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Walden University
2015

Abstract

Relationship between Whole-Person Learning and Growth Mindset in First-Generation Learners

by

Marian Heather Hartman Willeke

MAED, University of Phoenix, 2005

BSBM, Indiana Wesleyan University, 2003

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Adult Education Leadership

Walden University

May 2015

Abstract

Growth mindset is an important component for a journey towards self-actualization. It is unknown if whole-person learning can assist development of that growth mindset for first-generation learners. The purpose of this quasi-experimental study was to examine if exposure to whole-person learning positively influences a growth mindset by exploring the relationship between whole-person learning and a growth mindset in first-generation learners. Whole-person learning was presented as a vehicle for developing that growth mindset towards self-actualization. Dweck's Mindset Survey scores were collected from first-generation learners who participated in orientation courses either with or without whole-person learning in 4 institutions (n = 177) using a pretest/posttest control group design. A mean analysis of the overall pretest and posttest score was conducted using a factorial ANOVA. No significant change in mindset was detected from the pretest (first week of orientation courses) to posttest (last week of orientation courses) based on exposure to whole-person learning. It was discovered through one-way ANOVA demographic analysis that Black first-generation learners had a significantly higher mindset mean score (7.1) than White first-generation learners. While it is still unknown if exposure to whole-person learning pre-disposes first-generation learners towards growth mindset, there was a positive implication in that Blacks appeared more pre-disposed to a journey of self-actualization when exposed to whole-person learning. The social change benefit for this implication is that an increased focus on affective learning may lead to higher success rates within academics, career, and personal satisfaction for Black first-generation learners. Future researchers should include faculty engagement with whole-person learning and the development of an instrument more conducive to measuring mindset for adult learners.

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Dedication

My work on this dissertation and doctorate degree is dedicated to the people in my life who shaped me through a lens of whole-person thinking. I didn't know it at the time, but the major influencers of my life communicated to me through experiences, not just cognitive learning. Rob and Joy Hartman, my parents, laid a foundation of ethics and experiential learning that keeps me grounded and confident in who I am. Leah Kaufman, my equestrian trainer, taught me perseverance despite fear, transforming that fear into a continual desire to improve my physical abilities. Alice Eichholz, my dissertation chair and doctoral mentor, did the same with scholarly writing and thinking, always setting expectations slightly higher than I thought I could achieve, and then helping me achieve them. Lastly, Eric Willeke, my husband, is always a gentle balance of support and expectation. As I work to provide relevant learning for others, the experience of this doctorate has increased my own self-awareness of my journey towards self-actualization.

Acknowledgments

Quite simply, this achievement would never have existed without the direct support of certain people. The one who suffered the most was my seven year old daughter, Leah Elle. Having started this degree when she was one, she has no idea what a mum is like without doctoral work constantly overshadowing free time. The next one who sacrificed for my achievement of this degree was my husband, Eric, who managed to handle tasks that we both hated, deal with my stress, and be my statistics hero. All of my friends and family deserve more than a simple thank you for listening to my whining, crying, and self-pity on more than one occasion without judgment (at least no outward judgment). For all of my professional colleagues, it won't ever be forgotten that work was shuffled to support me when I begged off due to those rather constant doctoral deadlines. Lastly, but certainly not least, I appreciate the quality and care that Walden University faculty have for us as students. The commitment to scholarly excellence in expectations while respecting my busy life gave me the resources I need to be a lifelong scholar.

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Chapter 1: Introduction to the Study

Introduction

First-generation learners in the United States have increased collegiate enrollment in the decades following World War II, while simultaneously shifting from the manufacturing base that required no collegiate education to a knowledge work environment that demands collegiate education (Forbus, Newbold, & Mehta, 2010b; Woosley & Shepler, 2011). As this shift occurred, cognitive skills increased in the general population as a result of improved nutrition, better education, spatial games, and smaller families, while emotional skills have had a downward spiral, resulting in depression, anger, anxiety, and impulsiveness (Achenbach & Howell, 1989; Goleman, 2000; Neisser, 1998). The effect of lower affect and higher cognition has created a dissonance that Rogers (1980) referred to as "education from the neck up" (p. 267). Rogers felt that this narrow approach to learning had negative social consequences that could be reversed with whole-person learning, which is an awareness of cognition and affect during the learning experience. As such, whole-person learning is presented as a vehicle for developing a mindset of lifelong learning, also referenced as a growth mindset, and that mindset is a critical component for a journey of transformation towards self-actualization (Maslow, 1970; Rogers, 1980).

Some social consequences observed in literature include lower critical thinking skills, decision-making skills, and effective communication, which are all areas that organizations have noted an increased need for graduating and potential employees (Armstrong & Fukami, 2010; Hoover, Giambatista, Sorenson, & Bommer, 2010; Kraiger,

Ford, & Salas, 1993). As both the demand for these skills rise from organizations and the population of first-generation learners enrolled in college rises (Giancola, Munz, & Trares, 2008), these learners of any age, defined by being in the first generation of their family to attend postsecondary education, have a disadvantage in meeting organizational expectations having generally started with low family support and low academic preparation (Warburton, Burgarin, & Nunez, 2001). As first-generation learners are caught between the complex cultural differences and middle class norms (McDonald & Farrell, 2012; Stephens, Markus, Fryberg, Johnson, & Covarrubias, 2012), it is important to discover if there is any relationship between exposure to whole-person learning and development of a growth mindset in order to provide better opportunity and development for the first-generation learner population to succeed both academically and in the competitive business organizations focused in knowledge work.

Theories on whole-person learning and motivation as well as literature are presented here to establish that the holistic learning of engaging both affective and cognitive intelligence, or whole-person learning, predisposes individuals towards a mindset of personal development defined in my study as a growth mindset. A whole-person educational approach was predicted by Rogers (1980) to build a climate of trust that would allow learning to naturally emerge, provide stakeholders in the educational process the natural flow to engage in participatory decision making, allow space for the students to value themselves, develop deeper self-awareness, and give students a passion for learning that would lead into a growth mindset. This predisposition towards a growth mindset provides opportunity for a journey of transformation towards self-actualization,

as articulated by Maslow (1970). The decision making, self-value, and self-awareness found in increasing emotional intelligence also supports the needs for effective leadership (Goleman, 2000).

In this chapter, I outline the background of the study with a summary of research literature and a description of the gap in knowledge within the educational field. This is followed by a problem statement with summarized evidence of the problem's significance, countervailing findings, and meaningful gap that had not been studied. Next, the purpose of the study includes the research approach, intent, and describes the independent and dependent variables. This leads to a statement of the research question and hypothesis. Following that, the theoretical foundation is presented and a description of the nature of my study. Finally, definitions, assumptions, scope, limitations, and significance are discussed followed by a summary.

Background

For the background of my study, I examined what whole-person learning techniques were used in higher education to determine if there was a scalable implementation of whole-person learning exposure for the population of first-generation learners. It was important to see whether that implementation of whole-person learning experience was related to the development of a growth mindset. The scholars identified a review of whole-person learning methods for higher education, the challenges and needs of first-generation learners, and the role of mindset in whole-person learning effectiveness. Researchers have examined the increased self-awareness, improved decision making, and overall positive influence of whole-person learning on populations

other than first-generation learners within education (Armstrong & Fukami, 2010; Bolin, Khramtosova, & Saarnio, 2005; Carmeli & Josman, 2006; Hoover, Giambatista, Sorenson, & Bommer, 2010; Kraiger et al., 1993; Lynch, Russell, Evans, & Sutterer, 2009; Reeves, 1990; Taylor, Fisher, & Taylor, 2009). I found additional studies on the effect of mindset that led to a more positive learning process (Dweck & Ferguson, 1988; Hansen & Topolinksi, 2011; Johnson & Stapel, 2010; Reid & Ferguson, 2011; Stringer, Kerpelman, & Skorikov, 2012; Torelli & Kaikati, 2009). Studies that involved the population of first-generation learners were equally available, which included motivation, academic success, personal satisfaction (Forbus et al., 2011; Ramos-Sanchez & Nichols, 2007; Woosley & Shepler, 2011), as well as employability (Mamiseishvili, 2010), and teaching to this population as faculty (Heinz-Housel & Harvey, 2011). Literature explored for my research study included implementation strategies and challenges for whole-person learning (Hoover, Giambatista, Sorenson, & Bommer, 2010; Taylor et al., 2009), the cultural implications of first-generation learners (Ramos-Sanchez & Nichols, 2007; Stebleton & Soria, 2012; Stephens, Markus, Fryberg, Johnson, & Covarrubias, 2012; Woosley & Shepler, 2011), and the role of mindset in context of cognitive and affective learning (Bolin et al., 2005; Sitzmann, Ely, Brown, & Bauer, 2010) as well as how it impacts emotional intelligence (Carmeli & Josman, 2006; Malcolm, 2012; Sheldon, Ames, & Dunning, 2013).

The implementation of whole-person learning posed challenges because of the difficulty in measuring the affective component (Hurst, 1980; Lynch et al., 2009; Reeves, 1990). However, appropriately integrating the cognitive taxonomy (Bloom, 1956) and

affective taxonomy (Krathwohl, Bloom, & Masia, 1973) provided a measurable vehicle to ensure the presence of both feeling and intellect in the learning process, which is outlined by Hurst (1980) and Reeves (1990). Lynch et al. (2009), in the context of engineering education, noted that the integration of cognitive and affective taxonomies was essential for technical competence and social change. The use of journaling and self-assessments have been two methods used to ensure that affective learning is engaged within the learner (Armstrong & Fukami, 2010; Bolin et al., 2005; Sitzmann et al., 2010). However, it is important to diversify activities that purport affective learning. For example, complete reliance on self-assessments could provide inaccurate data if the learners have low self-awareness (Sheldon et al., 2013).

Beyond curriculum design and teaching strategies for implementing whole-person learning, an authenticity model for faculty was developed by Cranton (2006). While Cranton sourced the model from Jung's (1969) individuation approach and Mezirow's (1990) transformative learning theory, the model also reflected attitudes Rogers (1980) felt were necessary in order to create the environment for individuals to experience whole-person learning. This authenticity model involved five components: (a) a strong self-awareness as a teacher and person, (b) awareness of differences and preferences of learners, (c) relationship development that improves the facilitator and the learner, (d) awareness of teaching constraints and influence and (e) critical reflection and self-reflection engagement on the practice of authentic relationships (Cranton, 2006). Again, Cranton had a similar approach to Rogers as the purpose and value for the authentic relationships was a focus on facilitators and students to have the learning experience

together. It should be noted that Rogers ater developed into a practice called learner-centered teaching, allowing the student to take responsibility for their learning and better apply their knowledge in real-life scenarios (Blumberg, 2009). However, it is important to recognize the challenge that faculty experience in embracing the value of affective learning because of their stress and lack of feeling supported by administration (Collie, Shapka, & Perry, 2012). Another essential aspect in facilitator preparedness was clarity in factors relevant to affective facilitation, as Taylor et al. (2009) found that educator awareness is essential as emotional competency and value has different requirements across the two genders.

Heron's (1992) felt encounter framework was another approach for implementing whole-person learning, and Jung's (1969) theory on individuation was a good approach for integrating cognitive and affective learning (Boyd, 1991; Boyd & Myers, 1988; Dirkx, 2006). Heron developed the felt encounter framework in order to create a foundation for designing the learning experience that included affect, resulting in an increase of self-awareness, authentic participation, and empathic connections. Yorks and Kasl (2002) noted that faculty have the challenge of no guidance in developing experiences that mix feelings and intellect, and recommended Heron's framework as a guide to create such learning experiences. Meanwhile, Jung's individuation provides a path for facilitators to guide students through emotion-filled imagery, such as metaphors and stories about specific issues that learners face, which allows them to connect emotionally instead of purely cognitively. Free writing or journaling based on symbols or images that influence the learner also helps discover patterns, which can emerge into a

transformational experience as those patterns are relevant to the learner on an emotional and cognitive level (Dirkx, 2006). Additionally, Maslow (1976) extended his work in self-actualization and developed transpersonal psychology that built off the concepts of Jung to recognize the growth potential from metaphysical experiences.

A significant factor in the literature and studies representing methods to implement whole-person learning was that they did not seem to have any focus on first-generation learners. Taylor et al. (2009) focused on students taking literature. Hoover et al. (2010) focused on master in business administration (MBA) students. Dirkx (2001, 2006) focused on nontraditional learners. However, there were no studies found in the arena of whole-person learning that focused on first-generation learners. Studies abound on the first-generation learner population with a variety of focus, such as cultural mismatch (Stephens et al., 2012), employment and academic balance challenge (Mamiseishvili, 2010), early integration experiences (Woosley & Shepler, 2011), academic obstacles (Stebleton & Soria, 2012), high school preparedness (McDonald & Farrell, 2012), and motivational challenges (Forbus et al., 2011). These scholars painted a picture of the complex challenges that first-generation learners experience, with the additional challenges of a typical profile being an older student who is responsible for dependents, in a lower socioeconomic status, and employed (Bui, 2002; McCarron & Inkelas, 2006; Newbold, Mehta, & Forbus, 2010). Forbus et al. (2011b) noted that while nontraditional students did not significantly test as more stressed than younger traditional students, the stress factors for nontraditional students were matters of career, education,

and family balance, while the stress factors of younger traditional students were mostly social matters.

A positive side effect of so many first-generation learners being nontraditional learners, usually starting in their mid to late 20s (Newbold et al., 2010), was that Stringer et al. (2012) found that it was developmentally more appropriate that the confidence in career goals for adults in their 20s was linked to self-actualization instead of career decision making that occurred during younger years. Solutions that scholars discovered for making the first-generation learner's experience less stressful included student involvement, collaborative partnerships, focus groups, transitional programs from high school to college, strong social networks, and administrative awareness of cultural mismatch (Heinz-Housel & Harvey, 2011; McDonald & Farrell, 2012; Stephens et al., 2012; Woosley & Shepler, 2011). However, another strategy to help first-generation learners become successful in academics is to balance priorities across career, family, and academics as well as discover a path of transformation towards self-actualization was to provide a whole-person learning experience. The first question of such a strategy is to find out if the whole-person learning experience changes the first-generation learner's mindset to one that is more focused on personal development, which was the goal of my research study.

The concept of mindset is important in the measurement of attitude, such as a fixed mindset where intellect is presumed to be unchanging or a growth mindset where intellect is presumed to be malleable (Dweck, 2007). Affective outcomes include attitude and motivation, in which positive attitudinal behavior is attributable to improved self-

awareness and value alignment (Kraiger et al., 1993). Positive motivational behavior is attributable to three subcategories identified by Kraiger et al. (1993) as motivational disposition that was based on Dweck and Leggett's (1988) work, self-efficacy that was based on Bandura's (1977) work, and goal setting that was based on Locke and Latham's (1990) work. Reid and Ferguson (2011) performed a study of measuring mindset in first-year engineering students, and after discovering that the participants became more deeply fixed in their mindset after the school year was complete, they were able to develop interventions intended to reverse the fixed mindset and work towards a growth mindset. The presence of whole-person learning or focus on first-generation learners was not a part of this study; however, Reid and Ferguson demonstrated the effectiveness of measuring mindset in students older than Dweck's (2007) target of school children.

Other perspectives in improving mindset towards development were presented from other scholars, such as Hansen and Topolinski (2011), Johnson and Stapel (2010), and Torelli and Kaikati (2009). Hansen and Topolinski performed a study that resulted in the implication that using exploratory stimuli instead of physical approaches would be effective to work towards a growth mindset, which also corroborated the effectiveness of unique approaches found in whole-person implementation. Johnson and Stapel's study resulted in further indication that motivational tendencies can change according to situation as well as intervention, which suggested that the intervention approaches found in whole-person learning also corroborated with development of growth mindset. Additionally, Torelli and Kaikati suggested that an abstract mindset, which is comparable

to the growth mindset defined for this research study, supported predictability of values that represented abstract ideal states.

The core issue with this plethora of knowledge was that no literature was found that addressed all three aspects of whole-person learning, first-generation learners, and mindset. It was this gap that was the focus of my research study to determine if there was a relationship between whole-person learning and a growth mindset specifically for a population that experienced unique cultural challenges to overcome in order to be successful in a competitive knowledge work environment that was dominating and continually transforming a digital age.

Problem Statement

Higher education has provided opportunity for whole-person learning to be experienced by first generation college students in a variety of ways (Cranton, 2006; Dirkx, 2006; Carmeli & Josman, 2006; Taylor et al., 2009; Yorks & Kasl, 2002); however, scalability and implementation models for whole-person learning, as defined by Rogers (1980), in college curriculum were limited. These publications on the topic of whole-person learning have been limited to situational implementation. There is a lack of knowledge on whether whole-persona learning can assist with a growth mindset in the population of first-generation learners. A curriculum titled *On Course*, developed by Downing (2002), has been used as the treatment to expose first-generation learners to whole-person learning because the curriculum provided many elements helpful towards a developing a growth mindset. However, even this curriculum, while providing consistency, was not entirely focused on whole-person learning. There remains a question

of whether whole-person learning used in a curriculum is effective for first-generation learners achieving a growth mindset.

My quasi-experimental study provided insights on the relationship between whole-person learning and a growth mindset. It was hoped that a relationship would be found to help inform program directors and professors of the value of integrating both the cognitive taxonomy (Bloom, 1956) and affective taxonomy (Krathwohl et al., 1973) for a measurable presence of feeling and intellect throughout the learning experience. Even though it was determined that *On Course* (Downing, 2002) was not enough to represent an effective treatment of combining feeling and intellect, the gap identified and the lessons learned from this study provide a path for future research on this issue.

Purpose

The purpose of this study was to conduct a quasi-experimental research to determine if first-generation learners achieve a mindset towards growth within a whole-person learning process. Dweck's (2006) Mindset Survey, which is a validated and reliable instrument that measures mindset, was used to compare the outcomes for learners who experienced whole-person learning and learners who did not experience whole-person learning.

The independent variable was whole-person learning, which is operationally defined in my research study by participation in an orientation course using *On Course* curriculum (Downing, 2002) or by participation in an orientation course not using *On Course* curriculum. The *On Course* curriculum includes many aspects of whole-person learning, including development within self-efficacy, self-responsibility, self-awareness,

motivation, interdependency, and emotional intelligence, which served as a treatment for the population who experienced whole-person learning. The dependent variable was mindset, which is operationally defined by the measurement score from Dweck's (2006) Mindset Survey. A fixed mindset represented the perceptions of the individual that intellect cannot improve while a growth mindset represented the perceptions of the individual intellect can be altered (Dweck & Leggett, 1988).

Research Question(s) and Hypotheses

1. Is there a significant difference in mindset score between first-generation learners who experience whole-person learning and those who do not?

Null hypothesis ($H_0 1$)*:* There is no significant difference in the change of mindset score (fixed versus growth) between first-generation learners who participate in whole-person learning and first-generation learners who do not.

Alternative hypothesis ($H_1 1$): There is a significant difference in the change of mindset score (fixed versus growth based on mindset score) between first-generation learners who participate in whole-person learning and first-generation learners who do not.

Theoretical Framework

The guiding concept for this research study was that the whole-person learning experience is a potential vehicle for developing the growth mindset necessary to achieve the ultimate goal of self-actualization. The goal of this research study was to determine if whole-person learning was a mechanism that could be used to propel growth mindset and, eventually, according to theory, self-actualization (Maslow, 1970; Rogers, 1980).

The theoretical support for achieving self-actualization was based on Maslow's (1970) theory of motivation and classification for self-actualization. Maslow indicated that individuals with a mindset of lifelong learning, which is another term for growth mindset that Dweck (2007) used, exhibit specific behaviors that were classified as a profile for self-actualization. These behaviors include realistic perception of reality, accurate judgment, self-acceptance and acceptance of others, spontaneity, strong worldview, comfort in working alone, continued appreciation of previous experiences, deep personal relationships, democratic character structure, distilment between means and ends, unique sense of humor, creativity, and resistance to culture identification. Maslow (1970) noted that the analysis from his pool of participants who represented 1% of a university population and were studied for 2 years (p. 150) resulted in those listed behaviors as consistent characteristics of self-actualizing people (p. 153).

The theoretical support for whole-person learning as a catalyst for developing a growth mindset was based on Rogers's (1980) theory of whole-person learning. The essence of whole-person learning is motivational dynamic that brings the affective-experiential and cognitive senses together so that a person can learn as a whole person, which avoids a limited scope of awareness. Rogers's definition of learning as a whole person "involves learning of a unified sort, at the cognitive, feeling, and gut levels, with a clear awareness of the different aspects of this unified learning" (p. 266). This experience was not to be expected with every learning occasion, but it was a benchmark for how effective learning experiences should occur (Rogers, 1980). Creating the conditions for this experience to emerge involves three major attitudes that faculty and trainers need to

exhibit, according to Rogers. Those attitudes include authenticity during the learning engagement, acceptance demonstrated by respect even if the opinion is not shared, and empathy of the process from the student's perspective (pp. 271-273). Maslow (1970) and Rogers were complementary in their views as Maslow observed that perceived antagonism between the heart and head becomes synergistic as the individual works toward self-actualization while Rogers believed that learning is enhanced when both feelings and intellect are present.

Mezirow (1990) further supported Maslow's (1970) and Rogers's (1980) past work as Mezirow extended Rogers's examples of empathetic discussion and reflection with his own transformative learning theory that focused on critical reflection from discussion and experiences as a catalyst for the transformative learning that was necessary for a continued growth mindset and eventual achievement of self-actualization. Maslow noted that the purpose in publishing his work was to stress "the profoundly holistic nature of human nature" (p. ix). Rogers shared this value with additional concern that U.S. education focused on cognitive learning only, resulting in a narrowness that would have consequences for society (p. 267). Researchers continued to reflect the concern of narrowing the learning experience to cognitive education. Scholars have indicated the value of the whole-person learning approach in order to achieve a mindset of lifelong learning (Armstrong & Fukami, 2010; Cranton, 2006; Dirkx, 2001; Dirkx, 2006; Hurst, 1980; Kraiger et al., 1993; Lynch et al., 2009; Reeves, 1990; Yorks, & Kasl, 2002).

Application and measurement of whole-person learning can be achieved through Bloom's (1956) cognitive taxonomy and Krathwohl et al.'s (1973) affective taxonomy. These taxonomies provided a systemic method for ensuring the feeling and intellect noted by Rogers (1980) throughout the learning process. Bloom classified intellectual stages of learning across six levels, which included knowledge, comprehension, application, analysis, evaluate, and create. Each of these levels represents a higher level than the previous level for engagement and complexity with the topic being learned. Krathwohl et al. classified affective stages of learning across five levels, which included receiving, responding, valuing, organization, and internalization. Each of these levels has emotional subgroups that need achieved or represented in the learner before the classification was considered met. The balance of these taxonomies provided heuristics for the facilitator to clarify both cognitive and affective expectations and guide teaching methods (Reeves, 1990). Despite the lack of significance found in this present research using the *On Course* curriculum (Downing, 2002) as treatment, these theories and potential measurement of whole-person learning with the taxonomies remain a basis to continue efforts to determine the relationship of whole-person learning and a mindset towards lifelong learning as a catalyst for the path towards self-actualization.

The *On Course* curriculum (Downing, 2002) was used as the treatment in the control group for first-generation learners exposed to whole-person learning during the quasi-experiment for the present research. The presence of the same curriculum across the different universities within this research study helped ensure that the same approach of whole-person learning was provided to the students. The theoretical framework of *On*

Course curriculum (Downing, 2002) involved a variety of disciplines, which includes neuroscience, motivation, cognitive psychology, and business leadership (J. Brennan, personal communication, October 2, 2013), with theories including self-efficacy (Bandura, 1977), motivation (Pintrich & Schunk, 1996), mindset (Dweck, 2007), emotional intelligence (Goleman, 2000), whole-person learning (Rogers, 1980), and leadership characteristics (Covey, 2004).

There were three instructional principles of *On Course* (Downing, 2002), with the first principle asserting that the students construct learning as what they think, feel, and do rather than simply obey the facilitation. The second principle asserted that most effective learning involves self-responsibility, self-motivation, interdependence, self-awareness, lifelong learning mindset, emotional intelligence, and self-esteem. The third principle was an intersection between the empowered student and a well-designed curriculum as an opportunity for a transformational experience (Downing, 2002). The *On Course* curriculum (Downing, 2002) principles matched well with Rogers's (1980) principles of learning that included personal involvement, self-initiation, pervasive influence, learner evaluation, and essence of learning experience achieving meaning.

Because it was a difference in mindset that was sought as an outcome of this research study, it was necessary to present the difference between fixed and growth mindset, as they were specific measurements. Fixed mindset, sourced from entity theory of intelligence, was the perception that intelligence is fixed or something that cannot be altered (Dweck & Leggett, 1988). Growth mindset, sourced from incremental theory of intelligence, is the perception that intelligence can grow or something that can alter

(Dweck & Leggett, 1988). Dweck (2007) presented a model that interprets adaptive and maladaptive behavioral patterns as mastery-oriented and helpless patterns respectively. The mastery-oriented patterns indicated a growth mindset as a result of learning goals, which were focused on increasing competence, while the helpless patterns indicated a fixed mindset as a result of performance goals, which were focused on public appreciation of competency (Elliott & Dweck, 1988).

Nature of Study

The purpose of this quasi-experimental design was to determine the relationship between whole-person learning and growth mindset. The presence of whole-person learning was an independent variable assumed to influence the dependent variable of mindset because of the paradigm of humanism developed by Maslow (1970); Rogers' (1980) indicated the need for both cognitive and affective learning in order to fully realize a transformational journey towards self-actualization. As such, the independent variable was the presence or lack of presence of whole-person learning in the form of *On Course* curriculum (Downing, 2002), influencing the dependent variable of the mindset measurement score based on Dweck's (2006) Mindset Survey.

Dweck's (2006) Mindset Survey was applied to first-generation learners at the beginning and completion of orientation courses across four universities. Two of the universities included in the population had applied the whole-person learning through the use of the *On Course* curriculum (Downing, 2002) in orientation courses, while two other universities offered orientation curriculum that did not apply *On Course* curriculum or any other whole-person learning paradigm to the curriculum. Students from orientation

courses that used *On Course* curriculum and that did not used *On Course* curriculum were tested with Dweck's Mindset Survey and became the experimental and control groups, respectively.

The study was a pretest/posttest control group design on the population of first-generation learners classified by their exposure to whole-person learning in order to determine any difference in mindset change, as evaluated by the change in mindset score, between those who experienced whole-person learning and those who did not experience whole-person learning. A factorial ANOVA test was performed to identify relationships between the control group and experimental group.

In the sampling process for the study, I treated the individual student as the unit of analysis. The students surveyed were drawn from at least two schools that employed *On Course* curriculum (Downing, 2002) within their orientation courses. Selection of comparable courses for the control group consisted of a basic orientation course across two other schools. Courses' use of the *On Course* curriculum (Downing, 2002) was considered to provide a whole-person learning experience, and courses that did not use the *On Course* curriculum or any other whole-person learning paradigm were considered to not be providing a whole-person learning experience. Courses were selected in a quota sampling model in order to ensure a sufficient number of courses fell into each category. The list of potential schools itself was a convenience sample of schools willing to participate. The schools selected were all community colleges that run between 2,000 and 6,500 students. Students were selected using a convenience sampling strategy based on their enrollment into the school's orientation course in the Fall 2014 semester. At the

student level, the necessity of using pre and posttests of students on a specific course essentially forced a convenience sample based on the timing of the experiment. The cost of survey delivery was small enough that the population group did not need to be further reduced as part of delivering the survey. As such, no random or systemic sampling was needed.

Using G*Power to identify the samples required to detect a medium effect size (*d* = .5) with an alpha of .05 and power of .95, 184 participants evenly divided between the two population groups were identified as necessary.

Definitions

The following terms were used in this research study:

First-generation learner: Adult learners for whom neither parent has a college degree or postsecondary education (Forbus et al., 2011a). This was determined by self-report in the demographic section of the survey during data collection.

Mindset: A perception of an individual's own control over intellect that determines how the individual handles threat, self-evaluation, and performance (Dweck, 2007; Johnson & Stapel, 2010). This was operationally defined for this research study by the measurement scores of fixed or growth mindsets from Dweck's (2006) Mindset Survey.

Whole-person learning: Integrated use of cognitive and affective taxonomies throughout the learning experiences (Bloom, 1956; Krathwohl et al., 1973). This was operationally defined for this research study by the use of *On Course* curriculum (Downing, 2002).

Assumptions

The assumptions in this study represented components not within my control. The assumptions for this research study were as follows:

1. First-generation learners were not already on their way towards self-actualization and were in need of a mechanism or tool to assist them, such as whole-person learning.
2. The courses that use *On Course* curriculum (Downing, 2002) followed it appropriately in order to provide a whole-person learning experience.
3. Students within a whole-person learning environment will experience whole-person learning that is measurable.
4. *On Course* curriculum (Downing, 2002) used across multiple schools can be adhered to comparably.
5. First-generation college students were distributed more or less randomly across both types of orientation courses.

Scope and Delimitations

The study required at least 184 participants total according to G*Power, but there were some fears of the response rate levels because the survey was conducted online and required students to have access to a computer. Before the study was conducted, it was determined that the ideal number of total participants would be 250 in case some students do not attend their class for both sessions, and while that number was closely achieved, obtaining a usable number of matched sets of pre and posttests was not achieved. The specific focus of this study was chosen because it allowed for the comparison of a single

group of students, first-generation learners, experiencing or not experiencing a specific type of learning, whole-person learning, to evaluate the research question. This specificity allowed for the research question to be evaluated with the single variable of whole-persona learning. Potential generalizability was addressed by gathering data from multiple schools in a variety of locations, although the schools that did not provide exposure to whole-person learning had a far less response rate than the schools that provided exposure to whole-person learning.

Limitations

The most significant limitation of this study was in its reliance on students completing both the entire orientation course and the two-part mindset scale given at the beginning and end of that course. The study required that the student complete mindset scales during both pre and posttests to be included. To address this limitation, the study ensured selection of an appropriately large sample size to allow for enough responses.

Another limitation was that by gathering data from multiple schools, the courses being used could be conducted differently. To address this limitation, the study attempted to correlate the course comparisons as effectively as possible.

The third limitation was that I was potentially biased towards data indicating significance of emotional intelligence in mindset scale results, as opposed to contributing it to other factors such as experiences the participant had outside of the experimentation process.

Significance

This research study was designed to address the problem of whether whole-person learning as defined by Rogers (1980) was related to a growth mindset for first-generation learners through systemic exposure to learners. Opportunity for whole-person learning was available, but observations and implementations were limited to the situational level. Also, there appeared to have been no research found that specifically addressed the first-generation learner in context of whole-person learning effectiveness until this research study. As the first-generation learner has complex and challenging cultural adjustments, the perceived value of whole-person learning could increase growth mindsets in individuals from this population and consequentially, experience a higher success rate in academics, career, and personal transformation. While that was not a certainty, I sought to discover if there was a correlation between a growth mindset as a result of whole-person learning for the population of first-generation learners.

The contributions of this research was intended to provide the field of education applicable information for the first-generation learner population from a policy, instructional, and curriculum perspective, with a path towards more research on the topics of whole-person learning for first-generation learners.

Summary

This chapter provided an overview of the study, which addressed the problem of not knowing whether having whole-person learning provided systemically in collegiate education has a relationship to growth in mindset. It was the intent of this study to determine if growth mindset increased in the population of first-generation learners as a

result of experiencing whole-person learning. The background provided a profile of the research literature and demonstrated a gap in knowledge that research had not been located where whole-person learning had been measured in the population of first-generation learners, which if successful, would provide evidence of the value for scalable whole-person learning implementation on a policy, instructional, and curriculum level.

The study was based on the foundation of Maslow's (1970) theory of motivation and articulation of self-actualization as achievement for a growth mindset, which provided support for pursuing a growth mindset. Rogers's (1980) work in whole-person learning was also presented as a potential vehicle for achieving the valued growth mindset in order for an individual to experience transformation. The theoretical background of *On Course* curriculum (Downing, 2002) was provided, followed by an explanation of Dweck's (2007) fixed and growth mindset. The nature of this research study was presented as a quasi-experimental study design that was a pretest/posttest control group comparison of the two populations of first-generation learners in order to determine any difference in mindset between those who experienced whole-person learning and those who did not. A factorial ANOVA test was performed to identify relationships within the sample and the potential of generalization with no significance found, but with several issues identified for a repeated experiment.

Definitions that were used uniquely within this research study were provided for terms of first-generation learner, mindset, and whole-person learning. Assumptions were included, with the biggest one being the fact that first-generation learners were not already on their way towards self-actualization and required a vehicle such as whole-

person learning to help guide them. Another large assumption was that courses using *On Course* curriculum (Downing, 2002) provided the whole-person learning experience in conjunction with the facilitator's awareness and efforts. This particular assumption was realized as a limitation after the experiment. Limitations were presented as reliance on student completion of both pre and posttest participation as well as ensuring courses across multiple colleges is similar in content because it is impossible to have identical courses for this situation.

In the next chapter, I explore the theoretical foundation more deeply and include the theoretical grounding for *On Course* curriculum (Downing, 2002) as well as an analysis of Bloom's (1956) cognitive taxonomy and Krathwohl et al.'s (1973) affective taxonomy. This analysis is necessary because the operational definition of whole-person learning is the integration of these taxonomies. The literature review provides scope and history on implementing whole-person learning in the formal learning environment and the demand of business organizations to also include whole-person learning within organizational training environments. The literature review then presents the challenges and complexity of the first-generation population, followed by the value and role of mindset for individuals to work towards self-actualization, and how emotional intelligence fits within the learning process. The gap of observing growth mindset within the population of first-generation learners as a result of whole-person learning will be demonstrated throughout the literature review.

Chapter 2: Literature Review

Introduction

Higher education has worked to provide the opportunity for whole-person learning to first-generation college students in a variety of ways (Hurst, 1980; Kraiger et al., 1993; Krathwohl et al., 1973; Lynch et al., 2009; Reeves, 1990; Yorks & Kasl, 2002); however, scalability and implementation models for whole-person learning, as defined by Rogers (1980), in college curriculum appear to be absent. Publications on the topic of whole-person learning have been limited to situational implementation (Cranton, 2006; Dirkx, 2006; Carmeli & Josman, 2006; Taylor et al., 2009; Yorks & Kasl, 2002). In order to achieve a consistent application of whole-person learning to first-generation learners beyond individual courses, it is necessary to know more about the effects of whole-person learning on the population in terms of achieving an improved mindset of personal development.

The purpose of this research study was to determine if first-generation learners achieved an improved mindset for personal development, which was defined as a growth mindset for this research study, within a whole-person learning process. A validated and reliable instrument, Dweck's (2006) Mindset Survey, was used to determine a growth mindset towards personal development or a fixed mindset and was used to determine the relationship between the outcomes of learners who have experienced whole-person learning and learners who have not experienced whole-person learning.

The last several decades have seen scholarly examination on how to effectively integrate affective learning in formal learning environments. However, the only

consensus was that while the integration was essential to holistic learning, it was difficult to manage or apply systemically (Hurst, 1980; Kraiger et al., 1993; Krathwohl et al., 1973; Lynch et al., 2009; Reeves, 1990; Yorks & Kasl, 2002). Maslow's (1970) theory of motivation and self-actualization as well as Rogers's (1980) theory of whole-person learning indicated that exposure to integration of both cognitive and emotional intelligence within the learning experience provides a predisposition towards a journey of personal development, transformation, and self-actualization. Rogers's theories have evolved into learner-centered teaching, which is an approach that allows the student to take responsibility for his or her learning and better apply their knowledge in real-life scenarios (Blumberg, 2009). However, Rogers's (1980) later work continued to align with the essential elements presented in the 1980 publication. As such, whole-person learning was operationally defined for this study as the integrated use of the cognitive taxonomy developed by Bloom (1956) and the affective taxonomy developed by Krathwohl et al. (1973) throughout the learning experience.

The predisposition that whole-person learning increases the likelihood of an individual moving towards a mindset of personal development and a transformational journey was supported by more recent literature on how infusing emotional intelligence in the learning process for adults provides a path for transformative learning (Dirkx, 2001; Dirkx, 2006; Cranton, 2006; Mezirow & Taylor, 2009; Yorks & Kasl, 2002). There was consensus of the value for a balance between cognitive and affective learning to build higher self-awareness towards personal development; however, a consensus of a repeatable solution was still lacking for systemic application (Armstrong & Fukami,

2010; Bolin et al., 2005; Carmeli & Josman, 2006; Hoover et al., 2010; Kraiger et al., 1993; Lynch et al., 2009; Reeves, 1990; Taylor et al.; 2009).

The population for this research study was first-generation learners in order to examine the relationship between whole-person learning and a growth mindset. The operational definition for first-generation learners was adult learners for whom neither parent had attended college. Typical first-generation learners are adults, according to Forbus et al. (2011a), the application of Rogers's (1980) principle of actualizing tendency through the lens of Kegan's (1994) adult stage theory is an excellent context to support this population. First-generation learners face unique challenges that threaten attrition, such as cultural mismatch (Heinz-Housel & Harvey, 2011; Stephens et al., 2012) and susceptibility to discouragement because of lower career goals, anxiety, lack of study skills, and lack of family empathy (Forbus et al., 2011a). As educational theorists have worked to marginalize emotions over the years in order to achieve rational thought (Jagger, 1989), the emotions became ignored as baggage, and the learners have had no opportunity to work through the emotions and learn more effectively as a result (Dirkx & Spurgin, 1992; Gray & Dirkx, 2000). However, the educators who intentionally use emotional and affective learning contributed to a holistic experience that can have a lifelong lasting effect (Dirkx, 2001).

It was the goal of this research study to examine the difference in mindset between first-generation students who experience whole-person learning and first-generation students who do not experience whole-person learning. If there was a significant difference in mindset for those who experienced whole-person learning, then

future work would involve deeper examination on systemic application of whole-person learning on the curriculum as well as faculty awareness and training. However, as significance was not found, future scholars in this field may examine the constraints that occurred during this research study and repeating with a study that addresses those constraints.

The theoretical framework includes Maslow's (1970) theory of motivation and articulation of self-actualization as achievement for growth mindset, Rogers's (1980) whole-person learning as a vehicle for developing a growth mindset, as well as the explanation of integrating cognitive and affective taxonomies (Bloom, 1956; Krathwohl et al., 1973) as a basis for implementing whole-person learning. Once these theories and taxonomies are reviewed, the literature is reviewed across the last 3 decades and is presented as artifacts on ways that whole-person learning can be implemented effectively, the cultural implications of the population being studied, the value of emotional intelligence, and the growth mindset necessary to feed the balance of cognitive and emotional intelligence so that a person can experience a lifelong journey of transformation towards self-actualization that Maslow (1970) articulated. Finally, the curriculum, *On Course* (Downing, 2002), that was used as the representation of whole-person learning within the formal learning environment for this study is presented.

Literature Search Strategies

The dominant library search engines used to locate the studies provided in this research study included the Walden Library, Google Scholar, and ERIC. The Walden Library has a feature called Thoreau, which searches many subjects, including education

and psychology, which are relevant to my work. The majority of the studies and articles, 60% of the represented publications from 24 journals, were sourced from educational journals such as *Teachers College Record, College Student Journal, Adult Education Quarterly, New Directions for Teaching and Learning, New Directions for Community Colleges, New Directions for Adult and Continuing Education, Adult Basic Education, Administrative Sciences Quarterly, College of Student Affairs Journal, Academy of Educational Leadership Journal, Journal of Advanced Academics, Journal of Applied Research in the Community College, Teaching in Higher Education, Journal of College Student Development, International Journal of Educational Research,* and *Oxford Review of Education.* A smaller group of the studies and articles, 23% of the publications from 11 journals, were sourced from psychology journals such as *Journal of Educational Psychology, British Journal of Social Psychology, American Psychologist, Cognition and Emotion, Consulting Psychology Journal of Practice and Research, Journal of Applied Psychology, Journal of College Counseling, and Journal of Personality and Social Psychology.* Additionally, a few studies and articles, 17% of the publications from eight journals, came from educational journals that focus directly on learning within a variety of workplace industry, which include *Academy of Management Learning & Education, Human Performance, Pastoral Care in Education, Educational Technology & Society, The Journal for Quality & Participation, Journal of Business Ethics, Business Communication Quarterly*, and *Journal of Professional Issues in Engineering Education and Practice.* The representation from workplace learning was found to be relevant because many first-generation learners are adults who maintain careers during their

educational pursuit (Forbus et al., 2011a; Mamiseishvili, 2010). Three reports from *The National Center for Educational Statistics* were also referenced.

A filter for peer-reviewed studies was always selected for these searches regardless of the database being used. In order to find relevant literature, the key terms started out with tightly controlled terms, and then were broadened as it became clear how small the field was. For example, the first search used keywords *first-generation*, *whole-person*, and *mindset* with and without dashes. No results were evident and using several combinations of two of the variables also produced no results. However, slightly less than 100 options became available with the single search item of *first generation*. The same results occurred with the search for *whole-person*, although the results were far more relevant with *whole-person* and *learning* in the same search. The term *whole-person* and *transformation* resulted in alternative health studies. Adding the term *learning* had no results although *transformational learning* did result in a few studies that directly contributed. The terms *transformation* and *mindset* resulted in global studies that were not immediately relevant to this study while the terms *first generation* and *transformation* had mostly scientific study results. Switching out the term *affective* for t*ransformation* was also ineffective. The terms *transformation* and affective produced a couple of good starts, but by far the most effective result was *first generation*, the combination of *whole-person* and *learning*, as well as a couple hundred articles from the term *mindset*. After that, cross referencing in the bibliographies from the first immediately relevant 30-40 studies found from the key word searches was the largest source of relevant research needed. I stopped reviewing here due to time constraints.

Theoretical Framework

The theory used as a framework for this study includes Maslow's (1970) theory of motivation and self-actualization and Rogers's (1980) theory of whole-person learning. Maslow (1970) continued to refine the concept of self-actualization, later differentiating the lower levels of his needs hierarchy as a general self-actualization, which included physiological needs, safety needs, belongingness and love needs, as well as esteem needs (Maslow & Lowery, 1998). The ultimate self-actualization, according to Maslow and Lowery (1998) was one of self, and at the top of the newer hierarchy of needs, with transcendence being the highest achievement possible within the context of needs. It ws the self-actualization focused on self as a result of a transformational journey that this research study referenced with the term of self-actualization.

Maslow's (1970) and Rogers's (1980) theories indicated that exposure to integration of both cognitive and emotional intelligence within the learning experience provides a predisposition towards a journey of transformation and self-actualization. Elements included in the whole-person learning curriculum were responsibility, motivation, interdependence, lifelong learning, and emotional intelligence (Downing, 2002). Forbus et al. (2011a) noted that the typical first-generation population tended to be older; studies on non-traditional adult learner are also presented in the literature review.

Maslow's (1970) theory of motivation and classification for self-actualization is presented as the ultimate achievement for an individual on a journey of transformation. Rogers's (1980) whole-person learning is then presented as a vehicle for maintaining the growth mindset necessary for continuing transformation towards self-actualization.

Finally, Bloom's (1956) cognitive taxonomy and Krathwohl et al.'s (1973) affective taxonomy is explained in order to provide an understanding of the value for integrated taxonomies as a method for ensuring whole-person learning.

The concept of whole-person learning was provided by Rogers (1980), and the integration process of the cognitive and affective taxonomies (Bloom, 1956; Krathwohl et al., 1973) were applied through the works of Armstrong and Fukami (2010), Hurst (1980), and Reeves (1990). Since different universities used for this study may have implemented unique perspectives of whole-person learning, a single piece of curriculum, titled *On Course* that was created by Downing (2002), was required to have been implemented as the treatment for this research study. While difference in mindset is all that was sought for examination, the context of mindset for this study was the difference between a fixed and growth mindset (Dweck & Leggett, 1988). Johnson and Stapel (2010) explained that these differences in mindsets determine how the individuals handle perceived threat, self-evaluate, and performance.

Maslow's Theory of Motivation and Self-Actualization

The purpose in using Maslow's (1970) theory of motivation was to better understand the framework and characteristics of self-actualization. Rather than an outcome of career, income, or social status, an individual with a lifelong learning mindset should exhibit very specific behaviors that Maslow reported from a holistic analysis to help further future clinical and experimental studies. There were many behaviors that were noted as a result of a mindset towards lifelong learning. One behavior was that the individual would have a clearer and more realistic perception of reality. Maslow

indicated this through a study that showed more secure students having a more accurate judgment of their professors than students who were less secure. Another behavior indicative of a growth mindset working towards self-actualization was general acceptance of one's self and others. Maslow (1970) explained that individuals with this characteristic "can accept their own human nature in the stoic style, with all its shortcomings, with all its discrepancies from the ideal image without feeling real concern" (p. 155).

The capacity for spontaneous behavior was also noted as related to a growth mindset. Maslow (1970) explained that "their behavior is marked by simplicity and naturalness and by lack of artificiality or straining for effect" (p. 157). Another behavior marked towards a mindset necessary to achieve self-actualization was the individual's tendency to focus on problems bigger than the individual's own issues, leading to a problem-centric mindset instead of ego-centric mindset. More behaviors included the ability to work alone or be detached without insecurity or discomfort and autonomy in the environment, largely due to the fact that "they are propelled by growth motivation rather than by deficiency motivation" (p. 162). Also, the capacity for fresh appreciation of what the individual has already experienced many times and the depth of personal relationships, "capable of more fusion, greater love, more perfect identification, [and] more obliteration of the ego boundaries" (p. 166) were elements of the self-actualization framework within Maslow's motivation theory. Still more behaviors found in individuals seeking self-actualization that Maslow noted include the democratic character structure, the capacity to distinguish the means and ends, even if they did not have it articulated

well, a unique sense of humor, creativity without exception, and general resistance to culture identification.

Maslow (1970) summarized his profile of self-actualization characteristics by noting that individuals with these characteristics have a very strong value system due to a "philosophic acceptance of the nature of… self, of human nature, of much of social life, and of nature and physical reality" (p. 176). Also dichotomies in these individuals were resolved. Maslow explained dichotomies as being between the "heart and head, reason and instinct, or cognition and conation" (p. 179), noting that the antagonism between heart and head, or reason and instinct, now become synergistic as an individual continues with a lifelong learning mindset towards self-actualization.

Rogers's Whole-Person Concept

The foundation of whole-person learning, developed by Rogers (1980), has been attributed to several sources, which included his own past work, past conferences, the British historian of ideas, Lancelot Whyte, and the South African scholar and politician, Jan Christian Smuts (1926). Rogers (1980) had not been exposed to Smuts's (1926) work until further along in his own work, and Rogers (1980) noted surprise with how identical his work aligned with Smuts (1926). Rogers (1980) also credited Adler (1933) for extending Smuts's (1926) concept of holistic learning in support of Adler's (1933) own belief that everything within the body worked to become whole. Rogers (1980) credited these earlier thinkers as independent confirmation of his earlier work on a person-centered approach. The person-centered approach later developed into a higher education strategy called the learner-centered approach (Blumberg, 2009). The hypothesis of

Rogers's (1980) work was that "individuals have within themselves vast resources for self-understanding and for altering their self-concepts, basic attitudes, and self-directed behavior; these resources can be tapped if a definable climate of facilitative psychological attitudes can be provided" (p. 115).

Rogers (1980) explored a dynamic of human motivation that involved bringing the affective-experiential and cognitive senses together, meaning that a person learns as a whole-person, not one with only awareness for one aspect. Rogers gave an example of dissonance between affective-experiential and cognitive awareness with a hypothetical argument between two speakers that was passionate yet argued as if it were purely intellectual. Even for individuals where the affective and cognitive domains were present, the individuals will be unable to combine those perspectives and achieve learning if they only goal is to win the debate and humiliate the opponent. In this case, Rogers's point was that the speakers would be only aware of their cognitive processes (p. 265). Their awareness would be stunted and they would be blocked from learning in this circumstance. Therefore, Rogers provided a definition of learning as a whole-person, which "involves learning of a unified sort, at the cognitive, feeling, and gut levels, with a clear awareness of the different aspects of this unified learning" (p. 266). While it certainly would not necessarily occur on every occasion, or even almost every occasion, that definition could be seen as a benchmark for how effective learning experiences should be (Rogers, 1980).

Whole-person learning requires the creation of certain conditions for the environment of learning. Rogers (1980) identified a set of specific attitudes that need to

be nurtured within a student in order to achieve these conditions for whole-person learning. Once studies showed that when those conditions that Rogers purported did exist in psychotherapy, and that positive change did occur as a result of those conditions, Rogers then said that those "same attitudinal conditions would promote any whole-person learning – that they would hold for the classroom as well as the therapist's office" (p. 270). These conditions comprised of three main attitudes. The first major attitude was genuineness and authenticity to ensure there is no façade or pretense during the facilitation process. The second major attitude was acceptance and trust that is demonstrated by respect of another's position without sharing the opinion. The third major attitude was empathy shown by understanding how the process is appearing to the student. Rogers noted that the perception of these attitudes is essential to be sensed by the students (pp. 271-273).

Maslow's (1970) observation that the perceived antagonism between heart and head became synergistic as one works towards self-actualization supports Rogers's (1980) belief that not only should one learn with both feelings and intellect, but that the learning was enhanced with that combination. Rogers noted that the affective and cognitive learning experiences were most effective when brought together in a human relationship during the learning process. Examples that Rogers provided specifically revolved around discussion and reflection with empathy, was also supported by Mezirow's (1990) transformative learning theory, which focused on critical reflection as a catalyst for a transformational experience as a result of active learning. Rogers's (1980) concern was noted for American education that focused completely on "'education from

the neck up', [with] resulting narrowness […] having serious social consequences" (p. 267). That sentiment was reflected by scholars throughout the next three decades (Armstrong, & Fukami, 2010; Cranton, 2006; Dirkx, 2001; Dirkx, 2006; Hurst, 1980; Kraiger et al., 1993; Lynch et al., 2009; Reeves, 1990; Yorks, & Kasl, 2002).

The Cognitive and Affective Taxonomies

The cognitive and affective taxonomies, created by Bloom (1956) and Krathwohl et al. (1973) respectively, created a systemic method for ensuring the presence of both feelings and intellect within the learning experience. Taxonomies are simply classifications. For the cognitive taxonomy, Bloom (1956) classified the stages of learning that were experienced on the intellectual level. Six levels were explored thoroughly by Reeves (1990). The first level was knowledge, which should never or very rarely be used as an outcome. It is simply an embedded aspect to any learning experience, triggering the individual's memory for information necessary to complete the expectations. The next level, comprehension, was the most common level targeted by higher education as it focuses on ensuring the learner understands the concept well enough that it can be interpreted for others. The application level was the beginning of the creative or problem solving aspect of intellectual learning. The fourth level was analysis, where learners should be starting to complete complex projects. The last two and highest levels were evaluate and create respectively, best served as representation for complex intellectual learning that requires iterative progress throughout the learning experience (Bloom, 1956; Reeves, 1990).

For the affective taxonomy, Krathwohl et al. (1973) classified the stages of learning that were experienced on the emotional level. This taxonomy only has five stages of learning; however, it is crucial to recognize that it is the integration between the cognitive and affective taxonomies that creates the most effective learning that Rogers (1980) references. The first and lowest level of the affective taxonomy was receiving, which is broken down into three sub-groups that include awareness, willingness to receive, and selective attention. These sub-groups focus on the motivation for students becoming selectively attention to hear and experience the learning. The second level was responding. Its three sub-groups are agreeable behavior, active behavior, and satisfaction. The sub-group of satisfaction was not limited to this level of emotional learning; however, both agreeable and active behavior should be experienced from the students within this stage of learning.

The third level of valuing was more complex as self-reflection and attitudes become a part of the learning process. The three sub-groups were acceptance, preference, and commitment of value. The organization level diverges from what was up to this point, a fully integrated learning experience between both taxonomies. For example, the first three levels of affective learning taxonomy can be integrated in the same activities fulfilling the cognitive levels for a richer learning experience. However, both the last and highest levels of affective learning, organization and internalization, are best noted for overall experiences that a learner may complete separately from regular activities. The organizational level falls into the two sub-groups of value conceptualization followed by value system organization. The ordering of these two sub-groups is important because

learners must conceptualize their values before they can organize them. Meanwhile, internalization was the ultimate emotional intelligence level that breaks down between developing a cluster of attitudes, feelings, and beliefs, and then, once again in order, fully infuses or internalizes those attitudes, feelings, and believes to a point where the learner becomes a dominant influencer. It should be noted that these last two levels are not likely to be taught in the formal learning environment, but experienced as a regular practitioner of what those values represent (Krathwohl et al., 1973; Reeves, 1990).

Curriculum Control: *On Course*

An important consistency for this research study was to ensure that the same approach to whole-person learning was provided to the students across the different institutions participating in the experiment. The presence of one whole-person learning curriculum would provide more reliability on the results of Dweck's Mindset Survey (2006) of the population having experienced whole-person learning. The selection of the whole-person learning curriculum was *On Course* curriculum, created by Downing (2002), an international consultant who focused on faculty development and student success. According to the *On Course* website, Downing (2002) maintained a vision to help institutions fulfill the mission to "empower its students to live rich, personally fulfilling lives" (para. 7).

The theoretical framework of *On Course* curriculum (Downing, 2002) involved many different disciplines. J. Brennan from *On Course* explained that *On Course* was drawn from many different disciplines, such as neuroscience, motivation, cognitive psychology, and business leadership (J. Brennan, personal communication, October 2,

2013). Pillars of the curriculum were sourced from self-efficacy developed by Bandura (1977), motivational theory presented by Pintrich and Schunk (1996), mindset development from Dweck (2007), as well as theoretical influences from Goleman (2000), Rogers (1980), and Covey (2004). Brennan described how Downing (2002) studied these different disciplines and developed tools and interventions to test against new learners. After thousands of tests across many universities, *On Course* curriculum (Downing, 2002) was developed as an evidenced-based curriculum to enhance a university's capability in providing tools for student's gaining self-responsibility, self-motivation, self-management, interdependence, self-awareness, lifelong learning, emotional intelligence, and self-esteem (J. Brennan, personal communication, October 2, 2013).

There were three overarching instructional principles of *On Course* curriculum (Downing, 2002). The first principle was that students construct learning more as what they think, feel, and do rather than obeying instructors. The second principle was the assertion that the most effective learners are those who have self-responsibility, self-motivation, self-management, interdependence, self-awareness, lifelong learning, emotional intelligence, and self-esteem. The third principle was that the intersection of an empowered student and a well-designed curriculum is an opportunity for transformational experiences (Downing, 2002). These correlated with Rogers's (1980) principles of learning that included personal involvement, self-initiation, pervasive influence, learner evaluation, and how the essence of the learning experience achieves meaning.

The curriculum has been used across 500 colleges and universities in the United States and Canada, impacting more than 100,000 students (Downing, 2002). Twenty-two

universities have performed studies on the effectiveness for improving retention across a variety of subjects including math, English, and reading that demonstrated favorable results. Additionally, some of those universities reporting an increase of grade levels as a result of the *On Course* curriculum. An example of improvement for Bryant and Stratton College is the increased 30% retention for new evening students with academic achievement improvement of 21% between Fall 2002 of not using *On Course* and Fall 2003 in using *On Course* (Downing, 2002). Cuyahoga Community College provided a questionnaire in the Fall of 2007 to the participating students, and with a 91% response rate, the class reported feeling somewhat to much more positive about their success chances in the topic, which was math (Downing, 2002). Elgin Community College reported that students who completed the course with *On Course* curriculum implemented in the Fall of 2008 were significantly more likely to return the following term at 22-29% as well as return the following year at 28-34% than those who did not enroll in the course that had *On Course* curriculum implemented (Downing, 2002).

These colleges pointed to the value that *On Course* curriculum (Downing, 2002) provided to student's retention and academic success. However, it should be noted that whole-person learning was not necessarily a correlation to higher retention and as *On Course* curriculum was not intended a representation of whole-person learning. Despite that, the combination of the curriculum's consistency, success in positively influencing students, interdependence needed for the first-generation learners (Stephens et al., 2012), and correlation to the principles of Rogers's (1980) whole-person learning, suggested that the *On Course* curriculum (Downing, 2002) was reasonable constant in ensuring that

students being measured for mindset change are exposed to the same learning experiences.

Relevance of Theoretical Framework

The theoretical framework for this research study was based on motivational theory and a self-actualization framework (Maslow, 1970) as an achievement that requires a growth mindset activated by whole-person learning (Rogers, 1980) through *On Course* curriculum (Downing, 2002). Maslow (1970) articulated the underpinning for understanding basic human motivation, describing that once basic organic needs are provided, then higher needs are emerge, such as self-actualization. The framework of self-actualization is addressed in this study as an achievement that requires a growth mindset. It is the connection of Maslow's (1970) focus on an individual's holistic nature for achieving self-actualization and Rogers's (1980) approach of whole-person learning that represented by intellectual and emotional learning that represents the theoretical relevance of this study. Additionally, a thorough review of how both the cognitive and affective taxonomies of learning break down and can be applied in the learning environment was presented as measurable methods to ensure the presence of whole-person learning. Finally, a theoretical explanation for the value *On Course* (Downing, 2002) provided as a curriculum control was explored. As the problem identified for this study is to determine if there is a relationship between whole-person learning and a growth mindset, the intersection of self-actualization and whole-person learning was used as a theoretical construct to determine if first-generation learners exhibited a tendency toward growth mindsets when exposed to whole-person learning. Consistency across the

treatment for exposure to whole-person learning was important, so *On Course* curriculum (Downing, 2002) was selected to represent whole-person learning.

In the literature review that follows I analyzed the current literature on various methods of implementing whole-person learning through the integration of cognitive and affective taxonomies as well as other methods presented through theories by Heron (1992) and Jung (1969). Following that analysis is a discussion on the cultural implications for the population being studied, which is the first-generation learner. Finally, the role of mindset and its impact on emotional intelligence are presented.

The Literature Review

The following literature review represents implementation strategies and challenges for whole-person learning, and then presents the cultural implications of first-generation learners. The role of mindset needed for personal development is then reviewed, as well as the role and value of emotional intelligence within the learning process in the scope of developing mindset. While literature captured and presented provided emphasis on whole-person learning, the balance of cognitive and affective taxonomies, mindsets, and first-generation learner; no literature was found that encompassed all of these areas combined, suggesting a gap in the research literature.

Studies were found that examined the impact of whole-person learning on other populations within education (Armstrong & Fukami, 2010; Bolin, Khramtosova, & Saarnio, 2005; Carmeli & Josman, 2006; Hoover, Giambatista, Sorenson, & Bommer, 2010; Kraiger et al., 1993; Lynch, Russell, Evans, & Sutterer, 2009; Reeves, 1990; Taylor et.al, 2009). Studies were also found that examined the impact of mindset of the

learning process (Dweck & Leggett, 1988; Hansen & Topolinksi, 2011; Johnson & Stapel, 2010; Reid & Ferguson, 2011; Stringer, Kerpelman, & Skorikov, 2012; Torelli & Kaikati, 2009). Studies that impacted the population of first-generation learners are equally available (Forbus et al., 2011a; Heinz-Housel & Harvey, 2011; Mamiseishvili, 2010; Ramos-Sanchez & Nichols, 2007; Woosley & Shepler, 2011). However, the closest connection between any two of the three areas of study involved only one study that examined if self-efficacy, an important element to positive mindset, mediated academic performance, and college adjustment for first-generation learners (Ramos-Sanchez & Nichols, 2007).

The literature that was reviewed encompassed three topics, which included whole-person learning, first-generation learners, and mindset. In regards to whole-person learning, the first major approach for addressing whole-person learning involved infusing emotional awareness and intelligence within the learning experience (Cranton, 2006; Dirkx, 2001; Dirkx, 2006; Heron, 1992; Yorks & Kasl, 2002). The second major approach for addressing whole-person learning involved using strategies for balancing the cognitive and affective taxonomies (Armstrong, & Fukami, 2010; Bolin, Khramtosova, & Saarnio, 2005; Hoover, Giambatista, Sorenson, & Bommer, 2010; Kraiger et al., 1993; Lynch, Russell, Evans, & Sutterer, 2009; Reeves, 1990; Sitzmann, Ely, Brown, & Bauer, 2010). The third major approach for addressing whole-person learning involved connecting adult learning theory and self-efficacy to achieve transformation for the learner (Carmeli, & Josman, 2006; Cranton, 2006; Taylor et al., 2009). These three elements of whole-person learning, first-generation learners, and

mindset are studied in-depth, but literature has not been found where relationships between these elements were studied.

The culture and context for the majority of first-generation learners were also reviewed, along with specific strategies for how to address the challenges that this population experiences (Forbus et al., 2011a; Forbus et al., 2011b; Heinz-Housel & Harvey, 2011; Institute for Higher Education Policy, 2012; Mamiseishvili, 2010; Penrose, 2002; Ramos-Sanchez & Nichols, 2007; Woosley & Shepler, 2011). The purpose and need for these two topics being integrated was because of a presumed mindset shift on the part of the population as a result of whole-person learning. Studies discussing the value of mindset were also reviewed in the literature (Dweck & Leggett, 1988; Hansen & Topolinksi, 2011; Johnson & Stapel, 2010; Reid & Ferguson, 2011; Stringer, Kerpelman, & Skorikov, 2012; Torelli & Kaikati, 2009). However, the only study that encompassed at least two of these major areas of interest was one that examined if self-efficacy mediated academic performance and college adjustment for first-generation learners (Ramos-Sanchez & Nichols, 2007).

Whole-Person Learning Implementation

Rogers's (1980) position on whole-person learning was that both cognitive and affective taxonomies were incorporated in the effort of learning for an individual. Therefore, the integration of cognitive and affective taxonomies is a measurable way to ensure the presence of intellect and emotion within the learning experience. Additionally, the two taxonomies being integrated are critical for both technical competence and social change (Lynch, Russell, Evans, & Sutterer, 2009). However, Lynch et al. (2009) found

that even if it is successful, there was danger of affective learning leaning on the side of self-serving for the affective taxonomy's lower levels, such as a student providing the expected appearance while not being authentic. In order to mitigate this danger for successful whole-person learning implementation, it is important to have a vision that works towards a social role that has not been fully realized yet as a destination (Lynch et al., 2009). Also, the vision cannot be worked on by only new learners, but needs engagement with experienced practitioners as well, creating a sense of urgency for faculty to embrace and participate (Lynch et al., 2009). While the cognitive domain is broadly accepted for integration into the learning environment, the affective is also broadly known as challenging to integrate into the learning environment (Lynch et al., 2009). However, the themes of vision achievement that the affective domain provides make it an essential integration with the cognitive domain, and worth the integration challenge (Lynch et al., 2009).

Two common methods of introducing affective learning are to employ journaling practices and self-assessments (Armstrong & Fukami, 2010; Bolin, Khramtosova, & Saarnio, 2005). The value of affective outcomes for journal writing was shown to be high by a study conducted by Bolin, Khramtosova, and Saarnio (2005), and served as a predictor for over 50% of variances in student evaluations of the course expectations ($B = .619$, $SE = .022$, $\rho < .001$, overall model $R^2 = .501$). These results confirmed the value students have for affective outcomes of journal writing in that "students want to understand why they are learning the material" (Bolin, Khramtosova, & Saarnio, 2005, p. 157) and that those affective outcomes are predictive for student evaluations. Participants

for this study included 172 students from a single state university that were in five different sections of an introductory psychology course. While the study was not specific as to the instrument used, the study implied that the questionnaire was created by the researchers, as the details of the categories were provided along with reliability calculations from principle components analysis with varimax rotation. The context of the study was limited to journaling, but provided an example of how students can internalize and make relevant the learning through journaling on a personal level instead of simply memorizing construct models on the topic through cognitive mechanisms such as tests.

Self-assessments were found to be very useful in affective taxonomies as indicators of feeling about the learning experience instead of indicators of what was learned (Sitzmann, Ely, Brown, & Bauer, 2010). The meta-analysis presented by Sitzmann, Ely, Brown, and Bauer (2010) included 166 studies. The data included 222 independent samples from 41,237 learners from a variety of populations, which included 75% university students, 21% employees, and 4% military personnel. As a result from the discovered relationship between self-assessments of knowledge and motivation, it was noted that self-assessments were indicators of emotions towards the learning experience instead of the cognitive learning progress. High correlations were found between self-assessments of knowledge and affective outcomes in the meta-analysis presented. Self-assessment showed a moderate mean correlation with cognitive learning (ρ = .34), while a large mean correlation was noted with learners satisfaction with their instructional experience (ρ = .51) and motivation (ρ = .59). This did not necessarily mean that self-

assessments should indicate happiness, as some learning is painful and the adult learner may be experiencing a stage of tension or conflict. As such, the ability to understand how to interpret self-assessment results would be essential for instructors and self-assessments should not be a single measurement of learning (Armstrong & Fukami, 2010; Sitzmann, Ely, Brown, & Bauer, 2010).

Another reason to not completely rely on self-assessments is due to inaccuracy as a result of low self-awareness (Sheldon, Dunning, & Ames, 2013). After performing three quantitative studies involving professional students, Sheldon, Dunning, and Ames (2013) found that the least skilled participants had the most limited understanding of their own performance gaps, and were more reluctant than top performers to accept the need or value of self-improvement strategies, such as purchasing a book on emotional intelligence or professional coaching. The three studies were done at different universities and at the graduate level. All of the studies involved the completion of an emotional intelligence instrument, but a difference with the second study was that participants learned the results of their test and were provided feedback, while the third study incorporated the first two studies' designs along with either rating the expected accuracy or rating the expectation that a high emotional intelligence score would impact their future (Sheldon, Dunning, & Ames, 2013).

The second of Sheldon, Dunning, and Ames (2013) studies reported a strong correlation between interest in self-improvement books and actual emotional intelligence ($r = .34$, $\rho < .01$) and between the book interest and the student's anticipation of how accurate the assessment would be ($r = .36$, $\rho < .01$). The third of Sheldon, Dunning, and

Ames studies continued to report a correlation between a student's intentions to improve and their actual emotional intelligence ($r = .31$, $\rho < .01$) and that a student's willingness to pay for development correlated with both their overall intentions to improve ($r = .29$, $\rho < .01$) and their assessment of the accuracy of the emotional intelligence assessment ($r = .40$, $\rho < .01$). This compilation of studies provided evidence for the value of self-awareness, desire to improve, and emotional intelligence in order to shift to a growth mindset

An essential strategy to effective integration of cognitive and affective taxonomies has been the faculty effort to foster authentic relationships within the learning environment. Combining individuation from Jung (1969) and transformative learning from Mezirow (2009), Cranton (2006) developed an authenticity model for faculty that included (a) a strong self-awareness as a teacher and person, (b) awareness of differences and preferences of learners, (c) relationship development that improves the facilitator and the learner, (d) awareness of teaching constraints and the influence that, and (e) critical reflection and self-reflection engagement on the practice of authentic relationships. The assertion in value for authentic relationships with students was that both the teachers and learners benefit from the learning experience together (Cranton, 2006; Rogers, 1980).

Three strategies emerged from Cranton's (2006) work. The first strategy was raising self-awareness by exploring significant experiences, taking psychological inventories, and creating art that represented themselves as professors and individuals. Sharing these elements greatly increased the self-awareness to build upon the other strategies. The second strategy was awareness of others. This involved personal dialogue

with each student, becoming aware of the student's motivation for being there, and obtaining frequent feedback. The third strategy was articulation of relationship preference. Some professors preferred collegial relationships that involve side-by-side collaboration while others prefer close relationships that transcend the classroom.

According to Cranton (2006), all of the relationship types were effective for facilitating transformation through authentic relationships found in whole-person learning, but the facilitator must become deeply aware of the preference and why in order that students do not receive mixed signals. As critical reflection was an underlying premise for facilitating a transformative experience with students, the same guidelines applied to the professor on understanding personal assumptions and values of the process. In this sense systemic teaching is only applied in the broadest sense of the word as activities and connections become unique to the professor. This creates a precedent on the challenge of effectively facilitating affective learning and the key that faculty hold to positively integrating cognitive and affective learning, and should be addressed in future studies on this topic.

A challenge for faculty embracing affective learning, or the value of emotional intelligence and learning, was the need to experience and model it within their own working domain as teachers. Collie et al. (2012) performed a quantitative study that sought to understand teacher's perceptions of social and emotional learning as well as the school climate as related to three commonly studied variables of stress, teaching efficacy, and job satisfaction. Seven school districts in British Columbia and Ontario were used to draw a representative sample and a relevant instrument was used for each outcome

variable of work stress, teaching efficacy, and job satisfaction, as well as each predictor variable of school climate and social-emotional learning. The factor structure of the instruments was tested with exploratory factor analyses on half the data set while a confirmatory factor analysis was performed on the second half of the data set. Specifically relevant to this research, it was found that comfort with social and emotional learning within the classroom was negatively associated with student behavioral stress (r = -.280, $\rho < .001$), but positively associated with teaching efficacy (r = .488, $\rho < .001$) and job satisfaction (r = .430, $\rho < .001$). However, commitment to improve social and emotional learning within the classroom had positive association with stress (r = .157, $\rho <$ .001). These results helped clarify for administrators and policy makers that social and emotional learning requires a focus on the teachers as well as the students (Collie et al., 2012).

Additionally, teachers need to have clarity in factors that are relevant to affective facilitation. Taylor et al. (2009) collected data from a single university's undergraduate population of 289 students within a literature course in order to research the effect of learning through expression and emotion as a catalyst to provide more holistic learning experiences. Specific relationships that were sough between variables were gender and emotional responses to literature; age, emotional intelligence, and emotional responses to literature; as well as personality factors, emotional intelligence, and emotional responses to literature. Three instruments were used to collect the data.

The first instrument measured the emotional intelligence in order to validate the results from the next two instruments. The second instrument measured emotional

responses to literature while the third instrument measured the personality factors. The second instrument's results noted significantly ($F(1, 289) = 16.36$, $\rho < .001$) higher scores for females ($M = 52.62$) than males ($M = 47.47$) in measurement of emotional responses to literature, while a correlation analysis between the age and emotional intelligence score noted no relationship ($r = .02$). The relationship between the three variables of personality factors, emotional intelligence, and emotional responses to literature were tested through multiple regression producing a model ($F(5, 289) = 21.30$, $\rho < .001$) where 12% of the overall variance was accounted for by personality factors. The literature and findings demonstrate the need for educator awareness for emotional competency and value across the two genders.

Another strategy for incorporating whole-person learning was to use Heron's (1992) felt encounter framework as a foundation for designing learning experiences more effectively to include the role of affect. Practice of this process increased self-awareness and resulted in authentic participation and empathic connection. The added value of this framework to the role of affective learning included (a) experience being a felt encounter, otherwise describing encounter as a verb instead of a noun, (b) that there are many ways of knowing and they must be balanced with unique validity for each way, and (c) that there is articulation between feeling and emotion (Yorks & Kasl, 2002). While Dirkx (2006) made the point that faculty are willing to embrace emotional learning, Yorks and Kasl (2002) recognized the challenge in not having a theoretical map for guidance, and recommended Heron's (1992) framework as a roadmap for intentionally creating learning experiences that allow students to learn as whole beings. Specific recommendations for

continuous effort that provide these pathways included imagery drawing and storytelling (Boyd, 1991; Boyd & Myers, 1988; Dirkx, 2006).

A final strategic approach for integrating affective and cognitive learning through Jung's (1969) theory focused on individuation (Boyd, 1991; Boyd & Myers, 1988; Dirkx, 2006). Typically facilitated through emotion filled imagery, individuation provides a path to transformation in the context of learning and understanding one's own self and needs. A facilitator's guidance of students through metaphors and stories concerning specific issues instead of literal analysis allows individuals to connect through emotional ways instead of purely cognitively, creating a path for the issues to be worked towards resolution. The students work through the same process as a group, so they also experience transformation in both the individual's and the group's development (Dirkx, 2006). Free writing or journaling on a symbol or influencing image allows the learners to discover patterns, connecting the writers to how that symbol or image impacts and integrates with them.

Examples such as the free writing and journaling on influencing symbols help learners transform through the process of creating a deeper meaning of what is being studied and its relevancy to them as individuals. While not all educators are capable of such intentional guidance, there is potential for embracing affective learning in this manner. The use of affective learning and development of emotional intelligence adheres to the Jungian (1969) belief that powerful emotions elicited during the learning process are intrinsic of our humanity, rather than the assumption that a learner has emotional issues that disrupts the learning process. As first-generation adult learners have unique

emotional challenges, unique perspectives that positively influence the engagement of emotions are important (Cranton, 2006; Dirkx, 2001; Dirkx, 2006).

Implications of the First-Generation Learner Population

The attrition concerns for the first-generation learner have been identified and studied frequently since the 1970s through to the present decade (Billson & Terry, 1982; Ishitani, 2003; Pike & Kugh, 2005; Terenzini, Springer, Yaeger, Pascarela, & Nora, 1996; Woosley & Shepler, 2011). An outcome of studies concerning attrition has been to highlight the cultural challenges that first-generations learners experience, allowing deeper study in that area (Woosley & Shepler, 2011). As the operational definition of first-generation learners is adult learners for whom neither parent has a college degree, this population has been noted as to hold the most underprivileged, racial, and income groups (Choy, 2001; Horn & Nunez, 2000). Since the demographic profile of first-generation learners is typically older, responsible for dependents, have a lower socioeconomic status, and are employed, leading them to a higher likelihood of being non-traditional students, it was critical to observe additional stress factors that non-traditional learners have, such as time management and ability to persist under the pressure of the modern mental demands for parenting and career (Bui, 2002; Kegan, 1994; McCarron & Inkelas, 2006; Newbold, Mehta, & Forbus, 2010).

Non-traditional students have increased enrollment 30% to 50% across the ten year span of 1996 to 2006 and 73% of all students regardless of being non-traditional or tradition have reported non-traditional characteristics (Bye, Pushkar, & Conway, 2007; Compton, Cox & Laanan, 2006). As the United States shifted from a strong

manufacturing base to a knowledge services base across the twentieth century, the non-traditional student not only has an increased presence in higher education, but also more tension and responsibility (Morris, Brooks, & May, 2003). This influx of adult learners requires recognition of the emotional learning component that adult learning theory addresses, specifically with the transformative learning model for the adult perspective (Mezirow & Taylor, 2009). However, taking emotional recognition, acknowledgement, and learning a step beyond critical reflection, Dirkx (2006) discussed Jung's (1969) application of individuation, which is a process about recognizing and development awareness of ourselves as well as how we relate to others. It is this process by which a learner can have a deeper appreciation of self and withstand social and cultural pressures. While Jung's (1969) individuation strategy is only one possibility for addressing the emotional needs for adult learners (Boyd, 1991; Boyd & Myers, 1988; Dirkx, 2006), it was the goal of this research study to examine the strategies of emotional intelligence within the specific scope of the first-generation learner population.

Combined with the typical stress that any new learner experiences in formal educational environments, first-generation learners also must handle the additional dimensions of cultural, social, and academic stressors as well as the implications that come with the role of non-traditional students. Giancola, Munz, and Trares (2008) provided three major categories to help address these complexities of this population. The categories presented by Giancola, Munz, and Trares included pre-college characteristics and behaviors, four-year university transition, academic success, and retention outcomes. Warburton, Burgarin, and Nunez (2001) noted that first-generation learners were less

prepared academically than continuing-education learners, while Hellman and Harbeck (1997) found that first-generation learners have a lower academic self-image than their counterparts.

Based on these discoveries, Stebleton and Soria (2012) performed a study that used nonparametric bootstrapping to analyze the responses of 58,000 participants across six research universities in order to analyze perceived obstacle differences between first-generation learners and continuing-education learners. The results demonstrated that first-generation learners were significantly ($\rho < .001$) higher in obstacles such as competing job responsibilities ($d = -.27$), family responsibilities ($d = -.32$), weak math skills, weak English skills, and weak overall study skills ($d = -.18$, $-.19$, and $-.20$ respectively), as well as depression and stress (Stebleton & Soria, 2012).

Penrose (2002) further demonstrated the career and educational balance that first-generation learners face when the results of a quantitative study at North Carolina State University that surveyed nearly 3,000 students from a freshman orientation course in 1994 and then 330 graduating students from the same pool of respondents in 1998. It was found that 44% of first-generation learners faced the work and education balance compared to 30% of continuing-education learners in 1994 (χ^2 (2) = 49.43, $\rho = .001$), while 49% of first-generation learners balanced work and education compared to 30% of continuing-education learners in 1998 (χ^2 (2) = 37.85, $\rho = .001$).

An important perspective on types of stress was provided by Forbus et al. (2011b), as they examined the differences between non-traditional and traditional students with regard to stress factors and coping strategies. Newbold et al. (2010) defined

non-traditional students as those who have not followed a continuous educational path, and typically older than traditional students, just as first-generation learners tended to be in their mid-twenties (Bui, 2002; McCarron & Inkelas, 2006). Several hypotheses were tested for the context of demographics for non-traditional students, the context of attitude, and the factors surrounding stress and coping with that stress. This resulted in three outcome hypotheses that were tested, which were that non-traditional students are generally more stressed, more likely to have higher satisfaction with the university experience, and have a lower grade point average over their traditional student counterparts.

The study by Forbus et al. (2011b) was performed with a survey of the student population at a single university. The strategy for generalizing responses and eliminating bias was to train marketing research students to perform the surveys. Also, a stratified sampling plan was used that controlled for both the grade year and college within the university. The margin of error for the ending sample was ±4.5%, validated by a Chi-square goodness-of-fit test, which was determined to be non-significant. While all of the hypotheses developed within the context of demographics, attitude, and stress were proven correctly, all three of the outcome hypotheses were rejected. However, the various related hypotheses leading to the outcome hypotheses suggested that the reason non-traditional students did not significantly experience more stress was because the younger traditional students were less mature experienced stress over academic and social matters, while the stress attributed to non-traditional students were matters of career, education, and family (Forbus et al., 2011b).

Forbus et al. (2011a) focused specifically on first-generation learners on this topic of stress when they demonstrated in a quantitative study that this population not only faces the typical anxiety and challenges of every new student, but they also experience cultural, social, and academic changes due to lower self-efficacy and self-esteem, lower family support, and feeling unprepared for collegiate work. The study corroborated previous findings by testing nine hypotheses, which included first-generation students being more likely than continuing-generation students to have a stronger desire to graduate quickly, make a high performance effort in each course, place importance on earning the best grades possible, keep current with their academic work, report lower grade averages (GPAs), select university based on reputation, and feel university pride.

The two hypotheses that focused on first-generation students being less likely than continuing-generation students were interest in having a good time and satisfaction with the university experience. The authors accepted eight of their nine hypotheses, only rejecting the hypothesis that first-generation students were more likely to report lower GPAs. However, it was felt that this was mitigated by the university subject to this study due to their efforts of creating articulation agreements with over 40 community colleges in the state to avoid transfer shock. All of the hypotheses except for the sixth were tested with a 7-point Likert scale survey instrument. A pilot study was conducted to ensure the instrument's effectiveness and clarity of the eight construct questionnaire that had up to four items to represent each construct. The sixth hypothesis, which was also the one that had a surprising result, was examined through the evaluation of a chi-square that represented the GPA distributions.

Despite the challenges that first-generation learners face with their typically later entrance into higher education and subsequent career and family responsibilities, it was found in a longitudinal examination by Stringer, Kerpelman, and Skorikov (2012) that it was developmentally more appropriate that the confidence in career goals for adults in their 20s was linked to self-actualization instead of career decision making that occurred during younger years. The first hypothesis tested was if early career indecision predicting changes in self-actualization. The second hypothesis was if the first hypothesis could be predicted 4.5 years after high school. The third hypothesis was if early self-actualization would predict change towards career indecision. The fourth hypothesis was if the third hypothesis could be predicted 4.5 years after high school.

The data collection was through a large-scale and multivariate longitudinal study that used six adolescent samples studied six times across five years. There was good generalization with six high schools across Hawaii with excellent socio-economical and racial diversity. The researchers designed the population retention carefully and it resulted in only 16% attrition across the five year period. The measurements for career preparation were on career indecision, career confidence, and career planning. Multiple instruments were used to measure these constructs. The analytics were developed through latent growth curve analysis within a structural-equation modeling framework. Only 27% of participants did not have complete data at one or more of the data collection time points. While the listed diversity did not seem to have an impact on missing data, it was noted that men had more missing data and had higher attrition than women. As such, the researchers had gender as a control in the models. The results indicated that “career

confidence (π_{0i} = 4.17, ρ < .001; π_{1i} = 0.10, ρ < .001), career planning (π_{0i} = 5.32, ρ < .001; π_{1i} = 0.04, ρ < .01), social adaptation (π_{0i} = 3.03, ρ < .001; π_{1i} = 0.34, ρ < .01), emotional stability (π_{0i} = 2.99, ρ < .001; π_{1i} = 0.36, ρ < .05), and self-actualization (π_{0i} = 2.96, ρ < .001; π_{1i} = 0.31, ρ < .05) increased over time" (Stringer, Kerpelman, & Skorikov, 2012, p. 1348). The relevance of this study is recognizing the focus on first-generation students that fit in the nontraditional role of being older than traditional students (18-22 years old) is important for starting students on the journey towards self-actualization through the vehicle of whole-person learning. However, the fact that emotional stability is noted as essential for career preparation indicates the value of whole-person learning regardless of the end goal of self-actualization.

Many solutions have been explored to resolve the challenges that first-generation learners face from the perspective of the universities, which include comprehensive orientation, targeted focus from academic advisors, social activities, experiences that familiarize students with the faculty, and articulation agreements between community colleges and four-year universities (Forbus et al., 2011a). Recognition of early integration successfully retaining first-generation learners was noted by Woosley and Shepler (2011) who recommended that student involvement, collaborative partnerships, and focus groups would assist in university adjustment. Woosley and Shepler's literature review in the study they performed noted that integration as early as six weeks into the first semester had an impact on persistence, performance, and likelihood for completion. However, as there is little research in early integration for first-generation students, Woosley and Shepler sought to address that gap. The research questions developed were if the

variables measured correctly described first-generation student integration based on Tinto's (1993) longitudinal attrition model, and if so, which variables were the most valuable for integration prediction.

The data collection was from one American Midwest 4-year institution, limiting the population to the student type who likely had less integration concerns related to language and geographic diversity, which is supported by the fact that final sample was 87% Caucasian. The response rate to the initial survey was 85%; however, the response rate to all the survey items was only 26%, which limited the data analysis to that 26% participation. The research was based on Tinto's (1993) model where pre-entry variables (gender and admissions test scores), commitment to higher education, and campus engagement were identified. The criterion variables were social integration, academic integration, institutional satisfaction, and homesick-related distress. Results from social integration were that campus environment was important in developing social integration ($r = .478$, $\rho < .01$). Results from academic integration were that commitment to higher education ($r = .318$, $\rho < .01$), campus environment ($r = .470$, $\rho < .01$), and academic behaviors ($r = .560$, $\rho < .01$) were essential variables for students to understand. Results from institutional satisfaction were that the involvement expectations ($r = .242$, $\rho < .01$), commitment to higher education ($r = .275$, $\rho < .01$), and campus environment ($r = .547$, $\rho < .01$) were necessary in order to explain variance. Finally, results from homesick-related distress indicated a strong negative correlation with campus environment ($r = -.490$, $\rho < .01$), social integration ($r = -.340$, $\rho < .01$), and institutional satisfaction ($r = -.463$, $\rho <$

.01). The implications noted by the researchers were to focus on student involvement, collaborative partnerships, and hosting focus groups to improve university adjustment.

McDonald and Farrell (2012) focused on the fact that the success of early integration was affected by attributes such as family support, current skillsets, and prior education, resulting in a strategy for academic readiness by providing preparation courses and services (Born, 2006; Haggis & Pouget, 2002; Kirst & Venezia, 2001). As predictors for success fall within three constructs of motivation, academic skills, and social engagement, these served as an excellent framework in preparing for college integration (McDonald & Farrell, 2012). This was found through McDonald and Farrell's (2012) qualitative grounded theory study that investigated the perceptions, motivations, and knowledge about college as a result of participating in an Early College High School (ECHS).

Participants included 100 freshman and 98 sophomores with a strong demographic diversity. With a research question of finding ECHS students' perceptions of college readiness n context of academic, social, and personal preparedness, McDonald and Farrell (2012) presented a thorough review of the interview protocol, process, data collection, and data analysis, using an inductive, multistep, constant comparison analysis process. The findings indicated that the experiences of the ECHS program had significant impact on the students' acclimation to college work and collegiate identity (McDonald & Farrell, 2012).

A difficult area to address in acclimating first-generation learners to college life successfully is the cultural mismatch as named and theorized by Stephens et al. (2012).

Heinz-Housel and Harvey (2011) provided a vignette of Heinz-Housel's experience as a first-generation learner and the subsequent culture shock experienced when she saw the difference between how continuing-generation students perceived opportunities and how first-generation students handled opportunities. Despite the academic and career success that Heinz-Housel has achieved, she noted that the "feeling of straddling the working-class and middle-class cultures never goes away" (Heinz-Housel & Harvey, 2011 p. 6). Stephens et al. (2012) deeply explored a cultural mismatch theory that identified the independence purported strongly within the university culture actually undermines the interdependency that first-generation learners require for support in academic performance. Three hypotheses that Stephens et al. (2012) successfully demonstrated were that American universities reflect independent norms and that those independent norms are based on student's bringing models of self to the culture as well as that cultural mismatch resulted in impacting academic performance negatively.

Stephens et al. (2012) hypothesized that the source of underperformance from first-generation students was due to the lack of interdependent norms that this population experienced in their backgrounds. The position was that there was a mismatch with the middle-class expectations of independent norms present in college culture. Three specific hypotheses were created to test across four quantitative studies. The first hypothesis was that American universities reflect independent norms. The second hypothesis was that independent norms created are based on student's bringing models of self to the university culture. The third hypothesis was that a cultural mismatch would result in

impacting performance negatively. Surveys, longitudinal data, and experiments were used to collect the data for analysis across the four studies.

The first study tested the university culture by surveying 50 top national universities and 25 top liberal arts colleges. These colleges were defined by the U.S. News and World Report. A total of 650 administrators were invited to take the survey, and a total of 261 completed it. The second study tested the cultural norms across different social class backgrounds of the students. Incoming students were surveyed to assess motives and how they related to their social class backgrounds. This study followed the students for two years to observe academic results and to correlate them with the identified motives. The third study observed the effects of the cultural mismatch through exposure to updated orientation materials and the university culture, followed by completing verbal tasks such as anagrams. The fourth study duplicated the third study's results by using visual-spatial tasks such as tangrams. These third and fourth studies were to determine if there was a cultural mismatch, meaning that first-generation students would not be comfortable in completing the tasks. The results of these studies indicated that administrators generally focused more on independent norms ($\chi^2(1, 110) = 17.0, \rho < .001$), that interdependent norms mitigated performance concerns for first-generation students ($F(1, 38) = 4.2, \rho = .049$), and that continuing-generation counterparts do not see a performance difference between interdependent and independent norms environments ($F(1,42) = 0.8, \rho = .37$). This logic implied that first-generation students have a disadvantage in most college environments. The relevance of this study was the

confirmation of cultural mismatch that first-generation students experience in academic environments.

The goals of whole-person learning involve creating an environment that allows learning to emerge naturally (Rogers, 1980). As such, it was reasonable to suggest that cultural identity of first-generation students is an essential aspect of emotional recognition by university administrators and faculty, implying that sensitivity to emotional learning extends beyond the curriculum. Heinz-Housel and Harvey (2011) addressed this concern with a special journal publication containing an anthology of informational articles that targeted academic personnel on why first-generation learners are challenged academically, socially, and emotionally. Coffman (2011), one of the contributors in the Heinz-Housel and Harvey (2011) special journal publication of informational articles, advocated a strong social network that supports the first-generation learner's interdependency as noted by Stephens et al. (2012). Coffman (2011) reported, based on a collection of research, that the academic performance increased within first-generation urban students when they developed a strong social network that included family as well as when they experienced positive teacher influence. In fact, family support has been found to be one of the essential aspects to higher education motivation among first-generation learners (Auerbach, 2002). However, according to Stephens et al. (2012), it is a compilation of culture, emotional intelligence, and support that influences success. This compilation fits well with the intentions of whole-person learning to create an environment for natural learning to occur. As the needs of first-generation learners are

unique and also frequently fit within the parameters of non-traditional learners, it important to understand how whole-person learning would fit within this population.

The Role of Mindset and Emotional Intelligence

Mindset has a strong role in the determination of emotional intelligence, as is the change of attitude and value that allows measurement of a learning experience (Reeves, 1990). Mindset is a perception of one's own control over intellect that determines how the individual handles threat, self-evaluation, and performance (Dweck, 2007; Johnson & Stapel, 2010). It was operationally defined for this research study by the measurement score of fixed or growth mindsets from Dweck's Mindset Survey (2006). Kraiger et al. (1993) reported in a research article that affective outcomes included attitude and motivation. This thorough presentation of interdisciplinary research was based on Gagne's (1984) position that "an emphasis on behavioral or cognitive measurement at the expense of attitudinal and motivational measurement provides an incomplete profile of learning and the learning process" (as cited by Kraiger et al., 1993, p. 318). The affective outcome of positive attitudinal behavior was improvement of self-awareness and value alignment. The affective outcome of motivational behavior was noted in the research article as secondary training outcomes, and the sub-categories were selected based on extensive research in other psychological disciplines. The three sub-categories of motivation were reported as motivational disposition, self-efficacy, and goal setting, correlating with mindset.

Motivational disposition is rooted in Dweck and Leggett's (1988) work between orientations of mastery and performance mindsets. Individuals with motivation towards

mastery will risk error to improve, while individuals with motivation towards performance will only demonstrate exceptional work to perform well. While this mindset was originally considered to be dependent on the individual, Kraiger et al.'s (1993) researched the application of cognitive and affective outcomes to training assessment and indicated that these motivational tendencies can change according to situation or even intervention. This determination was supported by Johnson and Stapel (2010) when their collection of quantitative studies compiled for a single publication found a relationship between mindsets and social comparison responses. Five specific studies were performed on college students ranging from 55 to 125 participants per study, with each study addressing a single hypothesis for an ultimate examination of how the social comparisons by an individual are impacted by whether the mindset is towards a state of being or a state of becoming.

The first hypothesis was that mindsets impact how people think about themselves, with the mindset of 'being' having resulted in a self-view of stability and the mindset of 'becoming' having resulted in a self-view of actions and change. The results indicated "a significant difference between the priming conditions, $F(2,52) = 8.29$, $\rho = .001$. Contrast analyses revealed that participants in the being condition made fewer future statements ($M = 0.33$, $SD = 0.72$) than participants in the control conditions ($M = 1.26$, $SD = 1.15$), $t(52) = -.2.29$, $\rho = .03$" (Stephens, et al., 2012, p. 706). The second hypothesis was that mindsets would have an impact on the behavioral response to social comparisons. This was found to be accurate with the result that the current mindset, when examining social comparisons, determined how the information affected performance. The third hypothesis

that mindsets would determine how performance changed due to the social comparison experience was also proven. This was an extension of the second hypothesis in that the mindsets an individual currently have impacts self-evaluation, which affects performance expectations and subsequently the performance itself. The fourth hypothesis that mutability would not influence participants in a being mindset and conversely, mutability would influence participants in the becoming mindset, was validated. Finally the fifth hypothesis was the same as the fourth except that the mutability was extended beyond the academic domain and into other domains, and these generalized results held. This collection of studies demonstrated that certain social comparisons influence individuals, and that the mindset of 'being' versus 'becoming', which are comparable to fixed and growth mindsets, have important consequences on how social comparisons affect them (Johnson & Stapel, 2010).

Kraiger et al. (1993) noted in their informational article that the affective outcome of self-efficacy, which influences the individual's persistence and performance on tasks, originated with Bandura (1977). While it is often a direct objective to achieve, effectively developed learning experiences that involve deconstruction of difficult tasks and new competency is built up from simpler to complex tasks can result in unintentional improvement of self-efficacy (Kraiger et al., 1993). Finally, the affective outcome of goal setting is rooted in Locke and Latham's (1990) theory of goal setting, which involved relating goals and goal setting within motivation. The value of goal setting rests on the assertion that an individual will be different in their self-management activity, different in

the type and structure of goals, and different in the presence and quality of goals (Kraiger et al., 1993). This may provide implications on the quality of the learning experience.

Ramos-Sanchez and Nichols (2007) extended previous research on how self-efficacy helped first generation learners cope in the transition to collegiate studies, which was done by performing a quantitative study examining the relationship between self-efficacy and academic performance and college adjustment between first-generation and continuing-generation learners. There were three hypotheses. The first was that self-efficacy mediated the relationship between generation status and academic performance. The second hypothesis was that self-efficacy levels differ a great deal between the generation statuses. The third hypothesis was an exploration that asked if self-efficacy levels evolve over a year within each generation. The hypothesis of self-efficacy mediating the relationship between generation status and academic performance was invalidated. It was, however, found that high self-efficacy generally correlated to improved college adjustment at the end of the first year ($F(2, 188) = 10.62$, $\rho < .001$, $R^2 = .10$). Given that self-efficacy did not evolve over the course of the year ($F(1, 379) = 2.29$, *ns*), the presence of high self-efficacy at the beginning of the year can be seen to positively predict the improved college adjustment, providing the base of strategic planning for guidance counselors.

The study was limited to a single west-coast private college, reducing generalizability (Ramos-Sanchez & Nichols, 2007). Two instruments were used, but only a piece of both instruments was used to provide brevity for the participants. This lack of the full instrument may have impacted the lack of proving the first hypothesis, as well as

both reliability and validity for the study. However, there was excellent return on the survey with the initial survey returned in the low 60 percentile of the 354 potential participants, and the second survey returned in the high eighty and low ninety percentile of the 192 remaining participants. Part of the success for the return rate may be attributed to anonymous emailed questionnaire with a $10 payment upon completion. While self-efficacy was higher with continuing education learners, self-efficacy could not be isolated as a contributing variance for the relationship between generation statuses. It should be noted that there was not significant increase in self-efficacy across the year, suggesting that college experience does not greatly add to the initial confidence.

Dweck and Leggett's (1988) work in a mindset demonstrated the differences between fixed versus growth mindsets. Fixed mindset was based on the entity theory of intelligence, where intelligence is believed to be fixed or a trait that cannot change. Growth mindset was based on the incremental theory of intelligence, where intelligence was believed to be malleable or a trait that can change. Dweck and Leggett provided a research-based model that interprets major patterns of adaptive and maladaptive behavior, which was also described as mastery-oriented and helpless patterns, in order to identify a fixed or growth mindset.

Elliott and Dweck (1988) hypothesized that helpless patterns would be indicative of performance goals, while mastery-oriented patterns would be indicative of learning goals. Performance goals focused on public appreciation of competency while learning goals focused on increasing competence. While performance goals created a sense of judgment within the learner that transitioned their cognitive and affective process into a

state of vulnerability, the learning goal created a sense of increased ability within the learner that impacted their cognitive and affective process into a state of adaptive behavior and persistence. Elliott and Dweck tested this hypothesis by inducing performance or learning goals within school children, and then examined the resulting pattern of behavior. The predicted relationships occurred. Orientation toward skill acquisition resulted in mastery-oriented patterns or learning goals; and orientation toward evaluation of the task resulted in the child's perceived ability as the driving predictor for achievement.

While Dweck's (2007) studies have been focused on school children, Reid and Ferguson (2011) used the mindset instrument developed by Dweck (2007) for measuring first-year engineering students. Reid and Ferguson (2011) posited that entrepreneurial mindset was operationally defined as a mindset that leans towards the growth mindset as defined by Dweck (2007), as Reid and Ferguson (2011) assumed that a growth mindset was a necessity, or surrogate, for a student engineer's entrepreneurial, defined as creative and innovative, skills. As mindsets of this population of first-year engineering students were measured at mostly fixed levels at the beginning of the year, it is significant that end of year testing measured students at deeper fixed levels (d = -0.1348, $\rho < .05$ for fixed mindset, d = 0.1131, $\rho < .05$ for growth mindset). The result from this finding was that entrepreneurial interventions during the first year would be provided to help students move strongly towards the growth mindset, and then this study will be repeated. As this particular publication was a conference proceedings paper, the typical depth found in a regular journal publication was not provided. However, each element was present; it just

also truncated. It should be noted that no other examples of Dweck's Mindset Survey (2006) being applied in a study for adults was found, but the concept of fixed versus growth mindset has been found across educational and coaching practitioners to help adults understand how to reflect and strategize the shift from a fixed to a growth mindset (de Brantes, 2015).

An interesting perspective in developing a growth mindset was presented by Hansen and Topolinski (2011), where they found that this exploratory mindset, as they defined it, preferred novel stimulus instead of traditional approaches. Hansen and Topolinski (2011) performed a quantitative study that presented dot patterns with the instructions to imagine the stimuli as peas, and then the exploratory mindset was induced with the instructions to imagine the stimuli as stars. This study was titled as a brief report and did not contain the elements necessary to ensure repeatability on the research design, it was clear that there was a mixed factorial design and provides the population as 54 psychology students at a single university. While individuals in the control group that did not experience exploratory mindset manipulation preferred the prototype presentation, individuals that did experience exploratory mindset manipulation preferred the novel exemplars of the peas as stars, demonstrating a significant interaction effect ($F(2, 104) = 6.19$, $\rho < .01$, $\eta^2 = .106$). As star constellations are closely related to the concept of exploration and were rated higher for attractiveness when that stimulus was presented, the implications within the learning environment suggest that using exploratory stimuli instead of typical approaches would be effective to work towards a growth mindset.

There is a role that mindset provides beyond developing an openness and adaptability for an increased self-awareness and lifelong learning presented by Dweck and Leggett (1988) and Johnson and Stapel (2010). Torelli and Kaikati (2009) found that mindset can be predictive in judgment and behavior. Six quantitative studies were performed by Torelli and Kaikati that manipulated the participant's mindsets towards abstract or concrete thinking, and then measured the effect on judgment and behavior between the two mindsets. The hypothesis was that the abstract mindset results in actions connected to the relevant value, expressing those values in a predictable judgment and behavior. This did result positively with the fact that an abstract mindset did provide predictability for values such as power, benevolence, universalism, self-direction, individualism, and collectivism.

Torelli and Kaikati's (2009) first study primed the participants towards one of the two mindsets, and according to the predictions, the abstract mindset showed that the pooled correlation with the values of benevolence and power was significantly higher than in the concrete mindset ($z = 2.70$, $\rho < 2.70$). The second study extended the first with an actual behavior, demonstrating a significant negative correlation between the concrete mindset and universalism ($b = -57.5$, $t(70) = -2.31$, $\rho < .025$) and a significant positive correlation between the abstract mindset and universalism ($b = 67.3$, $t(70) = 3.63$, $\rho < .001$). The third study continued the extension by adding additional priming of individualism versus collectivism in a full factorial design, and demonstrated that participants primed with the abstract mindset are more likely to act in ways "congruent with the primed values ($M = 6.59$, $SD = 1.59$) than they did for products that were

incongruent with these values (M = 4.85, SD = 2.29), $t(50) = 3.19$, $\rho < .0025$, d = 0.88" (Torelli & Kaikati, 2009, p. 238).

Torelli and Kaikati's (2009) fourth study explored the relationship between contextual details and the concrete mindset, demonstrating that the presence of contextual information can prevent value-aligned decisions when primed with the concrete mindset ($r(40) = .04$, *n.s.*) while the absence of details allows those primed with the concrete mindset to act in a values-congruent manner ($r(37) = .44$, $\rho < .01$). The fifth study explored the projection of this value congruent behavior to hypothetical situations, demonstrating a significant interaction ($F(2,190) = 16.01$, $\rho < .001$, $\eta^2 = .09$) between mindset priming and the type of goals participants expected a hypothetical subject to pursue. The sixth and final study demonstrated repeatability using a different mindset manipulation and demonstrating compatible results showing a negative correlation between the concrete mindset priming and values-congruent behavior ($b = -.027$, $t(83) = -2.23$, $\rho < .05$).

Torelli and Kaikati's (2009) results demonstrated that an abstract mindset, comparable to the concept of Dweck and Leggett's (1988) growth mindset as well as Johnson and Stapel's (2010) becoming mindset, provided predictability for values such as power, benevolence, universalism, and self-direction. A major contribution this study provided was that values represent abstract ideal states. These values are more likely to influence behavior with an abstract mindset and the individual will likely interpret actions based on high level motivations (Torelli & Kaikati, 2009).

Regardless of how the mindsets are classified, whether fixed versus growth (Dweck, 2009; Dweck & Leggett, 1988), state of being versus state of becoming (Stapel & Johnson, 2010), or concrete versus abstract (Torelli & Kaikati, 2009), the essential message is that there needs to be a mindset that embodies values such as lifelong learning, self-awareness, self-efficacy, and self-responsibility in order to experience a journey of transformation towards self-actualization (Maslow, 1970; Rogers, 1980). The presence of emotional intelligence to facilitate a mindset towards lifelong learning is a major factor in both high motivation (Maslow, 1970) and whole-person learning (Rogers, 1980).

The description of emotional intelligence. While Reeves (1990) explained that mindset has a strong role in the determination of emotional intelligence, it is important to understand the relevance of emotional intelligence and how it influences the actions of an individual. Goleman (2000) stated that emotional intelligence is more important than raw expertise in the area of leadership, which is an essential element for every discipline. Greenberg (2012) postulated in a research article that those who experience deeply, accept their emotions, and can make sense of their emotions once they are activated have achieved optimal emotion processing. Whenever emotions change, an individual experiences a set of processes that includes awareness of the emotion, expression within a safe environment, regulation of the emotion, reflection on the emotional experiences, transformation of negative emotions with positive emotions, and finally, experiences that changes the negative emotions (Greenberg, 2012). While it is not required of faculty or students to understand these principles of emotional change on a psychotherapeutic level,

it is important to understand that changing emotions is a process, and it is at the crux of these changing emotions that mindsets can shift from maladaptive to adaptive behaviors, or in other words, mastery-oriented patterns and helpless patterns (Dweck & Leggett, 1988).

Dweck (2007) later identified these patterns as growth mindset for the mastery-oriented patterns and fixed mindset for the helpless patterns. A growth mindset allows for the experience of transformational learning, where an individual's values and assumptions are the perspective from which the individual examines new information (Merriam, 2004; Mezirow, 1990; Taylor, 2000). Transformational learning theory explains that when an experience cannot be explained through the current lens or perspective, a learner with an open, or growth, mindset can update the current perspective with a new perspective that is "more inclusive, discriminating, open, emotionally capable of change, and reflective" (Mezirow, 2000, p. 7).

A varied perspective on emotional intelligence is emotional literacy. Salovey and Mayer (1990) developed emotional intelligence as a term, which has been increasingly influential for attitude, learning, and performance development (Camilleri, Caruana, Falzon, & Muscat, 2012). However, Steiner and Perry (1997) produced the term emotional literacy, which contains knowing one's own feelings, empathizing capability, acknowledging emotions capability, addressing and repairing emotional damage capability, and better understanding the context of emotions (Camilleri et al., 2012). The advantages to emotional literacy, according to Camilleri et al. (2012), is that it focuses on competency development, is a continuous dynamic process that increases metacognitive

awareness, does not require a context because it occurs as a result of the dynamic of people and settings, and encourages communicating the emotions that are felt with respect, leading to self-empowerment (p. 22).

The value of emotions. Goleman (2000) noted that cognitive ability has been increasing since World War I as a result of variables such as better nutrition, consistency in education, computer games for spatial skills, and smaller families. However, Goleman then warned of the decreasing emotional intelligence with depression, anger, anxiety, and impulsiveness on the rise (Goleman, 2000). Engaging emotional learning and intelligence is typically manifested in subtle dynamics rather than obvious external behaviors, raising the challenge for the facilitator or instructor to judge or assess the effectiveness of the learning experience (Dirkx, 2006). Because of these perceived constraints, the academic setting typically overlooks or even misunderstands the necessary integration of both affective and cognitive taxonomies for a holistic learning experience otherwise referred to as whole-person learning (Bolin, Khramtosova, & Saarnio, 2005; Dirkx, 2006; Hurst, 1980; Lynch, Russell, Evans, & Sutterer, 2009; Yorks & Kasl, 2002).

While perspective exists that emotional intelligence in the formal learning environment is a negative influence and in opposition to reason (Ruggiero, 2003), adult learning theory recognizes the need and value of affect in learning with literature on the topic covering affective, emotional, and spiritual components of the adult's learning through development and transformation (Dirkx, 2001; Fenwick, 2003; Heron, 1992; Kegan, 1982; Kegan, 1994). Even in children's education, Malcolm (2012) reported a distinct movement away from a focus on curriculum content to an affective curriculum in

order to provide a strong image for children to see humans as emotional beings based on an interdisciplinary research study between philosophical, political, and sociological studies that Eccelstone and Hayes (2009) performed.

Beyond the university experience, business organizations are recognizing the value of affect in the training and learning experiences within the workplace (Kraiger et al., 1993; Marques, 2008; Lynch, Russell, Evans, & Sutterer, 2009; Armstrong & Fukami, 2010). Goleman (2000) reported that technical skills are lower in value to employers and that the top desire for a candidate is the ability to learn on the job. Other desirable skills in potential employees included communication, creativity applied to challenges, confidence, motivation, interpersonal effectiveness, and negotiation skills (Goleman, 2000). Also, studies have shown that individuals with high emotional intelligence have made positive influences into management and strategic processes (Huy, 2002; Samra-Fredericks, 2004; Zorn, 2001).

Hoover, Giambatista, Sorenson, and Bommer (2010) also reported that top needs requested of business organizations for graduate business students fell into the emotional and behavioral categories, which matched Goleman's (2000) observation from the previous decade that the three most desirable capabilities from MBA candidates included communication skills, interpersonal skills, and initiative. While all learners benefit from gaining higher emotional intelligence, first-generation learners especially benefit with their high likelihood and challenge to balance career and education (Mamiseishvili, 2010).

Mamiseishvili (2010) conducted a longitudinal quantitative study that explored the first-generation working student's perceived value of the college degree, and correlated high value perceptions of academics to a high persistence rate for completion. The literature review explained that attrition risk for first-generation students was 71% higher than continuing-education students. A gap that this study attempted to fill was the fact that student employment had not been a variable in the myriad of first-generation student persistence studies. This study's purpose was to discover effects of employment on persistence between first and second year academic work for first-generation students who were attending a 4-year postsecondary institution. Research questions asked what the predictors of this population were within 4-year postsecondary institutions as well as how employment impacted the persistence of this population. A logistical regression was used, which resulted in several predictors for the first-generation student's persistence between first and second years in college. The role orientation to employment versus academics was the largest predictor for persistence as well as the only significant one in regards to the employment variables provided in the model. Students oriented towards academics were more likely to persist to the second year by 2.742 times ($\beta = 1.009$, SE = .360, $\rho < .01$).

This study did find that the general characteristics of first-generation persistence between first and second years matched published literature on the topic. Academic persistence in light of employment was found to be based on the student's perceived value of academics. Prioritizing the college experience found deep persistence regardless of how much employment was required, resulting in the need for institutions to keep

working students engaged and rewarded in the academic experience in order to avoid employment becoming a higher reward and relevancy for the student. Implications for further study were noted to involve educating college administration and faculty on the differing motivations that this population experiences, and how to value the population in a holistic manner needed for the non-traditional student. Another implication was to have colleges improve communications on the value for academics and provide an active learning experience that is relevant to the students. Lastly, colleges need to provide more support and alternatives for students balancing work, family, and education.

Hoover et al.'s (2010) study was a quasi-experimental study that assessed the effectiveness of whole-person learning within the context of acquiring behavioral skills for MBA students who had no work experience. Based on the participation of 485 MBA students from a single university, the experiment measured of five dimensions, which included leadership, decision making, planning and organization, communication, and teamwork. A selected assessment center measured behavioral activities that included real life scenarios that students would experience in the workplace. The integration of whole-person learning measured increase of confidence and self-awareness (Hoover et al., 2010). The control group experienced the traditional lecture-based course, although there were fewer students in the control condition with only one course as the university did not feel that it was ethical to deprive students from the behaviorally-based curriculum.

It was found in the *t* tests that exposure to the behaviorally-based curriculum improved overall scores by 20.2 percentiles ($\rho < .001$) and additionally improved all of the measured dimensions except teamwork while the control group population had no

significant improvement in any of the measured dimensions (Hoover et al., 2010). However, while it should be noted that relevancy to this study proposal should consider that first-generation learners and graduate business learners are different populations, there is similarity in the study by Hoover et al. (2010) with the fact that the population of business graduate learners that contained a majority of students who had little to no business experience and demonstrated a fear of the unknown during the study. It was the increased decision-making (14.6 percentiles, $\rho < .001$) and communication (23.3 percentiles, $\rho < .001$) found in the experimental group for the Hoover et al. (2010) study that is being sought for first-generation learners through exposure to whole-person learning for this study. Additionally, business organizations reported that tacit knowledge was more abundant as a driver for positive business actions and decisions, and as such, Armstrong and Fukami (2010) found it important to include affective learning in the process.

Finally, it has been shown that emotional intelligence measurement predicts performance in career, education, and life, as Carmeli and Josman (2006) found positive correlations between emotional intelligence and task performance ($r = .47$, $\rho < .001$). Set in Israel, there were 215 participants that were also employees across several different organizations. An excellent response rate of 76.74% occurred from the two sets of structured questionnaires. The first questionnaire assessed emotional intelligence and demographic data, while the second questionnaire was directed to the supervisors on perceptions of the employee's task performance and citizenship behaviors. A hierarchical regression model was applied for positive and significant relationship between emotional

intelligence and task performance, supporting the hypothesis ($\beta = .20$, $p < .05$). The indicated need for emotional intelligence in the business field has led educators to incorporate social and emotional skill training into business related curriculum (Sigmar, Hynes, & Hill, 2012). The continuing challenge is implementing sustainable support for social and emotional learning within formal education (Kress & Elias, 2013).

The value for the measuring learning outcomes through Bloom's (1956) cognitive taxonomy has been widely accepted for several decades (Bolin et al., 2005). However, the incorporation of Krathwohl et al.'s (1973) affective taxonomy poses challenges as the focus on emotional intelligence makes it difficult to test internalized behavior, which are just as important as overt behavior (Reeves, 1990). In reality, grading or testing attitudes and values is inappropriate, but assessing the progress or change of attitudes and values is important for determining the effectiveness of the learning experience. Even if affective learning is successfully implemented, there is still a challenge for the facilitator to balance between avoiding indoctrinating values to the students while still identifying important values to share within the learning topic (Reeves, 1990).

The value of integration, however, was denoted by Hurst's (1980) proven hypothesis that participants would need to learn new cognitive skills and develop positive attitudes toward the curriculum being implemented by the participants. The participants consisted of 29 elementary school teachers within the same city that were already in different stages of implementing a curriculum. The hypothesis was that in order to successfully implement the curriculum, the teachers needed to both learn new cognitive skills and develop positive attitudes towards the curriculum. The result was that both

cognitive skills and attitudes had an integrated relationship that built up to the terminal goal mastery, which was voluntary implementation of the curriculum. The results suggested that both cognitive and affective domains were necessary for true goal mastery. If there was separation between the two domains, the result would have been two domains used independently instead of one integrated one (Hurst, 1980). This was supported by Kraiger et al. (1993) who noted the value of cognitive focus to internalize the continued practice of complex behavior, leading to and maintaining metacognition. It was also noted that strategy and decision making must take place before performance is enhanced, so strong self-awareness from affective learning correlate strongly to cognitive learning (Kraiger et al., 1993).

Through a phenomenological approach, Yorks and Kasl (2002) demonstrated the value and need for the role of affect in the learning experience, and to challenge assumptions made by educators on the role of experience for teaching purposes. Through powerful story illustration, the viewpoints of pragmatism and phenomenology were shared. It was noted in detail how pragmatism has deep support across many adult learning theorists, but even the most influential ones more strongly rely on the cognitive, or pragmatic, view. Kolb's (1984) experiential model demonstrated polarity between apprehension of concrete experience and comprehension of abstract conceptualization, which has a leaning towards thought over experience, although Kolb embraced the value of experience within learning (Yorks & Kasl, 2002). Mezirow and Taylor (2009) strongly embraced the value of experience, but even Mezirow (2000) focused on experience as a point of reflection, or analysis, underplaying the need and role for emotion. However,

affective learning must occur before critical reflection can truly emerge (Taylor et al., 2009).

Boud, Cohen, and Walker (1993) noted that the term, experience, is sometimes used as a noun for an encounter experience instead of as a verb, or the sensation of a felt encounter. However, Yorks and Kasl (2002) identified the phenomenological approach representing the term, experience, as a verb where emotions are part of the experience and considered valid (Heron, 1992). As such, Yorks and Kasl (2002) concluded that the pragmatic view of affect and experience limits the potential for adult learning possibilities, while the phenomenological or holistic approach increases presentational knowing (Heron, 1992), which serves as a bridge between felt experience and the ability to articulate it. However, the challenge is to incorporate such experiences into formal education systemically and effectively. A path for informing the process of recognizing experiences and articulating them is to incorporate the affective taxonomy into the learning environment in order to internalize values and raise self-awareness (Lynch, Russell, Evans & Sutterer, 2009). The intention behind implementation of whole-person learning by integrating cognitive and affective taxonomies would be to provide students the opportunity to "perceive, express, understand, and manage emotions … that could be eased by an increased ability to deal effectively with emotions" (Taylor et al., 2009, p. 29).

Summary and Conclusions

This chapter reviewed the search strategies used for the literature review, followed by an outline of the theoretical framework that supported the need for

examining if there was a relationship between whole-person learning and growth mindset. Assuming that growth mindset was a necessity for a journey towards self-actualization, I determined that *On Course* curriculum (Downing, 2002) could represent whole-person learning as the treatment in this research study. The literature review provided several methods of implementing whole-person learning on a class level, although nothing was found implemented on a scaled level. The implications of the first-generation learning population were reviewed, and then the role of mindset and emotional intelligence was examined in context of developing a growth mindset.

Theory Summary

Maslow (1970) and Rogers (1980) contributed the most to our understanding of motivation and learning that transcends cognitive learning in order to positively influence personal development, or a growth mindset. Maslow (1970) provided an ultimate achievement for each human to experience a journey of transformation for self-actualization due to his theory of motivation and behaviors of self-actualization. Rogers (1980) provided a vehicle to take that journey of transformation with whole-person learning, which involved specific attitudes that brought affective-experiential and cognitive senses together.

Boyd, 1991, Boyd and Myers (1988), Dirkx (2006), Cranton (2006), Heron (1992), and Yorks and Kasl (2002) provided strategies to instill the concept of whole-person learning in the formal setting. The combination of Bloom's (1956) cognitive taxonomy and Krathwohl et al.'s (1973) affective taxonomy was a dominant consistency throughout the literature that was presented. However, other solutions were presented as

well, such as Heron's (1992) felt experience model and Jung's (1969) individuation process. The challenge presented from all possible solutions was that any implementation would require faculty to be fully self-aware and embrace a solution, as Collie et al. (2012) identified, and Cranton (2006) worked to address.

The addition of the first-generation learner population provides a new set of challenges, as this particular group experiences cultural shock (Heinz-Housel & Harvey, 2011; Stephens et al., 2012), academic challenge (Hellman & Harbeck, 1997; Morris, Brooks, & May, 2003; Stebleton & Soria, 2012; Warburton, Burgarin, & Nunez, 2001), and balancing decisions between career and education (Penrose, 2002). As many have sought to solve these issues with smooth integration into the collegiate mindset (Born, 2006; Haggis & Pouget, 2002; Kirst & Venezia, 2001; McDonald & Farrell, 2012; Woosley & Shepler, 2011), this population also has a deep need to develop emotional intelligence in order to transition to a lifelong learning mindset. As mindset has a strong role in the determination of emotional intelligence (Reeves, 1990), it is the variable that was measured in this study for the population of first-generation learners based on exposure to the whole-person learning using the curriculum titled *On Course* (Downing, 2002).

Literature Gap

The scope of the literature review was not delimited to a time frame, although nothing was found before 1980 that was relevant to this study except from the books providing the theoretical foundation. The earliest work used was Maslow (1954), Bloom (1956), Krathwohl et al. (1973) as well as Rogers (1980). The combination of these

works provided the pioneering in the field of whole-person learning, or to put differently, the value of including emotional intelligence in the learning process. There were a few studies and articles provided from the 1980s and 1990s about emotional intelligence that are important as foundation and historical relevance, especially for integrating the affective and cognitive taxonomies to better ensure a whole-person learning experience. As the new century began, studies explored beyond just implementing the affective taxonomy and also delved into facilitation methods using adult learning theory using adult learning theory from the twentieth century. To ensure relevance and understanding of the current needs, there was an excellent balance of studies provided in the last five years concerning whole-person learning, the first-generation learner, and mindset. Approximately half of the resources are studies while the remaining sources include conference proceedings and informational articles based on theory and application. As a result, there appears to little exploration of the relationships between whole-person learning, first-generation learners, and mindset.

The gap identified for this study was the lack of studies found that specifically observed the effect of whole-person learning on first-generation learners. Curriculum such as *On Course* (Downing, 2002) was designed to support new learners more effectively by creating a sense of responsibility, motivation, and awareness, which is a major aspect of emotional intelligence. However, it was not directed to specifically support the unique needs of first-generation learners over any other population that is starting a degree program. It has been shown in literature that a differentiating factor between first-generation and continuing education that negatively affects first-generation

learners is the focus on independent thinking and doing within the learning community (IHEP, 2012; Stephens, et al. 2012). This differentiation is addressed in the *On Course* curriculum (Downing, 2002) as interdependence being a major element. As studies concerning the need for interdependence with first-generation learners were very recent (Stephens et al., 2012) it was an opportune time to measure the mindset difference for students who experience the support of elements taught within the *On Course* curriculum, which include emotional intelligence, lifelong learning, and interdependence.

Another major gap in the literature was that, with the exception of three publications (Stebleton & Soria, 2012; Stringer, Kerpelman, & Skorikov, 2012; Stephens et al., 2012), studies were completed within a single university setting. As that is a constant limitation to generalizability, this study sought to resolve that gap by measuring the mindset differences between first-generation learners who have and have not been exposed to the *On Course* curriculum (Downing, 2002) across several universities. While one could argue that the presence of the *On Course* curriculum was a limiting factor, it was selected to serve as a reliable constant for the study, although it was found that *On Course* curriculum alone was not sufficient to represent whole-person learning.

This study sought to build on the current research and added to the body of knowledge by reviewing constraints that contributed to a lack of significant findings and noting adjustments necessary for ensuring a successful repetition of the experiment. This quasi-quantitative analysis compared first-generation learners exposed to whole-person learner to first-generation learners who were not exposed through the mechanism of Dweck's Mindset Survey (2006) to examine if there was a relationship between exposure

to whole-person learning and growth mindset. The methods of this study are outlined in Chapter 3, which provides an overview on the survey instrument. Chapter 4 will present an analysis of the results. Chapter 5 will represent a discussion of the findings and recommendations for future research.

Chapter 3: Research Method

Introduction

The purpose of this quasi-experimental study was to determine if first-generation learners achieve a mindset towards growth within a whole-person learning process. Dweck's (2006) Mindset Survey, which was a validated and reliable instrument that measures mindset, was used to support a correlation analysis between the outcomes for learners who experienced whole-person learning and learners who did not experience whole-person learning.

In this chapter, I outline the research design and rationale for the quasi-experiment that occurred, followed by an in-depth description of the methodology used. The methodology section includes details on the population, sampling and sampling procedures, recruitment and data collection procedures, as well as the use and operationalization of the Dweck Mindset Survey. Threats to validity both externally and internally are presented along with the ethical procedures that took place for the experiment.

Research Design and Rationale

This study was constructed as a quantitative, pre and posttest quasi-experiment (Frankfort-Nachmias & Nachmias, 2007) using Dweck's (2006) Mindset Survey as the measurement instrument. The instrument was applied to two groups of the first-generation learner population; one group was exposed to whole-person learning and one group was not exposed to whole-person learning. This exposure to whole-person learning was the independent variable and Dweck's Mindset Score was the dependent variable. A

statistically significant difference between the two groups of the first-generation population was expected to indicate the effect of whole-person learning, although because that did not take place, a lack of statistical significance failed to invalidate the null hypothesis. The study was designed to directly expose the research question as a single independent and single dependent variable in order to allow a direct analysis of the effect or lack thereof for whole-person learning exposure.

A pre and posttest was needed during academic year's Fall 2014 semester to ensure enough participation. As Fall 2014 has high recruitment focus and represents the traditional starting period for universities, the high population from that semester was used to ensure higher likelihood for statistical significance. An entire semester was felt to be needed to determine if significance existed for experiencing whole-person learning, although accelerated courses used in the study stunted the exposure period. The instrument was provided through an online survey, so there was additionally a resource constraint of access to a computer. Although all of the institutions that participated provided library computers, the motivation to complete the survey was possibly reduced as a result of having to go out of their way to participate.

Methodology

The methodology of this quasi-qualitative study includes the elements of population, sampling, sampling procedures, recruitment procedures, participation, data collection, instrumentation, operationalization and the data analysis plan. These components represent how this study was conducted.

Population

The target population was first-generation learners, defined as adult learners for whom neither parent has a college degree or postsecondary education (Forbus et al., 2011a). This was determined by self-report in the demographic section of the survey during data collection. The overall target count for surveys returned was between 500-600 learners across the three universities because not all students will be first-generation learners. The target size for the first-generation sampling was 92 completed pre and posttest survey pairs from students exposed to whole person learning and 92 completed pairs from students not exposed to whole person learning, which were determined by the G*Power analysis.

Sampling and Sampling Procedures

In the sampling for the study, I treated the individual student as a unit of analysis. The students who were surveyed were drawn from two schools that employed *On Course* curriculum (Downing, 2002) and two more schools that did not employ *On Course* curriculum within their introductory courses. The criteria and selection of comparable courses for both the control and experimental groups was a basic orientation course. Courses that used the *On Course* curriculum were considered to provide a whole-person learning experience, and courses that did not use the *On Course* curriculum, or any other known whole-person learning paradigm, was considered to not be providing a whole-person learning experience. The list of potential schools itself was a convenience sample of schools willing to participate. The schools selected were all community colleges that ran between 2,000 and 6,500 students. They included colleges with this size population in

three different sections of the United States, which were the West Coast, Midwest, and Southeast. Students were selected using another convenience sampling strategy based on their enrollment into the school's orientation course in the Fall 2014 semester.

At the student level, the necessity of using pre and posttests of students on a specific course forced a convenience sample based on the timing of the quasi-experiment. The cost of survey delivery was small enough that the sample group did not need to be further reduced as part of delivering the survey. As such, no random or systemic sampling was needed. Additional exclusion criteria included incomplete surveys, a lack of first-generation status determined in the demographic questions, and a lack of corresponding pre and posttests.

Using G*Power to identify the samples required detecting a medium effect size (d = .5) with an alpha of .05 and power of .95; therefore, I needed at least 184 participants evenly divided between the two population groups. A medium effect size was selected because small effects are less likely to generalize to the entire population beyond the four sampled universities, while medium and large effect sizes should be sufficient to be impacted by future policy decisions. The alpha and beta values were selected for consistency with typical study parameters.

Procedures for Recruitment, Participation, and Data Collection

Recruitment of colleges that used whole-person learning was based on the list of colleges that actively participated in *On Course* curriculum (Downing, 2002); a list that was provided publicly on the *On Course* website. Colleges selected from the published list were reviewed for criteria of being a community college. The selection of community

colleges was based on geographic distribution across the United States with one each from Tennessee and Minnesota. Recruitment of colleges that did not use whole-person learning was based on my network of educators within institutions willing to assist in the study. A college liaison from each institution was assigned to distribute the survey URL with the consent form shown in Appendix A. The description of the research study and invitation to participate was sent in a pretemplated e-mail shown in Appendix B. This was sent to the entire roster within the first week of the semester and then again within the last week of the semester. The survey data were collected within SurveyMonkey from all students within the classes willing to participate, but results that were not from first-generation learners were be disregarded for purposes of this study. Identification of which surveys were provided by first-generation learners was determined through demographic questions provided at the beginning of the survey. Demographic collection included the following information:

1. Age
2. Gender
3. Ethnicity
4. Whether parents have attended college
5. Whether parents have completed college
6. Employment status
7. Location (known and coded already)
8. *On Course* presence (known and coded already)

Participants were provided informed consent on the first page of the survey. As it was an anonymous survey, a signature for the informed consent was not required, which was a necessary aspect of collecting the data in an online survey tool. No follow-up procedure was required.

Instrumentation and Operationalization of Constructs

Dweck developed the Dweck (2006) Mindset Survey. The survey instrument was felt to be appropriate to this experiment because the desired outcome was to find any significant difference in mindset between first-generation learners who had experienced whole-person learning and first-generation learners who had not experienced whole-person learning. As this survey instrument was used to determine if the participant had a fixed or growth mindset, it measured any change in mindset between the pretest and posttest experience. Permission from Dr. Dweck to use the Dweck Mindset Survey instrument was obtained verbally and presumed based on the multiple attempts by phone and e-mail to obtain formal written permission.

Another published use of Dweck's (2006) Mindset Survey was provided by Reid and Ferguson (2011) when they performed a study of measuring mindset in first year engineering students. After discovering that the participants became more deeply fixed in their mindset after the school year was complete, they were able to develop interventions intended to reverse the fixed mindset and work towards a growth mindset. The presence of whole-person learning or focus on first-generation learners was not a part of the Reid and Ferguson study; however, it seemed to be a precedent of effectiveness for measuring mindset in students outside of Dweck's (2007) target of school children. As this

dissertation research involved adult learners, it was necessary to demonstrate that growth mindset could be measured successfully in adults as well as Dweck's population of children.

Operationalization

Independent variable: Whole-person learning, which was operationally defined in my research study by participation or lack thereof in *On Course* curriculum (Downing, 2002) that includes many aspects of whole-person learning, including development within self-efficacy, self-responsibility, self-awareness, motivation, interdependency, and emotional intelligence, which served as a treatment for the population who experienced whole-person learning.

Dependent variable: Mindset, which was operationally defined by the measurement score from Dweck's (2006) Mindset Survey. A fixed mindset represents the perceptions of the individual that intellect cannot improve while a growth mindset represents the perceptions of the individual intellect can be altered (Dweck & Leggett, 1988).

Each of the Likert responses was stored as a 1-5 scale. The scores for the fixed mindset questions were reversed so that higher scores indicated less of a fixed mindset and the sum of the scores become the student's mindset score used in the data analysis. The final score ranged from 16-80 as a result. An example is that "strongly agree" equaling 5 on a 1-5 scale was applied for the statement "no matter who you are, you can significantly change your intelligence level" since the statement indicates a growth mindset. Meanwhile, a "strongly agree" equaled 1 on a 1-5 scale for the statement "you

have a certain amount of intelligence, and you can't really do much to change it" since the statement indicates a fixed mindset.

Data Analysis Plan

The screening procedure matched corresponding numbers provided on each questionnaire between the pre- and post-surveys. Incomplete surveys, lack of first-generation status determined in the demographic questions, and lack of corresponding pre- and posttests were removed from the analysis process to ensure clean data.

The units of analysis that passed the above screening criteria were coded and used in a Factorial ANOVA between the control group and experimental group. The primary variable of interest was the exposure to whole-person learning, but the available demographic data was observed to identify and control for any effects related to the demographics of the sample, per the data collection plan described above. The software used for analyzing the results of the pre- and posttest surveys was SPSS Statistics. The demographics data was coded and used in the analysis as described in the following table.

Table 1.

Coding Plan for Demographics on Survey

Variable Name	Description	Coding
Age	The reported age of the participant	Actual age
Gender	The reported age of the participant	Male=1; Female=2;
Ethnicity	The reported ethnic group of the participant	Dummy variables for actual reported groups; Caucasian as base case
parent_attend	Did either of participant's parents attend college?	Yes=1; No=2;
parent_complete	Did either of participant's parents complete college?	Yes=1; No=2;
Employed	Is participant currently employed?	Yes=1; No=2;
Location	Which university location does the participant attend?	Dummy variables for actual sample groups, base case TBD
Exposure	Was the participant exposed to the On Course curriculum?	Yes=1; No=2;

The multiple regression analysis test was considered, but that analysis requires interval or ratio data. The categorical variables of this study led to using ANOVA as the default analysis.

Research Question

1. Is there a significant difference in mindset score between first-generation learners who experience whole-person learning and those who do not?

Null hypothesis ($H_0$1): There is no significant difference in the change of mindset score (fixed versus growth) between first-generation learners who participate in whole-person learning and first-generation learners who do not.

Alternative hypothesis ($H_0$1): There is a significant difference in the change of mindset score (fixed versus growth based on mindset score) between first-generation learners who participate in whole-person learning and first-generation learners who do not.

The study design was a pretest/posttest control group comparison of the two populations of first-generation learners to determine any difference in mindset, as evaluated by the change in mindset score, between those who experienced whole-person learning and those who did not experience whole-person learning. The ANOVA test described above was used to identify any relationship between person learning and mindset score.

Threats to Validity

A threat to external validity for this quasi-experiment was consistency of the treatment, self-awareness of the participants, not enough timespan for treatment

influence, and the effectiveness of an instrument built for children. Treatment consistency posed a threat because applying *On Course* curriculum (Downing, 2002) had to be assumed as consistent, and those courses not using a whole-person learning paradigm had to be assumed as truly not providing any aspect of whole-person learning. The participant's self-awareness was a threat because that self-awareness could mean lower scores as growth mindset is better understood. The shortened time of accelerated courses represented at two institutions span threatened validity. Finally, the instrument posed a threat by not being used yet for studying adults.

A threat to internal validity for this experiment was mortality. If students dropped out of the course after the pretest, the data could not be used. Also, if potential participants did not check email where the URL links to the surveys were provided, that data would not be collected. The mitigation strategy for participation concerns was to ensure enough samples were requested to allow for that data to be lost without influencing the significance for the study analysis. The mitigation strategy for ensuring that the college liaisons sent the emails with the invitation and survey at the appropriate times was to maintain a strong relationship with them and remind them to send those emails at the time of need.

Ethical Procedures

Agreements required for this study included letters of cooperation from the colleges who agreed to participate in the study as well as the consent form shown in Appendix A being embedded in the survey tool before the potential participant continued

with the survey. As the surveys were anonymous, the consent forms did not have to have a signature, but they still needed to be provided to the participants.

The treatment of human participants for this study included the following:

- IRB approvals from each college participating in the study as well as IRB approval from Walden University. The approval Walden University IRB number was 07-25-14-0157165 and expires on July 24, 2015.
- The ethical concerns for recruitment was minimal as the college was asked to participate with a college liaison disbursing the email shown in Appendix B with the appropriate information for the pre- and posttest survey while providing awareness to the students that the project was voluntary.
- The ethical concerns for data collection was minimal as any participant who refused to participant simply did not have to complete the surveys, and any participant that had a change of mind for the second survey would not have the pretest survey included since a pre- and posttest set of surveys would be disregarded anyway.

The treatment of data for this study included the following:

- All surveys were anonymous with a unique identifying number required to be created by each student.
- Results that have the unique identifying number match was included in the data analysis while results without both pre- and posttest survey responses were not included in the data analysis.

Summary

This chapter provided the design and methodology of the quasi-experiment, which presented a pre- and posttest experiment that used Dweck's (2006) Mindset Survey as an instrument to measure any potential significance for mindset changes with the first-generation population that experienced whole-person learning in the context of *On Course* curriculum (Downing, 2002). A correlation analysis took place by also measuring for mindset changes with first-generation students that did not have experience whole-person learning. The target population of first-generation learners was self-reported in the demographic questions of the survey, while the general population of students was drawn from two schools that employed *On Course* curriculum (Downing, 2002) within introductory courses and two schools that did not employ *On Course* curriculum within introductory courses. College recruitment that represented whole-person learning was sourced from a public list of active colleges using *On Course* curriculum and then pared down to have the consistency for community colleges. College recruitment that did not represent whole-person learning was sourced from the researcher's network of individuals who worked within colleges willing to participate. The next chapter will present the results of the study based on the data collected within the experiment.

Chapter 4: Results

The purpose of this research study was to examine if exposure to whole-person learning positively influenced a growth mindset through a quasi-experimental study that explored the relationship between whole-person learning and a growth mindset in first-generation learners. The independent variable being measured was presence of whole person learning in curriculum as evidenced by *On Course* curriculum being used at specific colleges (Downing, 2002). The instrument used to measure the dependent variable of mindset was Dweck's (2006) Mindset Survey. The research question and hypotheses were

1. Is there a significant difference in mindset score between first-generation learners who experience whole-person learning and those who do not?

Null hypothesis ($H_0$1): There will be no significant difference in the change of mindset score (fixed versus growth) between first-generation learners who participate in whole-person learning and first-generation learners who do not.

Alternative hypothesis ($H_1$1) - There will be a significant difference in the change of mindset score (fixed versus growth based on mindset score) between first-generation learners who participate in whole-person learning and first-generation learners who do not.

In Chapter 4, I review the outcome of the quasi-experiment through an analysis of the data collection process, treatment, and results.

Data Collection

This was a pre and posttest study conducted during the fall semester of 2014 at four institutions. Two of the institutions provided the students who were exposed to *On Course* curriculum (Downing, 2002) while the other two institutions did not provide *On Course* curriculum exposure. A total of 177 first-generation students responded to survey invitations provided by college liaisons. The role of the college liaisons was to provide to all students in the preidentified orientation courses a templated e-mail provided by me that included a unique URL link to the survey for that college's pretest and posttest as shown in Appendix B. Students who participated did so voluntarily, as there was no negative impact of failure to participate. There was an expectation that students who did accept the invitation to participate would complete both the pretest and the posttest. The participants were 18 years or older and active members of a collegiate success orientation course at one of four participating institutions. This resulted in a convenience sample of unequal groups. Because of a number of variations in the way the students participated in the pretest and posttest, a large portion of responses produced unmatched results. Consequently, as depicted in Table 2, the final sample size contained a total of $n1 = 103$ pretest results, $n2 = 74$ posttest results. A pretest sample and posttest sample sharing the same unique identifier is referred to as a matched pair. Matched pairs are represented in Table 3 as *n3*. There were 35 matched pairs that represented exposure to whole-person learning in the form of *On Course* curriculum presence and only two matched pairs that represented the lack of exposure to whole-person learning in the form of *On Course* curriculum not being present.

Table 2.

Descriptive Statistics for Mindset Score of First Generation Learners

	On Course Presence	Mean	Std. Deviation	*N*
Pretest (*n1*)	Not present	64.88	8.309	18
	Present	60.95	10.019	85
	Total	61.64	9.820	103
Posttest (*n2*)	Not present	65.23	11.263	13
	Present	61.09	10.459	61
	Total	61.82	10.642	74
Total	Not present	65.03	9.481	31
	Present	61.01	10.169	146
	Total	61.71	10.142	177

Treatment

The two institutions that provided exposure to whole person learning through *On Course* (Downing, 2002) will be referred to in this discussion as College A and College B. The two institutions that did not provide *On Course* (Downing, 2002) curriculum will be referred to as College C and College D. The response demographics for each college are reported in Table 3.

Table 3.

Response Demographics for Each Participating College

Institution	*On Course* Presence	Pretest Results (*n1*)	Posttest Results (*n2*)	Matched Pairs (*n3*)
College A	Yes	75	56	33
College B	Yes	9	5	2
College C	No	8	7	1
College D	No	10	6	1
Total		103	74	37

There were insufficient matched samples that were not exposed to the treatment (N=2) to perform a within-subjects comparative analysis between the people exposed to the treatment and people not exposed. Because these samples could not produce an effective result, the overall population mean for the pretest mindset score was compared to the overall population mean for the posttest mindset score instead of analyzing the difference for each person. To test for a difference in these means, a factorial ANOVA was performed on the independent variable (the school's use of *On Course* curriculum). Also analyzed was whether the sample was a pre or posttest result as independent variables and the mindset score as a dependent variable. In the analysis, I found a significant (ρ = .048) effect for the use of *On Course* curriculum independent from whether the sample was pre or posttest. However, the result was nonsignificant for the interaction of the use of *On Course* curriculum and the pre or posttest. A further *t*-test was performed on only the samples using *On Course* curriculum to examine the change in mindset, with nonsignificant (ρ = .932) results.

Experiment Results

The hypothesis that there would be a significant difference in mindset (fixed versus growth based on mindset score) between first-generation learners who participated in whole-person learning and first-generation learners who did not participate was tested using a factorial ANOVA test. The interaction of the two factors was nonsignificant, ρ=.961. Given that, significance was not found and the null hypothesis was retained. ANOVA tests were performed to inspect the relationships of age, ethnicity, and gender with respect to both mindset score and the effect of treatment on mindset score. These analyses were conducted to ascertain if the students' demographic variables were acting as confounding variables.

An additional analysis was performed to detect significant differences in mindset score based on the additional demographic data that were captured in the survey. A one-way ANOVA was performed for each of the demographic variables against the mindset score and reported in Table 4. Two of these variables showed significant results. The use of the *On Course* curriculum by a college showed a barely significant result (ρ = .045) for which an effect size of η^2 = .023 was calculated. The students' reported ethnic group showed a significant result (ρ = .010) with a calculated effect size of η^2 = .083.

Table 4.

Results for ANOVA tests for Demographic Significant vs. Mindset Score

Comparison	ρ	Significance	Effect Size (η^2)
On Course presence	.045	Significant	.023
Pretest vs. posttest	.906	Not significant	
Age group	.191	Not significant	
Gender	.230	Not significant	
Ethnic group	.010	Significant	.083
Employment status	.559	Not significant	

There was only a single response for Native American or American Indian, as shown in the descriptive statistics in Table 5, so an additional ANOVA test was run after excluding that sample. This test demonstrated strong significance (ρ = .008) with a calculated power of η^2 =.076. Within the posthoc tests, the only significant between-groups difference was between White respondents and Black or African American respondents (ρ = .034).

Table 5.

Descriptive Statistics for Ethnic Group in First Generation Learners

Ethnic Group	*N*	Mean	Minimum	Maximum
White	144	60.8056	40.00	80.00
Hispanic or Latino	9	59.5556	46.00	80.00
Black or African American	18	67.9444	48.00	80.00
Native American or American Indian	1	50.0000	50.00	50.00
Asian / Pacific Islander	3	73.0000	67.00	80.00
Other	2	70.0000	68.00	72.00
Total	177	61.7175	40.00	80.00

As shown in Table 6, Black or African American respondents demonstrated a mean difference of mindset score 7.1 points higher than White respondents.

Table 6.

Comparison of Means between Black or African American Respondents and Other Ethnic Groups' Responses.

Ethnicity (A)	Ethnicity (B)	Mean Difference (A-B)	Std. Error	Sig.
Black or African American	White	7.13889	2.46242	.034
	Hispanic or Latino	8.38889	4.02111	.231
	Asian / Pacific Islander	-5.05556	6.14235	.923
	Other	-2.05556	7.34151	.999

Limitations

A few mitigating factors occurred during the data collection period.

1. Two colleges had a late start to the pretest distribution, limiting the exposure to treatment.
2. Students did not create the personal identification numbers as instructed, limiting the matched set potential.
3. Not all college liaisons followed the procedure as instructed, creating another layer of distribution through the facilitator.
4. Not all college liaisons embraced the role to help ensure maximum data.
5. Analysis of the IP addresses showed heavy reliance on library and school computer systems that required students to go out of their way to complete.
6. Analysis of the time stamps indicated that the most reliably complete data came when it was done in a classroom lab environment.

7. While not statistically significant, several sampling groups that were exposed to whole-person learning showed detectable negative changes to their mindset score, leading to concerns around the external validity or response pattern for the Dweck Mindset Survey (2006) for adults.

Summary

This study explored the relationship between whole-person learning and a growth mindset in first-generation learners to see if exposure to whole-person learning positively influenced a growth mindset. Based on the results of the ANOVA for the independent variable of whole-person learning and the dependent variable of growth mindset, the null hypothesis was accepted because no statistically significant change was found. These results, implications of the data collection, the instrument's validity, and suggestions for further research on the implications of whole-person learning for first-generation learners will be discussed in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

This chapter includes the study's results and social implications, as well as limitations experienced throughout the study. The problem, purpose, research question, and hypothesis are restated, followed by resulting interpretation, limitations, future research, and implications for positive change.

Restating the Study Elements

While higher education provided opportunity for whole-person learning on a class by class basis with excellent results, there were limited scalability and implementation models for whole-person learning as defined by Rogers (1980). Also, a relationship between whole-person learning and increased growth mindset for the specific population of first-generation learners was not found to be studied in scholarly literature. Despite a good deal of knowledge in literature on the topics of whole-person learning, first-generation learners, and mindset, there was no literature discovered on the intersection of all three of these topics.

The purpose of this study was to determine if first-generation learners achieved a changed mindset towards growth when exposed to a whole-person learning experience. It was felt that if there was a relationship between whole-person learning and a growth mindset in first-generation students, a foundation would be provided for solutions that would enable this population that has unique cultural challenges to overcome in a competitive knowledge work environment. Dweck's (2006) Mindset Survey has been determined to be a reliable instrument that served as the measuring tool for mindset (Dweck, 2007; Dweck & Leggett, 1988). As such, it was selected to support a correlation

analysis between outcomes for first-generation learners who were exposed to whole-person learning and first-generation learners who were not exposed to whole-person learning.

The curriculum titled *On Course* (Downing, 2002) that was selected for the scope of this study as a combination of affective learning levels includes several elements that represent whole-person learning (Krathwohl et al., 1973) and cognitive learning levels (Bloom, 1956). Consequently, the *On Course* curriculum was selected as the treatment for whole-person learning exposure because, according to Brennan (personal communication, October 2, 2013), it was built on the theories of self-efficacy (Bandura, 1977), mindset (Dweck, 2007), emotional intelligence (Goleman, 2000), and whole-person learning (Rogers, 1980). Also, it was considered beneficial that the *On Course* curriculum was a consistent application of these theories in the classrooms that used the curriculum. The instructional principles of the *On Course* curriculum and the whole-person learning principles of Rogers' (1980) made the curriculum a good choice for treatment. The research question and hypotheses are as follows.

1. Is there a significant difference in mindset score between first-generation learners who experience whole-person learning and those who do not?

Null hypothesis ($H_0 1$): There is no significant difference in the change of mindset score (fixed versus growth) between first-generation learners who participate in whole-person learning and first-generation learners who do not.

Alternative hypothesis ($H_1 1$): There is a significant difference in the change of mindset score (fixed versus growth based on mindset score) between first-generation

learners who participate in whole-person learning and first-generation learners who do not.

The review of the study elements provides the context for interpreting the findings based on the results of the experiment. The interpretation will include the testing used and resulting nonsignificance.

Interpretation of the Findings

Exposure to whole-person learning had no significant relationship to growth mindset for first-generation learners. The factorial ANOVA result was $\rho > .05$, indicating that the presence of the *On Course* curriculum did not have a significant effect on the mindset score for first-generation students over the duration of a first-year orientation course. Based on this analysis, the null hypothesis was accepted. Constraints experienced during the experiment period beyond the initially recognized set of study limitations prevented collection of the volume of data necessary for a good effect size. This led to performing the pre and posttest between-groups comparison of means rather than looking at the within-subjects differences for each individual. Challenges to the data collection leading to this decision are discussed below in the Study Design section.

The additional analysis of the demographic subgroups noted significance for *On Course* curriculum usage by a college. With only four colleges represented in the study, and the survey being provided in orientation courses, students joining one of the specific colleges within this study may have significantly different mindset scores than students who joined the other colleges' orientation studies within this study. Because of the small effect size of $\eta^2 = .023$, it is likely that this finding was attributable to external effects,

such as different recruiting techniques between colleges, regional differences among student populations, and other differences in the types of students each college attracts.

Significance was also noted within the ethnicity demographic that showed Blacks or African Americans demonstrating a 7.1 point higher mean mindset score as compared to White respondents. This is related to the Yorks and Kasl (2002) phemenological study on Heron's (1992) felt encounter framework concerning reflective discourse and the resulting lack of attention on the affective dimension of learning. Yorks and Kasl noted that between a team of White participants and a team of Black participants that the Black team "used affective and body-based strategies to explore individual differences and find commonalities" (p. 179), unlike the White team's cognitive approach to the project. The results from the mindset instrument supports the findings by Yorks and Kasl that Blacks or African Americans have a natural connection towards whole-person learning.

Limitations of the Study

This research study had assumptions that could become limitations to the study. These assumptions included that first-generation learners were not already on their way towards self-actualization, courses that used the *On Course* curriculum (Downing, 2002) provided a whole-person learning experience, students could experience whole-person learning within a whole-person learning experience, the *On Course* curriculum was comparably applied across different schools, and that first-generation college students were distributed randomly across both the orientation courses that had the *On Course* curriculum and orientation courses that did not have it. While these assumptions were accepted, additional limitations occurred both as to logistical constraints during the data

collection and as reflection of the data that were collected. The two main limitations were external validity and study design.

External Validity

Threats to validity are aspects of the study that may result differently than anticipated within the study. Threats specific to external validity potentially prevent the results from being generalizable. There are four external threats, which include treatment consistency, participant self-awareness, time span, and the instrument.

Treatment consistency. One of the intentions for this research study's design was to ensure multiple schools represented both the exposure and lack of exposure to whole-person learning in order to achieve generalizability, especially as multiple school studies were not discovered concerning either first-generation learners or mindset. However, as it was necessary to assume that the *On Course* curriculum (Downing, 2002) was comparably applied across different schools, this was also a potential threat to validity. In this same scope, another threat of validity discovered was that both of the institutions coded as not exposing their learners to the *On Course* curriculum had previously used the *On Course* curriculum, and some elements were adopted into their own developed orientation courses despite the fact that they did not feel their courses represented whole-person learning as defined by this study. As such, the orientation courses between all four institutions may have been similar enough to have diluted the possibility of there being a clear difference between whole-person learning being present and not being present.

Participant self-awareness. Another threat to external validity was the self-awareness element of the participants. Even though the data were not found to produce significant results for this study, it is worth noting that there were a few cases where participants started out with a higher mindset score and ended with a lower mindset score. Why this occurred is unknown. The nature of self-awareness provides a deeper reality of self. The *On Course* curriculum was designed to reflect the humanist adult learning theory concepts that perceptions are based on experiences, and then giving an individual the freedom and capability to reach his or her potential (Merriam, Caffarella, & Baumgartner, 2007; Maslow, 1970; Rogers, 1980). As such, as students became more self-aware through their course experience, it was possible that the posttest lower mindset scores reflected that self-awareness being sought to identify. There was a bigger possibility that while students who participated did so voluntarily, there was the expectation that the subjects who did accept the invitation to participate would be more likely than not to display growth mindsets. Regardless of which expectation was more appropriate, there was potential threat to the external validity in selection for this study when asking for a volunteer participation and expecting that only the higher scores necessarily represent an increase in growth mindset.

Time span. A common threat to external validity is maturation of the participants outside of the context of the study, but in the case of this study, there was likely not enough time to have the effect for mindset change regardless of the treatment. Two of the institutions, one representing exposure to whole person learning and one representing not being exposed, hosted accelerated courses that ranged from five to eight weeks. Some

courses were a full term, but high presence of accelerated learning was a threat to the treatment not being effective as the nature of accelerated learning did not equate to accelerated mindset change. Additionally, two other institutions, again one representing exposure to whole person learning and one representing not being exposed, had very late starts. Both of these institutions had full terms. However, the institution that did not expose their students to whole-person learning experienced a wildfire across the campus that reduced time for that semester. The institution that did expose their students to whole-person learning had an internal misunderstanding of their ethics committee review process, delaying the surveys until the participants were well into their semester. These constraints prohibited a true comparison of a full semester's exposure or lack of exposure of whole-person learning within a course at every institution except for the one institution that had both accelerated and full term courses. However, since the survey link used for each college was provided to all of the students for the pretest and again the same survey link was provided the posttest, there was no comparative data between courses that experienced time length differences.

Instrument. The Dweck (2006) Mindset Survey has been deemed reliable because of the measurement success that Dweck (2009) had with grade school children. However, it is possible that the instrument is not worded effectively for the adult learner, which is supported by the fact that the survey was only found to be used once for adults who were first-year engineers (Reid & Ferguson, 2011). Initially it was felt that Reid and Ferguson's significant results with this instrument demonstrated that the survey would be effective for first-generation learners; but, it is possible that it was not the best candidate

for the older adults as first-generation learners included in the study sample. The results reported in this study comparing each individual question to the overall mindset score supports the internal validity of the instrument, but there was insufficient evidence of the external validity as it relates to applying the instrument to first-generation learners.

Study Design

The second main limitation to this research study was the study design, and these constraints included issues encountered as a result of the population, treatment, ethics process, and instrument.

Population. It was reported in Chapter 2 that first-generation learners experienced academic gaps, which included critical thinking and decision making skills. Therefore, the complexity of the identification number for the posttest and pretest was likely inappropriate. Since it was a pretest and posttest experiment, a form of identification was necessary for matching pairs, and having the participants create their own identification code was required to meet the anonymous expectations from an ethics committee perspective. Since it was assumed that students would easily create too simple of an identification that would be easily duplicated or simply forget it by the time they were exposed to the posttest, a pre-established method for creating an identification was provided by using the four-digit birth year combined with the last four digits of their phone number, as shown in Figure 1.

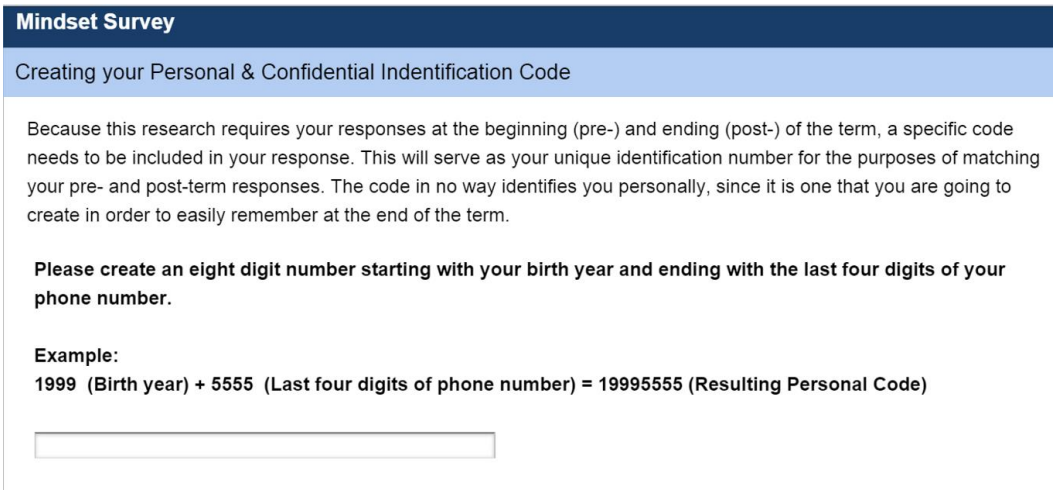

Figure 1. Image of personal identifier instructions provided in pretest survey

Just in case they forgot this combination, the posttest identification section reminded them of the need to use the same number used in the previous survey, with the same example, as shown in Figure #2.

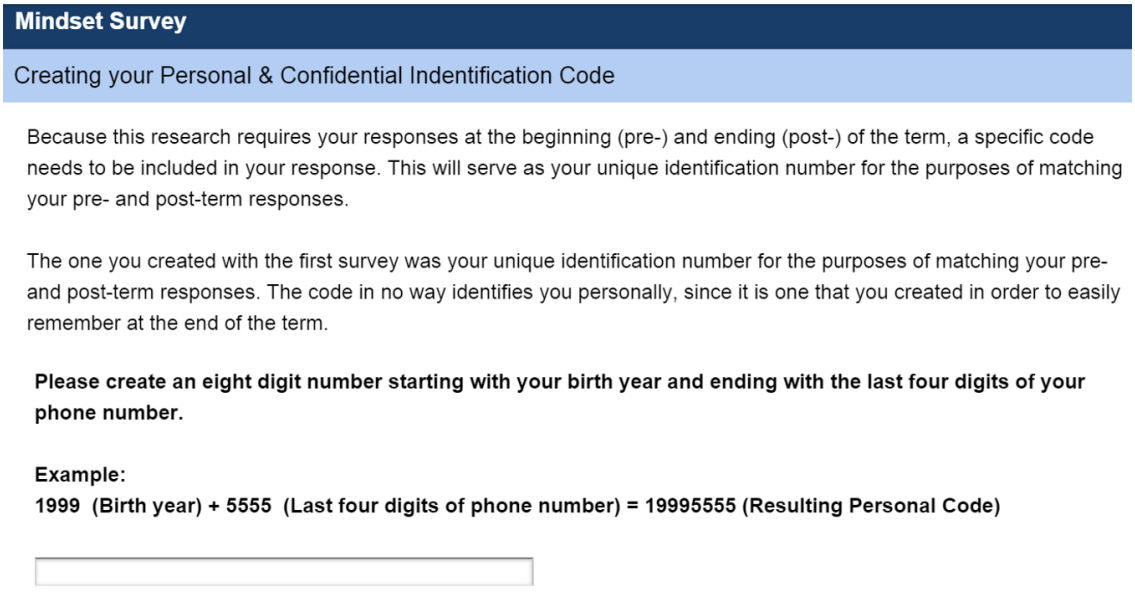

Figure 2. Image of personal identifier instructions provided in posttest survey

Despite 177 participants, only 37 were matched pairs of pre- and posttest results. Many of the participants switched the birth year and phone number order for the posttest, so the pretest and posttest did not match although it was clearly evident that it was the same individual. These, however, had to be discarded. Many more participants copied the example exactly, providing 19995555 as their identification for both the pretest and posttest. These were also discarded. A few participants just typed random characters that suggested there was no intention to comply with the needs of the identification number.

Treatment. The *On Course* curriculum (Downing, 2002) had many elements of whole-person learning; however, it was not entirely focused on whole-person learning as an outcome to the curriculum experience. There were simply enough elements present in the curriculum to represent the experience of affective learning and value of growth mindset to justify its use as treatment. That did not mean that the professors used the curriculum as it was intended, or all of the curriculum within the orientation courses intended as exposure to whole-person learning. Finally, just because the curriculum may have represented the essence of whole-person learning, that did not mean that the students necessarily experienced whole-person learning. Rogers (1980) expressed the value that the environment and tone be set properly for individuals to effectively experience whole-person learning. This was followed by an authenticity model for faculty, created by Cranton (2006). If the professors using this curriculum did not incorporate similar affective features in the classroom, then the treatment would likely not have been effective anyway. Conversely, for the professors who had previously used the *On Course* curriculum (Downing, 2002) in their two institutions that represented the

lack of exposure to whole-person learning, the affective and authentic elements may have still have been provided in the classroom without the treatment present.

Data collection requirements. The original intention for collecting the data was through faculty in the classroom using pen and paper surveys that had pre-coded identifications. This would seem to ensure a much higher rate of completion and matched sets of data. The ethics committee required that the researcher attend each pretest and posttest in person to gather the data, which would have required four flights in one week during the first week and another four flights during the last week of the semester courses. For the institutions that used accelerated programs, many more flights would have been required in short spans of time to accommodate each cohort. This was not a viable option for the researcher, so a virtual survey option was selected to ensure that the researcher would have the only access to the raw data. Additionally, the ethics committee determined that the researcher could not allow the survey to be conducted by the professor in order to avoid any perception that course expectations were related to the survey. A college liaison for each institution was permitted to send the pretest email invitation shown in Appendix B to potential participants. However, it was discovered that multiple liaisons simply forwarded the emails to the professors to distribute, nullifying the original intention of the ethics committee. It should be noted the data from courses where the professors clearly had students complete the surveys in class, based on IP address analysis, were the most reliably completed.

Instrument. As noted in external validity concerns, the instrument was found not to be effective for adults as a reliable instrument to measure mindset, indicating the

necessity of creating a method of measuring mindset for adults. Based on the nature of relevant and authentic assessment that is valued by adult learners, it is possible that a pre- and post- interview format would be appropriate for better understanding the mindset changes that may have occurred in a specified time span. The image available in Figure 3 helps identify trends that adults might find more relevant in their path towards self-actualization. For example, the result of selecting a number on a Likert scale to represent agreement with a statement such as "no matter who you are, you can significantly change your intelligence level" is predictable based on how much the adult learners already understand the concepts around mindset as well as a cognitive only response. However, creating questions around challenge, effort, feedback, and the success of others would possibly allow for a whole-person response as the individual connects their own experiences to the concepts being discussed.

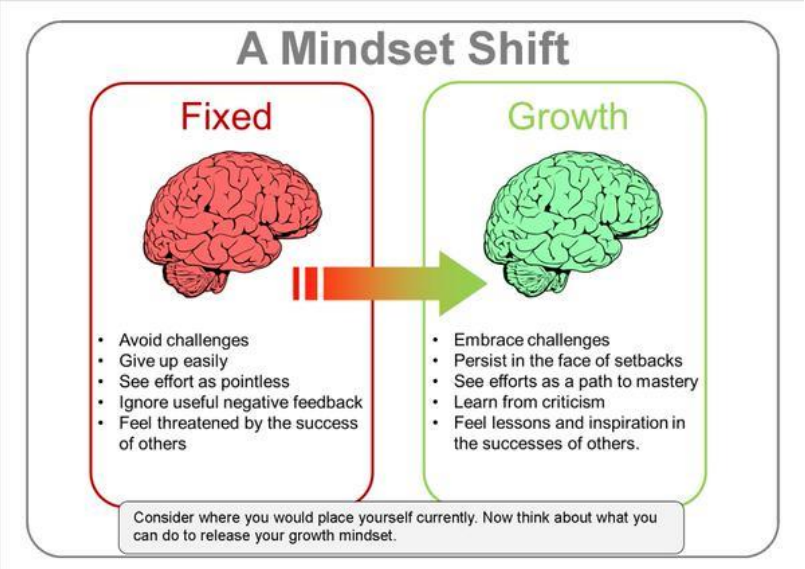

Figure 3. Image of how mindset shifts from fixed to growth. Used with permission from de Brantes (2015).

Although plentiful constraints and limitations were experienced, the process provided insights as to recommendations for future study, including ways to ensure that the same pitfalls could be avoided or mitigated.

Recommendations for Future Study

Recommendations for further study on the problem of determining if there is a relationship between whole-person learning and a growth mindset include use of a different instrument, more time between pre- and posttests available to measure a change in mindset, more structure around the choice of treatment, and inclusion of training for the professor's approach to facilitation. The problem was considered still a concern since there was a gap identified for the intersection of whole-person learning, first-generation learners, and mindset.

An instrument more appropriate to the adult learner and with the granularity to measure aspects of mindset is needed. Developing a mindset measurement that addresses the constraints of first-generation learners may assist in collecting the data necessary to demonstrate potential change in mindset for the adult population. As the time to determine a change was only a semester for some classes, and down to five weeks for some accelerated classes, it was felt that, as suggested in the literature (Bloom, 1956; Krathwohl et al., 1973), more time dedicated to the blend of cognitive and affective learning taxonomies was necessary to truly measure a change of something as ingrained as mindset.

The challenges around treatment structure would also need to be addressed. While the *On Course* curriculum (Downing, 2002) did provide many elements of whole-person

learning, it was not dedicated to the outcome of creating a whole-person learning environment. If the professor was not attuned to methods of teaching necessary for weaving affective learning throughout the course, the student exposed to the treatment may not actually experience whole-person learning. This leads into the last recommendation of including training for the professor's approach to facilitating the course as a part of the treatment.

This study surveyed several courses within four institutions and participation within each institution was widely varied. The commitment of the college liaison was key to the amount of data that was collected, and as such, it was felt that faculty certainly should be involved as committed stakeholders in the study to both ensure strong data collection as well as awareness for the need of consistency in the learning process. While this study performed a comparative analysis, simply measuring one institution with a very clear treatment process was necessary to measure and adapt until a change of mindset can be detected. If that occurred, then applying the same treatment process to other institutions could be completed to determine generalizability. Even though this study attempted to provide generalizability for the value of whole-person learning, both the treatment and instrument were too untested with this population to determine if they were effective for any population, let alone a specific population such as first-generation. However, despite the realization of adjustments needed in order to duplicate this study effectiveness, there were still implications for positive change that can be identified from this experience.

Implications for Positive Change

The result of no significance for a study that was addressing a gap in scholarly literature does not equate to the problem not being present. The issues that address the limitations are presented, followed by the implications of social change. The research question would need to be adjusted. The treatment needs much better structure with the inclusion of a major stakeholder left out previously: the professor. An instrument needs to be created to address the adult population's measurement of mindset. These adjustments provide for improved future research in the relationship between whole-person learning and first-generation learners. As a result from analyzing these limitations, potential social change include increasing the capability of having a whole-person solution and an instrument that can measure a change in adult learners' mindset.

The result of no significance for my study does not mean that whole-person learning fails as a vehicle for growth mindset as supported by theory (Maslow, 1970; Rogers; 1980). The implication for positive social change from this study was that there is the need for faculty involvement and training beyond just curriculum for a true vehicle of whole-person learning that exposes students to growth mindset, setting them on a path toward self-actualization. Also, despite the fact that it is still unknown if exposure to whole-person learning pre-disposes first-generation learners towards growth mindset, there was a positive implication from the demographic analysis of the ethnic group. Black first-generation learners appearing more pre-disposed to a journey of self-actualization through whole-person learning does provide a social change benefit in that increasing

focus on affective learning for Black first-generation learners may lead to higher success rates within academics, career, and personal satisfaction.

Regardless of the results of my study, first-generation students frequently are also non-traditional students who return for career purposes. Exposing them to whole-person learning and helping them develop a growth mindset also assists their self-awareness, decision-making capability, and communication skills, which are all skills that organizations have indicated necessary in today's workforce. The literature presented had previously shown the positive effect that whole-person learning has provided on a small scale; it is hoped that after taking into account the research issues realized from this study, there will be a clearer path towards developing a scaled curriculum for the whole-person learning experience for first-generation learners that can be delivered systematically and measured effectively.

Conclusion

The research question for this study was "do first-generation learners who experience curriculum based on whole-person learning exhibit a different tendency toward fixed or growth mindsets than first-generation learners who do not?" Theories on whole-person learning and motivation were studied to determine if the holistic learning of engaging both affective and cognitive intelligence, or whole-person learning, predisposed individuals towards a mindset of personal development, which was defined in this study as growth mindset.

The ANOVA showed no significant difference in growth mindset between first-generation learners who were exposed to whole-person learning and first-generation

learners who were not exposed to whole-person learning. The null hypothesis was accepted because significance requires $\rho < .05$, and the results displayed $\rho > .05$. As such, it is not known from this study if exposure to whole-person learning predisposes first-generation learners towards growth mindset. The problem identified in this study is subject for adjustment in regards to treatment and instrumentation to more appropriately align with the theory. As literature presented had faculty strongly involved, the lack of faculty presence in this study was a concern as to the potential effectiveness of the results. Repeating this experiment with more attention to all the variables would be necessary. A quantitative study within a single institution would be the best setting for the next experiment, followed by multiple institutions if significance is found.

The content of this study can assist professors and educational leadership to better understand the challenges and constraints discussed in the literature that first-generation learners experience. The literature review presented many solutions for providing a holistic learning experience on a class by class level, as well as solutions for better supporting the needs of first-generation learners. Even though this study did not demonstrate a change in growth mindset in first-generation learners when exposed to whole-person learning through a specific curriculum, there are studies presented in my work that have shown other effective ways to expose first-generation learners to whole-person learning. It is important to continue finding ways to apply whole-person learning to support these learners to ensure a successful completion of formal education, transition of learning to the workplace, and a mindset of lifelong learning.

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Appendix A

CONSENT FORM

You are invited to take part in a research study to find out if students who experience both thinking and feeling in this course exhibit a tendency towards growth mindset. The researcher is inviting all students taking an orientation or success-skills course to be in the study. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Marian Willeke, who is a doctoral student at Walden University and has no connection to your academic work at your college.

Background Information:
The purpose of this study is to conduct quantitative research to determine if first-generation learners achieve a mindset towards growth within a whole-person learning process. Results of this survey may inform future direction of college curriculum.

Procedures:
If you agree to be in this study, you will be asked to complete a 23 question survey during the first week of your course, and again during the final week of your course.

Here are some sample questions, which are all based on a five-point scale with 1 being the most agreeable and 5 being the most disagreeable.

Your intelligence is something about you that you can’t change very much.

No matter who you are, you can significantly change your intelligence level.

You can learn new things, but you can’t really change your basic intelligence

You can change even your basic intelligence level considerably.

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at <insert name of institution> will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind during the study. You may stop at any time. No compensation is provided for completing this survey.

Privacy:
Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not know your name or anything else that could identify you in the study reports, and the unique identifier you provide will be used only to match the two surveys that you submit. Data will be kept secure by being scanned and placed into an encrypted

file, kept in a secured cloud server. Data will be kept for a period of at least 5 years, as required by the university.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as sitting for a limited period of time in front of a computer or on a mobile device. Being in this study would not pose risk to your safety or wellbeing. The benefits of participation in this study include advancement of the research in college preparation for new learners.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via [redacted]. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 3121210. Walden University's approval number for this study is **IRB will enter approval number here** and it expires on **IRB will enter expiration date.**

Please keep this consent form for your records.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By accepting, I understand that I am agreeing to the terms described above.

Appendix B

Dear <insert college name> Student,

You are invited to take part in a research study to find out if students who experience both thinking and feeling in this course exhibit a tendency towards growth mindset. The researcher is inviting all students taking an orientation or success-skills course to be in the study. The survey should take approximately 15 minutes to complete.

This study is being conducted by a researcher named Marian Willeke, who is a doctoral student at Walden University and has no connection to your academic work at your college.

Results of this survey may inform future direction of college curriculum.

If you are willing to participate, click here to review the consent form and get started!

[link]