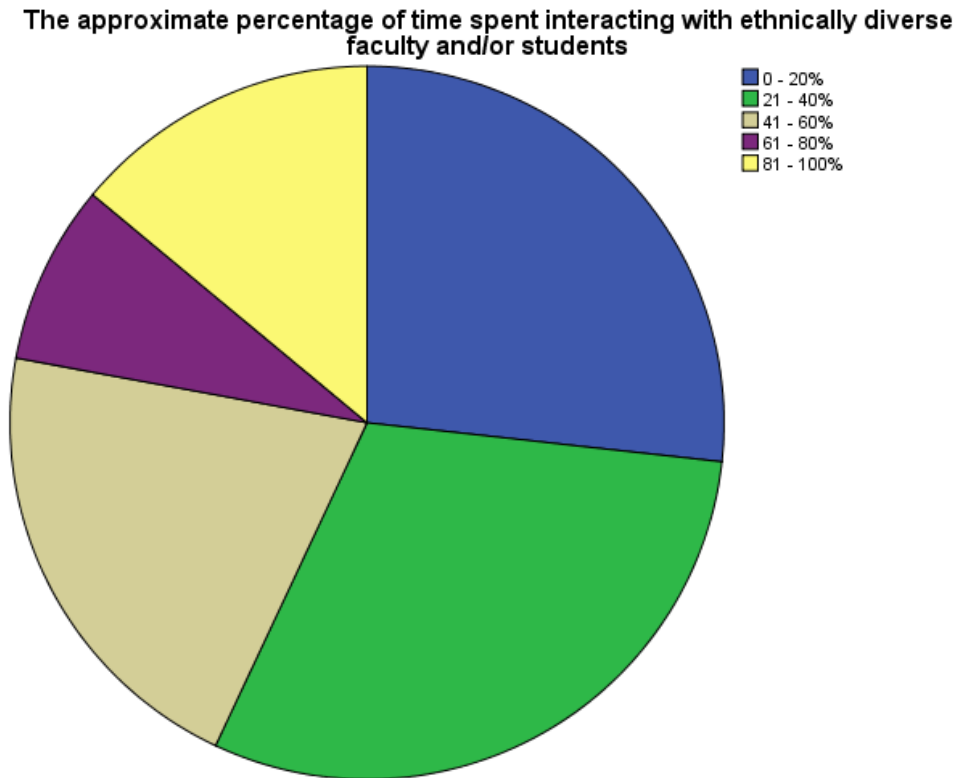


Figure 8. Interaction with diverse individuals.

The correlational study examined relationships between cultural intelligence and authentic leadership. A histogram was used to organize quantitative data and view the distribution among variables. A Kolmogorov-Smirnov test was run to determine normality of data.

A frequency histogram was used to organize the quantitative data and view the spread of the shape and center. The histogram (see Figure 8) showed the data were asymmetric and demonstrated a rough bell-shaped distribution. The data appeared to be skewed with a few values on the right side higher than the rest of the values. The standard deviation is .8750 with a mean of 5.42. (see Table 1)

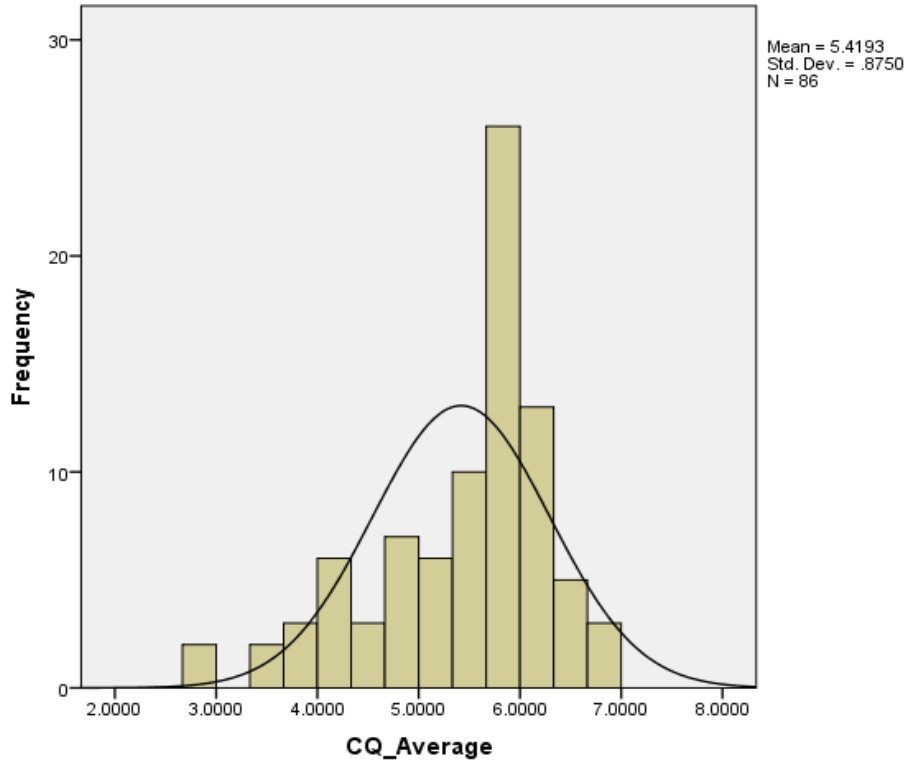


Figure 9. Cultural intelligence Histogram Kolmogorov-Smirnov results.

Table 1

CQ Average

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CQ_Average	.158	86	.000	.921	86	.000

^aLilliefors Significance Correction

The Q-Q plot (see Figure 10) shows the values scattered and any deviations from a normal distribution. Observation of the values above and below the zero line indicates the distribution is not normal.

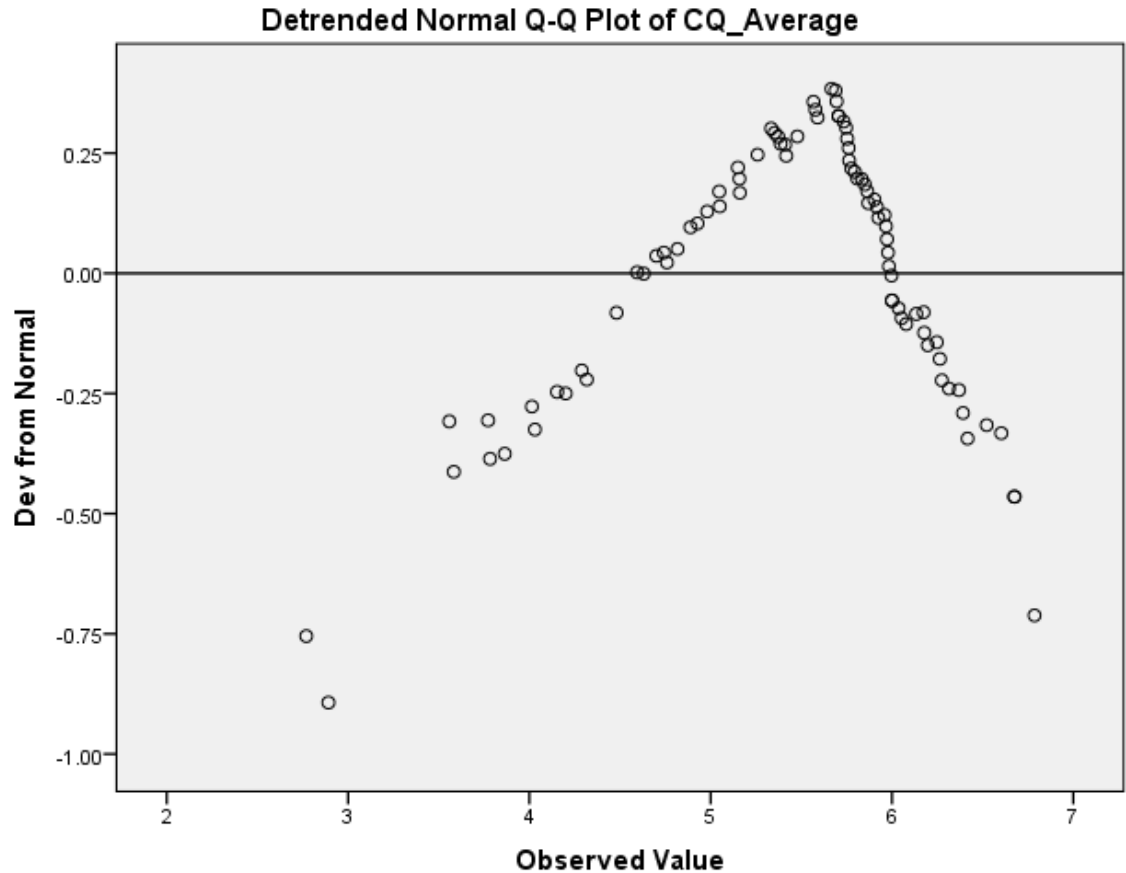


Figure 10. Cultural intelligence Q-Q Plot Kolmogorov-Smirnov results.

The figures below illustrate the distribution of data (see Figures 11 and 12). With data that are not normally distributed, Spearman rho is used to examine the strength of the relationship between two sets of data which included CQ and AL. Spearman rho also measured the four primary components of CQ—the metacognitive, cognitive, motivational, and behavioral—against AL. Spearman rho was used to measure relationships of the motivational and behavioral sub-components of CQ AL averages. Each of the four AL dimensions—self-awareness, balanced processing, relational transparency, and moral perspective—was also tested against the average of CQ for

purposes of examining subtle or significant relationships (see Table 2).

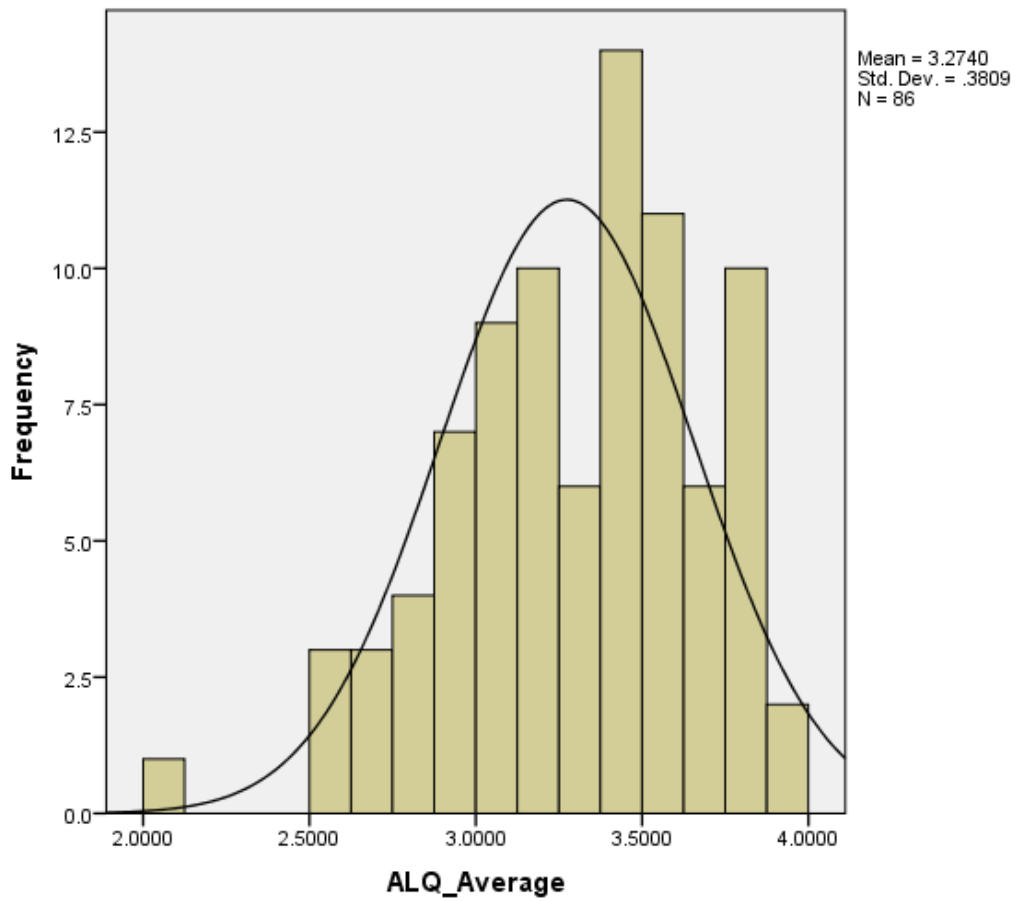


Figure 11. Authentic leadership Kolmogorov-Smirnov results.

Table 2

ALQ Average

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ALQ_Average	.105	86	.021	.965	86	.020

^aLilliefors Significance Correction

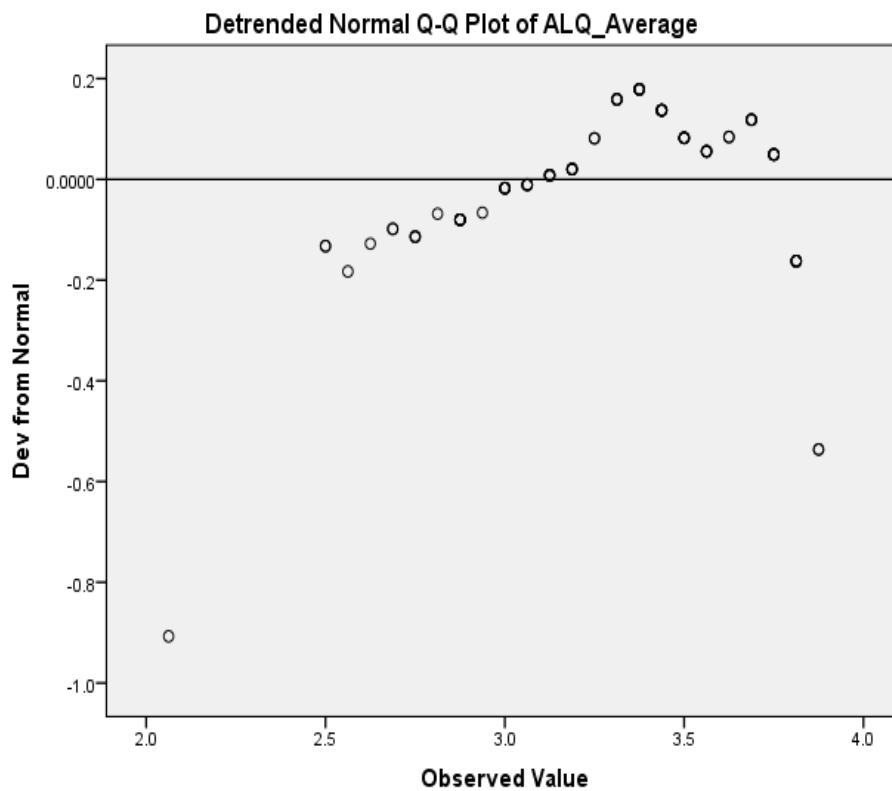


Figure 12. Authentic leadership Q-Q Plot Kolmogorov-Smirnov results.

The alternate hypothesis 1 argued a statistically significant relationship exists between the averages of CQ, as measured by the E-CQS and the averages of AL as measured by the ALQ. A weak correlation was found; therefore, the null was rejected (see Table 3). The degree of relationship between the two sets of data is shown to be

statistically significant with a $r(86) = .252$, $p < .05$, although the relationship is considered to be weak.

Table 3

CQ Average to AL Averages

Correlations			CQ_Average	AL_Average
Spearman's rho	CQ_Average	Correlation Coefficient	1.000	.252 ^a
		Sig. (2-tailed)	.	.019
		N	86	86
	AL_Average	Correlation Coefficient	.252 ^a	1.000
		Sig. (2-tailed)	.019	.
		N	86	86

^aCorrelation is significant at the 0.05 level (2-tailed).

The test showed there is no statistically significant relationship between the metacognitive average of CQ with the AL average. The result supports the null hypothesis (see Table 4) that stated there is no relationship between an academic leader's metacognitive capability as measured by the E-CQS and an academic leader's authentic leadership capability as measured by the ALQ.

Table 4

Meta-cognition Average to ALQ Average

Correlations			Meta_Average	ALQ_Average
Spearman's rho	Meta_Average	Correlation Coefficient	1.000	.184
		Sig. (2-tailed)	.	.090
		N	86	86
	ALQ_Average	Correlation Coefficient	.184	1.000
		Sig. (2-tailed)	.090	.
		N	86	86

There is a statistically significant correlation found between the two sets of data which showed a relationship between the cognitive average of CQ and the AL average. The result does not support the null hypothesis (see Table 5) that stated there was no relationship between an academic leader's cognitive capability and an academic leader's authentic leadership.

Table 5

Cognitive CQ to AL Averages

Correlations				
			Cog_Average	ALQ_Average
Spearman's rho	Cog_Average	Correlation Coefficient	1.000	.228 ^a
		Sig. (2-tailed)	.	.035
		N	86	86
	ALQ_Average	Correlation Coefficient	.228 ^a	1.000
		Sig. (2-tailed)	.035	.
		N	86	86

^aCorrelation is significant at the 0.05 level (2-tailed).

There is a relationship between the motivational factor of CQ and the average of AL. There is a correlation between the two sets of data which is considered statistically significant with a coefficient of .274. The result does not support the null hypothesis (see Table 6) which stated there is no statistically significant relationship between an academic leader's motivational capability as measured by the E-CQS and an academic leader's authentic leadership capability as measured by the ALQ.

Table 6

Motivational CQ to AL Averages

		Correlations		
			Mot_Average	ALQ_Average
Spearman's rho	Mot_Average	Correlation Coefficient	1.000	.274 ^a
		Sig. (2-tailed)	.	.011
		N	86	86
	ALQ_Average	Correlation Coefficient	.274 ^a	1.000
		Sig. (2-tailed)	.011	.
		N	86	86

^aCorrelation is significant at the 0.05 level (2-tailed).

There was no statistically significant relationship found between the behavioral factor of CQ and AL average (see Table 7). The correlation coefficient of .169 supports the null hypothesis which states that no statistically significant relationship exists between the behavioral capability of CQ and an academic leader's authentic leadership capability.

Table 7

Behavioral CQ to AL Averages

		Correlations		
			Behav_Average	ALQ_Average
Spearman's rho	Behav_Average	Correlation Coefficient	1.000	.169
		Sig. (2-tailed)	.	.120
		N	86	86
	ALQ_Average	Correlation Coefficient	.169	1.000
		Sig. (2-tailed)	.120	.
		N	86	86

No statistically significant relationship was found between CQ sub-component intrinsic motivation and the moral perspective of AL. The null hypothesis stated that no statistically significant relationship exists between an academic leader's motivational CQ

sub-dimensions—*intrinsic, extrinsic, and self-efficacy*—as measured by the E-CQS and an academic leader’s moral capability as measured by the ALQ. The result of this table (see Table 8) supports the null hypothesis.

Table 8

Intrinsic Motivational CQ to Moral Perspective AL

		Correlations		
			Intrinsic_Mot_ Average	Moral Perspective_ Average
Spearman's rho	Intrinsic_Mot_Average	Correlation Coefficient	1.000	.089
		Sig. (2-tailed)	.	.415
		N	86	86
	Moral Per_Average	Correlation Coefficient	.089	1.000
		Sig. (2-tailed)	.415	.
		N	86	86

The extrinsic motivational sub-component of CQ was tested by Spearman rho and shown to have no statistically significant relationship with the moral perspective of AL (see Table 9). The finding supported the null hypothesis which stated there was no statistically significant relationship between an academic leader’s motivational CQ sub-components as measured by the E-CQS, and an academic leader’s moral capability as measured by the ALQ.

Table 9

Extrinsic Motivational CQ to Moral Perspective AL

Correlations			Extrinsic_Mot_ Average	Moral Perspective _Average
Spearman's rho	Extrinsic_Mot_Average	Correlation Coefficient	1.000	.182
		Sig. (2-tailed)	.	.094
		N	86	86
	Moral Perspective_Average	Correlation Coefficient	.182	1.000
		Sig. (2-tailed)	.094	.
		N	86	86

No statistically significant relationship was found between CQ's sub-component self-efficacy and the moral perspective of AL. The test results supported the null hypothesis which stated there was no statistically significant relationship between an academic leader's motivational sub-components as measured by E-CQS, and an academic leader's moral perspective as measured by the ALQ (see Table 10).

Table 10

Self-Efficacy Motivational CQ to Moral Perspective AL

Correlations			Self-Efficacy_ Average	Moral Perspective _Average
Spearman's rho	Self-Efficacy_Average	Correlation Coefficient	1.000	.163
		Sig. (2-tailed)	.	.133
		N	86	86
	Moral Perspective_Average	Correlation Coefficient	.163	1.000
		Sig. (2-tailed)	.133	.
		N	86	86

No statistically significant relationship between CQ's sub-component verbal behavior and the relational transparency factor of AL was found in these sets. The correlation was calculated at $-.051$ between the variables, which demonstrated a negative relationship (see Table 11). The null hypothesis was supported, which stated there is no statistically significant relationship between an academic leader's behavioral CQ sub-dimensions (verbal, non-verbal, and speech acts) as measured by the E-CQS, and an academic leader's relational transparency capability as measured by the ALQ.

Table 11

Verbal Behavioral CQ to Relational Transparency AL

		Correlations		
			Verbal_Average	Relational Transparency_ Average
Spearman's rho	Verbal_Average	Correlation Coefficient	1.000	-.051
		Sig. (2-tailed)	.	.641
		N	86	86
	Relational Transparency _Average	Correlation Coefficient	-.051	1.000
		Sig. (2-tailed)	.641	.
		N	86	86

No statistically significant relationship was found between CQ's sub-component non-verbal behavior and the relational transparency factor of AL. The null hypothesis was supported and stated there was no statistically significant relationship between an academic leader's CQ behavioral sub-dimensions which includes non-verbal behavior, and an academic leader's relational transparency (see Table 12).

Table 12

Non-verbal Behavioral CQ to Relational Transparency AL

		Correlations		
			Non- Verbal_Average	Relational Transparency_ Average
Spearman's rho	Non-Verbal Average	Correlation Coefficient	1.000	-.070
		Sig. (2-tailed)	.	.524
		N	86	86
	Relational Transparency Average	Correlation Coefficient	-.070	1.000
		Sig. (2-tailed)	.524	.
		N	86	86

No statistically significant relationship was found between CQ's sub-component speech acts and relational transparency of AL. The correlation coefficient was .050 and supported the null hypothesis (see Table 13) which stated no relationship existed between an academic leader's behavioral CQ sub-dimensions including speech acts as measured by the E-CQS, and an academic leader's transparency capability as measured by the ALQ.

Table 13

Speech Acts Behavioral CQ to Relational Transparency AL

		Correlations		
			Speech_Acts_ Average	Relational Transparency_ Average
Spearman's rho	Speech_Acts_Average	Correlation Coefficient	1.000	.050
		Sig. (2-tailed)	.	.648
		N	86	86
	Relational Transparency_Average	Correlation Coefficient	.050	1.000
		Sig. (2-tailed)	.648	.
		N	86	86

The correlation coefficient between CQ average and relational transparency is .025. There is support for the null hypothesis (see Table 14) which states there is no statistically significant relationship between the averages of CQ as measured by the E-CQS, and an academic leader's authentic leadership capabilities including relational transparency as measured by the ALQ. The null hypothesis is accepted.

Table 14

CQ Average to Relational Transparency AL

		Correlations		
			CQ_Average	Relational Transparency_ Average
Spearman's rho	CQ_Average	Correlation Coefficient	1.000	.025
		Sig. (2-tailed)	.	.816
		N	86	86
	Relational Transparency_Average	Correlation Coefficient	.025	1.000
		Sig. (2-tailed)	.816	.
		N	86	86

A correlation coefficient of .080 was found when measuring whether a relationship existed between the CQ average and moral perspective of AL. The finding supported the null hypothesis (see Table 15) which stated no statistically significant relationship exists between the CQ average as measured by the E-CQS, and an academic leader's authentic leadership capabilities as measured by the ALQ.

Table 15

CQ Average to Moral Perspective AL

Correlations				
			CQ_Average	Moral Perspective _Average
Spearman's rho	CQ_Average	Correlation Coefficient	1.000	.080
		Sig. (2-tailed)	.	.466
		N	86	86
	Moral Perspective _Average	Correlation Coefficient	.080	1.000
		Sig. (2-tailed)	.466	.
		N	86	86

The correlation coefficient in these sets of data measured .341, which indicated a statistically significant relationship existed between the CQ average and the balanced processing of AL. The correlation did not support the null hypothesis (see Table 16). It did support the alternate hypothesis which stated a statistically significant relationship exists between an academic leader's CQ averages as measured by the E-CQS, and an academic leader's AL capabilities of balanced processing as measured by ALQ.

Table 16

CQ Average to Balanced Processing AL

Correlations			CQ_Average	Balanced_Average
Spearman's rho	CQ_Average	Correlation Coefficient	1.000	.341 ^a
		Sig. (2-tailed)	.	.001
		N	86	86
	Balanced_Average	Correlation Coefficient	.341 ^a	1.000
		Sig. (2-tailed)	.001	.
		N	86	86

^aCorrelation is significant at the 0.01 level (2-tailed).

A statistically significant relationship was found between the CQ average and self-awareness of AL. The correlation coefficient at .327 indicated a relationship exists between the two sets of data (see Table 17). The null hypothesis was rejected. The alternate hypothesis stated there is a statistically significant relationship between the averages of CQ as measured by the E-CQS, and an academic leader's authentic leadership capabilities of self-awareness as measured by ALQ. The alternate hypothesis was accepted.

Table 17

CQ Average to Self-Awareness AL

Correlations			CQ_Average	SelfAware_Average
Spearman's rho	CQ_Average	Correlation Coefficient	1.000	.327 ^a
		Sig. (2-tailed)	.	.002
		N	86	86
	SelfAware_Average	Correlation Coefficient	.327 ^a	1.000
		Sig. (2-tailed)	.002	.
		N	86	86

^aCorrelation is significant at the 0.01 level (2-tailed).

A statistically significant relationship was found to exist between the cognitive average of CQ and the balanced processing capability of AL. The correlation coefficient was .341, which indicated a relationship was measured between the two sets of data (see Table 18). The alternate hypothesis was accepted. A statistically significant relationship exists between an academic leader's cognitive CQ capabilities as measured by the E-CQS, and an academic leader's AL capabilities of balanced processing as measured by ALQ.

Table 18

Cognitive CQ Average to Balanced Process AL

		Correlations		
			Cog_Average	Balanced_Average
Spearman's rho	Cog_Average	Correlation Coefficient	1.000	.341 ^a
		Sig. (2-tailed)	.	.001
		N	86	86
	Balanced_Average	Correlation Coefficient	.341 ^a	1.000
		Sig. (2-tailed)	.001	.
		N	86	86

^aCorrelation is significant at the 0.01 level (2-tailed).

A statistically significant correlation was found to exist when measuring the cognitive CQ average against the self-awareness capability of AL. The correlation coefficient was .327, indicating a relationship between the two sets of data (see Table 19). The null hypothesis was rejected. The alternate hypothesis was accepted and stated there is a statistically significant relationship between the cognitive CQ capabilities as measured by the E-CQS, and an academic leader's AL capabilities of self-awareness as measured by ALQ.

Table 19

Cognitive CQ Average to Self-Awareness AL

		Correlations		
			Cog Average	SelfAware_Average
Spearman's rho	Cognitive Average	Correlation Coefficient	1.000	.327 ^a
		Sig. (2-tailed)	.	.002
		N	86	86
	SelfAware_Average	Correlation Coefficient	.327 ^a	1.000
		Sig. (2-tailed)	.002	.
		N	86	86

^aCorrelation is significant at the 0.01 level (2-tailed).

A statistically significant relationship was measured between the motivational CQ average and the balanced processing factor of AL. The correlation coefficient showed a relationship of .295 between the two sets of data (see Table 20). The null hypothesis was rejected. The alternate hypothesis stated there is a statistically significant relationship between an academic leader's motivational CQ capability as measured by the E-CQS, and an academic leader's AL capabilities of balanced processing as measured by ALQ. The alternate hypothesis was accepted.

Table 20

Motivational CQ Average to Balanced Process AL

		Correlations		
			Mot_Average	Balanced_Average
Spearman's rho	Mot_Average	Correlation Coefficient	1.000	.295 ^a
		Sig. (2-tailed)	.	.006
		N	86	86
	Balanced_Average	Correlation Coefficient	.295 ^a	1.000
		Sig. (2-tailed)	.006	.
		N	86	86

^aCorrelation is significant at the 0.01 level (2-tailed).

A statistically significant relationship was measured between the motivational CQ average and the self-awareness factor of AL. The null hypothesis was rejected. The correlation coefficient at .339 showed a relationship between the two sets of data (see Table 21). The alternate hypothesis was accepted, stating there is a statistically significant relationship between an academic leader's motivational CQ capability as measured by the E-CQS, and an academic leader's authentic leadership capability of self-awareness as measured by ALQ.

Table 21

Motivational CQ Average to Self-Awareness AL

		Correlations		
			Mot_Average	SelfAware_Average
Spearman's rho	Mot_Average	Correlation Coefficient	1.000	.339 ^a
		Sig. (2-tailed)	.	.001
		N	86	86
	SelfAware_Average	Correlation Coefficient	.339 ^a	1.000
		Sig. (2-tailed)	.001	.
		N	86	86

^aCorrelation is significant at the 0.01 level (2-tailed).

Research Findings

In the study, the relational strength between CQ and AL was measured with the result indicating a weak but significant correlation of .252 between the two sets of data. Both the metacognitive and cognitive components of CQ were tested against the AL average. There was no relationship between the metacognitive component and the AL average. The cognitive component showed a correlation of .228 against the AL average, which demonstrates a weak correlation but significant in that a relationship exists. There was a correlation of .274 when measuring the motivational component with the AL average, but no relationship between the behavioral component and the AL average. When measuring the correlation between the motivational sub-components—*intrinsic motivation, extrinsic motivation, and self-efficacy*—with the ethical perspective of AL, the data showed no relationship. The data also showed no relationship between the behavioral sub-components—*verbal, non-verbal, and speech acts*—and the transparency component of AL.

When the researcher examined the correlational possibility between the CQ average and the four components of AL, no relationship existed between the CQ average and both the transparency and ethical perspective of AL. When measuring the CQ average with the two AL components self-awareness and balanced processing, the correlations became significant at the 0.05 level. There was a correlation of .327 when measuring a relationship between CQ and self-awareness. When measuring the correlation between CQ and balanced processing, the strength of the relationship was .341. This correlation is still considered weak but moving closer to a moderate description when considering the degree of strength between variables.

Summary

The purpose of this section was to examine the degree of relationship between cultural intelligence as measured by the E-CQS and authentic leadership as measured by the ALQ. Primary and specific sub-components of CQ were tested against averages of AL to determine strength of relationships. When measuring correlations, relationships were either not statistically significant or were statistically significant but weak. The data did reflect some degree of correlation involving cognitive and motivational factors of cultural intelligence and relationships with both the self-awareness and balanced processing factors of authentic leadership.

Chapter Five: Discussion

The purpose for the study involved an examination of cultural intelligence as a moderator to authentic leadership, and to test relationships which impact the effectiveness of academic leaders' who work with culturally diverse student populations.

Demographic changes within student populations and the status of leadership in higher education are factors that are changing the landscape of higher education. A descriptive quantitative analysis using survey instruments drew inferences regarding the success of academic leaders and situations with diverse student populations. The results of the study are supported by earlier research conducted by Vogelgesang et al. (2009).

The literature stated that both cultural intelligence and authentic leadership are relatively new research disciplines which add to the growing interest about the interaction of CQ with AL and how each influences cultural possibilities. The study's examination of CQ and AL relational outcomes with higher educational leaders looked at how effectively academic leaders adapted and related to a growing number of culturally diverse students of multiple ethnic and racial populations. Ang et al. (2007) discussed theoretical relationships that develop through CQ capabilities and subsequent judgments. The authentic academic leader draws from daily interactions with culturally diverse individuals and learns about how cultural differences can actually form important life-changing connections among multicultural people.

This chapter will be organized to include a summary of research hypotheses and interpretations of results, relationships of the study's results to the literature, and

references to the research theory. Gaps in the literature will be cited to assist the reader in understanding the inclusion of new information and how it builds the knowledge base of CQ and AL. Exploratory research will be added in this chapter for purposes of generating scholarly interest for further research possibilities.

Research Hypotheses Results Summary

This study explored a relationship between cultural intelligence and authentic leadership and whether an individual with a high level of cultural intelligence will possess more authentic leadership behaviors and be better equipped to manage oneself in cultural settings (Vogelgesang et al., 2009). Hypotheses were formulated to examine cultural intelligence as a moderator to authentic leadership, and outcomes that a relationship between CQ and AL might produce. Using two research instruments, the Expanded Cultural Intelligence Scale (E-CQS) and the Authentic Leadership Questionnaire (ALQ), some relationships were statistically significant. The relationship between the CQ's four capabilities, as a multidimensional construct, (metacognitive, cognitive, motivational, and behavioral), and the four-factors of AL (transparency, moral perspective, balanced processing, and self-awareness), showed a statistically significant relationship, Spearman Rho = .252, $p < 0.05$. The correlation between CQ and AL at Spearman Rho = .252 suggests that academic leaders who have a high level of cultural intelligence will also demonstrate the behaviors associated with authentic leadership.

Relationships that Show Significance

There were relationships that were shown to have statistical significance. Spearman rho was used to test and measure the strength of the relationships. Two of the four capabilities of CQ—cognitive and motivational—had a statistically significant

relationship with the four-factor averages of AL, and specifically with the balanced processing and self-awareness factors of AL. The significance of the cognitive CQ capability and the AL averages was Spearman $Rho = .228$, $p < 0.05$ level. The relationship between the motivational CQ capability and the AL averages was statistically significant Spearman $Rho = .274$ level, $p < 0.05$. The cognitive CQ capability measured against the balanced processing factor of AL yielded a statistically significant correlation of Spearman $Rho = .341$, $p < 0.05$, while the relationship between the cognitive CQ capability and the self-awareness AL factor was statistically significant at Spearman $Rho = .327$, $p < 0.05$. When the motivational CQ capability was tested against AL's balanced processing, the relationship was statistically significant at Spearman $Rho = .295$, $p < 0.05$. The correlation between the CQ motivational capability and the AL self-awareness factor showed a statistically significant relationship at the Spearman $Rho = .339$, $p < 0.05$.

Cognitive capabilities of CQ are viewed as containing the knowledge dimension which shapes understanding of cultural systems and norms while helping to explain the significance of time, authority, and relationships among different cultures (Van Dyne et al., 2010). The motivational capability of CQ provides drive and energy when interacting across cultures (Van Dyne et al., 2010). Both of these capabilities signify knowledge and drive as they correlate with some of the factors of authentic leadership. Vogelgesang et al. (2009) suggested that cultural intelligence will interact with authentic leadership and encourage authentic leaders to become aware of the differences between cultural values held by different cultures.

Hypotheses H3_A and H4_A tested the assumption that statistically significant relationships exist between both cognitive and motivational CQ capabilities as measured by the E-CQS and an academic leader's authentic leadership capability, as measured by the ALQ. The cognitive capability showed a correlation of Spearman Rho at .228, $p > 0.05$ level with the AL average, and the motivational capability showed a higher correlation of Spearman Rho at .274, $p < 0.05$ level with the AL average.

The results of this correlation are important when considering that self-awareness is necessary for behavioral change to occur if higher educational leaders are to respond morally and with proper motives and cognitions working in a multicultural environment (Opatokun et al., 2013). Authentic leadership literature provides a definition of balanced processing as an unbiased willingness to process new and divergent viewpoints introduced by others (Gardner et al., 2011). This allows the individual to question personal beliefs and assumptions which may no longer be relevant or true, and to be open for processing new information that challenges previous thinking.

The self-awareness factor of AL engages the authentic leader with a deeper sense of self, and looks to both strengths and weaknesses while helping to make new meanings within an ever-changing world (Walumbwa et al., 2008). Combining both the motivational and cognitive capabilities of CQ with balanced processing and self-awareness factors of AL, academic leaders in higher education can be better equipped to meet the demands of multicultural populations. The relationship between these four dimensions was strong and inferred the alternate H9_A and H10_A were statistically significant with the cognitive and motivational CQ. Cognitive CQ includes outcomes such as cultural knowledge about systems and norms, and motivational CQ includes

outcomes of confidence and a drive. Cognitive and motivational CQ served as a moderator to the two factors of AL, balanced processing and self-awareness. This moderating effect results in the academic leader being more capable of authentic behaviors in cultural settings. As a leader in diverse academic institutions, authenticity and cultural intelligence may be used to create a culture of inclusiveness. Spearman rho showed a statistically significant relationship exists between the CQ averages and both the balanced processing and self-awareness components. This discovery leads the researcher to believe specific conditions are occurring that might involve the cognitive and motivational primary competencies or sub-components of CQ with the two components of AL. The literature discussed moral behavior as a prominent factor that influences AL. When examined to discover if relationships occurred between CQ capabilities and moral behavior of AL, all hypotheses were null. The transparency factor of AL when assessed against the CQ capabilities yielded the same results.

While both the moral perspective and transparency factors of authentic leadership are considered to be critical components for creating positive relationships between leader and followers, when blended with balanced processing and self-awareness, neither generated statistically significant correlations with the capabilities of cultural intelligence. Attention was directed to the strength of the CQ cognitive and motivational capabilities and how higher levels of each can better equip the authentic leader with the knowledge and energy to effectively interact with diverse multicultural populations.

Both the cognitive and motivational CQ capabilities are related to one's interest, knowledge, and energy in learning about cultural differences (Van Dyne et al., 2012).

The cognitive and motivational capabilities demonstrated a correlation to the AL average and two of the AL dimensions, balanced processing and self-awareness.

Based on the analysis of data, when academic leaders score moderate to high in cognitive and motivational CQ capabilities, they enhance the individual's pursuit of learning about unfamiliar cultures. Van Dyne et al. (2012) combined one's learning of new information about norms and cultural practices with individual confidence and interest toward exploring new cultural settings.

The study also found that both cognitive and motivational capabilities are a moderator to two AL factors: balanced processing and self-awareness. Together, these four components represent knowledge, personal insight, unbiased information processing, and motivational behavior—which collectively can be influential as adaptive behaviors within different multicultural settings.

Relationships that Show No Significance

Some of the relationships tested using Spearman Rho showed no statistically significant correlation between variables. The metacognitive CQ capability showed a correlation of Spearman Rho = .184, $p < 0.05$, when measured against the averages of AL, while the behavioral CQ capability showed a correlation of Spearman Rho = .169, $p < 0.05$, when tested against the averages of AL. The sub-components of both the motivational and behavioral CQ capabilities yielded no statistically significant relationships when tested against the moral and transparent AL factors. The three sub-components of the motivational CQ capability—intrinsic, extrinsic, and self-efficacy—were analyzed to determine whether there was a relationship between each sub-component and the moral perspective of AL. The results for the intrinsic sub-component

showed a correlation of Spearman Rho = .089, $p < 0.05$ against the moral AL factor. The extrinsic sub-component showed a correlation of Spearman Rho = .182, $p < 0.05$ and the self-efficacy correlation was Spearman Rho = .163, $p < 0.05$. Based upon the heuristic which determines statistical significance, a correlation of 0.0 to 0.2 is considered to be either weak or non-relational (Howell, 2008).

The behavioral sub-components were analyzed using Spearman rho to determine whether a relationship between each sub-component—verbal, non-verbal, and speech act—against the transparency factor of AL existed. The verbal sub-component's correlation with transparency resulted in Spearman Rho = .051, $p < 0.05$, non-verbal at Spearman Rho = .070, $p < 0.05$, and speech acts were at Spearman Rho = .050, $p < 0.05$. Each was determined to show no statistically significant relationship with the AL transparency factor. When assessing the CQ average against each of the four-factors of AL, there were no statistically significant relationships with either the transparency factor, Spearman Rho = .025, $p < 0.05$ or the moral perspective factor at Spearman Rho = .080, $p < 0.05$ and the CQ average.

The Study's Findings Compared to the Literature

The study examined a relationship between cultural intelligence and authentic leadership within the context of higher education's academic leaders. Both CQ and AL possess components that demonstrate effectiveness with academic leaders working in institutions of higher education. Jayakumar (2008) discussed the need for greater thinking about the role diversity plays in the success of the academic student. Brustein (2007) challenged academic leaders to consider how different the world is today than it was just a decade ago and the importance of global competence within the context of our

world. Otten (2003) believed cultural diversity's inclusive climate is designed to benefit multicultural populations to better understand cultural differences and adapt to new surroundings.

Culture, leadership, and higher education make a connection in the literature when inferring that new forms of leadership are beginning to consider the benefits of community building and broader roles of followers (Eddy & VanDerLinden, 2006). The literature also examines new concepts of leadership theory, including authentic leadership, which is described as a new focus for research and one which is still in a formative stage of development (Casa & Jackson, 2011). Cultural intelligence is defined as one's capability to function and manage oneself effectively in culturally diverse environments (Ang et al., 2007). Earley and Ang (2003) explored effective adaptation which requires specific skills when working and living among individuals of diverse cultures. Vogelgesang et al. (2009) proposed that the combination of cultural intelligence and authentic leadership increases the likelihood the individual's values will drive morally grounded actions toward developing cultural adaptation.

In earlier work, Keller (2001) forecasted demographic changes would occur in higher education that would impact the recruitment, retention, and overall university experience of incoming multicultural students. The literature in higher education suggests that when people are forced to process their inconsistent or fragmented beliefs and discrepancies from their past values, a state of disequilibrium occurs and one's cognitive growth is expedited (Jayakumar, 2008). Betts et al. (2011) suggested that academic leaders need to rethink higher education's direction as it involves commitment to cultural diversity and overall leadership within higher education.

Each of the four components of authentic leadership helps to create a self-based model that describes the process and influence of AL. The four capabilities of cultural intelligence also influence important outcomes for individuals confronting new and unfamiliar cultural settings. The study involved an examination of both cultural intelligence and authentic leadership to test for possible relationships and how these relationships influence higher education academic leaders who work with multicultural students. The examination assessed academic leaders who are authentic as measured by the ALQ who demonstrate a higher level of cultural intelligence with specific capabilities as measured by the CQS than those who score low in CQ.

The findings of the study showed a statistically significant relationship between CQ and AL, which indicated a correlation was present among specific components of each set of data. The cognitive and motivational averages showed statistical significance with the ALQ average. Both the metacognitive and behavioral averages showed no statistical significance with the ALQ average. Van Dyne et al. (2010) believed that effective leaders need multiple adaptive capabilities, including sub-components of motivational CQ—which are intrinsic, extrinsic, and self-efficacy. The sub-components of behavioral CQ are verbal, nonverbal, and speech acts. Vogelgesang et al. (2009) suggested that cultural intelligence—specifically the cognitive, motivational, and behavioral capabilities—will interact with and strengthen the effectiveness of authentic leadership to promote morally grounded cultural adaptation.

The study's test revealed statistically significant relationships between CQ and AL but revealed no relationship involving the moral factor of AL with either motivational CQ or behavioral CQ. Chang and Diddans (2009) acknowledged the ambiguity of moral

behavior with one's miscalculation of moral outcomes and risk which can lead to moral paradox in actual behavior. The study showed very weak or no relationship when involving the moral component of AL. The relational strength involved only those relationships in which the cognitive and motivational CQ components were engaged with self-awareness and balanced processing of AL.

When one contemplates moral behavior and its influence regarding a decision, a situation might change the individual's initial motive to carry out a moral decision and cause one to follow monetary gain, or other self-serving choice. A moral choice can occur when one moves from a position of selflessness to one that is self-serving. Ruggs and Hebl (2012) described an ethical dilemma for academic leaders who received students from vilified groups who had been targeted by negative perceptions and stereotypical attitudes. Some students become isolated and perceive academic discrimination from peers. Academic leaders confront the challenge of negative perceptions of preferential treatment and stereotypes among students and even academic peers while attempting to build trust among multicultural students. With pure intentions initially, academic leaders may lose sight of the benefits of cultural awareness and inclusion and assume a viewpoint that student inclusion as lifelong work is merely not worth the challenge it presents. Academic leaders who display traits of authentic leadership will be able to work towards eliminating negative perceptions of attitudes and behaviors toward diverse faculty and students. Therefore since cultural intelligence can be developed, academic leaders will prepare themselves through cultural intelligence training.

Jones and Grint (2013) argued that an acceptable definition of morality remains difficult to achieve. Those espousing authentic leadership seem to believe a universal moral principle exists (Jones & Grint, 2013). Vogelgesang et al. (2009) opined that while research provides support for universally subscribed moral principles, judgments regarding the appropriateness of cultural norms are not universal. Diddams and Chang (2012) stated that individuals at times can believe they have more courage than they actually have to behave morally in certain situations and may rationalize their behavior rather than critically examine their personal actions and words. Algera and Lips-Wiersma (2012) cautioned leaders not to automatically assume that authenticity leads to moral behavior just because the concept touches organizations. One's moral perspective may well extend beyond institutional goals and involve complex contradictions.

The study demonstrated the ambiguity of morality and the difficulty in finding a universal definition. The ethical perspective as part of the four-factors of authentic leadership did not convey any correlation with components of cultural intelligence, including the sub-components of the motivational and behavioral CQ capabilities. Novicevic et al. (2006) discussed authentic leadership from a higher level executive position and indicated that organizational morality was subject to situations, the self-identity of the leader, and narcissistic personal traits of executives who thrive upon their own prestige at the expense of others. Both the moral perspective and transparency factors of AL had no correlation with CQ components when assessed by Spearman rho.

References to Research Theory

Research theory provides multiple benefits to various fields of epistemology including general questions that raise new awareness of the topic being explored.

Zaccaro and Horn (2003) faulted the leadership literature for its trial-and-error approach to problem solving rather than having theoretically based models with scientific data guiding applications. Ang and Van Dyne (2008) viewed the behavior component of CQ as one of the most important factors an observer may use to appraise another individual's CQ, yet the study did not indicate any statistical significance between one's behavioral capability and any of the leadership factors necessary for what Vogelgesang et al. (2009) referred to as ingredients for cultural adaptation.

Individual behavior can be modified as a coping mechanism for when people enter into unfamiliar cultural situations. In the study, no relationship existed in which the researcher could infer the behavioral CQ sub-components of verbal, nonverbal, and one's speech provided any subtle influence with any of the AL components which would form a relationship. The study implied that because an individual's ALQ score is high, it makes no difference in one's verbal, nonverbal, or speech acts in terms of a correlation which might lead to moral grounding and culturally adaptive tendencies. According to Vogelgesang et al. (2009) both moral grounding and cultural adaptation are two critical components for today's leader adjustment.

There is integration between the study's findings on the relational strength of the cognitive capability of CQ with components of AL. Avolio (2007), while building an integrative and theoretical view of leadership, discovered the cognitive element of leadership which included the emotions, challenges, role interpretation, schemes, and systems which were shaped by information. Van Dyne et al. (2012) promoted the importance of understanding cultural norms, practices, and structures of knowledge contained within cultural environments. The study demonstrated the influence of cultural

cues and continuous knowledge that can connect the cognitive capability of CQ with AL in a cross-cultural setting. These concepts are actively engaged with decisions and action as a result of new information being disseminated. The study draws upon both the cognitive and motivational CQ capabilities and their relevance to self-awareness and balanced processing factors of AL (Vogelgesang et al., 2009).

Gaps in the Literature

The study involving cultural intelligence as a moderator of authentic leadership is comprised of scholarly topics that are still in development and considered new research areas. Ang et al. (2007) opined that empirical research on CQ is relatively new and therefore has only begun to provide scholarly advancement. Kanten (2014) included the statement that there are no studies that connect cultural intelligence with career competencies. Van Dyne et al. (2012) purported the CQ construct as being in a perpetual state of theorizing and development in which a gap is recognized in the literature. The existing research regarding the four CQ capabilities (metacognitive, cognitive, motivational, and behavioral) has grown with the addition of 11 sub-dimensions that have been added to refine the CQ capabilities (Van Dyne et al., 2012).

When describing the four factors of authentic leadership, the moral perspective is considered to have importance in a leader's moral behaviors and ethical choices that influence others. Ng et al. (2012) described cultural intelligence as consisting of the four capabilities (metacognitive, cognitive, motivational, and behavioral) within an integrative framework. Ng et al. (2012) added that CQ did not focus on human personality or values. This researcher recognizes this as a gap in the literature since much is written about moral perspectives and ethical choices within CQ and AL. Van Dyne and Kim

(2012) noted a gap in the literature that involves predictors of international leadership and its potential. The knowledge of predictors can help researchers better understand information which might be useful as antecedents to multicultural success.

The term *culture* is a complex construct and one which has multiple meanings to different populations and remains a source of debate (Avolio, Walumbwa, & Weber, 2009). Ng et al. (2012) added the importance in how one defines the term culture when writing about different ethnic and racial backgrounds, national and global cultures, and contexts in which questions are formulated. A lack of clarity involving the term *culture* as a key concept in both fields of leadership and cultural intelligence presents a need for continued exploration toward a more succinct and standard definition.

Exploratory Research

The study of cultural intelligence and its emphasis upon individual capabilities enable leaders to build upon cultural skillsets and global experiences which have far-reaching impact upon our world (Van Dyne et al., 2010). The goal of this study was to examine cultural intelligence, its four capabilities, and sub-components of motivational and behavioral CQ against the four factors of authentic leadership, and to detect whether a relationship exists with authentic leadership. The study included the data of this examination in a broader context and involved the impact a relationship has on higher educational academic leaders as culturally diverse student enrollments increase in higher education.

The focus of this study included cultural intelligence as a moderator to authentic leadership; therefore, much exploration in the field of CQ is taking place which the study can support. Van Dyne et al. (2012) discussed the expanded concept of cultural

intelligence in which a more refined second-order set of eleven sub-dimensions are now part of the CQ research examined under the four primary factors of CQ. Considered to be a next wave in CQ research, the study will now explore deeper meanings of CQ and provide new sets of antecedents for the study (Van Dyne et al., 2012). The motivational capability of cultural intelligence shows drive and interest on the part of the leader and was a prominent component when examining relationships between CQ and AL. Peng, Van Dyne and Oh (2014) presented recent research that advances cross-cultural education and highlights the influence of motivational CQ as a precursor to effective cross-cultural study programs as well as future research in education. Other research initiatives such as cross-border/ international assignments will benefit from a greater understanding of motivational CQ with its importance on self-efficacy which helps drive an individual's intrinsic capabilities (Kodwani, 2012).

As a result of this study, the implications for future research as it relates to the gender of academic leaders and if there is a difference in the level of CQ by gender and how it serves as a moderator to authentic leadership. Further studies in these areas would prove beneficial to academic leaders as it relates to their interaction with diverse student and faculty populations. As the demographics continually change, it is evitable that the degree to which academic leaders interact with their population may have an effect on their level of cultural intelligence and their ability to be authentic in cross-cultural interactions. Finally, exploratory research could examine the reverse of this study, where authentic leadership served as a moderator to cultural intelligence with primary focus on the dimensions and sub-dimensions of cognitive and motivational cultural intelligence.

Implications for Practice

The results of this study indicated there is a relationship between an authentic academic leader's level of cognitive and motivational cultural intelligence and their ability to be self-aware and willingness to change their viewpoint. As the culture of campuses continues to become more diverse due to more international and first generation students attending universities, the leadership must be capable of relating to these individuals in a positive and supportive manner. This can be accomplished by academic leaders being willing to develop their cultural intelligence and recognizing any cultural biases they may possess. Authentic academic leaders with a high level of cultural intelligence will create a more inclusive environment not only for students but for diverse faculty. Retaining minority students and faculty has become challenging. Many academic leaders are not aware of the cultural attitudes, behaviors, and worldview that ethnic minorities bring with them. Authentic academic leaders who demonstrate a high level of cognitive and motivational CQ will be more driven to ensure faculty and students have a sense of belongingness and this in turn will increase retention.

Limitations

All research studies have limitations despite the topic or length of study. This study has limitations that will hopefully invite further interest and future exploration by academic colleagues. The demographic study contained in this work involved four-year colleges and universities in the United States only. There were no higher educational institutions involved in the study located outside of the 50 U.S. states which made the study seem parochial but necessary in order to examine U.S. responses to multicultural survey questions. Another limitation is with a possible perception that CQ capabilities

such as metacognition remain too complex and nebulous for respondents to accurately measure or provide any internal understanding of their own cognitive processes (Thomas et al., 2008). The Expanded Cultural Intelligence Scale offers another limitation in that it represents a field of research that is considered to be a new addition to other studies involving structures of intelligence.

Aside from these limitations, the study invites new perspectives into the study of cultural intelligence and authentic leadership while discussing the academic leader and the growth of multicultural populations. This study will add to the literature and hopefully increase interest toward a better understanding of cultural diversity within a changing social structure.

Summary

This study has examined relationships between cultural intelligence and authentic leadership within the context of higher educational academic leaders. Components of both CQ and AL were assessed with consideration as to whether CQ was a moderator of AL. The study is significant in that it hypothesized that cultural intelligence serves as a moderator to authentic leadership behaviors in academic leaders. The findings of this study concluded that the dimensions of cognitive and motivational CQ served as a moderator to the authentic behaviors of balanced processing and self-awareness. Additionally an academic leaders overall understanding of cultural intelligence as measured by the CQS does have a moderating effect on their authentic leadership disposition as measured by the ALQ. Therefore they are likely to be more motivated and knowledgeable to support and adapt to the increase in multicultural student populations. Although both fields of cultural intelligence and authentic leadership are relatively new,

the literature and data collected from this study will add to a deeper understanding of both CQ and AL. The study is intended to provide information for academic leaders and multicultural populations.

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APPENDIX A: PERMISSION TO USE INSTRUMENT

Brad Grubb

Authentic Leadership Questionnaire Research Permission

Bruce J. Avolio, William L. Gardner, & Fred O. Walumbwa

Introduction: The Authentic Leadership Questionnaire (ALQ) has undergone preliminary validation efforts to demonstrate that it is both reliable and construct valid. Permission to use the ALQ free of charge and for a limited period is provided for research purposes only. This document contains:

Conditions of Use for the Authentic Leadership Questionnaire - Use of the Authentic Leadership Questionnaire is subject to the conditions outlined in this section.

Abstract of Research Project - A brief description of your research project.

Authentic Leadership Questionnaire - The form itself (rater and self) and instructions for calculating scale scores.

Permission to Reproduce Sample Items - You cannot include an entire instrument in your thesis or dissertation, however you can use up to three sample items. Academic committees understand the requirements of copyright and are satisfied with sample items for appendices and tables. For customers needing permission to reproduce three sample items in a proposal, thesis, or dissertation this section includes the permission form and reference information needed to satisfy the requirements of an academic committee.

All Other Special Reproduction: For any other special purposes requiring permissions for reproduction of this instrument, please review the information at <http://www.mindgarden.com/copyright.htm> or contact us at info@mindgarden.com.

Hello Brad,

Thank you for your interest in using the CQS in your dissertation. That is great. I know Joanna does an excellent job of covering CQ in her seminar.

You have my permission to use the scale in your dissertation.

There are two options.

1. You can create your own questionnaire and collect your own data.
2. You can use our on-line portal and incent your participants to complete the questionnaire by providing them with personal feedback reports. If you choose this option, we have special highly discounted academic pricing:
 - a. Options for costs per participant
 - i. Cost of Basic T1 program per participant is \$12 each
 - ii. Cost of Basic Plus T1 program (with feedback on cultural values in addition to CQ feedback) is \$18 each
 - iii. Cost of Basic T1-T2 program per participant is \$20 each
 - iv. Cost of Basic Plus T1-T2 program (with feedback on cultural values in addition to CQ feedback) is \$26 each
 - b. Cost for CQS data (in xls format) If you choose this option, you need to set up what we call a "Research" program.
 - i. \$100 for T1
 - ii. \$200 for T1-T2
 - c. Cost for a group summary report

i. \$50 for Basic T1 - \$250 for Basic Plus T1-T2 - \$250

I am copying Keyla Waslawski on this email. She can help you set up a program and either she or I would be glad to answer any of your questions.

Best wishes

Linn

APPENDIX B: RESEARCH PARTICIPANT CONSENT FORM

Dear [Participants Name],

My name is Brad Grubb and I am a doctoral candidate at Indiana Wesleyan University in Marion, IN. In partial fulfillment of my degree, I am conducting research on cultural intelligence (CQ) and its relationship to authentic leadership (AL) in higher education academic leaders.

You are invited to participate in a web-based online survey (through Survey Monkey). The survey should take *approximately 15 minutes* to complete.

Participation is voluntary and participants may withdraw at any time without penalty and prejudice. The study proposes minimal threat to participants and is not intended to create any harm or stress to participants. There are no direct benefits or costs to you or your organization for participating in this study. However, upon completion of the survey, you may opt to be entered into a drawing for *one of five \$50.00 Amazon gift cards*. (The demographic portion of the survey will ask you to enter your email to be eligible for the drawing).

Data will be protected and any potentially identifying information will be kept confidential. The data will only be available for review by the researcher and will only be used for the purpose of this study. The surveys are hosted by SurveyMonkey, a third-party service provider. SurveyMonkey is designed with enhanced security to protect the information collected. You may review the privacy policy of SurveyMonkey at www.surveymonkey.com/mp/policy/privacy-policy and the security policy at www.surveymonkey.com/mp/policy/security.

If you have any questions about this research project, you can contact me at brad.grubb@indwes.edu or Dr. Joanne Barnes, Research Advisor, at joanne.barnes@indwes.edu. Research participants may also contact the Institutional Review Board at Indiana Wesleyan University, Office of the Dean of the Graduate School, 4201 S. Washington Street, Marion, IN 46953 or 765.677.2090.

By clicking on the link below, you agree that you have had the opportunity to read the above information as your consent, ask questions about the research project and are prepared to participate in this project.

RESEARCH SURVEY LINK – PLEASE CLICK BELOW

<https://www.surveymonkey.com/s/9LR8TB5>

Please feel free to share this email with other academic leaders in your institution.

Regards,

Brad A. Grubb
Doctoral Candidate
Indiana Wesleyan University

317-574-3980 |

VITA

Brad A. Grubb, Professional Vitae

Brad Alan Grubb entered the Cincinnati Bible College in 1973 after completing two years of post-secondary liberal arts undergraduate work at Ball State University. After earning a bachelor degree in 1975 from Cincinnati Bible College, Mr. Grubb returned to Ball State University to complete a teaching certificate in secondary education with a concentration in social studies and a State of Indiana Bulletin 400 teaching license. After teaching social studies for three years at West Noble School Corporation in Ligonier, Indiana, Mr. Grubb returned to Ball State University where he completed a master's degree in secondary education in 1981.

For the next ten years, Mr. Grubb worked in the social service and corporate training fields and began adjunct teaching with Indiana Wesleyan University in 1989 while serving as a corporate trainer with the University of Detroit/ Chrysler Motors. In 1992, Mr. Grubb accepted an administrative position with Indiana Wesleyan University's adult education program while continuing to teach courses for the university in business and liberal arts. In 2004, after earning a Master of Science in Management degree from Indiana Wesleyan University, Mr. Grubb accepted a regional dean position through IWU and spent the next several years launching and leading the Cincinnati Regional Education Center.

In 2010, Mr. Grubb accepted the role of regional dean for IWU- Central Indiana and currently serves in this role for the university. In July, 2010, he entered the university's doctoral program in organizational leadership which has afforded him the opportunity to travel with university doctoral students and faculty to Kiev, Ukraine and London, England as part of his doctoral experience. Mr. Grubb has also presented at professional conferences hosted by the International Leadership Association and Tobias Leadership.

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