AN EXAMINATION OF MOTIVATIONAL LEVELS OF NON-TRADITIONAL UNDERGRADUATE BUSINESS AND EDUCATION MAJORS

by

Kristopher Ryan Bradshaw

Liberty University

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

Doctor of Education

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ABSTRACT

This research dissertation was developed for the purpose of advancing the literature in the realm of student motivation. Previous research in the field has placed little emphasis on the adult, non-traditional student population. Adult, non-traditional students represent an important part of the higher education climate in the United States and the unique motivators of this population needs further examination in order to more closely align academic programs and services with motives and goals. The research questions seek to answer if a significant difference exists between the intrinsic and extrinsic motivational levels of business majors compared to education majors in the adult, non-traditional student population. This research study will employ a causal-comparative design using a Likert instrument to explore the motivational levels of non-traditional undergraduate students. The two research questions for this study include: Is there a difference in the intrinsic motivational levels of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate; is there a difference in the extrinsic motivational levels of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors?

The methods employed include the use of the previously validated instrument, the Academic Motivation Scale, which has been used in similar studies focused on different populations for the purpose of identifying motivational levels in students. The sample size for the study included 110 subjects and a simple, independent samples t test was deployed during the analysis. The results of the study demonstrate significant differences between non-traditional business and education majors on both the intrinsic and extrinsic measurements.

Keywords: intrinsic, extrinsic, motivation, self-determination, non-traditional, college, university, undergraduate, business, education, autonomy.
Dedication

This work is dedicated to my family. I would be lost with the love and support they bring me. And to my children: Nothing great is achieved without sacrifice and hard work. Have faith and never give up. Life will throw a lot of things at you that you had no idea were coming. All the best planning in the world cannot account for some of the challenges ahead. But, if you know that challenges from the unknown are coming, you can prepare yourself mentally to be strong, patient, and level-headed when you face them. You are never alone and not all the worlds’ problems rest on your shoulders.

I would also like to dedicate this to my students: past, present, and future. I hope this work is an example of what you can do if you want to and if you try. Education is a matter of determination. Not everyone chooses this path, but the elements of accomplishment apply to all paths in life. Mediocrity is for the masses. Anyone can be mediocre. Be remarkable at whatever path you choose in life. Do work that makes you happy and fulfilled. Life is too short to do things that don’t matter. Find what you love and stick to it.
In the beginning was the Word,  
and the Word was with God,  
and the Word was God.  

John 1:1 (KJV)

I chose to include a personally important verse from the scripture prior to this acknowledgement. Every time I read John 1:1 it hits me in a very spiritual and emotional way for several reasons. The Word, God personified in the flesh, Jesus Christ, our Lord and Savior. The Word represents God and also speaks to the value that God places on wisdom. I have been fortunate to have been able to attend Liberty University and one of my favorite professors had a saying, “The words you choose reflect your soul.” Dr. Ellen Black speaks to the high quality and caliber of faculty members at Liberty because I have only been in her presence for one week out of my life, but she made a difference in that week and I reference her often. First and foremost I would like to acknowledge and thank God for leading me here and staying with me all the days of my life.

It gives me great pleasure to be able to write this acknowledgement as I come to the end of this long and important journey. A journey by which I have learned and grown much more than I would have thought I would in the beginning. When I look back I can feel the difference these past five years have made on my life as I negotiated the doctoral program. Here toward the end I have had a revelation; I choose to remain humble because the more I learn the more I realize how much I do not know. I also know the value God places on wisdom and plan to
continue my pursuit of wisdom through study and teaching others in my current role as a faculty member.

So many people make up the tapestry of my life. So many people have influenced me, cared for me, listened, shared, believed, trusted, and loved me throughout my life. Upon reflection it makes my heart ache and my eyes water at the enormity of God’s love and grace in my life. It would be nearly impossible to name each person, but I owe it to so many to do my best and to recognize them as noted here:

- My wife, Karen: For the love, trust, belief, and being the loving mother of our children
- My parents, Robin and Glenn: For the love and so much more
- My children, Ava, Bella, and Jack: For being the lights of my life that ends all darkness
- My mother and father-in-law, Karen and Brian: For being supportive and loving
- My sister, Jennifer: Every day is a new beginning and I love you always
- My grandmother, Jean: For being the rock and a living Saint
- My grandmother, Blue: I think of you often and know you are happy with my life
- My aunts and uncle,
  - Teresa: You are a role model for true believers with a faith I admire
  - Gail: You are a role model for unconditional love
  - Bettie Blue: For all the love and reminding me to not be so serious
  - Eric: For being a true genius, friend, mentor, and compadre
- My first scoutmasters, Bill Frasier and Jim Naylor: For teaching me the 12 Laws
- My piano teacher, Stan Benton: You are one of my heroes (just so you know)
- My Kenpo instructor, Shihan Terry Rich: A man of honor and a role model
- Sampson Community College: For being a great place for someone to get started
  - Dr. Tim Wright: For being a great instructor and influential faculty member
  - Tom Clere: For being one of the most well-read people I have ever met
  - Dr. Jim Humphrey: For teaching me to love history and story-telling
  - Paul Wolf: For introducing ideas of understanding thought and emotion
- The University of Mount Olive: A special place and my alma mater
  - Dr. Barbara Kornegay: Thanks for giving me a shot and for being a great leader
  - Dr. Michael Ammons: The man, the myth, the legend, thank you brother
  - Dr. Paul Rutter: Hands down one of THE BEST bosses in the history of bosses
  - Dr. Chris Skinner: For being a role model and your humble awesomeness
  - David Bourgeois: My first professor on a path of redemption
  - Henry Singletary: For pushing me to think more abstractly, e2 to e4
  - Michelle Rutledge: Thanks for being a good and spiritual person (and role model)
  - Brooke Bitzenhofer: Unstoppable, highly intelligent, and a true team player
  - Braxton Bell: For being a good man and dedicated to learning
Christina Williams: For her unwavering confidence and guts
John Klemmer: For being an advisor and friend
Aaron Carver: It’s your turn

Liberty University: For standing up for education, the faith, and building bridges
Dr. Ellen Black: For touching my soul
Dr. Scott Watson: For being interested in my topic and your early guidance
Dr. James Swezey: For scaring me (inside story) and having high standards
Dr. Amanda Szapkiw: For also scaring me, but enforcing excellence
Dr. Andrea Beam: For being a kind and joyful person and professor
Dr. Henry Dorr: For all the encouraging words
Dr. Eric Lovik: For being a blessing to work with and a patient, capable chair

Wayne Community College: For allowing me to do what I believe I’m supposed to
Beth Hooks: For being an incredible, compassionate, and loving leader
Tracy Schmeltzer: For answering that first email and giving me a chance
My colleagues in Business/IST Division: Thanks for welcoming me to the family
Bill Reboli: For being my personal mentor and advocate

So many friends and loved ones that have touched my life, have come and gone. Know that I love you all and carry you in an ocean of memories. The axiom, “As it begins, as how it ends,” is one that been with me for some time. As I expand my scope and delve more deeply into professional and creative writing, I recognize the importance for bringing a topic or story home, and thereby making it whole. This work began with the Word, with faith, with a belief in more than the sum of the mind, bodily, and spiritual aspects that make up my existence.

Words have power. Words should not be taken lightly or chosen haphazardly. Words should be chosen deliberately and with purpose. After all, “In the beginning there was the Word, and the Word was with God, and the Word was God” (John 1:1, KJV).
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List of Abbreviations

Academic Motivation Scale (AMS)
Extrinsic motivation (Emo)
Intrinsic motivation (Imo)
Kolmogorov-Smirnov (KS)
Maslow’s Hierarchy of Needs (MHoN)
Non-traditional student (NTS)
Self-Determination Theory (SDT)
Shapiro-Wilk (SW)
Statistical Package for the Social Sciences (SPSS)
CHAPTER ONE: INTRODUCTION

Background

Motivation is an interesting topic in the education realm. Through the years the conversation on motivation has been mostly focused on how to motivate students to learn (Robinson, 2012; Thoonen, Sleegers, Peetsma, & Oort, 2010). The question of how is understandable within the K12 and traditional undergraduate student populations due to students having to attend school, whether or not by the personal desire for education. External contingencies can cloud the internal desire to perform tasks, such as learning in students (Deci, Koestner, & Ryan, 2001). However, the non-traditional student population has risen tremendously in recent years (Casselman, 2013) and is now the new majority of students in higher education (Bell, 2012). This brings about an interesting development in the field of student motivation.

This research dissertation will address the problems of understanding the unique intrinsic and extrinsic motivators in non-traditional business and education undergraduate students. Adult, non-traditional students have complex motivators – both internal and external – that have been shown to affect motivation to learn (Hegarty, 2011). More specifically, adult non-traditional students have been found to have higher levels of intrinsic motivation (Bye, Pushkar, & Conway, 2007), which in turn led to positive outcomes. This chapter will present a background of the problem, the problem and purpose statements, the significance of the study, the research questions, the hypotheses, assumptions and limitations, and the variables within the study. Additionally, a list of definitions will be provided.

This research study includes a comprehensive review of related research, motivation theories, books, and student dissertations. The genesis of this research began in reading the
book, *Drive: The Surprising Truth About What Motivates Us*, by Daniel Pink. In the book, Pink (2009) describes the relationship between intrinsic and extrinsic motivation. Pink (2009) provides a foundation for the discussion in relying on two theories on human motivation. The first is Self-Determination Theory (SDT), which was developed in the mid 1980s in an effort to explain the relationship of extrinsic contingencies on internal (or intrinsic) drivers (Deci & Ryan, 1985). The second is Flow Theory, which was influenced by SDT and states that individuals have ‘flow’ moments of actualization when skill and task are at the same level (Czikszentmihalyi, 1990).

Historically, the conversation on motivation has evolved over the past century. Freud was a contributor by offering that individuals exhibited behaviors in an effort to fulfill specific desires (Dennis, 1949). Maslow took the conversation much further by developing a categorical Hierarchy of Needs (Maslow, 1954), which offers that individuals fulfill foundational physiological needs and then move on to more complex psychological needs fulfillment. Other theories discussed in the literature review offer pieces of the theoretical continuum on motivation, however, the development of Self-Determination Theory by Deci and Ryan (1985) began a new conversation on individual motivation.

Specifically, SDT has three main tenets. The first tenet of STD is that individuals are intrinsically motivated to perform tasks. Secondly, extrinsic motivators (also called external contingencies) hinder intrinsic desire. Finally, individuals go through a complex process of internalization of external processes, which gradually shift external motivators to internal motivators (Deci & Ryan, 1985; Gagné & Deci, 2005). Humans are thought to naturally have a desire to seek development (Kirk, 2010). The social context of this study seeks to understand the complex motivators of adult, non-traditional undergraduate business and education majors in an
effort for higher educational institutions to better serve this population. The theoretical constructs of this study include Self-Determination Theory, Maslow’s Hierarchy of Needs, Flow Theory, and reviews the literature regarding a variety of other theories of motivation. The proposed study will advance the current body of literature by exploring motivation in a population that has previously been studied on a limited basis.

The problem, which merits the need for this study, is two-fold. First, much of the previous advancements in motivation research were gained by studying other academic populations, including K-12, traditional, and graduate higher education (Goins, 1993; Reardon, Bertoch, & Cummings, 2010; Sparks, 2012). When viewing the historical scope of academia, modern non-traditional students are a relative new development. Non-traditional students now represent a large section of students in higher education. According to the Department of Education, an adult non-traditional student has one of the following descriptors, including: delaying enrollment to higher education, is a part-time student, is a full-time worker, is financially independent, has dependents beyond a married partner, is a single parent, or lacking a high school education (Hillman, 2008). According to Hillman (2008), 73% of the student population in the United States attending higher educational institutions has one or more of the previous non-traditional student descriptors.

Many reasons can be speculated on as to why adult students have made a return to higher education. One reason may be increased availability of non-traditional courses in an online or evening format. Another may be the need for white collar workers in lieu of factory workers due to outsourcing. Regardless of the environmental reasons, limited research has been performed on understanding the intrinsic and extrinsic motivators of non-traditional students. In continuation, the topic of non-traditional undergraduate motivation is one of interest for multiple
reasons. Primarily, this research will help to identify the types of motivation that drives non-traditional business and education majors, which can be used to tailor administrative and academic approaches to better serve students. More specifically, being able to understand the unique drivers of non-traditional students will allow both the administrative and academic services of institutions of higher learning to create programs, policies, and processes to be in-line with the needs of adult students.

Filling the gap in the literature with this research is important for many stakeholders, including researchers, administrators, professors, and students. One could see this topic as being inclusive of institutions and students only. However, adult students have many ties to the community through civic, church, professional, and work organizations. Each one of these organizations has a vested interest in the success of adult students. If an institution of higher learning has a greater understanding of non-traditional student motivation, measures can be taken to align the institution with these motives. For example, if students are found to be highly motivated by the extrinsic desire for workplace promotion, the institution can provide services and information to cater to that need. This tailored approach could be a way for institutions to meet the needs of students, as well as, other stakeholders involved. This research will primarily benefit institutions of higher learning by using the resulting information to increase the understanding of the non-traditional undergraduate student population.

Similar research has been completed regarding student motivation. One study examined the intrinsic and extrinsic motivational levels of graduate business and education majors, which revealed that education majors in the study possessed higher levels of intrinsic motivation above the business counterparts (Hegarty, 2010a). This addressed the problem of understanding graduate student motivation; however, non-traditional undergraduates were not included in this
study. The previous research has examined motivation among many student populations; however the proposed research will extend and refine the existing knowledge by providing new information on non-traditional undergraduate motivation.

**Problem Statement**

Motivation research has scarcely shifted the focus toward non-traditional student populations. One problem is a large and growing student population of non-traditional students (Jenkins, 2012) with little research to understand the unique intrinsic and extrinsic motivators present in this group. In previous research on individual motivation, Gagné and Deci (2005) suggest that individuals go through a process of internalization of external contingencies in order to become more intrinsically motivated to perform tasks. Hegarty’s (2010a) study looking at graduate student motivation; however, the population of undergraduate non-traditional students has been left with little research in the area of student motivation. With the limited motivation research targeting non-traditional undergraduate populations, gaps are left, which leaves educators to draw inferences based on research with other populations.

This creates a second problem in that inferences are difficult in comparing K12, traditional undergraduate, and graduate student motivation findings with non-traditional undergraduate students. Non-traditional students (generally) have diverse life experiences (Carreiro & Kapitulik, 2010) that may create change in both the extrinsic and intrinsic motivators on the individual level. For example, an individual may place a high value on compensation (extrinsic) early in a career, however, may shift to valuing quality of life (intrinsic) more than compensation mid-career. Higher education in the United States has a large group of students, of which the documented and research-based reasons for student motivation has not been achieved in the literature. This lack of significant representation on non-traditional student motivation
research in the literature provides an opportunity to expand the body of knowledge, to understand non-traditional student’s complex drivers, and provides opportunity to improve ways in which institutions serve this population.

**Purpose Statement**

The purpose of this causal-comparative study is to employ a quantitative approach to examine the unique intrinsic and extrinsic motivators within a selected population of non-traditional undergraduate business and education majors. This study uses the Self Determination Theory (SDT) to help understand the motivational characteristics of non-traditional undergraduate business majors when compared to non-traditional undergraduate education majors at a rural, liberal arts university in eastern North Carolina. The independent variables in this study are defined as the majors involved (business and education) with the dependent variables being defined as the motivational levels measured (Gall, Gall, & Borg, 2007). Motivating students to learn is generally the goal researchers seek when approaching motivation research. This study seeks to help understand why non-traditional undergraduate students are seeking higher education. The answers to these questions can help support institutional decisions in future offerings and services provided to the large population of non-traditional students.

Intrinsic motivation has been defined as ones willingness to perform a task without external contingencies. Extrinsic motivation has been defined as external controls, contingencies, or consequences meant to motivate the individual to perform a task (Deci & Ryan, 1985). The majors will be used to compare levels of both intrinsic and extrinsic motivation in an effort to establish which group exhibits higher/lower levels of each type of motivation. The motivational levels will be measured using the Academic Motivation Scale, which has been internally validated to .81 (Vallerand, Pelletier, Biais, Briere, Senecal, & Vallieres, 1992).
Significance of the Study

Other studies have examined motivation on the K12 (Mamlok-Naaman, 2011; Willems & Gonzalez-DeHass, 2012; Senn, 2012), students with special needs (Kuzu, 2011), undergraduate (Pastore & Carr-Chellman, 2009), and graduate (Hegarty, 2010) levels. However, few studies have focused on the specific population of non-traditional students or on why students are motivated. Too often the focus of student motivation research has been to address the question of how to motivate students to learn.

Through a review of the literature, no other study aligned with the type of research being performed on the targeted population. From a theoretical standpoint, this study seeks to help validate or question with more scrutiny existing motivational theories. Empirically, this research seeks to test previous observations in motivational research (Hegarty, 2010) in an effort to expand the literature by including a population with limited study inclusion.

On a small scale the research site will benefit by being able to have greater insights into the unique motivators present within the non-traditional undergraduate student population. The benefits cover multiple stakeholder groups. First, the institution will have more information about the attending non-traditional undergraduate student population. This information can be used to adapt programming and service to better meet the needs of non-traditional undergraduate students. Secondly, the students will benefit from this study by the institution being aware of the motivating factors and tailoring the approaches to better serve that population of students. Lastly, the community stakeholders will benefit from this study. Specifically, the organizations the students are members of or come into contact with can benefit from this study through improved programming and services provided to the students at the institution. If the institution is performing better with regards to tailoring administrative and academic approaches to meet the
needs of non-traditional students, one could expect a positive impact on the students, which
could benefit other organizations utilizing the academic assets gained by the student.

An additional point for the significance of the study is promoting the awareness of
motivation research to students, professors, administrators, and professional researchers. Having
a cognizance of why individuals exhibit certain behaviors or make certain choices is
foundational in understanding the human psyche (Deci & Ryan, 2000a). The greater hope of this
researcher is an increased understanding of motives that can result in better alignment of actions.

**Research Questions**

This study is designed to examine the intrinsic and extrinsic motivation of non-traditional
undergraduate business and education majors. The objectives of the study will be to:

1. Examine the complex intrinsic and extrinsic motivators of non-traditional business
   and education majors.
2. Establish if the previous research on student motivation is consistent with new
   findings in a non-traditional undergraduate population.
3. Provide new data to the literature in an effort to increase the scope for future research
   in the fields of educational psychology and motivation research.
4. Offer new information to the research institution site within the study in an effort to
   promote new ways of tailoring services and programming toward students.

This research study will fill a need in both the literature and through practice at the
research site. Little research has been done to date that targets the specific population of non-
traditional undergraduate students. This gap in the literature is significant in that researchers
cannot rely on other population studies due to the unique nature of adult, non-traditional
undergraduate students. Additionally, the research site services a large population of non-
traditional students and would benefit by having a greater understanding of the unique drivers this group possesses. With these points in mind the research questions for the study include the following:

**RQ1:** Is there a difference in the intrinsic motivational levels of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate?

**RQ2:** Is there a difference in the extrinsic motivational levels of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors?

**Null Hypotheses**

Null hypothesis for the Research Questions:

**H_01:** There is no statistically significant difference in the intrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate education majors.

**H_02:** There is no statistically significant difference in the extrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors.

**Definitions**

1. *Amotivation* – A term used to describe individuals lacking both external and internal forms of motivation (Gagné & Deci, 2005).
2. *Extrinsic motivation* - Also referred to external contingency or external driver, this form of motivation is present when a source of motivation is present, which originates outside of the individual desire to perform a task (Gagné & Deci, 2005).


4. *Flow Theory* – A theory that ‘flow’ moments occur when skill level and task are in alignment. Flow can be likened to moments of actualization (Csikszentmihalyi, 1990).

5. *Identified Regulation* – A form of extrinsic motivation where the individual becomes cognizant of the importance of goals, values, and regulations (Gagné & Deci, 2005).

6. *Integrated Regulation* – A form of extrinsic motivation where the individual has a clear understanding of the goal, values, and regulations (Gagné & Deci, 2005).

7. *Internalization* – A process in which external drivers become internal ones through four gradual and transitional stages (Gagné & Deci, 2005).

8. *Intrinsic motivation* – Also referred to as internal drivers, this form of motivation is present within individuals without external contingencies present and is considered naturally occurring (Gagné & Deci, 2005).


10. *Hierarchy of Needs* – A theory stating that individuals have groups of needs that begin as physiological needs, once satisfied lead to more complex psychological needs (Maslow, 1954).
11. *Locus of Causality* – A phrase used to describe an individuals’ perception of the ability to make choices (De Charms, 1968).

12. *Motivation* – a term used to describe wants, needs, and desires towards an objective, task, or act on the part of an individual that manifest from both internal and external processes.

13. *Non-traditional* – Identified by the Department of Education as having one of the following descriptors: delaying enrollment to higher education, is a part-time student, is a full-time worker, is financially independent, has dependents beyond a married partner, is a single parent, or lacking a high school education (Hillman, 2008). For the purpose of this study the term non-traditional applies to students who attend class in a one-night-a-week evening program.

14. *Self-Determination Theory* – A theory of motivation that states (1) individuals are naturally intrinsically motivated to perform tasks, (2) extrinsic motivators hinder intrinsic motivation, (3) individuals internalize external contingencies, (4) and that individuals seek autonomy, competence, and relatedness (Deci & Ryan, 1985; Gagné & Deci, 2005; Niemiec, Lynch, Vansteenkiste, Bernstein, Deci, & Ryan, 2006).
CHAPTER TWO: LITERATURE REVIEW

Introduction

Individuals have complex internal and external motivators. Motivation research is important to education because learning requires conscious and deliberate actions on the part of students (Stipek, 1998). This literature review will present a discussion on the topic of motivation, the major and minor theories involved, with the inclusion of non-traditional student motivation. The content of this review consists of two sections, including a discussion on the theoretical framework and the literature related to the selected topic.

Motivation is a continuum with various motives being present and changing based on situational triggers. For example, throughout a single day in an individual’s life many motivation theories can be present to varying degrees. In the early morning an individual typically seeks out food and clothing in preparation for the day ahead, aligning with the basic needs (motives) in Maslow’s Hierarchy (1954). While at work the same individual can experience various motives, some intrinsic motives align with Csikszentmihalyi’s (1990) Flow Theory, DeCharms (1968) Locus of Causality and Personal Causation, and Deci and Ryan’s (1985) Self-Determination Theory, while other motives that can align with extrinsic drives presented by Herzberg (1966), McGregor (2006) and Ouchi (1981).

Motivation in and of itself is difficult to assess due to the complexity of motivating factors. Individuals possess inherent physiological motives (Maslow, 1943) for basic survival, intrinsic and extrinsic motives (Deci & Ryan, 1985) toward various life functions, societal motives (Bowditch, Buono, & Stewart, 2008; McClelland, 1953), and even work motives (McGregor, 2006; Ouchi, 1981). Modern psychology offers that mankind may even have motives that are only known on a subconscious level (Jianging, 2014; Latham & Piccolo, 2012;
Thomas, 1927). As a species, humanity is driven by the visible forces of physiology and nature, as well as the elusive invisible forces that exist within man’s heart, mind, and soul. Science may be able to make generalizations on motivation, however, will continue to struggle to understand the complexities of motive.

The previous example illustrates how an individual can have motivators related to a number of different motivation theories. This example was provided to illustrate how no single theory can be identified to explain motive. However, individual theories can be pieced together to help provide insights for motive. Although the theoretical framework for this study uses Self-Determination Theory (SDT) to help explain student motivation, other factors on the motivation continuum should be considered and are thusly examined within the literature.

The word continuum is used to describe the flux state and varying degrees, levels, and types of individual motivation. What creates a drive within an individual to get up in the morning and go to work could be a combination of internal, external, and societal drivers. Once there, the compliance to fulfill work could be a combination of factors to include external contingencies, pleasure seeking behavior, pain avoidance, and internalization. Many factors and variables are involved in attempting to understand the individual psyche and motives.

The theoretical framework discussion will present the key theories in the field of motivation research, the previous advancements in the literature, and the research focus for the proposed topic. The related literature will present an argument for the significance of the study, the current knowledge in the field of student motivation, and areas in the field yet to be examined. The goal of the proposed study seeks to examine the motivational levels of non-traditional undergraduate students. The two types of students proposed to be a part of the study include business and education majors. The proposed study should fill a needed gap in the
literature by expanding upon previous work in the fields of educational psychology and motivation research, by studying a more specific population, and by studying how student motivation varies by major.

**Theoretical Framework**

An important pursuit in the field of educational psychology is motivation research and trying to understand the intrinsic and extrinsic motivating forces that prompt individual actions. In studying human motivation, many theories exist amongst the current body of literature. The following will present a review of the related theories, the previous advancements in the literature, as well as, details regarding how this research will focus on the advancement of the current body of knowledge.

**Motivation Theories**

Many theories exist on human motivation with the foundational questions seeking to understand why individuals exhibit certain behaviors, perform tasks, and what motivators drive these actions. Piaget postulated that children have an intrinsic desire to learn, explore, question, test, and repeat in order to learn (Miller, 2011). Drive and exploration are internal mechanisms that can be sustained through no other reinforcement than the act of exploration alone (White, 1959). Two central questions of this proposed research seeks to understand if adult students possess the intrinsic desire to seek education and learning, or are extrinsic drives the factor in adult, non-traditional students. The following presents a review of the relevant motivation theories to the proposed research. Each of the follow theories contribute to the working theoretical framework regarding non-traditional student motivation.
Maslow’s Hierarchy of Needs

Invisible motivators exist each day in the lives of individuals. The decision to eat, go to work, return to college, to exercise, and to seek social acceptance all have driving forces within individuals. One of the most prominent voices on human motivation is Abraham Maslow. Early work on the subject of motivation began the formation of a group of individual needs. “Man is a perpetually wanting animal,” is how the argument is framed (Maslow, 1943, p.370). Maslow (1943) stated that individual needs arise as subsequent and more dire needs are met. In other words, once the primary needs of food and shelter are satisfied, new needs emerge. These thoughts continued with Maslow as the development of a cornerstone theory formed.

Maslow’s Hierarchy of Needs presents a theory as to how humans categorize and prioritize needs. Primary needs are concerned with essentials to living, such as food, water, clothing, and shelter. Once these primary needs are met in order to sustain an individual physiologically, the next group of needs aim to satisfy individual psychological needs. The need to be connected to other human beings is an important drive within humans. “Most people feel a nearly intolerable sense of emptiness when they are alone, especially with nothing to do. Adolescents, adults, and old people all report that their worst experiences have taken place in solitude” (Csikszentmihalyi, 1990, p.168). Thusly, humanity seeks connectivity with others as the individual makes progress up the hierarchy, fulfilling those base physiological and psychological needs. This concept of satisfying one need before moving to the next is referred to as prepotency (Maslow, 1954).

Prepotency can be thought of as a house being built on a foundation. As each tier of construction is fulfilled, the next is able to begin construction. More specifically, as an individual establishes that primary needs are met, other needs become clear and are sought out in
order to fulfill the next level of Maslow’s Hierarchy. The end result is a five-tiered categorical system where an individual goes through the process of meeting physiological, safety, social, and esteem needs, resulting in what Maslow (1954) referred to as self-actualization; the process of reaching ones full potential. However, if Maslow was correct, man, once fulfilled will perpetually want to seek out a new desire or need in order to find new fulfillment.

In continuation, Maslow (1959) took the concept of self-actualization a step further by stating that individuals can have peak experiences with moments of self-actualization occurring. Self-actualization and reaching ones full potential are goals individuals strive to reach (Weinberg, 2011). Having a cognizance of the Hierarchy of Needs is important as a premise for human motivation. Additionally, using Maslow’s theory is an important part of the current proposed research and theoretical framework. Applied to the education realm, students also have needs that must be met in order to reach individual achievement. Maslow believed individuals were driven by needs and this idea also manifests in a theory of self-determination.

**Self-Determination Theory**

A classical view of development from Aristotle states that “people are assumed to possess an active tendency toward psychological growth and integration” (Deci & Ryan, 2002, p.3). While Maslow’s (1954) work focused on human needs, another theory seeks to understand the connection between internal and external motivating forces. Early work leading to the development of Self-Determination Theory examined the connection between intrinsic motivation and external rewards.

Cognitive Evaluation Theory helped to lay a foundational discussion on the relationship between extrinsic and intrinsic motivators, which helped lead to the development of Self Determination Theory (Ambrose & Kulik, 1999). In brief, CET began the academic discussion
on the effects of extrinsic motivators on intrinsic motivators. For example, external contingencies such as money, evaluations, monitoring, and compliance have a negative impact on intrinsic motivation due to a perceived loss of autonomy (Gagné & Deci, 2005). Rewards – or external motivators – and surveillance have been shown to decrease levels of internal motivation in children (Lepper & Greene, 1975). Additionally, time deadlines have shown a decrease in activity interest levels (Amabile, DeJong, & Lepper, 1976) due to a feeling of lost autonomy. This loss of autonomy affects an individuals’ feeling of choice, what DeCharms (1968) referred to as ones perceived locus of causality.

Deci’s work in the area of extrinsic and intrinsic motivation has been met with scrutiny within the academic community. Specifically, the early work of Deci was said to have methodological issues with the experiments in the 1971 and 1972 studies (Calder & Staw, 1975). Deci (1975) responded to the criticisms brought forth by Calder and Staw (1975) by offering additional data to validate earlier findings on the relationship between extrinsic and intrinsic motivation. “People are intrinsically motivated to perform activities which make them feel competent and self-determined; therefore, rewards or feedback can affect their intrinsic motivation by affecting their feelings of competence and self-determination” (Deci, Cascio, & Krusell, 1975, p.82). Personal choice and freedoms are important factors in motivation research.

In addition to autonomy, individuals seek out the psychological need for competence and relatedness (Niemiec, Lynch, Vansteenkiste, Bernstein, Deci, & Ryan, 2006). Individuals desire to explore in order to be competent with the environmental surroundings (White, 1959). Furthermore, individuals seek out others in a function of relatedness (Harlow, 1958). According to Gagné and Deci (2005), the real progress of the extrinsic/intrinsic discussion occurred when Deci & Ryan (1985) added a continuum of motivation, resulting in Self Determination Theory.
This continuum added levels of extrinsic motivation, classified into four types, including external, introjected, identified, and integrated. These motivation types revolve around the concept of internalization, the process by which an individual shifts external drivers to internal processes (Deci, Vallerand, Pelletier, & Ryan, 1991). This internalization (through introjection or integration) is a primary tenet of SDT by which individuals are motivated to internalize uninteresting activities (Deci, Eghari, Patrick, & Leon, 1994). When Aristotle discussed integration (Deci & Ryan, 2002), perhaps internalization is in fact an illustration of how individuals integrate into roles and groups, as well as perform activities.

To expand upon internalization, the continuum of extrinsic motivators exists to illustrate the shift from controlled motivation (external regulation) and moderately controlled motivation (introjected regulation) to a more moderately autonomous motivation (identified regulation) and finally to autonomous motivation (integrated regulation). According to Gagné and Deci (2005), external regulation still has the presence of contingencies, such as rewards and punishments, while introjected regulation incorporates self-worth as being contingent on performance. As the individual internalizes the external motivating forces, identified regulation occurs, which results in a cognizance of goals, values, and rules. The final point within the extrinsic motivation continuum is integrated regulation, which allows for the individual to have a more coherent understanding of the said goals, values, and rules. The far point of the continuum lies inherently autonomous motivation, which is the realm of intrinsic motivation (Gagné & Deci, 2005).

Although self-determination is internally created, an individual in a position of authority can promote intrinsic motivation externally by offering choices, non-threatening and constructive feedback, and being accepting of other’s perspectives (Deci, Connell, & Ryan, 1989; Zuckerman, Porac, Lathin, Smith, & Deci, 1978). Intrinsic motivation exists when an individual
chooses an action without an external motivator (Deci & Ryan, 2000b). This type of motivation is spawned freely and the individual does not need material rewards or constraints (Deci & Ryan, 1985). Three perspectives on intrinsic motivation exist and state that individuals seek competency development, seek novelty, and have a need for autonomy. Additionally, intrinsic motivation is self-rewarding through learning, without the need of external rewards (Stipek, 1998).

An example of this would be an artist choosing to paint a picture for the mere act of creating a work of art. The ‘reward’ is the creation and learning through the process. Deci (1972) hypothesized that external motivators can in fact hinder or lessen internal intrinsic motivation. Evidence has shown this initial hypothesis to be more complex in that subjects from the 1972 study demonstrated mixed results to extrinsic motivators. Specifically, verbal reinforcements enhanced intrinsic motivation, while money paid as a reward created a controlling dynamic, hindering intrinsic motivation (Deci, 1972). This curiosity spawned further research, culminating in the seminal work on Self-Determination Theory.

Deci and Ryan (1985) continued his research and formally introduced the concept Self-Determination Theory to the academic community. In brief, SDT states that intrinsic motivation occurs when a task is done without an extrinsic reward or consequence. Deci and Ryan (1985) believed the two forms of motivation to be at odds and specifically that extrinsic rewards suppressed intrinsic drivers. Two conflicting meta-analyses (Cameron & Pierce, 1994; Deci, Koestner, & Ryan, 1999) disagree as to whether extrinsic rewards suppress intrinsic motivation. This topic spurred debate within the academic community; however evidence does suggest that tangible extrinsic rewards do undermine internal motivation (Deci, Koestner, & Ryan, 2001).

The SDT has been applied to helping cross-cultural work organizations predict task engagement
and well-being (Deci, Ryan, Gagne´, Leone, Usunov, & Kornazheva, 2001). As work continues on SDT, many other potential applications could spawn.

**Flow Theory**

More than two thousand years ago Aristotle offered that, “More than anything else, men and women seek happiness. While happiness itself is sought for its own sake, every other goal—health, beauty, money, or power—is valued only because we expect that it will make us happy” (Csikszentmihalyi, 1990, p.1). Csikszentmihalyi (1990) offers that happiness is achieved by ones mastery of the inner self and individuals should strive to stretch skills toward higher pursuits in an effort to become extraordinary, or as Maslow (1943) proclaims, reaching a state of actualization.

As with Maslow’s (1959) discussion on optimal experiences – and considering the concepts of self-determination and intrinsic motivation – another motivation theory was developed to attempt to explain the optimal experience in individuals. Flow Theory contends that optimal experiences occur when an individuals’ skill set and the challenge of a task are in alignment (Csikszentmihalyi, 1990). Pioneered by Csikszentmihalyi (1990), the idea of flow can be likened to when a pianist practices a challenging piece of music and becomes able to perform at a high level, almost effortlessly. Additional examples of Flow Theory in action include a person playing a game and finding several had passed without being aware of time or a painter focused on a project becoming lost in the moment. These ‘flow’ moments of time help to identify times when a person is doing an activity that is intrinsically motivated through one’s own desire toward fulfillment for the sake of performing the task (Csikszentmihalyi, 1990).

acknowledges Csikszentmihalyi’s work on Flow Theory by describing how individuals seek optimal experiences. Flow Theory also references the work of Deci and Ryan (1985) in order to create a framework for the forces that drive individual achievement. In continuation, Csikszentmihalyi (1990) theorized that flow occurs when a person focuses on the positive aspects of life, such as joy, good works, and creative endeavors. These flow moments can be likened to what Maslow (1954) referred to self-actualization, or reaching one’s full potential for a moment in time. In fact, the subtitle of Csikszentmihalyi’s (1990) book about Flow Theory is *The Psychology of Optimal Experience*. This optimal experience lends well to the aforementioned discussion on Maslow’s Hierarchy, one’s desire to seek actualization.

**Theory X, Theory Y, and Theory Z**

Management science is tied to the study of human motivation. “Every managerial act rests on assumptions, generalizations, and hypotheses—that is to say, on theory” (McGregor, 2006, p.8). McGregor (2006) continues that while incentive as an important aspect of managerial control (external contingency), “the typical incentive plan is of limited effectiveness as a method of control if the purpose is to motivate human beings to direct their efforts toward organizational objectives” (McGregor, 2006, p.12). The reason—in part—for this limited control based on financial incentives is due to employees valuing more than monetary compensation. Things like validation (approval), security, ingenuity, and autonomy are powerful motivators that financial means alone cannot offer compensation (Deci & Ryan, 1985; McGregor, 2006).

In order to understand student motivation, further insight on human behavior is required to help form a framework. Theory X and Theory Y were initially developed as a tool to help managers understand human behavior with regards to the workplace. It is important to include a
discussion on work motivation due to the impact on quality of life. More specifically, “Quality of life depends on two factors: how we experience work, and our relations with other people” (Csikszentmihalyi, 1990, p.164). Theory X was formed on three basic assumptions. First, human beings do not like to work and will avoid it if possible. Secondly, in light of the first assumption and in order to reach organizational goals, humans must be controlled through external (extrinsic) motivators, which can include punishment, coercion, direction, and other forms of control. The last assumption states that individuals prefer direction, responsibility avoidance, lack serious ambition, and covets security (McGregor, 2006).

Theory Y creates a different set of assumptions with regards to individual motivation and behaviors. According to McGregor (2006), Theory Y has six foundational assumptions. First, McGregor (2006) believed that work – whether mental or physical – was as natural to a human as rest or play. Secondly, humans can be self-directed and impose self-controls rather than to have to be managed or threatened with punishment. Third, rewards and achievement are tied to organizational objective. Fourth, humans inherently seek out responsibility. Fifth, the vast amount of the population – when allowed – can develop imaginative and creative solutions. Finally, human intellect is only partially utilized when working under menial labor conditions (McGregor, 2006).

Although McGregor (2006) developed Theory X and Theory Y for the purpose of helping managers and leaders to understand human motivation and behavior, some of these concepts can be applied to the current research in order to help develop the theoretical framework. Specifically, in McGregor’s (2006) discussion on Theory Y, references were made to humans being self-directed and able to impose self-controls. This dialog is thematic of Deci and Ryan’s (1985) Self-Determination Theory in that individuals are intrinsically motivated.

Theory Z is the next evolution of both Theory X and Theory Y. Stemming from a study of Japanese manufacturing and the efficiency within, Theory Z promotes the ideas that subordinates should be engaged in a participatory leadership model. Emphasis is placed on the total individual’s well-being, both inside and outside of the workplace (Ouchi, 1981). The success of the Japanese manufacturing model could be attributed to organizations valuing the overall health and development of individuals. Perhaps both the theories of McGregor (2006) and Ouchi (1981) can offer insight into student motivation and help educational leaders discover ways to promote student well-being.

Applied to the realm of education, Theory X, Theory Y, and Theory Z can offer insight on student motivation. Specifically, students could be motivated by external factors, such as the threat of losing a job, the potential loss of student aid benefits, and familial pressures. These factors would support McGregor’s (2006) assumptions made in Theory X. In continuation, students could be potentially motivated by internal desire, by taking responsibility for the future, and by seeking internal rewards and gratification. These assumptions would fall in line with McGregor’s (2006) assumptions regarding Theory Y, as well as and in part, Deci and Ryan’s (1985) Self-Determination Theory. Finally, students could be motivated by institutional environmental factors, such as providing a safe classroom environment, a shared classroom leadership style, and a concerned faculty and staff for the total well-being of students inside and outside of the educational setting.
Herzberg’s Two-Factor Theory

The Two-Factor Theory (also known as Motivator-Hygiene Theory) can be described as a motivation theory consisting of two dimensions of human drive. The first factor involves areas of the workplace that help employees avoid dissatisfaction, such as comfortable desks, air conditioning, functioning electronics, and restrooms. While these aspects of employment do encourage the prevention of dissatisfaction, little is offered to encourage employees to grow, develop, and ultimately reach higher levels of achievement. These environmental elements of the workplace are known as hygiene factors (Herzberg, 1966).

The other part of Herzberg’s (1966) Two-Factor Theory involves motivating factors that do encourage employee growth and development. Herzberg developed Two-Factor Theory with the overarching premise of motivators being introduced to the workplace in order to encourage subordinates to perform above minimal efforts (Bowditch, Buono, & Stewart, 2008). In earlier work on the subject, Hertzberg (1966) developed a list of ten hygiene and motivating factors. The hygiene factors included: working conditions, interpersonal relationships and supervision, salary, supervision-technical, and company policy and administration. The motivation factors included: advancement, responsibility, the work type, recognition, and achievement (Hertzberg, 1966). A later revision of the hygiene factors added an additional five factors, including: security, status, relationship with subordinates, personal life, and relationship with peers. Only one more motivating factor was added to include growth (Hertzberg, 1968).

Herzberg echoes a theme from other motivation research. In brief, Herzberg believed that “the common denominator for the reasons for positive job attitudes seemed to be variations on the theme of feelings of psychological growth, the fulfillment of self-actualizing needs” (Herzberg, 1966, p.78). An important idea to take from Herzberg’s (1966) research is that
according to early data collection, motivating factors can lead to higher levels of extreme satisfaction, above the levels of hygiene and extreme dissatisfaction. Many potential applications exist in education from Herzburg’s theory including the development of more achievement and recognition-based metrics to motivate students. Additionally, institutions can evaluate the hygiene factors in place that could potentially increase student dissatisfaction, including: access to resources, campus safety, and classroom conditions.

Understanding student motivation is important for educators in order to tailor pedagogical approaches to non-traditional students. In other words, if institutions of higher learning know why a student is motivated to attend college, programs can be developed to better serve the needs of students, improve retention, and improve academic achievement. Ultimately, educational motivation research can make the lives of all the stakeholders involved better through what Ouchi (1981) alluded to as an emphasis on the total individual.

**Expectancy Theory**

Another theory on human motivation is expectancy theory. Victor Vroom spent much of his academic career focused on the development of expectancy theory. The theory has three basic tenets. The first states that good performance will stem from effort-performance expectations and increased effort (termed expectancy). Secondly, having a perception of outcomes stemming from good performance will led to rewards (instrumentality). Lastly, motivation occurs based on the value or attractiveness of the outcome or award to the individual receiving it (Bowditch, Buono, & Stewart, 2008).

Another term for Expectancy Theory is VIE Theory. The valence determines how badly someone wants (desires) the motivating reward. Expectancy specifically deals with the perception an individual has toward being able to complete a task in order to meet or exceed
expectations. Instrumentality speaks to the likelihood that the expected outcome will materialize if the designated tasks are completed (Walkley, 2008). Expectancy Theory adds to the working framework of motivation theories to help understand what motivates students. As with motivating factors, students have mixed expectations. Some students expect that a college education will result in higher salaries, better career prospects, and material rewards while others seek education for the joy of learning and the drive to achieve. An assumption in the proposed research is that many individuals have complex motivators that stem from both intrinsic and extrinsic sources.

**Personal Causation**

Another theory that follows up well with Expectancy Theory is Personal Causation. As aforementioned, Expectancy Theory asserts that individuals have an expectation based on the fact that a certain input will result in a certain output. Personal Causation asserts that individual action is motivated by the intention to create change in the environment (DeCharms, 1968). Interestingly, DeCharms (1968) presents a debate on how science seeks to understand the cause of phenomena; however, according to the theory, motive is the cause of behavior.

For example and within the Personal Causation framework, a researcher may be tempted to study the ‘cause’ for a massive return to higher education by individuals in the 25-49 age bracket. Personal Causation offers that researchers should instead study the motive to understand the cause and ultimately explain the phenomena. In other words, by focusing on the driving factors behind a behavior (motive), researchers can more clearly understand cause. By understanding what drives an individual (motives), researchers and educators can better understand why students are motivated in educational settings.
Related Literature and Theories

Motivation research is connected across many academic disciplines, including psychology, education, business, biology, and many others. The following theories have relevance to motivation research and offer additional theoretical constructs for the proposed research framework. Some of the theories within stem from other academic disciplines however have applications that can be useful in education research.

Achievement and Path-Goal Theories

With the prior discussion regarding motivation, understanding how an authority figure can influence motivation is an important topic worth including. Path-Goal Theory offers insights on leadership with regards to the adaptability of leaders to situational scenarios and the ability of a leader to compensate for subordinate deficiencies (House, 1971). Adapted to an educational setting, a teacher or instructor can tailor classroom leadership to meet the needs of students, much like a business leader would to subordinates in the workplace.

In addition to Path-Goal Theory, another theory is more specifically geared toward the education sector. Achievement Goal Theory seeks to understand the motivation for student achievement (Barron & Harackiewicz, 2001). Additionally, Barron and Harackiewicz (2001) further describe achievement goals as being reflective of the purpose behind achievement-based pursuits and have been classified into two types, including mastery and performance. The seeking of new knowledge and skills is considered mastery while maintaining a relative competence amongst peers is considered performance (Ames & Archer, 1988). More recent research offers to revise the breakdown of Achievement Goal Theory in order to combine performance-approach and mastery goals in an effort to seek an optimal motivation within students (Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002).
Trait Theory

Leadership is an important topic when discussing motivation. In fact, leadership and motivation have been said to be “necessarily connected” (Schaffer, 2008, p.6). Effective leadership can be identified through certain “traits” of a designate leader. According to Bowditch, Buono, and Stewart (2008), six traits exist that contribute to effective leadership. The first trait is drive, or the level to which a leader is achievement focused. Second, the individual must possess the desire to lead (referred to as leadership motivation). Third, the leader must be honest and have a high level of integrity. Fourth, the leader must have the self-confidence to be able to inspire confidence in others. Fifth, the leader must have the ability to create resonance – positive emotion and enthusiasm – throughout the organization. Lastly, leaders must possess the cognitive ability and knowledge of the content area (Bowditch, Buono, & Stewart, 2008).

The first trait mentioned by Bowditch, Buono, and Stewart (2008) in the review of Trait Theory was drive. Once again, the idea of intrinsic motivation surfaces in the literature. Maslow (1998) acknowledged the connection between management, leadership, and psychology in the book, *Maslow on Management*. Deci and Ryan (1985) purported that extrinsic motivators hinder intrinsic motivation, something that Piaget said was inherent in children (Miller, 2011). Considering these thoughts, leaders could be more effective by understanding the theorized relationship between external motivators and the internal drives of others. This could help educational leader’s impact student motivation.

Acquired Needs Theory

Society plays a role in how people react to the external world. For example, a person born in a community of arctic fishermen will likely have a vastly different lifestyle and worldview than an individual born in New York City. Acquired Needs Theory offers that
individuals ‘acquire’ needs from societal forces. In brief, McClelland categorized these societal-based needs into: achievement, power, and affiliation (Bowditch, Buono, & Stewart, 2008).

McClelland (1953) began the process of developing the theory in the early 1950s and ultimately categorized human motives into the aforementioned divisions. Differing from Maslow’s (1954) Hierarchy of Needs, McClelland placed the needs emphasis on satisfying perceived needs imparted from the greater society from which an individual is connected. Interestingly, McClelland also believed that needs of the individual change – or are newly acquired – over time (Bowditch, Buono, & Stewart, 2008). If needs change over time, types of motivation could also change over time. However, McClelland (1965) did acknowledge that changes in motivation are difficult for adults due to personality and motive characteristics being molded in childhood. An important idea from this theory is for a researcher to be aware of changes in motive that can stem from changes in life experiences.

**Recent Advancements of the Literature**

Motivation is a complex subject and difficult to measure due to having to create an objective measure of individual motivations (Goenner, Harris, & Pauls, 2013). “Human beings are motivated – moved to do something, or to avoid doing something – for a multiplicity of often interrelated, and sometimes conflicting, reasons” (Bézenac & Swindells, 2009, p. 5). Motivation in higher education is also complex, however an important topic to help educators understand the specific drivers for students attending college. Cognizance of motivation in higher education is valuable if for no other reason than to understand how motive affects engagement. Specifically, if students attend college due to a belief in a future outcome, the intrinsic value of a degree pursuit can be devalued (Kover & Worrell, 2010).
Furthermore, the evidence supports that intrinsically motivated students have an advantage over extrinsically motivated students. Intrinsic motivation has been linked to predicting perceived improvements of higher-order cognitive skills (Mehta, Clayton, & Sankar, 2007). Extrinsically motivated students need potential rewards or outcomes in order to initiate motivation, while intrinsically motivated students can internalize learning without the support offered from a reward. Students having intrinsic motivation have the advantage of being able to internally promote learning (Lei, 2010). This lends help with understanding the problem with performance amongst students. If a student attends higher education with an emphasis solely on potential rewards, the intrinsic value of learning is lessened.

While performing a review of the literature in the areas of motivation, intrinsic motivation, and extrinsic motivation in higher education, several variables have been studied. These different areas of study including researchers focusing on gender, socio-economic status, nationality, intra-discipline propensity, race, modalities, predictor traits, as well as other variables. While these variables may not specifically align with adult, non-traditional student motivation, the literature does provide a way to establish themes on student motivation. These variables do however shape student commitment and influence academic performance (Goenner, Harris, & Pauls, 2013). The following will present recent advancements in the literature with regards to motivation theory and higher education. After reviewing this section, the reader should be able to identify key themes stemming from higher educational motivation researcher.

**Fostering Motivation**

Fostering motivation is a theme that has been present throughout the literature. In brief, intrinsic motivation comes from within an individual, however, an external force can influence (or foster) intrinsic motivation. Kasser stated that in order to foster motivation, “You have to
give students choices when you can, you have to consider the students’ perspective, and you have to remove grades when possible” (Keeley, 2010, p. 150). The variable of choice, or autonomy, is a theme also seen in the literature and addressed in this review. The idea of removing grades is to remove the external contingency, which Kasser believes to be a hindrance to natural intrinsic motivation.

Outcomes have become an important part of the United States educational climate of late. Outcomes are also important in higher education for multiple reasons. Motivation has been shown to have a significant relationship with test scores and that educators can enhance – or foster – motivation conditions in students (Liu, Bridgeman, & Adler, 2012). Additionally, understanding how motivation is connected to outcomes is valuable to higher education. One study focused on three types of learning models – surface, deep, and strategic – and identified the value of fostering intrinsic motivation in students. Subjects of one study demonstrated low intrinsic motivation scores to learn accounting; however, student interest should be nurtured through “alignment of the curriculum, teaching and assessment” (Byrne, Flood, & Willis, 2009, p. 162). Academic outcomes can also be influenced by initial motivations and influences to attend college. In fact, attending college has been shown to fulfill the intrinsic needs for autonomy and competence (Guiffrida, Lynch, Wall, & Abel, 2013).

The literature is riddled with examples of how external factors can influence intrinsic motivation. One study examined the effect of high school size on student motivation toward attending a higher education institution and found that students attending larger high schools were more extrinsically motivated. Additionally, the study found that fostering – or developing – a students’ intrinsic motivation is more important to the overall academic success of the

**Autonomy**

Another word referenced in the Byrne, Flood, and Willis (2009) and the Guiffrida et al. (2013) study’s was autonomy. Autonomy is referenced continually throughout the literature (DeCharms, 1968; Deci & Ryan, 1985; Gagné & Deci, 2005; Niemiec, Lynch, Vansteenkiste, Bernstein, Deci, & Ryan, 2006) and is an important factor in an individuals’ ability to have intrinsic motivation. Additionally, intrinsic motivation and the need for autonomy is a universal phenomenon across all cultures (Shin & Kelly, 2013). Furthermore, students have reported that pressure and tension can arise through a lack of autonomy (Coutts, Gillear, & Baglin, 2011). With the evidence presented throughout the literature, one can surmise that autonomy is a key factor in intrinsic motivation.

People like to either have control over choices in life or have the perception of control over choices in life. Individuals lose intrinsic motivation if autonomy is lost or if manipulation occurs due to extrinsic rewards (Benson, 2009). According to Byrne (2009), an instructor should balance a students’ autonomy to allow for independent learning and yet remain close to also allow the student to feel supported. This combination allows for the cultivation of interest, which in turn could lead to deeper learning and intrinsic motivation. The Byrne, Flood, and Willis (2009) study also supports a relationship between intrinsic motivation and deeper learning.

In the study, *Choices and Motivations*, the authors study a large population of over 11,000 students entering higher education and found that the top three reasons for students desiring a degree were to “prepare for an attractive career, to obtain a degree, and to be able to
choose the direction of their life” (Tavares & Ferreira, 2012, p. 324). Furthermore, the authors suggest that these reasons overlap since having a degree is the beneficial to achieving a good job and ones desired direction in life. These reason also demonstrate ultimately lead to the theme of autonomy by the student having control over life choices and directions. Another study identified intrinsic motivation as a driver for why students attend college. More specifically, college students viewed education as a means to “gain independence, explore life directions, engage in personal growth, and learn skills to help change the world” (Henderson-King & Mitchell, 2010, p. 129).

Another interesting phenomena regarding autonomy is the internalization discussed by Gagné and Deci (2005) of external contingencies in order to convert said contingencies into intrinsic drivers. For example, a student in early K-12 experiences has the external contingencies of parents, teachers, grading, and peers in order to motivate the student toward desired tasks in education. Once that student moves on from the K-12 experience to higher education, the extrinsic motivators may still be in place, however the level to which these extrinsic factor impact academic performance may have changed. To explain, college-level students typically have more autonomy and have to be self-motivated to go to class and to study. This could be because the student has internalized the extrinsic motivators and therefore has more intrinsic desire toward education. This of course is speculation, however, illustrates the internalization that Gagné and Deci (2005) described.

**Other Motivation Factors**

Many studies were present that examined a host of other motivation factors relating to student intrinsic and extrinsic motivation. Some examples include studies that examined gender, goals, physical activity and weight loss, technology, program persistence, financial aid, size of
high school students attend, and other factors on motivation. One study found that students seeking mastery of a subject were highly intrinsically motivated (Schweinle & Helming, 2011). This section examines excerpts from the literature in order to continue to identify themes on motivation in higher education.

The literature has established the importance of motivation on a students’ alignment to attend college and on persistence in a variety of academic endeavors. Intrinsically motivated students tend to integrate knowledge in a way that creates feelings of joy, competence, and satisfaction; while students that are more extrinsically motivated place an emphasis on external contingencies such as rewards and punishments (Coutts, Gillear, & Baglin, 2011). Intrinsic motivation is vitally important to student success. Intrinsic motivation has been shown to “positively correlate with learning, achievement, perception of competence and self-efficacy, and is negatively correlated with anxiety, depression, and frustration” (Lei, 2010, p. 154). Additionally, intrinsic motivation has been shown to have a strong relationship with first-year academic performance (Arnold & Straten, 2012).

From a review of the literature, motivation is complex and stems from both internal and external factors, much like the continual debate of nature versus nurture. With regards to motivation, a students’ motivation can be situational depending on the activity or action. One study examined the motivational levels of college-level music students and found that intrinsic motivation was higher toward music (Diaz, 2010). While another study found that college students student where more extrinsically motivated to participate in physical education (Goa, Podlog, & Harrison, 2012). Each of these studies involved college students and courses, however, the end results upon comparison illustrate how the type of activity can affect certain motivation levels.
While reviewing the literature several studies were present that focused on the relationship between student motivation and technology. Since distance education has become a norm in higher education, researchers are being ever more diligent to study technology interactions by students. One study identified that students with higher levels of intrinsic motivation are better able to accomplish academic demands and scored higher on online exams (Radovan, 2011).

The climate of higher education has changed dramatically in the past few decades. Online education was once thought the exception, however has quickly become a normal part of a student’s higher education experience. With technology being central to a students’ higher educational experience, understanding student motivation towards technology is important. According to Shroff and Vogel (2009) intrinsic motivation does have a positive effect on learning.

The research done by Shroff and Vogel (2009) focused on online versus face-to-face learning modalities and on individual perceptions of intrinsic motivation, which include: perceived competence, perceived challenge, feedback, perceived choice, perceived interest, and perceived curiosity. The data stemming from the study are the high levels of perceived choices and perceived competence in the online course versus the traditional face-to-face course. Additionally, the authors acknowledge that online students were more eager to participate in discussion than the face-to-face students (Shroff & Vogel, 2009). One could draw inferences from this study to state that having a higher level perceived choice (autonomy) and competence could lead to higher levels of interest, which Byrne, Flood, and Willis (2009) indicated was important in academic success.
Another study showed the interest level and academic motivation declines as a student progresses through an academic program (Brouse, Basch, LeBlanc, McKnight, & Lei, 2010). In the study, *College Students’ Academic Motivation*, the authors used the Academic Motivation Scale (Vallerand et al, 1992), which is also being employed in the current study. Three findings stemmed from the study. First, females have higher motivation levels on both the intrinsic and extrinsic scale. Second, motivation level decline as a student progresses through an academic program. Last, self-funded students – ones not receiving student loans or parental support – demonstrated overall lower levels of motivation (Brouse, et al, 2010).

Another study sought to predict student motivation toward engagement in physical education courses by studying the relationship between goal orientations, situational motivation, and persistence in physical education course (Goa, et al, 2012). This study found that self-determination theory and achievement goal theory are valuable in helping to predict behavior changes and participation in physical education classes. According to Goa et al. (2012) several predictors exist to identify participation in a physical activities class, intrinsic motivation being one of the predictor identifiers. However, the authors state that identified regulation – a form of extrinsic motivation that is self-determined – was the largest predictor of persistence in physical education courses. The reasons stated as to why external motivating factors are more prominent in this study is due to exercise being linked to more extrinsically motivated factors, such as appearance, reducing stress, and improving health. Furthermore, the study offers that students may be more intrinsically motivated by sports participation than be exercise alone (Goa et al, 2012).

In the same realm of physical activity and motivation, another study examined healthy weight loss in college students. In the study, *College Students’ Motivation to Achieve and*
Maintain a Healthy Weight, the authors interject once again the themes of autonomy, choice, and intrinsic motivation. Specifically, the study found that intrinsic motivation is a factor in students achieving weight loss. The degree to which a student was motivated on an intrinsic and extrinsic scale was found to correlate with the student beginning weight. More specifically, in this case, students that were already in a normal weight demonstrated higher levels of intrinsic motivation, while students that were overweight scored higher on the extrinsic factor of social rewards. Female students were also identified as a group that would potentially benefit from what the authors referred to as “effective strategies to enhance intrinsic motivation” (Furia, Lee, Strother, & Huang, 2009, p. 262). This lends to the previously identified theme of being able to externally foster intrinsic motivation.

**Research Focus and Advancement of the Literature**

Within the previous body of knowledge, the literature on motivation theory offers several relevant themes and insights on student motivation, including: the individual desire for autonomy, the locus of causality, extrinsic rewards hinder intrinsic motivation, and external contingencies can be internalized to become inherently intrinsic. Motivation theories grew from early psychology discussions and have applications in other disciplines, such as business and education. Even Maslow as a foundational theorist on human motivation acknowledged a relationship across academic disciplines between psychology and management (Maslow, Stephens, & Heil, 1998).

As aforementioned, the focus of the proposed research seeks to examine the motivational levels of undergraduate non-traditional students by major. The proposed subjects being examined are classified as being business or education majors. Non-traditional students represent a large population of undergraduate college students (Bell, 2012). In fact, over a third
of undergraduate students are over the ages of 25 and a fourth are over 30 (Digest of Educational Statistics, 2012; Hess, 2011). However, research on the non-traditional student population—with regards to motivation—is limited with most studies reflecting populations in the K-12 (Areeputtamannil, Freeman, & Klinger, 2011; Mary, 2007), traditional undergraduate (Hilmi, 2013; Shekhar & Devi, 2012), and graduate-level students (Hegarty, 2010b; Epstein, Clinton, Gabrovska, & Petrenko, 2013). A recent study on self-determination when applied to graduate students indicated that education majors possessed a stronger intrinsic motivation level than that of business students (Hegarty, 2010a).

The primary theory used for this research study is Self-Determination Theory (SDT), put forth by Deci and Ryan (1985). Students (as individuals) are no different than other individuals within populations and according to SDT have the desire for autonomy, competence, and relatedness (Niemiec, et al, 2006). People desire the autonomy to have control to make choices, the competence to interact with others and the environment, and the relatedness to be one within a group. SDT further states that individuals go through a process of internalization. An example in higher education is for a freshman to fear a bad grade (external) and through that fear studies vigorously in order to avoid punishment. However, a senior (someone more advanced and with more potential internalization) may study due for the joy of learning (internal) and know that studying is the right thing to do (internalization – no need of external contingencies).

Research focus on Self-Determination Theory in the area of education has promoted the creation of the Academic Motivation Scale (AMS). This instrument was developed in order to measure the intrinsic and extrinsic motivation within students, as well as, the amotivation levels present within students. Amotivation occurs when a disconnection exists between the action and the outcome within individuals, such as performing a task with no reason. Additionally, the
AMS has been found to be a valid and reliable instrument to measure motivation within students (Vallerand, et al, 1992). From early work on measuring self-determination in college students it was found that students persisting and completing courses had higher levels of intrinsic motivation than students that dropped out. Additionally, the AMS found that certain forms of extrinsic motivation can have a positive outcome, which validates Deci and Ryan’s (1985) earlier assumption about the relationship between extrinsic and intrinsic motivation (Vallerand & Bissonnette, 1992).

Considering the current body of literature, the proposed research offers an opportunity to fill a gap in the literature by expanding upon previous research in the field of self-determination theory and student motivation. Much is not known in the area of non-traditional student motivation. For example, life experiences, such as work and family, could impact student motivation on both an intrinsic and extrinsic scale. Traditional students – for the most part – have not been externally influenced by having to work a career or raise a family. These differences in the life experience of a student could significantly alter the motivators toward education in non-traditional students. The emphasis on non-traditional students is valuable considering the limited literature available. The proposed research seeks to advance the literature by utilizing the Academic Motivation Scale as a validated instrument to gather information regarding the motivational levels of non-traditional undergraduate students by major.

**Summary**

Great strides have been made in the area of human motivation research. Early work to present day on the topic of motivation shows an evolution of ideas that bring about key themes in the proposed research. Specifically, Freud believed that individual behavior stemmed from the
need to fulfill desires (Dennis, 1949). Maslow (1943; 1954) organized these desires into a
categorical, hierarchical system of individual need fulfillment, which stated that as one need is
met a new need arises. McClelland (1953) developed another group of motivators based on
societal needs. De Charms (1968) put forth that motive derives from the desire to change ones
environment.

Edward Deci (1971; 1972) began work that would result in the development of SDT, an
important part of the proposed research (Deci & Ryan, 1985). The important development in the
work of Deci and Ryan (1985) is the gradual internalization of external motivators an individual
goes through in order to experience greater levels of intrinsic motivation. Csikszentmihalyi
(1990) took Maslow’s (1959) ideas regarding moments of self-actualization by offering that
individuals desire to find opportunities where skill and tasks meet in order to exist in ‘flow’
moments of time. Other research has furthered the body of knowledge by focusing of specific
elements of motivation, such as Herzburg’s (1966; 1968), Ouchi’s (1981) and McGregor’s
(2006) focuses on motivating employees and subordinates.

Motivation is a complex subject and no one theory can explain the specific drivers within
individuals. Motivation is a continuum that can change from moment to moment as one thought
enters the mind and another leaves. Individuals have simple daily motivators that Maslow
(1943) used to construct the base of a hierarchy and individuals also have complex motivators
that cause them to work for years toward a goal, such as graduating from college. Each theory
on motivation has a place in the continuum. Some theories identify how individuals are
motivated and can be controlled through external contingencies (Herzburg, 1966; McGregor,
2005; Ouchi, 1981). While other theories illustrate how motivation can be internalized and
derived from within (Csikszentmihalyi, 1990; DeCharms, 1968; Deci & Ryan, 1985; Dennis, 1949).

Ultimately, motivation theories point to external and internal drivers that factor into an individuals’ motivation. Motivation research in the field of higher education, and more specifically higher education, is still young, with limited prior research relating to the selected niche population of adult, non-traditional, business and education majors. This research is important for multiple reasons. By researching adult, non-traditional student motivation a gap in the literature will be filled, as well as a working foundation will be formed for future research that can be directed toward other topics linked to student motivation, such as retention and persistence.

With all of these concepts compiled into a working framework for understanding human motivation, further research can be done in order to understand what drives non-traditional students. Themes emerged regarding motivation while reviewing the literature. Specifically, three major themes continually rose to the forefront of the discussion. The first theme is that individuals are driven by a combination of simple and complex physiological, psychological, and environment motivators. The second theme is that individuals desire to seek achievement for personal (internal), societal, and external reasons. Last, intrinsic motivation is naturally occurring and prompts individuals to engage in activities of interest that create rewards through the act of engagement without external motivating factors.

The academic community can draw inferences as to what is known regarding motivation. However, much is still unknown in the realm of motivation and specifically in the area of student motivation. As aforementioned, much of the previous work in the field has been directed toward other student populations. The rise of adult, non-traditional students creates a need to study this
population. By advancing the literature in this area, the academic community can better understand the unique motivators, wants, and needs of the non-traditional student population.

Adult, non-traditional students are autonomous and have motives to attend higher education. The themes identified from the literature help to validate the relevance of the current study in the field of educational motivation in higher education. Specifically, adult non-traditional students typically have life obligations – including work, family, community, and other tasks – requiring attention. Choosing to attend college is an action performed, despite other life circumstances. This autonomous choice, at the core, has a motivating driver. This studies aim is to answer the research questions while adding to the current body of literature in an effort to perpetuate – or controvert – other previously established student motivation themes.
CHAPTER THREE: METHODS

This methodology chapter will present a discussion on the exact methods to be employed during the data collection and analysis phase of this study. As aforementioned, the purpose of this study is to examine the intrinsic and extrinsic motivational levels of non-traditional undergraduate business and education majors. Research has been done in the area of student motivation (Chesbrough, 2011; Eppler, Ironsmith, Dingle, & Errickson, 2011; Schweinle & Helming, 2011); however, little research has been performed to examine the complex internal and external motivating factors of non-traditional undergraduate students. Additionally, many theories contribute to a working framework including self-determination theory, which purports that individuals are driven by the intrinsic desire to align skill level with applicable tasks (Csikszentmihalyi, 1990; Deci & Ryan, 1985). This could – in part – help explain why non-traditional students are driven to seek higher education at later points in life than traditional undergraduate students.

In continuation, this methodology chapter will present seven key aspects of the research in an effort to inform the reader so that this design can be replicated in future studies. More specifically, this chapter will provide information regarding the design of the study, the research questions and hypothesis, the participants, setting, instrumentation, procedures, as well as data analysis. At the conclusion of this chapter, the reader should have a clear understanding of the methodology used throughout this study.

Design

This research study will employ a causal-comparative design using a Likert instrument to explore the motivational levels of non-traditional undergraduate students. A causal-comparative was selected in order to understand a cause and effect of behavior in individuals, which is the
premise for the study (Gall, Gall, & Borg, 2007). A causal-comparative design is non-experimental in nature and a design in which researchers “seek to identify cause-and-effect relationships by forming groups of individuals in whom the independent variable is present or absent – or present at several levels – and then determining whether the groups differ on the dependent variable” (Gall, et al., 2007, p. 306).

Furthermore, a causal-comparative design was an appropriate selection for the study due to the research being non-experimental and non-correlational. Additionally, the treatment in the study has already occurred as the students have already selected a major and have various intrinsic and extrinsic motivational levels, driving individual achievement; this lent to an ex post facto approach in a causal-comparative design. According to Gall, et al (2007), causal-comparative research seeks to understand causes and effects of personal characteristics and comparing individuals having said characteristic to others that may or may not possess similar characteristics. By definition, this research seeks to identify the personal motivational characteristics of non-traditional undergraduate business students and compare them to the motivational characteristics of non-traditional undergraduate education students.

**Research Questions**

The research questions for the study include the following:

**RQ1:** Is there a difference in the intrinsic motivational levels of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate?

**RQ2:** Is there a difference in the extrinsic motivational levels of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors?
Null Hypotheses

Null hypothesis for the Research Questions:

**H₀₁:** There is no statistically significant difference in the intrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate education majors.

**H₀₂:** There is no statistically significant difference in the extrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors.

Setting

The site of the study is a Christian, liberal arts university in eastern North Carolina. Established as a two-year private institution, the university has grown and now offers a variety of degrees at the bachelor level, with over 40 majors. According to the latest data, the total enrollment for the institution is 3,175 students, with 1,963 of these students being classified as non-traditional evening students. Additionally, the university has established a master’s degree program, which is offered in an online format. The institution has six satellite campuses used to serve the non-traditional undergraduate population. Evening classes are offered for the non-traditional students beginning at 6:00 PM and ending at 10:00 PM. Students generally take one course per session on a given night. Classes are offered Monday through Thursday nights at the college locations. Each of the six locations used in the study to gather data regarding non-traditional student motivation. The following offers a brief account of the areas which the evening college locations reside and the setting of the study.
**Location One**

The first location is the main campus of the institution. This campus is located in rural, eastern North Carolina and surrounded by a heavy agricultural base. The main campus hosts a traditional student population of 1,000 students, of which approximately one third live on the campus. The non-traditional evening college students meet in the largest classroom building, which is has two levels and multiple general purpose classroom facilities. The table presence for this location was established in the main hallway of the first floor in the classroom building. This location was optimal in order to receive the most opportunities for students to pass by and provide data for the study.

**Location Two**

This second location is a large population center for the state. Unlike the first location, this site highly industrialized with little agricultural base in the county. The area surrounding the site is urban and can be considered a technology and research center for the state. Additionally, many other colleges and universities are located in the area, providing both competition amongst the institutions and opportunities for students to have many options to pursue higher education. The setting for this site of the study is located off a busy highway in a professional building, suited for business, which has been adapted to meet the administrative and classroom needs of the college location. The administrative offices are positioned in one wing of the buildings lower floor, allowing for the remained of the floor to be designated for classrooms. The table presence for this location was established inside the entrance area in order to greet students entering the building. This location was selected due to being able to have every student be exposed the data collection area, while not taking away from the classroom area of the building.
Location Three

The third location in the study is classified as a small city with the third highest per capital income of all the locations included in the study (see included U.S. Census Bureau table). As many other satellite campus locations, this site has a single building that houses both the administrative offices and classroom units. The location of the table presence in the study will be in the common area, just inside the main entrance. This location will offer all entering students the opportunity to participate in the study.

Location Four

The fourth location site of the study is near a military base. The area is well developed with a solid business base and is near the coast. The building is relatively new, having been built less than two years prior and located just off a main highway through the town. The classroom building houses both the administrative offices, as well as a large group of general classrooms. The selected location of the table presence for this site is in the common area of the building, which is located between the administrative and classroom sections. This location houses a general seating area where students can naturally congregate before and after classes. This location proved an optimal selection for the site due to it being away from the classrooms, yet allowing for a high exposure rate to participants.

Location Five

The fifth location of the study is located in central, eastern North Carolina. This location is classified as rural, however has a large university in an adjacent township. The site is located near heavy traffic areas and has a central location for both the administrative offices and classrooms. The table presence for the study will be in the student area, just outside of the
classrooms. This area will allow for exposure and opportunities for students to participate in the study without disturbing the classrooms.

**Location Six**

The sixth and final location for this study is located in a coastal area with another large university, which contributes to a higher population of students in the local area. The site is located near a large shopping complex, near a busy highway. The building serves the dual purpose of housing both the administrative offices and classrooms. The location selected for the table presence was the common area just inside the entrance of the location. This location was the optimal selection due to it providing exposure to students entering the building, without disrupting the classroom area.

**Additional Information Regarding the Setting**

In order to provide additional information regarding the sites of the study, the researcher consulted the United States Census Bureau information to provide additional demographic information of the areas within the study. Once IRB approval is granted, the researcher will provide specific information on the student population demographics. Table 1 (below) provides additional demographic details from the areas surrounding the study sites.
Table 1

*Supplementary Information Regarding Location Demographics by County*

<table>
<thead>
<tr>
<th>Site</th>
<th>Total Pop</th>
<th>Gender</th>
<th>Race</th>
<th>BS Degree</th>
<th>Income*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1</td>
<td>124,246</td>
<td>M: 49.2%</td>
<td>White: 63.8%</td>
<td>16%</td>
<td>$21,135</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F: 50.8%</td>
<td>Black: 32.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hisp: 10.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 2</td>
<td>952,151</td>
<td>M: 51.3%</td>
<td>White: 69.6%</td>
<td>47.9%</td>
<td>$33,161</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F: 48.7%</td>
<td>Black: 21.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hisp: 10.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 3</td>
<td>209,324</td>
<td>M: 51.7%</td>
<td>White: 81.4%</td>
<td>36.0%</td>
<td>$29,281</td>
</tr>
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<td></td>
<td></td>
<td>F: 48.3%</td>
<td>Black: 14.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hisp: 5.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 4</td>
<td>183,263</td>
<td>M: 46.0%</td>
<td>White: 76.6%</td>
<td>18.0%</td>
<td>$21,391</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F: 54.0%</td>
<td>Black: 16.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hisp: 11.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 5</td>
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<td>M: 49.7%</td>
<td>White: 72.4%</td>
<td>21.0%</td>
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<td></td>
<td></td>
<td>F: 50.3%</td>
<td>Black: 22.1%</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Hisp: 6.6%</td>
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<td></td>
</tr>
<tr>
<td>Site 6</td>
<td>47,507</td>
<td>M: 51.8%</td>
<td>White: 71.7%</td>
<td>19.1%</td>
<td>$23,209</td>
</tr>
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<td></td>
<td></td>
<td>F: 48.2%</td>
<td>Black: 25.6%</td>
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<td></td>
<td></td>
<td>Hisp: 7.2%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* per capita monitory income in the past 12 months

Note. From *State and County Quickfacts, June 2013*, United States Census Bureau

Participants

Non-traditional students are now a majority of the undergraduate student population (Bell, 2012). The non-traditional students for this study were selected as a sample from a rural, private, Christian liberal arts college in North Carolina. The college has two divisions for the evening program of which non-traditional students participate. These divisions include a School
of Business (for business majors) and a School of Arts and Sciences (for education and other related majors).

Additionally, the business school for non-traditional students offers five majors, including: accounting, business management, healthcare management, human resource management, and management of information systems. The school for arts and sciences offers three majors for noon-traditional students, including early childhood education, criminal justice and criminology, and religion. All of the aforementioned programs are designated as Bachelor of Science Degrees.

The non-traditional student population of the college is highly diverse, with age ranging 21 and up. The age demographics alone allow for a mix of students with diverse life, professional, and educational experiences. However, when considering the other demographic information combined with the range of experiences, the population with this study provides a fertile field of data to help understand non-traditional student motivation.

Sample Characteristics

The sample characteristics include a detailed account regarding the sample selected for the study. More specifically, the characteristics of the sample describe the population, size of the sample, type of sample, sample identification, sample selection, study introduction, as well as how participation was gained for the study. The following provides an in-depth discussion of each aspect of the sample used for the study.

Population and Sample Size

A power analysis was performed in order to determine the sample size estimation. The effect sizes (ES) in this study was 0.347 on the intrinsic variable and 0.406 on the extrinsic variable, which is considered to be a medium response using Cohen’s (1977) criteria. With an
alpha = .05 and power = 91, the projected sample size needed with this effect size is approximately 110 for this between groups comparison. Thusly, the identified sample size does fall within expected standards and meets the objectives within the confines of the study.

As aforementioned, the institution has a widely diverse student population. Aside from the non-traditional student focus of this study, the institution also has a thriving traditional (daytime) student population. The non-traditional students of the institution attend courses during the evening in a modular (one course at a time) format. The non-traditional student population for the selected study, across all locations, is 1,963 students. The goal of the study was to produce a large sample, consisting of at least 5% (approximately 100 students) of the non-traditional student population.

Sample Type

Random samples have been found to strengthen a study due to each participant having an equal chance of providing data for analysis (Gall, et al, 2007). The goal of the study was threefold. The first goal of the study is to gather data to either support or nullify the proposed hypotheses. Second, the study seeks to objectively and ethically collect, analyze, and report any data received as a result of the study. Last, the study seeks to provide the best possible data to future researchers. Random sampling helps achieve all three of the aforementioned goals of the study.

Sample Identification and Selection

The researcher in this study is employed at the site of the study. Working directly with non-traditional students began the inspiration of the study, as well as the population to include as a part of the study. Thusly, the population was selected for the purpose learning more about non-traditional student motivation. The sample was identified from the population through random
sampling. Having a random sample is important to the study in order to give each member of the selected population and opportunity to participate in the study, which is one of the identifiers of a random sample (Gall, et al, 2007).

Randomness occurs in four ways within this study. First, the course schedule has been pre-generated by the University to offer courses on random nights. Second, students randomly selected the courses to take on random nights. Third, the data collection process will take place on random nights at different locations across the institution. Fourth, attendance at various locations will be random. In brief, these measures help to ensure that randomness is occurring and that each member of the population has an opportunity to participate in the study. The researcher established a table presence in each of the classroom building on various nights to allow for students to participate in the study. Students were made aware of the table presence prior to the event via email.

Gaining Participants

A table presence was established at each of the various evening college locations on different nights, allowing for a diverse and random sample to be generated for the study. Additionally, the table presence provided light refreshments where participants were asked to fill out a brief survey for the purpose of gathering data for this study. As students arrived for class or went on a break, opportunities were present for students to fill out the survey instrument. Ultimately, the study was able to secure 110 participants.

Instrumentation

The instrument selected for this study is the Academic Motivation. The AMS was developed originally in France and adapted to meet the needs of cross-cultural procedures in the early 1990s. More specifically, the ASM was adapted in order to provide an instrument to
measure student motivation in English-speaking countries and maintains a satisfactory internal consistency. The instrument consists of 28 items on a Likert scale, which are subdivided into seven subscales. These subscales assess three types of motivation, including: extrinsic, intrinsic, and amotivation. For the purpose of this study, amotivation data will not be included in the analysis since it does not lend to answering the research questions. Additionally, the AMS has been validated with an internal validity of .81 and a reliability of .79 (Vallerand, Pelletier, Blais, Briere, Senecal, & Vallieres, 1992). Another note on reliability is that in the Vallerand, et al (1992), study a subscale breakdown was provided to illustrate the internal consistency across each subscale, which included: amotivation (.85), external regulation (.83), introjected regulation (.84), identified regulation (.62), intrinsic motivation to know (.84), intrinsic motivation to accomplish (.85), and intrinsic motivation for stimulation (.86).

The AMS has been used in multiple research studies (Brouse, Basch, LeBlanc, McKnight, & Lei, 2010; Horyna & Bonds-Raacke, 2012; Singh, Singh, & Singh, 2012), as well as multiple student dissertations (Rezvina, 2008; Washington, 2009; White, 2001). The ASM was selected for the study for three reasons. Firstly, the internal validity of the instrument is such to produce quality data for analysis. Secondly, the instrument is designed to measure the intrinsic and extrinsic motivators within students, which is the primary purpose of the study. Lastly, the AMS has been used extensively throughout the literature, further establishing that the instrument is known as a tool for measuring student motivation. (Cokley, 2015; Kusurkar, Croiset, Gerda, Cas, 2011; Shillingford & Karlin, 2013).

**Procedures**

The procedures for the study involve a ten-step process. These steps were established to systematically proceed through the research process of the study, ensuring compliance to the
standards set forth by the institutions involved while allowing for data to be gathered. The first step in the process is to receive permission to proceed with the study by having an acceptable first three chapters to include a comprehensive plan to proceed forward. This step is important in order to ensure that the plan is sound and that everyone involved is aware of what processes will be taking place throughout the study.

The next step involves securing IRB approval from the institutions involved. The IRB approval process further ensures the study will first do no harm to the participants and secondly that the study will gather information for the purpose of intent. Once IRB approvals are in place, the researcher will prepare the AMS instrument to include a participation letter and demographic information. Participants need to know why the study is taking place and how participating can benefit the study. Additionally, the demographic information is important to provide additional data in order to better understand a more accurate description of the sample.

Following the preparation of the instrument is the establishment of a data collection schedule. This will provide a specific timeline with dates to visit each site in the study for data collection. Many authority figures will be involved in the process of data collection and as a courtesy an email will be send to the Vice-President of Academic Affairs and both academic Deans to inform about the timelines for visitations, a brief abstract of the study, and the procedures involved. This step will be followed by two steps involving sending additional emails to both the faculty and non-traditional student bodies. These emails will provide a brief overview of the study, timelines, and information on how students can participate in the study.

The final steps of the study procedures begin with the visitations to each campus site. These visitations will take place between 5:30 PM and 8:30 PM on a pre-selected night of the week that classes meet at each of the non-traditional locations. With six locations to visit, the
researcher is planning to pre-select two different nights to visit each location in order to increase exposure and the possibility for more data collection. Once the data collection process ceases, the next step is to perform the data analysis (t-test) in order to understand the differences between the mean scores, ultimately demonstrating if a significant difference exists between student intrinsic and extrinsic motivation levels by major. The final step in the procedures is to report the findings of the study.

Data Analysis

The selected data analysis for this study is a simple independent samples t test. According to Gall, Gall, and Borge (2005), a t test is employed “to determine whether an observed difference between the mean scores of two groups on a measure is likely to have occurred by chance or whether it reflects a true difference in the mean scores of the populations represented by the two groups.” Since the data provided is going to be comparing two means (intrinsic versus extrinsic motivation) the t test analysis is most appropriate for the study. The data analysis tool used for analysis is SPSS.

As aforementioned, the study has two research hypotheses. The first hypothesis seeks to establish that no significant difference exists between non-traditional business and education majors with regards to intrinsic motivation toward education. The t test can establish the differences in the mean scores using the AMS instrument and effectively identify if a significant difference exists. The second hypothesis seeks to establish that no significant difference exists between non-traditional business and education majors with regards to extrinsic motivation toward education. As with the first hypothesis, a t test can also be employed to analyze the data in an effort to establish if a significant difference exists.
CHAPTER FOUR: FINDINGS

On the surface, motivation is a simple construct. Some internal or external force manifests and the individual responds in a variety of ways as determined by innumerable variables such as time, the amplitude of the force, biochemical responses, psychological factors, and the space in which the force and individual exists. Some research attests that motivation is desire driven (White, 1959) while other data points to the seeking of need fulfillment (Maslow, 1943). These wants versus needs are a classic model of how individuals seek out and respond to the physical world.

Beyond the want/need complex, other research has added a level of sophistication to motivational studies by offering that individuals internalize external contingencies in order to be self-directed (Deci & Ryan, 1985). Gagné and Deci (2005) take this a step further by adding that external contingencies hinder intrinsic motivation and that individuals seek out the autonomy to choose individual paths in life; mastery over the tasks by which a person is engaged; novelty through new thoughts, activities, and ideas; and relatedness with others and the environment. People also seek flow moments (Csíkszentmihalyi, 1990) where they experience actualization through the alignment of skill and task, where boredom and frustration are alleviated and intrinsic motivation is inherently present. These thoughts have begun to create a paradigm shift for how leaders think about motivating others (Pink, 2009).

Applying these concepts to education is a task that is continually evolving. Much of the previous research has been dedicated to the premise of understanding motivation from an extrinsic dynamic. Educators seek to determine ways to create external factors to motivate students toward education-based outcomes such as higher tests scores, better study habits, and more engaged classroom participation. In an era where national test scores are showing decline
(Brown, 2015), perhaps a paradigm shift with regards to motivation should occur within education as well.

This research dissertation seeks to advance the discussion on student motivation by examining an under-represented group within the literature. The Academic Motivation Scale (Vallerand, et al, 1992) was deployed to a group of non-traditional undergraduate students to examine motivational differences amongst business and education majors. This chapter will provide a variety of data collected from the AMS in the form of descriptive statistics with a comparison of means using SPSS to perform a simple independent samples $t$-test. Additionally, the specific results will be presented with regard to $H_1$ and $H_2$, examining the significance of intrinsic and extrinsic motivational levels between non-traditional undergraduate business and education majors. The procedures performed will be presented along with the research questions and a summary of the major finding resulting from the study. Lastly, additional analyses will be presented to expand upon the presented data.

**Research Questions**

The research questions for the study include the following:

**RQ1:** Is there a difference in the intrinsic motivational levels of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate?

**RQ2:** Is there a difference in the extrinsic motivational levels of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors?

**Null Hypotheses**

Null hypothesis for the Research Questions:
**H₀₁**: There is no statistically significant difference in the intrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate education majors.

**H₀₂**: There is no statistically significant difference in the extrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors.

**Descriptive Statistics**

The distribution of the AMS survey took place across six sites of a small, liberal arts, Christian-affiliated University in eastern North Carolina. Prior to distribution, IRB approval was granted by the institution. Each site was contacted individually via email to the site director in order to solicit participation in the study. A schedule was developed for data collection and the principle investigator visited each site over a two month period.

While at each site the principle investigator established an area to collect surveys and visited with students as they arrived for evening classes; communicating the purpose of the study; inquiring about the students major and willingness to participate in the study; and providing willing participants with the AMS instrument along with the statement of consent (see Appendix A).

Once data collection was complete the principle began imputing the data into the SPSS software for analysis. This process involved creating 35 variables including: major, gender, age, race, household income, size of household (see Table 2 for demographic descriptive statistics), and the 28 individual questions assessed on the AMS instrument.
Table 2

*Descriptive Statistics of Demographics*

<table>
<thead>
<tr>
<th>Measure</th>
<th>frequency</th>
<th>%</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>74</td>
<td>67.3</td>
<td>.4714</td>
</tr>
<tr>
<td>Education</td>
<td>36</td>
<td>32.7</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>15</td>
<td>13.6</td>
<td>.3765</td>
</tr>
<tr>
<td>Female</td>
<td>74</td>
<td>67.3</td>
<td></td>
</tr>
<tr>
<td>Undefined</td>
<td>21</td>
<td>19.1</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 25</td>
<td>13</td>
<td>11.8</td>
<td>1.7843</td>
</tr>
<tr>
<td>26 to 30</td>
<td>24</td>
<td>21.8</td>
<td></td>
</tr>
<tr>
<td>31 to 35</td>
<td>20</td>
<td>18.2</td>
<td></td>
</tr>
<tr>
<td>36 to 40</td>
<td>17</td>
<td>15.5</td>
<td></td>
</tr>
<tr>
<td>41 to 45</td>
<td>17</td>
<td>15.5</td>
<td></td>
</tr>
<tr>
<td>46 to 50</td>
<td>11</td>
<td>10.0</td>
<td></td>
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<tr>
<td>51 to 55</td>
<td>4</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>56 to 60</td>
<td>2</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Undefined</td>
<td>2</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African Am.</td>
<td>34</td>
<td>30.9</td>
<td>2.6323</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td>1</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Other</td>
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<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>58</td>
<td>52.8</td>
<td></td>
</tr>
<tr>
<td>Multiracial</td>
<td>8</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>Undefined</td>
<td>3</td>
<td>2.7</td>
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</table>
### Table 2 (continued)

**Descriptive Statistics of Demographics**

<table>
<thead>
<tr>
<th>Measure</th>
<th>frequency</th>
<th>%</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; $10,000</td>
<td>5</td>
<td>4.5</td>
<td>2.0736</td>
</tr>
<tr>
<td>$10,000 to $19,999</td>
<td>16</td>
<td>14.5</td>
<td></td>
</tr>
<tr>
<td>$20,000 to $29,999</td>
<td>19</td>
<td>17.3</td>
<td></td>
</tr>
<tr>
<td>$30,000 to $39,999</td>
<td>16</td>
<td>14.5</td>
<td></td>
</tr>
<tr>
<td>$40,000 to $49,999</td>
<td>7</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>20</td>
<td>18.2</td>
<td></td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>18</td>
<td>16.4</td>
<td></td>
</tr>
<tr>
<td>$100,000 to $150,000</td>
<td>6</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>&lt; $150,000</td>
<td>1</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Undefined</td>
<td>2</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Size of household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>13</td>
<td>11.8</td>
<td>1.4490</td>
</tr>
<tr>
<td>2</td>
<td>27</td>
<td>24.5</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>26.4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>21.8</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>2.7</td>
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</tr>
<tr>
<td>7</td>
<td>4</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Undefined</td>
<td>2</td>
<td>1.8</td>
<td></td>
</tr>
</tbody>
</table>

*Note. See Appendix D for demographic charts*

Once the variables were created the data entry process involved inserting the data and determining the appropriate path to perform the independent samples t-test. Once the data set was whole, the principle exported the data to Microsoft Excel in order to sort and aggregate the data.

The principle sorted the data by major and then color coded each of the AMS question variables into three subscale categories (red = amotivation, blue = extrinsic, and green = intrinsic). The AMS contains seven subscales (amotivation, external regulation, introjected regulation, identified regulation, intrinsic motivation to know, intrinsic motivation to accomplish,
and intrinsic motivation for stimulation), one of which (amotivation) was ignored for the purpose of this study due to amotivation not being addressed as a part of the research. However, the other six subscales were batched into two groups assessing the intrinsic and extrinsic motivational levels of the study participants. Once batched, the data were then aggregated to identify the mean intrinsic and extrinsic values for each of the study participants. These values were used to run the independent samples $t$-test in which the major was the dependent variable and the intrinsic and extrinsic motivational levels were the independent variables.

Two separate analyses were performed to examine both types of motivation in the study (intrinsic and extrinsic) involving business and education majors. The descriptive statistics of the motivational values are provided in Tables 3a and 3b, including the range, mean, median, mode standard deviation, skewness, Kurtosis, and variance.

Table 3a

*Descriptive Statistics of Intrinsic and Extrinsic Values*

<table>
<thead>
<tr>
<th>Measure</th>
<th>n</th>
<th>Range</th>
<th>M</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic</td>
<td>110</td>
<td>5.333</td>
<td>4.744</td>
<td>4.750</td>
<td>6.000</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>110</td>
<td>3.500</td>
<td>5.599</td>
<td>5.917</td>
<td>7.000</td>
</tr>
</tbody>
</table>

Table 3b

*Descriptive Statistics of Intrinsic and Extrinsic Values*

<table>
<thead>
<tr>
<th>Measure</th>
<th>n</th>
<th>SD</th>
<th>Variance</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic</td>
<td>110</td>
<td>1.358</td>
<td>1.845</td>
<td>-.260</td>
<td>-.661</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>110</td>
<td>1.211</td>
<td>1.468</td>
<td>-1.099</td>
<td>.935</td>
</tr>
</tbody>
</table>
Assumptions Testing

Prior to performing the independent samples t-test, the assumptions of the study were addressed through the following analyses, including: independence, normality, and homogeneity and equality of variance.

Assumption of Independence

A few assumption tests were done in order to provide more specific characteristics of the data collection and analysis. Randomness occurred due to the data collection sites visitation dates were not pre-selected. Additionally, the students in attendance on data collection nights were randomly allowed to register for courses that were being offered at the date and time of the data collection. The measurement of motivation for both the business and education majors are independent of each other, thusly the assumption of independence was met due to the data being independently and randomly sampled.

Assumption of Normality

Normality was assessed by using two methods. First, the frequencies process was used in SPSS to identify the distribution for Skewness and Kurtosis. The second test performed identified the Kolmogorov-Smirnov and Shapiro-Wilk tests for normality.

Skewness and Kurtosis. This SPSS analysis resulted in the skewness and Kurtosis being within +/- 1 for the extrinsic data, however, the intrinsic data did not meet the assumption, being greater than +/- 1. Nonetheless, the intrinsic value is close to the desired values within +/-1 and therefore acceptable to the study. Additional assessment for normality is provided through alternative testing (see Kolmogorov-Smirnov and Shapiro-Wilk). The values for skewness and Kurtosis are provided in table 4 and the histograms of the normality test are provided in Figures 1 and 2.
Figure 1. Histogram for normality assumption of intrinsic data.
Figure 2. Histogram for normality assumption of extrinsic data.

**Kolmogorov-Smirnov and Shapiro-Wilk.** For this analysis, the only variable that demonstrated significance was the intrinsic variable as identified through the KS test (.200). The SW test identified the intrinsic value to not be significant and both the KS and SW tests identified the extrinsic variable as not being significant. Therefore, the principle can infer that the data does not assume a normal distribution on both the intrinsic and extrinsic variables (see Table 4 and figures 3 through 6).
### Table 4

*Test of Normality: Kolmogorov-Smirnov and Shapiro-Wilk*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stat</td>
<td>df</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>.061</td>
<td>110</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>.124</td>
<td>110</td>
</tr>
</tbody>
</table>

---

**Figure 3.** Normal Q-Q Plot of Intrinsic Data.
Figure 4. Detrended Normal Q-Q Plot of Intrinsic Data.

Figure 5. Normal Q-Q Plot of Extrinsic Data.
Assessing the assumption of homogeneity resulted in the intrinsic variable demonstrating significance due to the $p$-value (sig) being greater than .05, thus indicating that the assumption of equality of variance is met. The extrinsic variable did not meet the assumption of equality of variance between the groups due to the $p$-value being higher than .05, which through the homogeneity testing indicated that the variance between the groups significantly differs on the extrinsic variable (see Table 5).

*Figure 6. Detrended Normal Q-Q Plot of Extrinsic Data.*
Table 5

*Test of Homogeneity of Variances*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Levene Stat.</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Based on Mean</td>
<td>2.439</td>
<td>1</td>
<td>108</td>
<td>.121</td>
</tr>
<tr>
<td>Based on Median</td>
<td>2.434</td>
<td>1</td>
<td>108</td>
<td>.122</td>
</tr>
<tr>
<td>Based on Median with adjusted df</td>
<td>2.434</td>
<td>1</td>
<td>101.770</td>
<td>.122</td>
</tr>
<tr>
<td>Based on trimmed Mean</td>
<td>2.438</td>
<td>1</td>
<td>108</td>
<td>.121</td>
</tr>
<tr>
<td>Extrinsic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Based on Mean</td>
<td>11.192</td>
<td>1</td>
<td>108</td>
<td>.001</td>
</tr>
<tr>
<td>Based on Median</td>
<td>9.094</td>
<td>1</td>
<td>108</td>
<td>.003</td>
</tr>
<tr>
<td>Based on Median with adjusted df</td>
<td>9.094</td>
<td>1</td>
<td>93.969</td>
<td>.003</td>
</tr>
<tr>
<td>Based on trimmed mean</td>
<td>10.433</td>
<td>1</td>
<td>108</td>
<td>.002</td>
</tr>
</tbody>
</table>

**Results from Independent Samples t-test**

After the assumptions tests (independence, normality, and homogeneity and equality of variance) for the independent samples *t*-test were performed and analyzed, the SPSS program was deployed once again in order to examine the research questions, hypotheses, and to make a determination regarding the null hypotheses. The results of the analyses are reported by presenting the hypotheses separately along with the accompanying data to support the results of the examination.

**Null Hypothesis One**

**RQ1:** Is there a difference in the intrinsic motivational levels of non-traditional
undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate?

**H01:** There is no statistically significant difference in the intrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate education majors.

Table 6

*Intrinsic Independent Samples Test*

<table>
<thead>
<tr>
<th>Levene’s Test for Eq. of Var.</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Equal Variances Assumed</td>
<td>2.439</td>
</tr>
<tr>
<td>Equal Variances Not Assumed</td>
<td>-3.813</td>
</tr>
</tbody>
</table>

An independent-samples *t*-test was used to analyze the first null hypothesis that examined the intrinsic motivational levels amongst non-traditional undergraduate business and education majors. The assumption of independence was met by examining the methods deployed to collect data. The assumption of normality was assessed using two methods, including an analysis of skewness/kurtosis and Kolmogorov-Smirnov and Shapiro-Wilk. The results indicated a lack of significance for the first analysis (S/K), however, significance was demonstrated for the other analyses (KS, SW). The assumption of homogeneity for intrinsic motivation demonstrated significance with a *p*-value greater than .05.
The business majors \( N = 74 \) were associated with intrinsic motivational levels \( M = 4.44 \) \( (SD = 1.39) \). By comparison, the education majors \( N = 36 \) were associated with the numerically higher intrinsic motivational levels \( M = 5.36 \) \( (SD = 1.07) \). To test the hypothesis that there is no statistically significant difference in the intrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate education majors, an independent \( t \)-test was performed. As can be seen in Figure 1, the intrinsic motivation levels were sufficiently normal for the purpose of conducting a \( t \)-test. Additionally, the assumption of homogeneity of variances was tested and satisfied with a Levene’s \( F \) test, \( F(108) = 2.44, p = .121 \). The independent samples \( t \)-test was associated with a statistically significant effect, \( t(108) = -3.49, p = .001 \). Since the \( p \)-value is less than .05 the null hypothesis was rejected.

**Null Hypothesis Two**

**RQ2**: Is there a difference in the extrinsic motivational levels of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors?

**H\(_0\)_2**: There is no statistically significant difference in the extrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors.
Table 7

*Extrinsic Independent Samples Test*

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Eq. of Var.</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal Variances Assumed</td>
<td>11.192</td>
<td>.001</td>
</tr>
<tr>
<td>Equal Variances Not Assumed</td>
<td>-4.757</td>
<td>105.175</td>
</tr>
</tbody>
</table>

An independent-samples *t*-test was used to analyze the second null hypothesis that examined the extrinsic motivational levels amongst non-traditional undergraduate business and education majors. The assumption of independence was met by examining the methods deployed to collect data. The assumption of normality was assessed using two methods, including an analysis of skewness/kurtosis and Kolmogorov-Smirnov and Shapiro-Wilk. The results demonstrated significance for the first analysis (S/K), however did not demonstrate significance for the other analysis (KS, SW). The assumption of homogeneity for extrinsic motivation demonstrated significance with a *p*-value greater than .05.

The business majors (*N* = 74) were associated with extrinsic motivational levels *M* = 5.29 (*SD* = 1.28). By comparison, the education majors (*N* = 36) were associated with the numerically higher extrinsic motivational levels *M* = 6.22 (*SD* = .736). To test the hypothesis that there is no statistically significant difference in the extrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate education majors, an independent *t*-test was performed. As can be seen in Figure 2, the extrinsic motivation levels
were sufficiently normal for the purpose of conducting a t-test. Additionally, the assumption of homogeneity of variances was tested and satisfied with a Levene’s $F$ test, $F(108) = 11.19$, $p = .001$. The independent samples $t$-test was associated with a statistically significant effect, $t(108) = -3.98$, $p = .000$. Since the $p$-value is less than .05 the null hypothesis was rejected.

**Summary of Results**

This study examined the intrinsic and extrinsic motivational levels of non-traditional undergraduate business and education majors. Non-traditional students are an underrepresented group within the literature and as such an independent samples $t$-test was deployed to examine the intrinsic and extrinsic motivational levels of non-traditional undergraduate business and education majors in an effort to answer the research questions regarding significant differences between two types of motivation based on major.

The data analysis indicated that a significant difference was present in both the intrinsic and extrinsic motivational levels amongst business and education majors. The analysis also supports the hypotheses within the study that there is a significant difference between the business and education majors for both the intrinsic and extrinsic motivational levels. Chapter five will present additional discussion along with conclusions, implications, limitations, and recommendations for future research.
CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summation of the information contained throughout the study and includes the purpose of the study, the finding regarding the intrinsic and extrinsic motivational levels of non-traditional undergraduate business and education majors, conclusions based on the findings, implications, limitations, and recommendations for future research.

The business majors ($N = 74$) were associated with intrinsic motivational levels $M = 4.44$ ($SD = 1.39$). By comparison, the education majors ($N = 36$) were associated with the numerically higher intrinsic motivational levels $M = 5.36$ ($SD = 1.07$). Additionally, the assumption of homogeneity of variances was tested and satisfied with a Levene’s $F$ test, $F(108) = 2.44$, $p = .121$. The independent samples $t$-test was associated with a statistically significant effect, $t(108) = -3.49$, $p = .001$. Since the $p$-value is less than .05 the null hypothesis was rejected.

With the extrinsic variable, the business majors ($N = 74$) were associated with extrinsic motivational levels $M = 5.29$ ($SD = 1.28$). By comparison, the education majors ($N = 36$) were associated with the numerically higher extrinsic motivational levels $M = 6.22$ ($SD = .736$). Additionally, the assumption of homogeneity of variances was tested and satisfied with a Levene’s $F$ test, $F(108) = 11.19$, $p = .001$. The independent samples $t$-test was associated with a statistically significant effect, $t(108) = -3.98$, $p = .000$. Since the $p$-value is less than .05 the null hypothesis was rejected.

Discussion

The purpose of this research study was to examine the intrinsic and extrinsic motivational levels of non-traditional undergraduate business and education majors. Non-traditional students – those students classified as being 21 years or older and attending an evening college program –
are severely under-represented in the literature. In order to examine the motivational levels of non-traditional undergraduate students, the application of the Academic Motivation Scale was deployed in order to gain insights on the intrinsic and extrinsic levels of both business and education majors. The AMS instrument has demonstrated an internal validity of .81 (Vallerand, et al, 1992). The AMS comprises 28 questions on a seven point Likert scales specifically used to measure student intrinsic, extrinsic, and amotivation. The intrinsic and extrinsic levels each have three subscales (external regulation, introjected regulation, identified regulation, intrinsic motivation to know, intrinsic motivation to accomplish, and intrinsic motivation for stimulation), however, for the purpose of this study the subscales were not used along with the exclusion of amotivation since the inclusion would not contribute toward addressing the research questions (Gagné & Deci, 2005).

The study was performed over a two month period, visiting six sites hosting evening college classes for a small university in eastern North Carolina. Potential subjects were approached prior to classes beginning and asked to identify a major area of study. If the subject identified as being either a business or education major, the principle then requested participation in the study. If the subject agreed to participate, the principle provided a copy of the AMS – including a developed demographic instrument – along with the informed consent document. Two hypotheses were developed to approach the research and finding.

**Hypotheses**

The premise behind this research was multi-faceted. Specifically, this research serves to help fill the gap in the literature by placing emphasis on the non-traditional student population. Additionally, the examination of motivational levels helps shed light on the topic of motivation, the degree to which students are motivated, and how selected major factors into motivational
levels. These factors have tremendous potential in being able to understand which majors have themes of higher and lower motivational levels on both the intrinsic and extrinsic scales.

**RQ1:** Is there a difference in the intrinsic motivational levels of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate?

**H₀₁:** There is no statistically significant difference in the intrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the intrinsic motivational levels of non-traditional undergraduate education majors.

**Brief Discussion Regarding RQ1 and H₀₁:** Prior to beginning this research, the principle believed that education majors would demonstrate higher levels of intrinsic motivation over business majors for the simple reason that education is a service industry, surrounded by the ideals that educators serve the community and do so often without great extrinsic rewards (monetary compensation). The results of the study affirmed the belief that education majors are more intrinsically motivated.

**RQ2:** Is there a difference in the extrinsic motivational levels of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors?

**H₀₂:** There is no statistically significant difference in the extrinsic motivational levels as measured by the Academic Motivation Scale of non-traditional undergraduate business majors when compared to the extrinsic motivational levels of non-traditional undergraduate education majors.
**Brief Discussion Regarding RQ2 and H02:** Prior to beginning this research, the principle believed that business majors would possess a greater degree of extrinsic motivation over education majors. To the surprise of the principle, in this case the education majors demonstrated higher levels of extrinsic motivation over business majors. The following will continue the discussion of findings.

**Summary of Findings**

This study examined the intrinsic and extrinsic motivational levels of non-traditional undergraduate business and education majors. Non-traditional students are an underrepresented group within the literature and as such an independent samples t-test was deployed to examine the intrinsic and extrinsic motivational levels of non-traditional undergraduate business and education majors in an effort to answer the research questions regarding significant differences between to two types of motivation based on major. The data analysis indicated that a significant difference was present in both the intrinsic and extrinsic motivational levels amongst business and education majors. The analysis also supports the hypotheses within the study that there is a significant difference between the business and education majors for both the intrinsic and extrinsic motivational levels. The education majors participating in this study demonstrated significantly higher motivational levels on both the intrinsic and extrinsic spectrum.

The business majors \((N = 74)\) were associated with intrinsic motivational levels \(M = 4.44\) \((SD = 1.39)\). By comparison, the education majors \((N = 36)\) were associated with the numerically higher intrinsic motivational levels \(M = 5.36\) \((SD = 1.07)\). Additionally, the assumption of homogeneity of variances was tested and satisfied with a Levene’s F test, \(F(108) = 2.44, p = .121\). The independent samples t-test was associated with a statistically significant
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With the extrinsic variable, the business majors ($N = 74$) were associated with extrinsic motivational levels $M = 5.29$ ($SD = 1.28$). By comparison, the education majors ($N = 36$) were associated with the numerically higher extrinsic motivational levels $M = 6.22$ ($SD = .736$). Additionally, the assumption of homogeneity of variances was tested and satisfied with a Levene’s $F$ test, $F(108) = 11.19, p = .001$. The independent samples $t$-test was associated with a statistically significant effect, $t(108) = -3.98, p = .000$. Since the $p$-value is less than .05 the null hypothesis was rejected.

**Discussion of Findings in Light of the Relevant Literature and Theory**

As indicated in the review of the literature, studies that are specific to the population of undergraduate, non-traditional students with regards to motivational levels are limited. Although many motivation theories are explored in the literature, this investigation primarily developed a theoretical framework from three motivation theories. Self-Determination Theory primarily presents a general framework regarding how individuals are intrinsically motivated – by seeking autonomy, novelty, mastery, and relatedness – and the negative correlation between extrinsic motivators and inherent intrinsic motivation; or, as external contingencies rise, internal motivation falls, whereas, when external contingencies are with-held, SDT posits that internal motivation rises. SDT also attests that individuals inherently have a tendency toward internalization (Deci & Ryan, 1985; Gagne & Deci, 2005).

Maslow’s Hierarchy of Needs presents the literature with a basis for understanding general human motivation (Maslow, 1943). Specifically, humans have unmet physiological (food, water, shelter) and psychological needs (comfort, relationships, safety) in an effort to
reach the elusive state of self-actualization; a point by which an individual finds all the needs met and experiences a ‘high point’ in life. Not unlike MHoN, Flow Theory examines key moments that people have where skill and task are in alignment, creating a “flow zone” where time seems to pass by quickly and individuals find more fulfillment and are more intrinsically motivated (Csikszentmihalyi, 1990).

Despite these theories creating a framework by which to examine motivation, much more work is needed in the field of student motivation, with specifically examining non-traditional students (an under-represented population in the literature). In order to truly advance the literature, a researcher must commit to replication studies and studies that expand the scope of the investigation. The principle investigator plans to replicate this study, with hopes of increasing the scope to examine more majors and by increasing the number of participants.

Conclusions

Foundationally, this study has been a philosophical journey in search of those motives that drive human curiosity to learn and grow. This study was able to demonstrate significant differences amongst undergraduate, non-traditional business and education majors on both the intrinsic and extrinsic levels. These differences were measured using the Academic Motivation Scale, which was developed to measure student motivation (Vallerand, et al, 1992). Other studies have been conducted around the content – not in direct alignment – of this study and found that major selection uses a combination of intrinsic and extrinsic factors (Firmin & MacKillop, 2008); motivation factors can impact specific course performance and academic behaviors (Maurer, Allen, Gatch, Shankar, & Sturges, 2013); extrinsic factors negatively impact major selection while intrinsic factors are positively related to major selection (Soria &
Stebleton, 2013); and (graduate) education students display higher levels of motivations than business majors (Hegarty, 2010a).

Additionally and with regards to conclusions being drawn from this study, the principle does not believe any substantial conclusions can be drawn from this individual examination. More specifically, the examination found that in the case of the non-traditional students in the selected population, education majors demonstrated higher levels of both intrinsic and extrinsic motivators. Making an inference from this one set of data would be careless and a poor research practice. A better approach would be to consider the data retrieved from this examination as a curiosity; an interesting discussion point in the field of student motivation research, however, not strong enough on the merits of this study to be able to drawn substantial inferences. Only through replication and larger samples could one be able to begin to make generalizations about the state of non-traditional student intrinsic and extrinsic motivation.

**Implications**

From a research standpoint, the principle investigators goal with this research dissertation was to begin a conversation with regards to motivation theory and education. Few dissertations rise to a level of having substantial impacts on existing theory, however, with the combined efforts of dedicated researcher and the axiom that research should be meticulous, thoughtful, honest, accurate, and a slow process, the current framework toward motivation will evolve.

One major concern from the PI throughout the entirety of research process is ensuring the information within is presented objectively – although bias is present in all works – and with an understanding that good science is a humble endeavor. Changes toward current theory or the establishment of new theories is an endeavor that often outlives the individuals seeking out truths through dedicated research. The implications of this examination primarily establish the work as
a foundation for future research through replication and expansion of the scope and targeted populations. Future research can lend to either strengthening the key theories used in the framework of this research or the development of a new theory to explore the illusive and ever interesting realm of motivation.

One interesting aspect of Self-Determination Theory – beyond the premise that individuals seek novelty, autonomy, mastery, and relatedness – is the idea that individuals go through a process of internalization (Gagne & Deci, 2005). This internalization means that as individuals experience external contingencies (extrinsic) a process begins whereby over time the need for external contingencies lessens and inherent intrinsic motivation is bolstered. According to SDT the principle can infer that as a student grows the need for extrinsic motivators lessens (educators and parents making the student comply) and the desire to perform well as a student should increase. However, educators are still faced with the conundrum of having to discover ways to encourage motivation within students.

**Limitations**

Despite having a validated instrument, motivation is difficult to pinpoint due to the vast array of internal and external motivating forces. Ultimately, one study cannot determine motivational patterns, however, can be the foundation of future research and – when combined with other research – can help to present themes in student motivation. The identified limitations for this study are identified as five factors, including: size of the study, scope of the study, population, instrumentation, and region.

**Size of the Study**

Initially, the principle chose to acquire approximately 5% of the selected population (around 100 subjects) and was able to secure 110 participants. This number is appropriate,
however, a larger number of participants would have increased the confidence interval, thereby strengthening the presented data. This limitation can be mitigated in future studies by increasing the number of participants. A power analysis was performed in order to determine the sample size estimation. The effect sizes (ES) in this study was 0.347 on the intrinsic variable and 0.406 on the extrinsic variable, which is considered to be a medium response using Cohen’s (1977) criteria. With an alpha = .05 and power = 91, the projected sample size needed with this effect size is approximately 110 for this between groups comparison. Thusly, the identified sample size does fall within expected standards and meets the objectives within the confines of the study.

Scope of the Study

The principle began this investigation with a simple premise of examining the motivational – intrinsic and extrinsic – levels of non-traditional, undergraduate business and education majors. While this examination was appropriate to answer the research questions, the overall scope of the study was limited to just the selected majors. Future studies should consider increasing the scope to include all majors.

Population

The population of the study also creates a limitation in that the principle only garnered participants described as “non-traditional, undergraduate students.” While this label is important for the purposes of the investigation, the data collected was limited to those subjects within non-traditional business and education programs. A better approach in future studies would be to garner participation from all undergraduates and then increase the number of research questions to include analyses of topics such as: non-traditional motivation by subject; traditional motivation by subject; a comparison of non-traditional and traditional motivational levels;
gender differences amongst traditional, non-traditional, and by subject; and age differences in motivational levels.

**Instrumentation**

The selected instrument for the study was appropriate in that it had an interval validity of .81, which is an acceptable level. However, the instrument has been established for over 25 years and would benefit from a reconfiguration. In future studies the principle would consider reconfiguring the AMS instrument or work toward developing a new instrument for the purpose of measuring student motivation.

**Region**

As stated previously, the region by which the study took place is in eastern North Carolina. This region has a high level of diversity (racial and ethnic) and according to the USDA rural poverty well-being statistics (2015) is generally socio-economically challenged when compared to other regions of the United States (see Appendix F). These factors could play a role in student motivation and therefore should be considered a limiting factor of the study. The principle should seek out other regions in future studies.

**Recommendations for Future Research**

One of the most important aspects of this research is the foundation it offers for future research. More specifically, the size and scope of this study was limited to the selected region and by the population. However, this study can be a platform for future studies that can further investigate non-traditional student motivation, or can be applied to other populations, such as traditional, graduate-level, and even students in the K-12 population.

In the short term it would be interesting to duplicate this study with another group of non-traditional undergraduate students from one or more other institutions, including the majors
selected for this study (business and education) and expanding the field to include all majors to see if the findings are consistent with the current study and to examine other majors and the associated motivational levels. The next logical step beyond would be to duplicate the study again in a traditional undergraduate population, including all majors, which would allow for more data to be collected examining motivational levels in an even greater diverse population.

A long term approach would be to continue expanding the populations with the same general questions examining motivational levels and major and then to also include students from grades nine through 12. At that point a meta-analysis could be performed to help identify how student motivation changes over time. The group of studies could have data including subjects as young as 14 with no age cap on the upper end. This analysis could be greatly beneficial to the literature in that it would offer insights as to the general ages associated with higher and lower levels of intrinsic and extrinsic motivation. The meta-analysis could also examine other factors such as race, gender, and socio-economic status and the impact on motivation.

Generally, the process of collecting and examining data is a lengthy one and involves multiple studies, which in the end leaves more work to be done. The science of discovery never ends and data collection leads to more questions and new paths to tread. The work of one research is greater than the scope able to perform in many lifetimes. The legacy of the work is therefore left to the literature for others to carry on. Outside of the individual scope of performance, the principle recommends of researchers beginning with the previously established theories by Maslow (1943), Deci and Ryan (1985) and Csikszentmihalyi (1990) in order to form a theoretical framework by which to develop a study. Specifically, the work of Deci and Ryan
(1985) on Self-Determination Theory has the potential to continually shift the way individuals, educators, and leaders think about motivation.

One of the observed failings of the K-12 educational system in the United States is the misalignment of individual aptitudes with the mass education (one size fits all) approach. A grander hope of this study is that the information within will be a foundation to helping discover ways to make education more tailored to the individual student, allowing for students to learn and be engaged in ways that are intrinsically substantial and fulfilling. The world, from education to many organizations, relies too heavily on extrinsic motivators, which according to SDT creates a hindrance to quality intrinsic motivation (Gagné & Deci, 2005). Understanding motivation and how to encourage intrinsic motivation is fundamental in shifting our culture away from making students comply and toward students naturally wanting to be engaged and to learn.

As presented during the review of the literature, no study was identified that examined the specific variables investigated in this study, including under-graduate, non-traditional business and education majors, however, the literature and theory does provide interesting inferences to build upon with future research. For example, this study examined non-traditional (adult) students and generally adults have a higher implied level of autonomy than students in a K-12 or even traditional undergraduate students. This implication stems from the premise that adults make life choices and younger students (generally) have choices made by caretakers and educators. A future study could build off of this existing study to examine age and autonomy, or the hypothesis that as age and autonomy increases, so does the intrinsic motivation toward education.

Although these thoughts may be radically redefining the way leaders approach motivation, all theories at one point were radical and paradigm shifting ideas. One of the main
tenets of SDT is the idea that people desire autonomy, the freedom to choose the directions of life. The principle believes that education reform can begin with something as simple as giving students a choice.
REFERENCES


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APPENDIX A: PARTICIPANT LETTER

CONSENT FORM

Title of Study: An Examination of Motivational Levels of Non-Traditional Undergraduate Business and Education Majors

Title of Project: Research for partial fulfillment of requirements for Liberty University

EDUC 989 Dissertation Seminar

Principal Investigator: Kristopher Ryan Bradshaw

Liberty University
Department of Education

You are invited to be in a research study of motivational levels of non-traditional students enrolled in an evening program. You were selected as a possible participant because you are currently enrolled in the evening program and are classified as a non-traditional student. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Kristopher Ryan Bradshaw, Principal Investigator, who is a doctoral candidate through the Graduate Education Department, Liberty University, Lynchburg, Virginia.

Background Information

The purpose of this study is: To examine the motivational levels of adult, non-traditional students in an effort to establish the driving factors that motivate non-traditional students to attend a college program.

Procedures

If you agree to be in this study, we would ask you to do the following things:
Complete the Academic Motivation Scale Survey

Grant the principal investigator permission to use your responses and demographic information pertinent to this study.

Risks and Benefits of Being in the Study

The risks of this study are minimal. They are no more than the participant would encounter in everyday life. The benefits to participation are increased understanding of:

- The participant's motivation levels toward higher education.
- The types of motivation inherent within the participant.
- An increased knowledge of student motivation to the academic literature.

Compensation

You will receive no payment or compensation for participation in this study.

Confidentiality

The records of this study will be kept private. In any sort of report we (the principal investigator, Liberty University, or this community college) might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Participant data will be coded to make identification of participants by anyone other than the principal investigator impossible. The data will be stored by and may be accessed by the following:

- In the computer of K. Ryan Bradshaw, principal investigator, at Mount Olive, North Carolina
- In the Graduate Education Department at Liberty University, Lynchburg, Virginia;
- In the Office of the Evening College at this University.
Voluntary Nature of the Study

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

The researcher conducting this study is K. Ryan Bradshaw, a doctoral candidate at Liberty University, Lynchburg, Virginia. The researcher's dissertation committee chair is Dr. Eric Lovik. You may ask any questions you have now. If you have questions later, you are encouraged to contact Mr. Bradshaw at 549 Michael Martin Drive, Mount Olive, North Carolina 28365, (919) 658-7774, RBradshaw@umo.edu or Dr. Lovik at Liberty University, 1971 University Boulevard, Lynchburg, Virginia, 24502, (727) 748-6008, eglovik@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Human Subject Office, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email at irb@liberty.edu; or the Director of Evening College, Dr. Paul Rutter, 549 Michael Martin Drive, Mount Olive, North Carolina 28365 or email at jrutter@umo.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent

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

Signature: __________________________________________ Date:___________

Signature of Parent or Guardian:_________________________ Date:___________

(If minors are involved)

Signature of Investigator:_________________________ Date:___________
APPENDIX B: EMAIL GRANTING

PERMISSION TO USE ACADEMIC MOTIVATION SCALE

From: Ariane St-Louis <stlouis.ariane@gmail.com>
To: Bradshaw, Ryan
Cc: 
Subject: Re: Permission to Use AMS for Dissertation

Dear Ryan,

You have the permission to use the AMS for your dissertation.

Thank you for your interest and good luck with your research!

Ariane

2014-06-06 15:58 GMT-04:00 Bradshaw, Ryan <RBradshaw@umo.edu>:
APPENDIX C: GRAPHIC OF MOTIVATION THEORIES AND THEMES

Many motivating factors come into play in an individuals daily life. Additionally, many theories on motivation are present in the literature to postulate on specific motivations. The ★ symbols denote major themes discovered in the literature. The blank circles represent unknowns, because motivation research is a young science, with much left to be discovered.

Flow Theory
Herzberg's Two Factor Theory
Personal Causation
Expectancy Theory
Self-Determination Theory
Maslow's Hierarchy
Theory X Y & Z

Individuals are driven by a combination of simple and complex physiological, psychological, and environmental motivators.

Individuals desire to seek achievement for personal (internal), societal, and external reasons.

Intrinsic motivation is naturally occurring and prompts individuals to engage in activities of interest that create rewards through the act of engagement without external motivating factors.
APPENDIX D: DEMOGRAPHIC CHARTS OF PARTICIPANTS
APPENDIX E: DEMOGRAPHIC INSTRUMENT

Demographic Information

PLEASE CIRCLE THE APPROPRIATE SELECTION

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<td>Above 66</td>
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<tr>
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<tr>
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<tr>
<td>Other</td>
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<table>
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<tr>
<td>$10,000 - $19,999</td>
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<tr>
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<td>$30,000 - $39,999</td>
</tr>
<tr>
<td>$40,000 - $49,999</td>
</tr>
</tbody>
</table>

| SIZE OF HOUSEHOLD: | 1 | 2 | 3 | 4 | 5 | 6 | 7+ |
APPENDIX F: POVERTY RATES BY REGION

Poverty rates by region and metro/nonmetro status, 2010-14