ABSTRACT

Sharon D. Smith, EXPLORING ACADEMIC MOTIVATION BETWEEN A TWO-YEAR AND A FOUR-YEAR INSTITUTION IN THE SOUTHEASTERN REGION OF THE US BY GENERATIONAL STATUS: A SEQUENTIAL EXPLANATORY ANALYSIS (Under the direction of Dr. Crystal Chambers). Department of Educational Leadership, April 2017.

First generation students are a growing body in the overall student population enrolling in both public two-year higher education institutions and public four-year higher education institutions in the United States; yet, little research has been conducted to examine the initial motivational orientation of these students as they start their academic journey. Even less research explores motivational differences among both first generation students and non-first generation students enrolled in public two-year institutions in comparison to students enrolled in public four-year institutions. Self-determination theory is widely used in educational research to explore motivation among individuals and the factors that both enhance and decrease motivation in students. It is an effective theory in identifying a student's motivation towards education based on the three motivational orientations including intrinsic motivation, extrinsic motivation, and amotivation. Motivation is important as there is a positive correlation between higher level of self-determined motivation and higher level of academic achievement. The purpose of this sequential explanatory study was to explore academic motivation of first-time, first-year freshman at a four-year and a two-year higher education institution to provide an analysis of self-determined motivational orientations between self-identified first generation students and non-first generation students.

There were a total of 385 students included in the quantitative phase of the study and 14 students in the qualitative phase. Quantitative data analysis indicated first-time, first-year students on average are more extrinsically motivated *(M = 25.26, SD = 3.47)* with both student groups scoring higher averages in the extrinsic motivation – external regulation orientation

(institutional type; *M=25.26, SD = 3.47*, generational status, *M=25.25, SD= 3.46*) than either of the other six orientations identified. The qualitative phase revealed 12 motivational factors which included: (1) Parental/Family influences, (2) Internal ambition, (3) Career focus/aspiration, (4) Adjustment, (5) Finances, (6) Internal struggle, (7) Time management, (8) Meeting new people, (9) Freedom/Becoming own person, (10) Campus environment, (11) Sports/Athletics, and (12) Other influences. An understanding of the differences between the motivational orientations and the factors that influence that motivation could inform the development of specialized programs for students identified with lower levels of self-determined motivation, and potentially increase overall academic achievement.

EXPLORING ACADEMIC MOTIVATION BETWEEN STUDENTS AT A TWO-YEAR AND A FOUR-YEAR INSTITUTION IN THE SOUTHEASTERN REGION OF THE US BY GENERATIONAL STATUS: A SEQUENTIAL EXPLANATORY ANALYSIS

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EXPLORING ACADEMIC MOTIVATION BETWEEN STUDENTS AT A TWO-YEAR AND A FOUR-YEAR INSTITUTION IN THE SOUTHEASTERN REGION OF THE US BY GENERATIONAL STATUS: A SEQUENTIAL EXPLANATORY ANALYSIS

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DEDICATION

This dissertation is dedicated to my Best Buddies. While I enjoy being Best Buddy, I think I am going to enjoy being Dr. Best Buddy a little more. This is my investment into each of your lives and my promise to be the very best I can be for each and every one of you! I love you guys with all my heart!

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I would also like to dedicate this to two very, very special people in my life who have never given up on me. This is for you, Rodney Jones and for you also, Kadesha Roach.

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CHAPTER 1: INTRODUCTION

The American Association of State Colleges and Universities President Muriel Howard stated in the 2015 Public Policy Agenda, "public institutions are gateways to educational opportunity and economic success for all Americans, and serve as proud and indispensable venues for minority access and success" (p. 3). While this is certainly the hope and the aspiration of public higher education institutions in the United States, many students are still grappling with various issues that become road blocks to degree completion. While some students are able to overcome those issues, there are many who do not and they never see graduation day. The National Postsecondary Student Aid Survey (2005) revealed that some of these barriers are characteristics of non-traditional students: first generation status, delayed entry, part-time attendance, off-campus employment, financial independence, dependent single parenthood, and the absence of a high school diploma (National Center for Education Statistics). These factors were found to be associated with lower student persistence and decreased academic achievement among these students as compared to more traditional student population groups.

First generation students have a higher percentage of not persisting to degree completion as opposed to continuing generation college student populations. This lower level of persistence and academic achievement has led to first generation students being identified as a high risk population by faculty, administration, and educational leaders. The National Center for Education Statistics (NCES) issued the First Generation Students in Postsecondary Education (2015) report which showed that first generation students represented 22% of the student population entering college 1992-2000 and of those students approximately 4 out of every 10 students or 43% (p. 6) who entered left postsecondary education without a completed degree. In contrast, the report showed that only 20% of non-first generation students leave without

completing a bachelor's degree. Fast forward to fall of 2016 and there is expected to be an increase of nearly 20.2 million students in attendance in an American (US) college or university (U.S. Department of Education, 2015). The Pell Institute for the Study of Opportunity in Higher Education (2011) estimates that only 11% of the first generation population will have a college degree within six years of entering college. While there are growing financial returns with each additional year of college, completion of a baccalaureate degree is shown to be associated with greater economic and non-pecuniary advantages (Kane & Rouse, 1999). Moreover, it is at the attainment of the baccalaureate degree that economic inequities dissipate and graduates have a more certain entry to middle class status (Walpole, 2007).

However, for many students, the path towards a baccalaureate degree starts at the two-year institutional level, which houses higher numbers of those students who are categorized as non-traditional. According to Bean and Metzner (1985), the students within the two-year sector are, by definition, non-traditional. Traditional students are often defined by the U.S. Department of Education (2010) as "full-time students between the age of 18 and 22, living on campus" while non-traditional students are often defined as those older students (23 years and above) who have returned to school, commute to and from campus while holding either a part-time or full time status and managing outside obligations, e.g., family responsibilities (Kulavic, Hulquist, & McLester, 2013). As such, non-traditional students face different sets of challenges than faced by their traditional peers. Overall, there are approximately 6.8 million non-traditional students enrolled in a higher education institution (Nelson, Gortmaker, Sucramanian, & Wechsler, 2007). The National Center for Education Statistics (2016) reports a projected increase of the non-traditional student population by 23% by the year 2019.

At both the two-year institutional level and the four-year institutional level, the academic experience will prove too much for some within this population and they will not return. As of 2001, 43% of the first generation students enrolled in a higher education institution left without obtaining their desired degree (Chen, 2005). These figures vary widely by the type of students and institutions. For example, the National Center for Education Statistics (2008) reported, for the 2010 cohort, the three year graduation rate for public two-year college students was 29% but even this figure is inflated by virtue of the cohort definition. This percentage represents only first time, full time degree seeking students in the Integrated Postsecondary Education Data System (IPEDs) cohort. On the other hand, the percentage is also an undercount, in that it only counts completions at the initial institution of enrollment. Counted more broadly, some 38.1% of 2009 two-year college students completed any college degree within six years (Shapiro & Dundar, 2015). This still means that for two-year college students, the vast majority do not reach their educational goals. The National Center for Education Statistics (2015) reports only a 39.8% degree completion rate within four years at the four-year institutional level as opposed to 59.4% completing after six years from the start of their academic journey. This data shows the importance of examining student populations in more detail than any simplified aggregate look can give.

One area to explore in understanding the factors that lead to higher academic achievement and persistence is the presence of motivation. Research surrounding motivation has been applied to several areas within educational research. Previous studies show there is a positive correlation to students who have a high level of self-determined motivation on their academic achievement (Kaufman, Agars, & Lopez-Wagner, 2008; Pintrich & Schunk, 2002; Trevino & DeFreitas, 2013; Vallerand & Bissonnette, 1992). Since there continues to be an

increased focus on academic achievement and persistence in an effort to increase degree completion at both the two-year and four-year level, the link between motivation and academic achievement and persistence seems to be an area to further explore. As first generation students are identified as non-traditional and therefore at high-risk of lower levels of academic achievement and persistence, what role does motivation play? Is there a way to identify those students who show an orientation towards a lower level of self-determined motivation and find ways to move them towards a higher level of self-determined motivation as a way to increase academic achievement and persistence towards degree-completion?

The task at the center of the present study is to identify the motivational orientations towards education that exist in students at the beginning of their post-secondary academic journey. In both two-year and four-year institutions, it should be important to know whether first generation students start their higher education experience with lower levels of self-determined motivation. It should be useful to provide a descriptive exploration of the motivational components that make up the motivational orientations in those students. Motivational orientations is defined as the reasons that influence an individual to attend college (Erickson, 2007; Plimer & Schmidt, 2007). The three motivational levels at the heart of this study are that of intrinsic motivation, extrinsic motivation and motivation. Using a mixed-method research design, this study will utilize the Academic Motivation Scale: College Version (Vallerand, Pelletier, Blais, Briere, Senecal, & Vallieres, 1992) as the survey instrument as well as a brief interview (see Appendix A) of students to further explore possible connections between motivation orientations towards education and academic achievement using the self-determination theory (SDT) as the conceptual framework.

Purpose of the Study

The purpose of this sequential explanatory study presented an opportunity to explore academic motivation of first-time, first-year freshman across a four-year higher education institution and a two-year institution utilizing both quantitative research methods and qualitative research methods in an attempt to provide an analysis of self-determined motivational orientations between self-identified first generation students and non-first generation students.

Problem Statement

First generation students continue to enroll in both public two-year universities and public four-year universities and yet they are not all persisting to graduation. First generation students come into higher education labeled at-risk before they even get through the doors (Smith, 2013). However, many of these students are hidden among their peers and therefore do not get the help they need at times. These students are labeled at-risk because they fall within two or more of the following characteristics: "raised in a single family household, low-income, first generation, demonstrate poor academic performance, and other factors that put students in danger of failing in school" (Smith, 2013, p. 3). Researchers argue that colleges have a responsibility to provide these students with the academic assistance, resources, and knowledge they need to successfully merge into the institutional academic culture of higher education. Many colleges do provide programs aimed at providing the academic support they need.

However, there has been little research conducted regarding the initial motivational orientation towards education in first generation students and the impact it may have on their overall level of academic achievement. The research that has been conducted shows that first generation students "do not imagine themselves reaching the same academic heights as other students, and when they are motivated to attend college it is often for more practical, short term

reasons than those motivating non first generation students" (Prospero & Vohra-Gupta, 2007, p. 81). Research in this area could potentially identify differences in the motivational orientations of first generation students compared to non-first generation students between the two institutional levels. An understanding of those differences could inform the development of specialized programs for students identified with lower levels of self-determined motivation, and potentially increase "the retention and graduation rates of these underserved students" (Smith, 2013, p. 3).

Significance of the Study

This mixed-method study is needed for several reasons. First, there currently exists a gap in the literature surrounding the motivational orientation towards education among first generation students in comparison to non-first generation students. There is even less literature discussing differences of motivational orientations towards education in an analysis form between two-year and four-year higher education institutions. Literature currently exists that explore the individual topics of first generation students, motivational orientations towards education, and academic achievement, however, few studies examine the potential links between the three topics collectively. Secondly, the information provided in this study can potentially be used to further exploration on the topic of motivation of first generation students and its link to academic achievement. Lastly, the results of the study can be potentially used to develop programs that target the individual motivational orientation towards education specific to the particular institutional level.

Research Questions

The following questions will guide the study:

1. What are the motivational orientations of first-time, first-year college students overall?

2. Is there a difference in the motivational orientations of these students by first generation status?
3. Is there a difference in the motivational orientations of these students by institution type: two-year versus four-year?
4. Do any such difference in motivational orientations interact between first generation status and institution type?
5. What factors do the students attribute to their overall motivational orientation?

Overview of Research Methods

The purpose of this sequential explanatory study presented an opportunity to explore academic motivation of first-time, first-year freshman at across a four-year higher education institution and a two-year institution utilizing both quantitative research methods and qualitative research methods in an attempt to provide an analysis of self-determined motivational orientations between self-identified first generation students and non-first generation students. Quantitative data will be collected via the Academic Motivation Scale: College Version survey (see Appendix A) which will be administered to first-year students at both a two-year and a four-year public institutions to identify the motivational orientations towards motivation. Qualitative data will be collected via student interviews to provide a descriptive exploration of the motivational components that make up the motivational orientations in those students.

Definition of Terms

All term definitions were provided by and included in the literature review found in the next chapter.

Academic Persistence – Refers to students who continue their enrollment at the same institution from one term/semester to the next.

Academic Success – the positive outcome resulting in the achievement of a set goal; ideally involves establishing specific, measurable, attainable, realistic and time-targeted objectives.

Amotivation – A motivational dimension in which an individual performs an action or behavior that shows no contingency between their actions and their pending outcomes.

Concurrent Triangulation – collects both quantitative and qualitative data concurrently and then compares the two databases to determine convergence, differences, or some combination of the two.

Determinism – a philosophical doctrine positing that events are effects of preceding causes; there are generally two forms of the doctrine, hard and soft determinism.

Extrinsic Motivation – A motivational dimension in which an individual performs an action or behavior for the purpose of obtaining an external reward or outcome.

External Motivation – External Regulation – acts that occurs when an individual preforms a task either to reach a positive end state or to avoid a negative end state but the end state is separate from the task itself.

Extrinsic Motivation – Identified – acts that occurs when the reasons to engage in an activity are internalized such that the activity is judged valuable to the person.

Extrinsic Motivation – Introjected – acts that are influenced by their environments and in turn they bring that influence inside of themselves.

Free Will – the power of acting without the constraint of necessity or fate; the ability to act at one's own discretion.

First Generation Student – Indicates a student for whom neither parent attained a credential beyond a high school diploma.

First-time Student – Indicates a student who has enrolled in a higher education institution and is attending for the first time.

Four-Year Institutions – institutions providing higher education, granting certificates, bachelor's degrees, and/or graduate level degrees.

Intrinsic Motivation - A motivational dimension in which one preforms an action or behavior for the sake of enjoyment.

Intrinsic Motivation – to experience stimulation – acts that occur when the individual is engaged in an activity because of the stimulating sensations associated with it.

Intrinsic Motivation – to know - engaging in activities because of the pleasure and satisfaction derived from learning, exploring, and understanding new things.

Intrinsic Motivation – toward accomplishment- engaging in activities because of the pleasure and satisfaction derived from trying to surpass oneself, creating, or accomplishing something.

Two-Year Institutions - institutions providing higher education and lower-level tertiary education, granting certificates, diplomas, and associates' degrees.

Summary

This study will attempt to identify the motivational orientations towards education, as defined by the self-determination theory, in both first generation students and non-first generation students at two-year and four-year public institutions. The self-determination theory breaks down motivation into three levels, intrinsic motivation, extrinsic motivation and amotivation. In order to better understand these motivational orientations and the connections between motivation and academic achievement in students, an extensive review of the literature will be presented in chapter 2. First, chapter 2 will review the research that helps define who a

first generation student is, how first generation students differ from non-first generation students, and what role the institutional level (two-year versus four-year institutions) may have on these differences. After that extensive review into those areas, we will take an in-depth look at motivation, focusing on how it is defined, what motivation looks like in educational research and how motivation fits into academic success. Finally, chapter 2 will break down the self-determination theory, as it is the theoretical framework used to guide this study. We will review how the self-determination theory has been incorporated into research in higher education, paying close attention to any research that focuses on motivating students toward academic success.

CHAPTER 2: REVIEW OF LITERATURE

It seems plausible that motivational orientation varies between first generation and non-first generation students, and that it plays a significant role in outcomes for these students. Given the other student differences by institution type, it is also plausible that motivation varies by institution type for first generation and non-first generation students. This literature review will undertake an in-depth examination of the characteristics of first generation students before they enter higher education, as they arrive into higher education and through the matriculation of their programs. It will compare how those characteristics manifest at two-year versus four-year institutions. It will examine motivation from several disciplines in an attempt to fully understand how motivation is described, including academic motivation. Finally, this chapter will discuss the self-determination theory (SDT) as it was used to guide the study.

First Generation Students

Research has shown parental level of education has the greatest influence on whether students attend college or not (Bryant, 2001; Choy, 2001; Perna & Titus, 2005). The distinction of the term first generation students was first used administratively as a way to demonstrate student eligibility for outreach programs that were federally funded (Ward, Siegel, & Davenport, 2012). The definition of the term first generation student varies throughout the literature. The U.S. Department of Education established the definition of first generation students in 1996 as those whose parents have not completed a college degree program (Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). From that there was a shift in the definition to reflect college students from families where neither parent has more than a high school education (Prospero & Vohra-Gupta, 2007). Some sources define first generation students more specifically as "a student for whom neither parent attended college" while others define them as "a student for whom neither

parent attained a baccalaureate degree" (Ward et al., 2012, p. 3). Even with the inconsistencies within the definition of first generation students, in each stage of the expansion of higher education institutions, first generation students have been present. The largest influx of students came during the transition from elite to mass higher education in the early 1900s (Swail, Redd, & Perna, 2003). The focus shifted significantly in the 1970s and 1980s to the minority student populations as national attention was given to college access and by the mid-1990s the focus moved away from access and more towards "issues of choice, affordability, and persistence to degree" (Swail et al., 2003, p. 1). At that time more attention was given to both access and degree completion for African American, Hispanic, Native American, low-income students, and students with disabilities (Gladieux & Swail, 1998; Swail et al., 2003). While access was still an important component of the national conversation, "persisting to degree is really what matters to the post-college world . . . unfilled academic goals often result in unfulfilled career realities: lower pay, less security, fewer opportunities, and dreams deferred–if not abandoned" (Swail et al., 2003, p. 1). First generation students are considered a sub-set of the minority student population and nationally speaking, nearly six out of every ten public school students can be classified as first generation (Herrold & O'Donnell, 2008).

For the purposes of this study we will utilize the definition 'a student for whom neither parent attained a credential beyond a high school diploma' to reflect as large a population of students as possible. While the definition may seem a minor issue, asserting one definition over the other can have serious financial and educational implications. For administrators and leaders in charge of planning services and the allocation of resources, defining first generation students as students "for whom neither parent attainted a baccalaureate degree" (Ward et al., 2012, p. 23) would add a significant number of students whose parents attended college but never completed

a baccalaureate degree. This would also include those students whose parents received an associate's degree but did not move on to obtain the baccalaureate (Ward et al., 2012). For these institutions, the numbers of students reported as first generation would be significantly higher. This presents higher education institutions with a unique intersection where policy meets retention for this special population of students. To capture as many students as possible and to stick as closely to the definition established by the U.S. Department of Education (1996), we will utilize the definition given above of a student for whom neither parent attained a credential beyond a high school diploma.

The research surrounding first generation students falls into three particular categories: pre-college characteristics; the transition from high school to college; and academic persistence through college to graduation (Giancola, Munz, & Trares, 2008; Pascarella, Pierson, Wolniak, & Terenzini, 2004; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). These three categories allow for researchers to explore students' preparedness, their social and academic needs when they are in college and even their expectations once they are there (Smith, 2013).

Pre-College Characteristics and Behaviors

As a whole, first generation students can be described as lacking important precollege characteristics, experiences and behaviors that their non-first generation peers are more likely to have, putting first generation students in a challenging position as they try to grasp the concept of going to college (Smith, 2013). Cultural capital represents the education and the advantages a person accumulates. Cultural capital has been noted as the key construct in the research of first generation students. The concept of education as a model in predicting social mobility dates back to the late 1960s-early 1970s (Tramonte & Willms, 2010). Studies conducted by Bielby (1981), Kerckhoff (1996), and Sewell, Hauser, and Featherman (1976) show that academic achievement

and occupational attainment are both in large part determined by an individual's family origin and education experiences (Tramonte & Willms, 2010). As Smith (2013) states, "the major difference between low-income families and middle-income families and high-income families is that low-income families often lack the academic cultural capital and resources to help their children achieve their college dreams" (p. 16).

First generation students generally lack the skills and the preparation they need to be as successful in college as their non-first generation peers, because their parents do not possess the information, familiarity, jargon, cultural understanding, experience, and emotional bearings that the students need to effectively tackle the challenges of the college environment (Smith, 2013, p. 6). Cultural capital is essential to first generation students having the preparation they need before they even get to college in order to elevate their chances of ensuring social mobility. According to Ward et al. (2012), cultural capital includes:

> . . . the knowledge students and their families have about the variables involved in getting into college (for example, researching institutions, making informed decisions, applying to schools, locating financial resources, developing expectations and learning the language and terminology of college life)—persisting in college once there (for example, locating campus-based resources, developing friendships and social connections, learning how to navigate the academic curriculum, participating in campus activities, and making progress toward graduation).

College-based cultural capital is relevant to college matriculation as it is only attained when a parent or guardian "acquires significant and meaningful college experiences (going through the admissions process, experiencing freshman orientation, interacting with faculty, doing college-level work, being self-directed, learning the language and customs of higher education, living

with other students, taking finals, navigating the library, making decisions about majors and career pathways, developing help-seeking skills, etc." (Smith, 2013, p. 8). Bourdieau (2001) expressed cultural capital as a way to explain the "unequal scholastic achievement of children originating from the different social classes by relating to academic success" (p. 84). In relation to first generation students, they are typically from the lower socioeconomic and minority population of students, therefore, they are awarded the scholastic achievement opportunity Bourdieu (2001) expresses at a much lower level, if even at all. Research supports the assertion that parental level of education is one of the greatest influences on whether an individual attends college or not (Bryant, 2001; Choy, 2001; Perna & Titus, 2005), but it also allows for an advantage in cultural capital if the parent did attend college. Lareau (2000) addresses the concept of the parental role in social mobility as it relates to education and how involved the parents are in their child(s) educational success. Many parents are not involved in their child's education through their K-12 years, so to be involved at the postsecondary level may be met with a sense of being overwhelmed. Lareau also addresses the understanding that while some parents may not be involved in their child's education, some still are heavily invested. He, however, questions the educational system: "the standards of the school are not neutral; their quests for parental involvement may be laden with the social and cultural experiences of intellectual and economic elites" (Lareau, 2000, p. 8). These are barriers both the student and the parent face that continue to impact success. Ultimately this is the student's experience, and for underrepresented students, such as first generation students, the lack of education experience places them at a huge disadvantage as they are forced to "learn to critically navigate this bittersweet reality, drawing on cultural knowledge and skills gained in overcoming earlier structural barriers to education" (Yosso, Smith, Ceja, & Solorzano, 2009). Entering into an atmosphere created by having a lack

of cultural capital that more prevalently present in non-minority groups (Yosso et al., 2009), first generation students may find their motivation tested before they even take their first course (MacBrayne, 1995).

When it comes to the challenges first generation students face, research shows that these students are significantly more disadvantaged than their non-first generation student peers when entering into college. These disadvantages are what have placed first generation in the at-risk student population within higher education (Gardner & Holley, 2011; Ishitani, 2006). However, this was not always the case. First generation students have been a part of higher education since its foundation. It is the face of first generation students that have changed over the years: "thirty to forty years ago, first generation college students were predominantly white, working class, baby-boomers whose parents were often first and second generation European immigrants" (Merritt, 2008, p. 45). The shift of first generation student classification began as access to higher education increased and more diverse student populations began to enroll and enter the postsecondary arena. It was with this shift that more research began to be conducted into this group of students.

Exploring precollege characteristics are useful in understanding a students' readiness for the academic, social, and emotional demands of college. As examples of what can be classified as precollege characteristics, researchers look at student demographics (for example, race and ethnicity, socioeconomic status, and family structure) and even the student's high school education, particularly the nature and the quality of the education (Ward, 2012). First generation students differ from their non-first generation peers in many different variables, including being widely represented in disadvantaged racial, income, and gender groups thus occupying "intersecting sites of oppression" (Lohfink & Paulsen, 2005, p. 409). First generation students

are more likely to be racial and/or ethnic minority students (Bui, 2002; Choy, 2001; Horn & Nunez, 2000; Terenzini et al., 1996); students from lower socioeconomic backgrounds (Bui, 2002; Oldfield, 2007; Terenzini et al., 1996), older, married and with dependents (Nunez et al., 1998; Terenzini et al., 1996), to have taken less rigorous high school courses, to have lower standardized test scores, to be employed as a full-time worker while taking courses, to enroll in postsecondary education as a part-time student, to be taking remedial classes, to persist in postsecondary education at a lower rate, to earn a lower GPA, to drop out by their second year of attending a four-year institution, to select a two-year institution as first institution of choice, and to not participate in extracurricular activities.

First generation students are characterized as having lower educational aspirations than other college-bound students (Bui, 2002; McCarron & Inkelas, 2006; Miller, 2008; Terenzini et al., 1996). Even students who possess high levels of academic ability (high GPA's, high test scores, etc.) frequently select institutions that are less academically rigorous than their intellectual capabilities would suggest they can handle (Inkelas, Daver, Vogt, & Leonard, 2007); Pascarella et al., 2004; Warburton, Bugarin, & Numez, 2001). This is often times attributed to first generation students making their college selection based on financial concerns and opportunities that will allow them to complete their programs close to home and even while working to support their families at a higher rate than non-first generation students (Nunez & Cuccaro-Alamin, 1998). Because of these and other variables, first generation students simply do not imagine themselves reaching the same academic heights as other students, and when they are motivated to attend college it is often for more practical short-term reasons than those motivating non-first generation students (Bui, 2002; McCarron & Inkelas, 2006; Miller, 2008; Prospero & Vohra-Gupta, 2007; Terenzini et al., 1996).

While these characteristics are agreed upon by the research community and even overlap from one research study to the next, Marcias (2013) points out that a negative stereotype of first generation students has resulted, as the above characteristics can be considered negative. Marcias (2013) notes first generation students are associated in the minds of fellow students, faculty, staff, and even educational administrators with words such as; "clueless," "minority," "immigrant," "entitled," "unrealistic expectations," "confused," and "unsophisticated" (p. 13). Marcias (2013) called these stereotypes "deficit-oriented perspectives" which often times negatively highlights areas of concern for this group of students ranging from their lack of academic engagement and motivation to their low self-esteem instead of identifying the positive areas of their academic engagement and even their motivation (p. 18). It is true that students are faced with varying levels of anxieties and difficulties during the college experience, but first generation students are met with additional cultural, social, and academic challenges that makes their matriculation harder than their non-first generation student peers (Forbus, Newbold, & Mehta, 2011; Pascarella et al., 2004). And while the above characterizations of first generation students show that they are in the most underprivileged ethnic, income and gender groups (Choy, 2001; Horn & Nunez, 2000; Warburton et al., 2001), the continued growth of the enrollment of first generation student shows a level of strength and resilience that cannot be overlooked (Gardner & Holley, 2011; Marcias, 2013; Tokarczyk & Fay, 1993).

Transition to Higher Education

The transition from high school to college is an exciting one, yet it can be extremely stressful for students and parents. Many first generation students are not prepared for the college experience (Conley, 2003). Transition from high school into college is crucial as the state of this transition can set the stage for either the students' college success or their ultimate college failure

(Forbus et al., 2011; Gall, Evans, & Bellerose, 2000). Researchers find that first generation students have all the same anxieties and difficulties with this transition as their non-first generation student peers; however, there is an increased level of social, academic, and cultural differences in the college process that first generation students experience that non-first generation students do not (Clark, 2005; Forbus et al., 2011; Terenzini, 1996), making the transition from high school to college a very different experience for first generation students (Clark, 2005). Prospero and Vohra-Gupta (2007) explain that these differences are a result of first generation students' parents not having the college experience to enhance their ability to assist their children. According to the researchers, this places first generation students at a disadvantage going into the college experience because they lack the basic knowledge of college, their level of family support is significantly lower, their level of knowledge on educational degree expectations and plans is lower, and they typically come into college with lower academic preparation from both home and from the high school system (Prospero & Vohra-Gupta, 2007).

One of the main weaknesses for first generation students in comparison to their non-first generation student peers is their lack of basic knowledge about the college experience in general from the realization of the costs associated with college to the application process itself. However, other areas that are classified as disadvantages for first generation students come from the level of family income and support, their degree expectations, and their level of academic preparation from high school (Forbus et al., 2011; Warburton et al., 2001). Some researchers suggest that first generation students may be less prepared for college due to lower critical thinking skills in high school (Dennis, Phinney, & Chuateco, 2005; Forbus et al., 2011). Researchers also suggest that first generation students are less prepared for college as they have a

lower level of family support, lower career ambitions, lack of both personal and social skills, lack of peer support and even lack of administrative support from their local high schools that hinders a successful transition into the college experience (Bui, 2002; Dennis et al., 2005; Elkins, Braxton, & James, 2000; Forbus et al., 2011; McConnell, 2000).

Once on campus, the process of just attending a higher education institution is another hurdle all students have to cross in order to have a successful college career. Researchers studying this process have examined the familiarity with the college environment and campus standards, having access to advising and financial resources, and the familiarity with the normal functioning of a higher education setting. For non-first generation students this knowledge is typically conveyed by their parents having been previously exposed to this process, however, with the first generation students' parents not being exposed to this process, this lack of knowledge may add a sense of what researchers call "college culture shock" (Forbus et al., 2011; McCarron & Inkelas, 2006; McConnell, 2000). There are also those nonacademic characteristics of first generation students identified by researchers which increase the level of difficulty in their successful transition into college: lower self-esteem, reduced self-efficacy, less family income, more dependent children, longer expectation to complete a degree program, less encouragement from parents to attend college, and an increased interest in attending a higher education institution that is geographically closer to their home (Forbus et al., 2011; Hahs-Vaughn, 2004).

Yet, faced with these challenges, first generation students are present and continue to enroll in higher education. Understanding the factors that motivate first generation students is critical to developing strategies to increase academic achievement, however, currently there is no literature that discusses the motivational orientation towards education for first generation

students who enter higher education with which could help shape our understanding of how they overcome these challenges beyond acceptance into the college/university.

Academic Persistence

Researchers have found that first generation students take longer to complete their higher education degrees and they also have lower degree aspirations in comparison to their non-first generation student peers. This decreases their level of persistence through degree attainment (Gardner & Holley, 2011; Ishitani, 2006; Nunez et al., 1998; Pike & Kuh, 2005). Research also shows that the parental level of education coupled with the parent(s) level of both assistance and encouragement is one of the most important predictors of students persistence towards their educational goals as well as their ease of access to college and the attainment of a four-year undergraduate degree (Auerbauch, 2002; Forbus et al., 2011; Prospero, Russell, & Vohra-Gupta, 2012). The inclusion of parents in the college experience and in the educational process has been stated to both increase first generation students' hopes and level of aspirations while simultaneously reducing the negative effects of what researchers reference as college culture shock (Forbus et al., 2011; McCarron & Inkelas, 2006; McConnell, 2000).

For those students who do make the transition from high school to college and move through their first semesters of their college experience, research has shown that first generation students are 71% more likely to drop out of college than non-first generation students, even after controlling for race, gender, high school grade point average, and family income (Ishitani, 2006, p. 47). For those first generation students who do persist, research shows that their performance in writing and reading comprehension skills and critical thinking is comparable to those non-first generation students (Pascarella et al., 2004; Prospero & Vohra-Gupta, 2007) and in the labor

market there is no significant difference in the income levels of first generation students and non-first generation students (Choy, 2001).

At the two-year institutional level, Nunez et al. (1998) stated that first generation students were less integrated in the environment academically as they were less likely to meet with advisor, attend campus programs and even join study groups. At the four-year institutional level, Pike and Kuh (2005) discovered a positive link between higher levels of educational aspirations and living on campus to increased academic and social engagement. This suggests there is a link between the environment and the level of academic engagement among two-year institutions in comparison to four-year institutions for students. Another area of research in regards to the difference among the choice between two-year intuitions and four-year institutions among students is what researchers call the attraction-selection-attrition model. As Schneider (1987) describes this model, students are attracted to and choose institutions they believe fit their characteristics, institutions select those students that fit their institutional criteria, and students leave institutions where a fit no longer exists.

Once an institution has been identified as a fit for the student, what then motivates them to make it to the classroom for their first set of classes? This is where decision meets motivation for students as they not only start their higher education academic journey but also continue from one class to the next, one semester to the next, with the ultimate goal of degree completion for the student.

Defining Motivation

Studies have examined first generation college students in terms of their academic preparation, transition to higher education, and their academic persistence, however less research has been conducted to study the effects motivation has on first generation students at neither the

two-year nor four-year levels. Motivation has been explored vastly in terms of defining the concept of motivation as a whole and in various perspectives with many theories concerning academic motivation. Defining motivation is the first step to better explore how motivation could possibly affect first generation students. Reeve (2005) asks in a series of questions "Is motivation a desire? A feeling? A way of thinking? A sense of striving? A need, or a collection of needs? A process, or a set of processes?" (p. 1). Ahmed, Nawaz, Iqbal, Ali, Shaukat, and Usman (2010) defines motivation simply as a tool for individuals to strive to achieve better in life. While understanding motivation is important for the sake of motivation itself, its importance is also essential as it has the capacity to indicate those instances in life that we care deeply about and even impact the outcomes of those things, including the quality of the performance we give towards those outcomes (Reeve, 2005). The understanding of motivation is extremely useful as most psychologists argue in agreement that it plays a crucial role in success, learning, and desired change (Gelona, 2011; Petersen, Lavelle, & Guarino, 2006). Understanding where motivation comes from and even why it sometimes changes and why other times it does not, under what conditions motivation increases or decreases, and what aspects of motivation can and cannot be changed, can all be applied in researching motivation across many disciplines (Reeve, 2005). Reeve (2005) indicates that the first fundamental question is "what causes behavior," and more specifically, "why does behavior start, once begun, why is behavior sustained over time, why is behavior directed toward some goals yet away from others, why does behavior change its direction, why does behavior stop?" (p. 6). This allows motivation to be explored into the study of how it "affects behavior's initiation, persistence, change, goal directedness, and eventual termination" (Reeve, 2005, p. 4). The underlining factors that outline the core of understanding

motivation is that (1) not everyone is motivated in the same way and (2) the factors that motivate individuals are not identical (Ahmed et al., 2010).

Motivation's second fundamental question, as explained by Reeve (2005) is "why does behavior vary in its intensity? Behavior varies in its intensity and it varies both within the individual and between different individuals. Between different people, motivation varies" (Reeve, 2005, p. 18). Martin (2009) echoes this concept as he asserts that not all students are motivated the same way or by the same desires and needs. This makes researching motivation a complex task. While we all share many of the basic motivations (e.g., hunger, need for affiliation, anger), people clearly have differences in what motivates them and to what extent it motivates them (Reeve, 2005). So another motivational issue is to recognize that individuals differ in what motivates them and to explain why one person shows intense behavioral engagement in a given situation while another does not (Reeve, 2005). For this matter, it is clear to see why Reeve (2005) has broken motivation down to eight recurring themes that run through research studies:

1. how motivation benefits adaptation
2. how motivation affects behavior by directing attention,
3. how motivational strengths vary over time and influence behavior,
4. how various types of motivation exists,
5. how motivation includes both approach and avoidance tendencies,
6. how motivational studies reveals what people want,
7. how motivation needs supportive conditions to flourish,
8. how there is nothing so practical as a good theory

Student Motivation

Student motivation (also referenced in the literature as academic motivation) continues to be a challenging topic for educational administrators across the nation (Howey, 2008). Motivation to learn was identified as the most important factor for the interpretation of individual achievement. The common assumption within the literature is that students are internally (intrinsically) motivated to learn. Jurisevic (2012) describes student motivation as a process that continues throughout the student's entire learning development. The academic motivational process begins with various "motivational components" such as goals, values, self-awareness, and interests (p. 222). Those motivational components are further developed day by day as learning experiences are created. According to Jurisevic (2012) it is these motivational components that combine to create the motivational orientations (intrinsic motivation, extrinsic motivation, and amotivation) as described by Deci and Ryan (1985).

Research into student motivation has yielded results that indicate intrinsic motivation has a positive impact on academic factors like achievement and persistence (Kaufman et al., 2008; Vallerand & Bissonnette, 1992), engagement and decision making (Pintrich & Schunk, 2002), and academic resiliency (Trevino & DeFreitas, 2013). An interesting debate exists where some researchers argue that one individual cannot motivate another individual while many practitioners argue that there are strategies that can be used to, at the very least, create an environment in which students want to learn (Kittrell & Moore, 2013). Research into student motivation, focuses primarily on identifying the factors that affect (positive and negative) motivation and developing strategies to increase motivation as a way to increase student success and degree completion (Petty, 2014). Motivation continues to be seen as the most important contribution to higher levels of performance and acceptable outcomes (Gillet, Vallerand, &

Rosnet, 2009) as the role of motivation in academic achievement is more firmly established (Hammond, McBee, & Herbert, 2007).

For educational research, attempting to understand what motivates students to achieve and in what ways that motivation can be used to determine or predict student success in a much broader sense is a very prominent research area (Magson, Bodkin-Andrews, Craven, Nelson, & Yeung, 2013). This has lead research on student motivation to be conducted in various topics spanning including exploring the connection between motivation and academic achievement/performance (Arkin, Detchon, & Maruyama, 1981; Frymier & Shulman, 1995; McCann & Garcia, 1999; Tiwari, Tiwari, & Sharma, 2014; Vollmer & Almas, 1974); environmental influences on motivation (both inside the classroom and institutional level influences) (Ames 1992; Archer & Scevak, 1998; Artino, 2009; Provitera-McGlynn, 2002; Pintrich, 1995; Radovan, 2011; Radovan & Makovec, 2015; Reeder & Schmidtt, 2013; Zimmerman, 2008), influence of communication on motivation (Kerrsen-Griep, Hess, & Trees, 2003), motivation and leisure preferences among students (Barnett, 2006), motivation and moral decision making (Kaplan, Crockett, & Tivan, 2014), motivation and student burnout (Pisarik, 2009); student perception towards motivation (Hilmi, 2013; Radovan & Markovec, 2015), and motivation towards weight loss/healthy weight maintenance in students (Avery & Lumpkin, 1987; Furia, Lee, Strother, & Huang, 2009; Gao, 2008; Soudan & Everett, 1981). Research has also been conducted exploring motivation specifically focusing on one population of the student body. Rodgers and Summers (2008) and Reeder and Schmidtt (2013) explored motivational patterns of African American students, Francois (2012) explored motivation in non-traditional students, Berger (2012) explored motivation in vocational training students, Gillett, Vallerand, and Rosent (2009) and Ryska (2003), and Braddock, Ly, and Dawkins (2008) explored

motivation in student athletics, and Albaili (2003), Hammond, McBee, and Herbert (2007), and Tzuriel, Bengio, and Kashy-Rosenbaum (2011) all explored intellectually gifted students. Within those research studies, a few of the researchers utilized the study to provide a comparison among the groups. For instance, Reeder and Schmidtt (2013) also provided a comparison of motivation of African American students among Historically Black Colleges and Universities to that of African American students at Predominately White Institutions, while Tzuiel, Bengio, and Kashy-Rosenbaum (2011) explored a comparison between gifted students and non-gifted students in terms of motivation.

Researchers (Pintrich & Garcia, 1991; Zimmerman & Martinez-Pon, 1988) found that students who have higher levels of self-regulated/self-determined behaviors are more internally or intrinsically motivated while Zimmerman (2000) found that student who have lower levels of self-regulation/self-determination are more externally or extrinsically motivated. Mostly focused on the impact of learning strategies on learning achievement, the construct of self-regulated learning operates under the assumptions that students are aware of the benefits of this self-regulated learning process and students actively and constructively monitor and use the process to control their own motivation to better secure their academic success (Butler & Winne, 1995; Dubois & Stanley, 1997; Paulsen & Feldman, 2005; Pintrich, 1995, Winne, 1995; Zimmerman, 1994). Yet, Jurisevic (2012) presents a research platform that allows one to go beyond answering the question on how students are motivated, but rather explores the varying motivational components within one individual and answers the specific pattern of their academic motivation structure; "what is the specific combination of both intrinsic and extrinsic orientations in the same student" as the defining factor of overall student success (p. 222). This creates the philosophy of thinking that students have within them various motivational components and

those components are not equal from student to student. Jacobs and Newstead (2000) noted that when it comes to understanding what motivates higher education students and what causes them to start their studies in the first place, little is known. Lavery (1999) expressed a lack of literature surrounding academic motivation and multicultural higher education settings. The need for further research is apparent, and seeking to answer more than just what motivates students requires more than just looking at motivation through one lens (Hilmi, 2013). This can be achieved by not just looking at motivational orientations but exploring the various motivational components that exist within the orientations. These motivational components can be listed as personality characteristics, social conditions, events (internal and external), feeling, attitudes, environmental situations, family circumstances, and learning objectives and regulations (Hilmi, 2013).

While the results of the various studies vary significantly, the most used dichotomy of motivational research in the education realm is the intrinsic-extrinsic duo. However, the established foundation shows that within students mastery goal orientations (associated with intrinsic motivation) are more closely aligned with positive or desired educational outcomes while performance goal orientations (associated with extrinsic motivation) aligned with negative educational outcomes (Ames, 1992; Ames & Archer, 1988). Most often the level of academic success is measured by the completion of goals (be it internally or externally defined), this is what researchers call the goal-orientated theory (Ames, 1992; Albaili, 2003). Locke and Latham (1990) defines goals as the subject, activity, or phenomenon at which our actions are directed to satisfy a pre-determined need. Researchers have studied student motivation towards achieving particular tasks by showing a difference between mastery goals and performance goals. Mastery goals are defined as intrinsic goals for which the emphasis is placed on the development of

competence and performance goals as extrinsic goals in which emphasis is placed on achievements and comparisons with others (Radovan & Makovec, 2015). Archer (1994) has shown positive effects of intrinsic or mastery goals in the area of advanced learning strategies while Elliott and McGregor (1999) have shown negative effects of extrinsic or performance goals in the use of superficial learning strategies. The research continues to suggest that enhancing intrinsic motivation is an effective tool in increasing learning outcomes in higher education (Radovan & Makovec, 2015). As learning outcomes increase, the potential for higher levels of student achievement increases as well. Researchers have also shown various aspects of motivational orientations to determine its relation to the educational outcomes of academic self-efficacy (Roeser, Midgley & Urdan, 1996); academic persistence (Elliott & Dweck, 1999); and academic achievement (Albaili, 2003; Tanaka & Ysmauchi, 2001). However, while there are several researchers (Deci & Flaste, 1995; Reeve, 2005; Schunk & Pajares, 2002; Wigfield & Eccles, 2002; Zeldin & Pajares, 2000) who agree that behaviors are influenced by both personal and environmental factors, there still seems to be a debate among the school of thought (Blackwell & Pinder, 2014). Zeldin and Pajares (2002) state neither socioeconomic status, educational or familial structures nor economic structures have an impact or affect human behavior in a direct manner. Zeldin and Pajares (2002) suggest that the limit of the above factors are only to the degree of influencing a "person's aspirations, self-efficacy beliefs, personal standards, emotional states, and other self-regulatory influences" (p. 46).

In terms of academic achievement, Trevino and DeFreitas (2013) postulates that research on student motivation has looked more closely at internal (intrinsic) and external (extrinsic) motivation and how they influence academic success over the past decade. Vallerand and Bissoneette (1992) reported that students are more intrinsically motivated towards their

academics at the beginning of the semester. Kaufman, Agars, and Lopez-Wagner (2008) expanded upon that foundation by suggesting a relationship between intrinsic motivation and higher academic performance in students as opposed to extrinsic motivation. In relation to environmental factors, research shows an emphasis on the role environmental factors play in either enhancing or decreasing motivation to learn within a student (Ames, 1992; Archer & Scevak, 1998; Pintrich, 1995). What is missing in the literature surrounding motivation and student motivation is a clearly defined classification of student's individual motivational orientations. Where the literature shows students who are intrinsically motivated as those with higher levels of academic achievement, there is little literature to identify which students are intrinsically motivated and which students are extrinsically motivated. Another gap in the literature is the concept of amotivation. While motivational orientation research mainly focuses on the dichotomy of intrinsic motivation and extrinsic motivation, the existence of amotivation in the literature indicates the classification of students being either intrinsically motivated or extrinsically motivated is incomplete.

Motivation and First Generation Students

Like research on student motivation in first generation has been conducted examining the links between motivation and college choice (Dennis et al., 2005), motivation and social capital (Mochetti & Hudley, 2015), and institutional choice (two-year versus four-year) (Santos, 2004). More specifically, Forbus et al. (2011) examined the variation between motivation and academic achievement in first generation students and non-first generation students and the influence at the institutional level (two-year versus four-year) on the student's choice. Research has also been conducted on special populations within the first generation classification. Prospero et al. (2012) looked at motivational differences among Hispanic students looking specifically at differences in

motivational orientations of intrinsic motivation, extrinsic motivation and amotivation. Dennis et al. (2005) examined motivational orientations in 100 ethnic minority students. Although community colleges have enrolled the largest number of minority and first generation students over the last decade and first generation students concentrating majority at the two-year institutional level (Levine, 2007), very little research has been conducted to identify the initial motivational orientations of these students as they enter their first year of college. This is the same for first generation students at four-year institutions as well; the research is lacking for identifying their initial motivational orientations.

While the research that has been conducted on student motivation for first generation students and non-first generation students, the information has been used in the most part to create strategies to enhance individual motivational orientations in students (Gall et al., 2000), like orientations programs, advising, tutoring and mentoring (Engle & Tinto, 2008). While these strategies have been shown to be effective in increasing academic achievement, that initial identification of motivation is still missing from the literature as this information can go a long way in not only identifying the level of motivation, but also show any similarities and differences among the students to help administrators better serve these students from the beginning of their academic journey (Pisarik, 2009). While we know intrinsic motivation has a positive correlation to academic achievement, we currently do not know which students (first generation or non-first generation, students who choose two-year institutions or students who choose four-year institutions) start their academic journey with higher levels of intrinsic motivation, extrinsic motivation, or amotivation. This is a gap in the literature that this study attempts to add value to. While the initial motivation toward education is at the center of this study, it is only one part of the overall study. Implications in the examination of the initial motivation orientations can

provide additional information that can be used to inform practices that lead to increased student engagement and student persistence in attempts to increase overall academic achievement.

Student Engagement

Facilitating and maintaining student engagement has been a focus of various researchers through the years as higher education institutions become more and more diverse. Studies show that engagement strategies can be used to predict academic motivation (Hall, Perry, Ruthig, Hladkyj, & Chipperfield, 2006). Creating an engaged campus environment was much simpler when the vast majority of the student population consisted of "male, heterosexual, Christian, and economically affluent" students (Harper & Quaye, 2009, p. 1). Higher education has passed a point years ago where doing the same thing for all students stopped working. Student engagement is more than just what students put into their college experience. Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008) express it this way:

> Student engagement represents two critical features. The first is the amount of time and effort students put into their studies and other educationally purposeful activities . . . The second component of student engagement is how the institution deploys its resources and organizes the curriculum, other learning opportunities, and support services to induce students to participate in activities that lead to the experiences and desired outcomes such as persistence, satisfaction, learning, and graduation. (p. 44)

Also important is the level of commitment both from the student and the institution to the overall success of the student. The developmental, academic and social needs of first generation students present them with unique challenges as they enter into higher education. For many of these students, positive engagement will be the key to their ultimate success in college. Choy (2001) notes that the number of students who enroll into college, directly after completing high

school, whose parents did not attend college (first generation students) is significantly smaller than the number of students who enroll in college whose parents did attend college (non-first generation students). The differences in the enrollment rates sparked interest in developing outreach programs that focused increasing college enrollment for those students (Swail & Perna, 2000). Student engagement being a target area, researchers found that the transition period between high school and college is a decisive period for these students and that transition can set up either academic success or academic failure for the student (Gall, Evans, & Bellerose, 2000). First generation students are entering college during that transition period without the same level of knowledge and comfort with the educational experience held by non-first generation students; therefore, leaving first generation students void the cultural capital that can be beneficial to their success (Xu & Hampden-Thompson, 2012).

Additional factors that often hinder the success of first generation students during this transition stage into higher education are identified as (1) access to college, (2) engagement in college, (3) personal development, and (4) academic success (Gupton, Castelo-Rodriquez, Martinez, & Quintanar, 2009). These factors, in addition to the lack of cultural capital, can negatively impact the motivation of first generation students as each individual concern can sometimes require very different approaches to developing a solution. Tierney (2003) suggests that successful engagement of students in higher education must first start within the K-12 system. This will foster a shared responsibility to the overall success of all students. However, once in higher education, positive engagement can prove to enhance individual motivation, especially if the level of commitment is shared between both the institution and the student (Gupton et al., 2009). One way to begin to bridge the gap between engagement and motivation is to access student's initial motivation towards education in their first year to determine if there are

differences in the motivational orientations of first generations students. If a variance in the motivational orientations towards education is present, student engagement strategies can then be better tailored to their specific motivational orientation and once student engagement has increased, so does the likelihood their persistence to degree completion will.

Student Persistence

Student persistence continues to be another major concern for higher education administrators for all levels and all types of higher education institutions, from community colleges, to both public and private four-year institutions (Seidman, 2005, 2012). Swail et al. (2003) reported that nearly 50% of all college students withdraw from their institutions just after attending their first year. Over the years, trends in higher education policy continues to shift from issues of performance funding, undocumented students, tuition policies, enrollment capacity, college readiness, etc., to those of quality education, student persistence, graduation rates and improving access through affordability (Burkholder, Lenio, Holland, Seidman, Neal, Middlebrook & Jobe, 2013). The increased attention to student persistence is made clear as President Obama set a goal of having 5 million community college graduates by the year 2020 (The White House, 2013a, para. 10). With statistics as presented by Swail (2003), 50% of students withdrawing from their initial institutions before the start of their second year, much attention has be given to various issues many student and institutions have to face to keep student persistence rates high.

Once a student has entered through the doors of the institution, they are experiencing a new set of obstacles. Many admitted students feel the institution has an ethical obligation to ensure their success as the student. The ethical obligation debate ties into the conversation of retention as many believe “by admitting a student, an institution not only makes a contractual

commitment to that student but also incurs a moral obligation to provide him or her with an appropriate level of education and support" (Swail, Redd, & Perna, 2003, p. 8).This has been debated over the years as the challenge presents itself as to the true definition of success. From a financial and policy aspect success can be measured by the number of students who enroll and complete their degree in the allotted amount of time required for the program. However, for the individual student, success can be measured in various ways that may not include graduation at all (Swail et al., 2003). For many students, making it into college was a struggle and with that struggle over, now they must focus on actually staying in college. There are both external and internal factors that hinder students from staying enrolled once they have been accepted into an institution but for the vast majority of students, academic preparedness is the cause of their ultimate failure (Swail et al., 2003). Academic preparedness is defined in terms of the measurement of one or more of the following: overall GPA in high school, overall class ranking in high school, entrance scores for college, level of high school courses taken, and the quality and the intensity of the high school attended (Swail et al., 2003).

To combat the increasing number of students who leave before completing their desired degree; educational researchers, administrators and practitioners continue to develop, plan and implement comprehensive campus-based programs aimed to not only understand this trend but also reverse it (Swail et al., 2003). Exploring the role the orientation of self-determined motivation within students as they enter into higher education can possibly provide information to help foster increased levels of academic achievement and higher rates of overall student success.

Self-Determination Theory

Deci and Ryan (2002) assert that "individuals tend naturally to seek challenges, to discover new perspectives, and to actively internalize and transform cultural practices" (p. 3). This perspective of human development stems, in large part, from the assumption that individuals possess within themselves the tendency towards both psychological growth and integration as described through the classical Aristotelian viewpoint. With this internal active tendency towards growth and integration lies what Deci and Ryan (2002) note as a "coherent sense of self" to which they define as "a sense of wholeness, vitality, and integrity" (p. 3). They also assert that awareness of that "sense of self" leads individuals to make decisions and take actions that are true to that particular self (Deci & Ryan, 2002). This perspective leads one to believe that one's actions are in an attempt to be true to that "sense of self" and a way to maximize the level of wholeness, vitality, and integrity within the student.

However, there are theorists who oppose this perspective of self-awareness by asserting that individuals do not possess the internal tendency towards growth and development (Deci & Ryan, 2002). For those theorists, the environment surrounding the individual directly impacts the directions they take and the decisions they make (Deci & Ryan, 2002). The self-determination theory (SDT) is the attempt from Deci and Ryan (2002) to bring the two opposing viewpoints together by recognizing "that there is compelling evidence in favor of human tendencies toward active engagement and development and that there is, as well, manifold indication of fragmentation and conditioned responses, SDT provided a framework that integrates the phenomena illuminated by these discrepant viewpoints" (p. 5).

The increased use of self-determination in research and in trying to gauge a general understanding as it relates to the two opposing perspectives has caused the term "self-

determination" to become "laden with multiple meanings and intents that have resulted in confusion and misunderstandings as frequently as clarity and utility" (Wehmeyer, 2004, p. 338). The SDT as presented by Deci and Ryan (1985, 2000) is a theory of human motivation and behavior. The basic assumption of this theory is that each individual possesses "natural, innate, and constructive tendencies to develop an ever more elaborated and unified sense of self" (Deci & Ryan, 2002, p. 5). In many places, self-determination is also described as perceived locus of causality (Reeve, 2005). Deci and Ryan (1985, 2000) argue that one's behavior is based "on the need to maintain a sense of personal interdependence and competence to successfully meet challenges and to feel a sense of belonging" (Prospero & Vohra-Gupta, 2007, p. 966) as well as satisfying autonomy (Prospero, Russell, & Vohra-Gupta, 2012). The developmental outcomes that present themselves from one's behavior range from "a relatively active and integrated self to a highly fragmented and sometimes passive, reactive, or alienated self, as a function of social environmental conditions (Deci & Ryan, 2002, p. 5). These social environments can both "facilitate and enable growth and integration propensities with which the human psyche is endowed, or they can disrupt, forestall, and fragment these processes" (Deci & Ryan, 2002, p. 6). The SDT is used to address many questions raised as an attempt to understanding both psychological and social development in individuals. The theory has been applied over the years to answer questions related to several fields of study including "parenting, education, work, health care, exercise regimes, environmentalism, religiosity, psychotherapy" (Deci & Ryan, 2002, p. 6).

Free-Will versus Determinism

The debate over free-will versus determinism was first birthed from the age old debate of free will versus determinism (Wehmeyer, Abery, Mithaug, & Stancliffem, 2003). In order to

fully understand the purpose and the intent of the self-determination concept as it is used today by educational researchers, both the free will of individuals and the determinism concepts must be examined. As a philosophical construct, determinism is positioned as events that occur due to the effects of preceding causes, and in the cause of educational research, it is examined in the context of human behavior and actions in which they take. There are generally two forms of the philosophical construct: hard determinism and soft determinism (Wehmeyer et al., 2003). Hard determinism "is the doctrine that every event and every action is caused in accordance with casual law that account completely for the event's or action's occurrence" (Wehmeyer et al., 2003, p. 18). Hard determinists believe that when events occur in an individual's life, it is a result of determinants or caused by specific predisposed conditions to ensure the event takes place (Wehmeyer et al., 2003). The philosophical position of this perspective is simply that every action an individual takes is already pre-determined and predictable (Cowburn, 2007). The belief of hard determinists is that "even when human actions are hypothesized to result from mediating determinants or causes, such as wants, wishes, desires, motivations, or feelings, those same wants, wishes, desires, motivations, and feelings are, themselves, caused by specific antecedent conditions that ensure their occurrence (Wehmeyer, 2004, p. 340). For example, in an individual reading this very paper, the hard determinist perspective is that events in that particular individual's life lead them to this very point in their life where reading this paper was already pre-determined for their specific life for this specific time. Therefore, the freedom to take any other action outside of reading this paper is only an illusion (Pereboom, 1995).

On the other hand, the soft determinist's position is that any given occurrence can be both caused and that of free will. They believe that every action is caused somehow but that not every action is forced or compelled by a specific way of existence (Wehmeyer et al., 2003; Wehmeyer,

2004). The concept of freedom is widely versed within the soft-determinist perspective. The position held by soft determinists is that the freedom to choose lies within the individual regardless of any outside influences (Pereboom, 1995; Wehmeyer et al., 2003). There is a level of understanding within this perspective that highlights the freedom of action. Pereboom (1995) describes this notion by asserting, "an action is free in the sense required for moral responsibility when it is one the agent really wanted to perform . . . and action is unfree, by contrast, when, for example, it is performed as a result of brainwashing or some type of mental illness" (p. 22). There is a higher sense of responsibility attached to the soft determinism perspective than the hard determinism perspective. Using the above example, the soft determinist would assert that while there may be a cause that brought an individual to read this paper, the individual has the freedom to either read this paper or not.

There is yet another position that sits on the opposite end of the spectrum from the concept of determinism. There are those that believe that events occur that are completely due to free will (Wehmeyer et al., 2003). This is the viewpoint of the indeterminists or anti-determinists. From a sociopolitical view, self-determination comes from the belief that everyone deserves to be free to the maximum extent at which it is possible for each individual person; and from a psychological view, self-determination comes from the belief that each individual has the capacity to act on their own right but in order to do so they must first possess a strong desire and ability within (Wehmeyer et al., 2003). Cowburn (2007) asserts there are two specific meanings attached to saying a person has free will. The first meaning is that the possibility is present for an individual to make more than one decision, seemingly, alternative decisions to the same situation. Using the same example as before, an individual can make one decision to continue reading the remainder of this paper or they can make an alternative decision to stop reading from

this point. The second meaning is that the individual – not anyone else but the individual – chooses to make one of the decisions (Cowburn, 2007). Cowburn (2007) asserts that whatever the choice the individual makes, "it is in consciousness that persons determine their decisions or perform what is called self-determination" (p. 17).

The question of free will versus determinism continues to be a philosophical concern (Wehmeyer, 2004). It becomes a question if individuals have the freedom to choose their actions, if we as individuals are being controlled by some unseen authority and our actions are not our own, or if we exist somewhere in between those two concepts:

> On the one hand, does man possess genuine moral freedom, power of real choice, true ability to determine the course of his thoughts and volitions, to decide which motives shall prevail within his mind, to modify and mold his own character?
>
> Or, on the other, are man's thoughts and volitions, his character and external actions, all merely the inevitable outcome of his circumstances? Are they all inexorably predetermined in every detail along rigid lines by events of the past, over which he himself has had no sort of control? This is the real import of the free-will problem. (Wehmeyer, 2004, p. 342)

While the SDT asserts that in itself it is a function of a person's internal capacity and opportunity to ultimately make their own decisions, there are factors within the theory that are not answered (Wehmeyer et al., 2003). For instance, the theory does not explain why some individuals are more self-determined than others or even what factors (internal or external) attribute to that discrepancy, nor does the theory express if self-determination can be taught or learned through experience if those factors were identified (Wehmeyer et al., 2003). However, it does suggest that in order for an individual to exhibit high levels of self-determining behavior, it

means they choose to "engage in an activity with a full sense of wanting, choosing, and personal endorsement" (Deci, 1992, p. 44). Since literature suggests a positive connection between students who possess higher levels of self-determination and increased academic success, identifying those students early in their academic journey can be beneficial.

Self-Determination Theory and Motivation

From the understanding of psychological growth and development stems the SDT in terms of the motivation that leads individuals towards their actions, be it by free-will or based on the concepts surrounding determinism. Self-determination through the lens of motivation consists of three distinct motivational orientations: (1) intrinsic motivation, (2) extrinsic motivation, and (3) amotivation (Deci & Ryan, 2000; Prospero & Vohra-Gupta, 2007; Prospero, Russell & Vohra-Gupta, 2012). These motivational orientations are described as "prototypes of self-determination activity" (Deci & Ryan, 2002). These prototypes can therefore be used by researchers to address the link between how one's motivation relates to their self-determined action. In education, there is an understanding that can be applied to foster the motivation to promote academic achievement (Reeve, 2005). It is hypothesized that self-determined motivation has a positive impact on academic achievement (Deci, 1980; Deci & Ryan, 2000; Vallerand et al., 1997).

To further understand the three motivational orientations within the SDT, Vallerand and Ratelle (2004) highlight several motivational features. The first feature they highlight is in the pure complexity of the motivational structure, positing that by referring to motivation as a general, unitary concept is "insufficient to explain such complexity" (Vallerand & Ratelle, 2004, p. 38). They suggest, instead, that motivational structure be focused on a collection of motivations differing in types and levels of generality (Vallerand & Ratelle, 2004). As an

example, an individual can be intrinsically motivated in one task yet he/she perform through extrinsic motivational factors in another task. To address the student as either intrinsic or extrinsic in all tasks they preform is an insufficient representation of the individual as a whole. Understanding that the three motivational orientations (intrinsic, extrinsic, and amotivation) can be both present and expressed within one individual in differing settings can be beneficial in understanding motivation on a contextual level (Vallerand & Ratelle, 2004). A second feature of the motivational structure is that "other individuals can have a substantial impact on our many motivations" (Vallerand & Ratelle, 2004, p. 39). The third feature stated is that "it yields important consequences occurring at three levels of generality . . . the global level . . . the contextual level . . . the situational level (Vallerand & Ratelle, 2004, p. 40). The last feature describes what Vallerand and Ratelle (2004) refers to as the "bottom-up influence of situational motivation on contextual motivation (p. 40). In understanding the three orientations of motivation (intrinsic, extrinsic, and amotivation) having those four features of the motivational structure a part of the conversation will allow for a more complete understanding of motivation and how motivation lends itself to our everyday actions.

Intrinsic Motivation

Deci and Ryan (1985) characterizes intrinsic motivation as the act of doing a particular activity for the sake of the activity itself and not for the potential of any external rewards that could be gained. The behaviors that result from an individual being intrinsically motivated are seen as being based on "inherent satisfactions of the behavior . . . in that, when intrinsically motivated, people engage in activities freely, being sustained by the experience of interest and enjoyment" (Deci & Ryan, 2004, p. 10). One example they use is of a student who attends class for the interest and satisfaction he/she has in learning that particular subject matter. Intrinsic

motivation is broken down into three types: intrinsic motivation - to know (IM-Knowledge), intrinsic motivation - toward accomplishment (IM-Accomplishment), and intrinsic motivation - to experience simulation (IM-Stimulation) (Vallerand et al., 1992). Intrinsic motivation to know is vastly rooted in educational research. Deci and Ryan (1985) describe that intrinsic motivation emerges from three distinct places: psychological needs, personal curiosities, and innate strivings for growth. Students who are intrinsically motivated in their studies are motivated from within and therefore are in school because of the enjoyment they receive from it. It is an internal reward.

As a part of the first feature in understanding the motivational structure, Vallerand and Ratelle (2004) utilize what they describe as a "tripartite taxonomy of intrinsic motivation" (p. 42). First there is intrinsic motivation to know (Vallerand & Ratelle, 2004). This taxonomy describes the action of "engaging in activities because of the pleasure and satisfaction derived from learning, exploring, and understanding new things" (Vallerand & Ratelle, 2004, p. 42). This would describe an individual who takes a piano course for the sake of learning how to play the piano. The second taxonomy described is intrinsic motivation to accomplish. This describes an individual "engaging in activities because of the pleasure and satisfaction derived from trying to surpass oneself, creating, or accomplishing something" (Vallerand & Ratelle, 2004, p. 42). This would describe a person who is attending college to fulfill a goal of obtaining a degree. Lastly, the third taxonomy is described as intrinsic motivation to experience stimulation. At this level, an individual "is engaged in an activity because of the stimulating sensations associated with it" (Vallerand & Ratelle, 2004, p. 42). An example of this behavior is an individual who bungee-jumps for the thrill and the excitement he/she receive as they jump.

Extrinsic Motivation

On the other end, extrinsic motivation is classified by Deci and Ryan (1995) as the act of doing a particular activity for the external reward received and not for the sake of the activity. Researchers have identified three strategies or external incentives that coerce individuals to participate in an activity or task: attractive incentive, aversive incentive and prompting (Reeve, 2005). Unlike intrinsic motivation, extrinsic motivation relies on external factors that extend beyond the activity or task (Prospero & Vohra-Gupta, 2007; Reeve, 2005). For students who are not attending college for themselves but for external reasons, once those external reasons are no longer present they can find themselves losing interest or motivation in staying in school. Extrinsic motivation works on a system of consequences, reinforcements, and punishers (Reeve, 2005). Reinforcements are broken down into two categories: positive and negative. Reeve (2005) defines them both as such: positive reinforces are "any environmental stimulus that, when presented, increases the future probability of the desired behavior" and negative reinforces are "any environmental stimulus that, when removed, increases the future probability of the desired behavior" (p. 139).

Deci and Ryan (1985) identified four types of extrinsic motivation in which they describe as varying in their level of self-determination and can also be ordered along a self-determination continuum. The continuum ranges from non-self-determination behaviors to those identified as self-determination behaviors within extrinsic motivation. Three motivational orientations of extrinsic motivation are extrinsic motivation - external regulation (EM-Regulation), extrinsic motivation – introjected (EM-Introjected), and extrinsic motivation - identified regulation (EM-Identified) (Deci & Ryan, 1985; Vallerand & Ratelle, 2004). External regulated acts occurs when an individual preforms a task either to reach a positive end state or to avoid a negative end state

but the end state is separate from the task itself (Deci & Ryan, 1985; Vallerand & Ratelle, 2004). An example of a positive end state is an employee working to receive their paycheck at the end of the pay period and an example of a negative end state is a child cleaning his/her room to avoid being punished for not doing so. The second regulation, introjected, is the first stage of the internalization process (Vallerand & Ratelle, 2004). In this regulation state, individuals are influenced by their environments and in turn they bring that influence inside of themselves (Deci & Ryan, 1985). The actions of the individual are done so out of obligation or some level of internal pressure (Vallerand & Ratelle; 2004). An example Vallerand and Ratelle (2004) presents is of a woman who may vote at a municipal election due to an internal pressure to do so as an obligation and duty as a citizen. They describe this example as the woman being introjected towards municipal politics (Vallerand & Ratelle, 2004).

The third regulation is identified regulation. Vallerand and Ratelle (2004) present the example of a high school student who wakes up an hour early to study for a specific test because he feels it is important. His regulated identification is of that of a student. By this example, identified regulation when "the reasons to engage in an activity are internalized such that the activity is judged valuable to the person" (Vallerand & Ratelle, 2004, p. 43). This person is described as acting from identified reasoning. All orientations of are various types of extrinsic or external motivations that show the complexity of the motivational structure as a whole.

Amotivation

In order to fully grasp the concept of motivation, Deci and Ryan (1995) posited a third motivational construct in which an activity is done neither for the sake of the activity or the rewards that may come from it, which means without motivation (Reeve, 2005, p. 153). This is what Deci and Ryan (1985) describe as a person whose actions shows no contingency between

their actions and their pending outcomes. This is most often compared to the construct of Abramson, Seligman, and Teasdale (1978) concept of learned behavior. Vallerand and Ratelle (2004) liken the two concepts as they describe amotivated individuals as acting as if they have little to no control and often express a sense of helplessness. Vallerand and Ratelle (2004) shares the example of an amotivated student being one who may drop out of high school due to a lack of connection between their education and their future.

As the SDT has evolved through the years, four mini-theories have been formed that each relate to a specific portion of the phenomena with the main assumption remaining as the foundation for each mini-theory (Deci & Ryan, 2002). Those four mini-theories evaluate some aspect of the three motivational orientations (intrinsic motivation, extrinsic motivation, and amotivation) and are described as cognitive evaluation theory, organismic integration theory, causality orientations theory, and basic needs theory.

Cognitive Evaluation Theory

This mini-theory was first formulated by Deci in 1975 and revised by Deci and Ryan (1980), "to describe the effects of social contexts on people's intrinsic motivation" (Deci & Ryan, 2004, p. 10). The contextual elements that are described under this mini-theory are supportive, controlling, and amotivating. The goal of this mini-theory is to link the contextual elements to various types of motivational factors (Deci & Ryan, 1980; Deci & Ryan 2004). A key concept utilized within the cognitive evaluation theory is perceived locus of causality (Deci & Ryan, 2004). Hedier (1958) first introduced the concept of perceived locus of causality specifically in reference to interpersonal personal perception, "and more specifically with regard to the phenomenal analysis of how one infers the motives and intentions of others" (Ryan & Connell, 1989, p. 749). Deci (1980) adapted the understanding of perceived locus of causality

and it was described as measure "between the activity and the external reward" (p. 36). The measure asserts that "when an event prompts a change toward a more external locus, intrinsic motivation will be undermined; whereas, when an event prompts a change toward a more internal perceived locus, intrinsic motivation will be enhanced" (Deci & Ryan, 2004, p. 11). More specifically Deci (1980) expressed "people feel self-determining when they perceive the locus of causality to be internal and they feel non-self-determining when they perceive the locus of causality to be external" (p. 111).

Organismic Integration Theory

This mini-theory is originally formulated by Deci (1985) and revised by Ryan and Connell (1989) and is "based on the assumption that people are naturally included to integrate their ongoing experiences, assuming they have that the necessary nutriments to do so (Deci & Ryan, 2004, p. 12). The goal of this mini-theory is to explain the dynamics and the overall development of extrinsic motivation, specifically utilizing the regulations and looking at the degree to which individuals experience autonomy while they are engaged in an extrinsically motivated activity (Deci & Ryan, 2004; Ryan & Connell, 1989). While the cognitive evaluation theory focuses on intrinsic motivation and primarily applies to the activities in which individuals find either interesting, optimally challenging, or aesthetically pleasing, this theory looks more closely at the activities that individuals perform due to the external factors present (Deci & Ryan, 2004). Organismic integration theory examines the possibility that individuals can be autonomously extrinsically motivated relying on the premise that "if external prompts are used by significant others or salient reference groups to encourage people to do an activity – an activity for which they are not intrinsically motivated – the individuals will internalize their activity's initially external regulation" (Deci & Ryan, 2004, p. 12).

Causality Orientations Theory

This mini-theory was formulated by Deci and Ryan (1985), "to describe individual differences in people's tendencies to orient toward the social environment in ways that support their own autonomy, control their behavior, or are amotivating (Deci & Ryan, 2004, p. 10). For many researchers, this particular theory can be used to predict the experience and behaviors of a given situation (Deci & Ryan, 2004). As the SDT has developed through the years, the assumption has remained that a "person's motivation and behavior, and experience in a particular situation is a function both of the immediate social context and of the person's inner resources that have developed over time as a function of prior interactions with social contexts (Deci & Ryan, 2004, p. 21). This theory is used to look at the descriptive accounts of the inner resources mentioned above. It specifies three distinct orientations that is stated to be present in every individual on some level and differ in the degree to which they represent self-determination within that individual. Those three orientations are autonomy orientation, controlled orientation, and personal causality orientation (Deci & Ryan, 2004).

Basic Need Theory

This mini-theory, formulated by Deci and Ryan (2000), was created to explain the relation of motivation and goals to health and well-being" (Deci & Ryan, 2004, p. 10). The concept of psychological needs is of great importance throughout the SDT. This specific theory focuses solely on the relationship between fulfilling basic psychological needs and well-being (Deci & Ryan, 2004). As the most recently designed mini-theory, Basic need theory operates under the premise that needs "when satisfied, promote well-being, but when thwarted, lead to negative consequences" (Deci & Ryan, 2004, p. 22). The underlying goal of this mini-theory is to evaluate the relationship between life goals and daily behaviors within an individual.

Summary

Both first generation students and non-first generation students continue to enroll into both the two-year level and the four-year level institutions. Studies support the claims that first generation students face unique institutional challenges not only before they enroll into a higher education institution but also throughout their entire educational journey. In order to be a successful student, these students must overcome many of these challenges before they step foot into their first class. These challenges often times hinder students' opportunity to reach their educational goals. The same disadvantages that differentiate these students from their non-first generation students are also some of the same disadvantages they have to conquer to not only have a successful transition but also persist through their undergraduate degree. First generation students are characterized to have lower educational aspirations, have lower levels of self-esteem and self-efficacy. With 71% of first generation students dropping out of college and nearly 50% of all students withdrawing before they reach their second year, more research into first generation students is needed (Ishitani, 2003, p. 47). There are students who do make it to college despite the disadvantages before them. What motivated these students? Does motivation look different among these students versus others? According to the self-determination theory (SDT) there are three orientations of motivation that guide our behaviors and decisions: intrinsic motivation, extrinsic motivation, and amotivation. Vallerand et al. (1992) posits motivation to be one of the most important psychological concepts of education. Radovan (2011) defines motivation as an affective aspect of the learning process for students while Jurisevic (2012) defines academic motivation as a mediating factor in determining school success. One of the conceptual perspectives used to better understand the connection between motivation and education is the perspective set forth by Deci and Ryan (1985) in which behavior falls into one

of the three motivational orientations (intrinsically motivated, extrinsically motivated or amotivated) in any given situation. Research links motivation to academic outcomes such as persistence, learning, and performance (Vallerand et al., 1992). Of the four mini-theories developed under the SDT, the causality orientations theory can be best applied to a research study that looks into the specific motivational orientations that influence a student's behavior and level of self-determination within that student. The mini-theory at its core seeks to bring a descriptive account to what Deci and Ryan (2004) describe as inner resources. Research suggests that students with lower levels of self-determined motivation have lower levels of academic achievement. Identifying the motivational orientations a student enters the college experience with, and providing a descriptive account of those orientations, will possibly help us further develop efforts designed to increase academic achievement and persistence for students in both the two-year and the four-year sectors alike.

CHAPTER 3: METHODS

The purpose of this sequential explanatory study presented an opportunity to explore academic motivation of first-time, first-year freshman at a four-year higher education institution and a two-year institution utilizing both quantitative research methods and qualitative research methods in an attempt to provide an analysis of self-determined motivational orientations between self-identified first generation students and non-first generation students. Using a mixed methods design, this study utilized a combination of administering a survey instrument (quantitative method) and semi-structure interviews (qualitative method) in an attempt to provide a descriptive analysis of motivation between self-identified first generation students and non-first generation students. This chapter contains information on the research design that guided this study. This chapter also contains information regarding the research method and design, setting, research questions, participant selection, instruments for data collection, data collection, data analysis, and limitations.

Research Method and Design

This sequential explanatory mixed methods study utilized both the quantitative and qualitative methods to analysis, synthesize and interpret the data to answer the five research questions presented (Creswell & Planko-Clark, 2011). This design was selected as the appropriate design in an attempt to identify students' motivational orientation towards education (intrinsic motivation – to know, intrinsic motivation – stimulation, intrinsic motivation – accomplished, extrinsic motivation – identified, extrinsic motivation – introjected, extrinsic motivation – external regulation, and amotivation) entering their first semester of their first-year at both a two-year and a four-year institution. This study attempted to provide a descriptive analysis of first generation students and non-first generation students across both sectors of

institutions. In designing the study, individual quantitative and qualitative research methods were taken into consideration. However, a mixed-methods design was found to be the best route for obtaining the level of information this study seeks to explore. By definition, mixed methods is defined as a method that focuses on collecting and analyzing both qualitative and qualitative data in a single study or a series of studies that combined provides a better understanding of research problems than either approach alone (Creswell, 2013; Creswell & Planko-Clark, 2011; Yin, 2009). The sequential explanatory design was chosen as it is an overall attempt to explain the complexity of human behavior by studying it from more than one standpoint (Cohen, Manion, & Morrison, 2011). For this study, a pre-developed survey was utilized for the quantitative aspect and semi-structured interviews were utilized for the qualitative aspects of the mixed methods design of the study. The quantitative data was collected and analyzed first and those results were used to determine the individuals to participate in the semi-structured interviews as the quantitative data informed the qualitative data collection (Creswell, 2009). Figure 1 illustrates the study's explanatory sequential design.

Quantitative

The quantitative component of this study utilized a cross-sectional survey design to provide a numerical description of the academic motivational characterizations among the first-time, first-year students at each institution. The survey was a pre-existing self-administered questionnaire (Fink, 2012). Verbal informed consent from the students was conducted before the administration of the survey. The verbal consent explained the purpose of the study, how the information gathered would be used in the study, the level of their confidentiality, how confidentiality would be maintained and the voluntary nature of the study for all students. Consent was represented by the student continuing with the survey. The survey instrument was

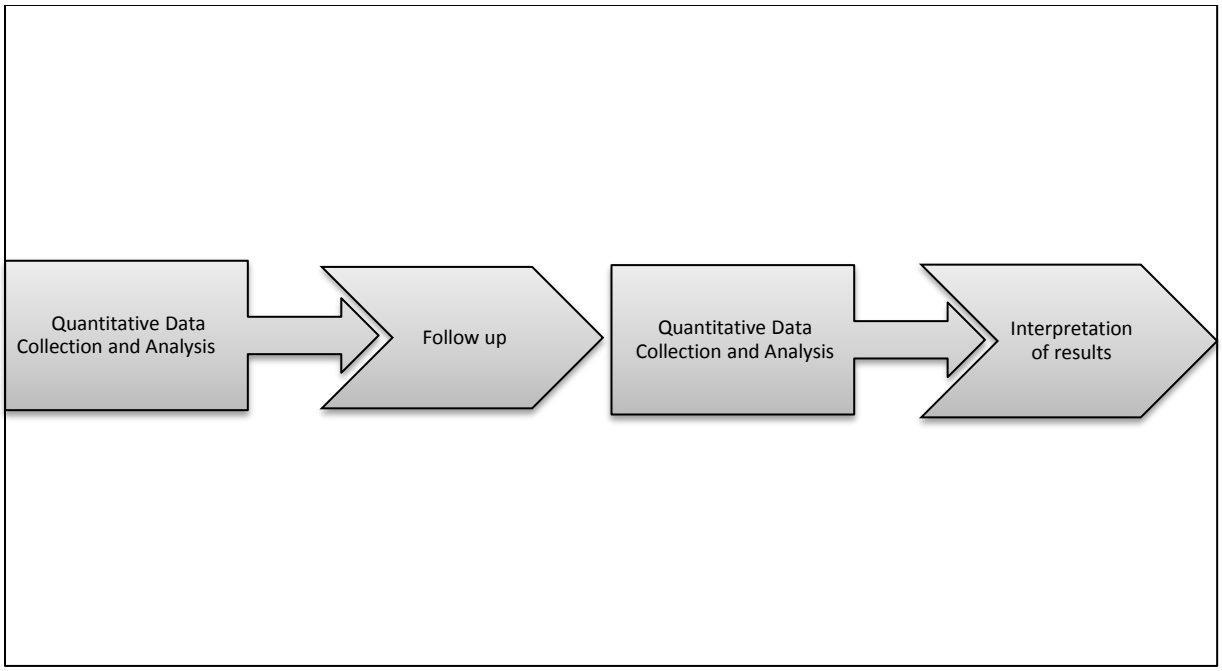

Figure 1. Explanatory sequential design of research study.

administered to all students in person, in the classroom setting during the hours of their freshman seminar course. The quantitative survey data lead to the selection of students to participate in semi-structured interviews (qualitative phase) as a follow up to the results.

Qualitative

At the end of the quantitative study, students were asked in a supplemental section if they were willing to participate in a brief five-question follow-up interview upon their return in the spring 2017 semester. Individuals participating in the follow-up interview were eligible to and did receive a gift card to be given upon the completion of their interview. While the quantitative phase of the study provided a numerical description of the academic motivational characterizations among first time, first year students, the qualitative phase of this study attempted to supplement this information by also providing a narrative description. The pre-existing survey instrument identified students who are intrinsically motivated, extrinsically motivated, or amotivated towards education. The questions that formed the semi-structured interview were informed by the literature review (Rubin & Rubin, 2005) to focus on the topics of student motivation, student persistence and college choice (two-year institution/four-year institution).

Setting

The two settings chosen for this study were a public two-year institution and a public four-year institution in the southeastern region of the US. The target population was first-time, first-semester freshmen who began in the fall 2016 academic year at each of the two identified institutions. Attention was given to the targeted four-year institution because of their first-year retention rates (78.4%, according to the 4-year College Data Tool provided by collegemeasures.org). Statistics provided by the National Association for College Admission

Counseling (NACAC) on the College Data website shows this institution has a total undergraduate student body population of approximately 28,962 students after fall of 2016 census day which includes 4,320 in the freshman body. This institution was also chosen as it was named, according to *U.S. News* (2016), one of the 100 schools in the "A+ Schools for B Students" which uses first-year retention rates as an indicator in developing the overall listing. The target two-year institution was chosen as it is within the same geographic location as the four-year institution. The targeted two-year institution sits less than 10 miles away from the heart of four-year institution's campus and yet they service two different target populations of students. The two-year institution serves students who are seeking to obtain either an associate's degree (two-year degree) or lower while the four-year institution serves students who are seeking a bachelor's degree (four-year degree) or higher. According to the 2015 fact sheet provided by the two-year institution's website, the total first-time, first-year population for the fall semester was approximately 1,038 students. Researching students at this institutional level allowed for a more in-depth examination of various student populations within a two-year sector as a larger population of the at-risk population of students are considered to be present at a higher percentage at two-year institutions in comparison to four-year institutions. Therefore, having institutions represented in this study from both perspectives gave this study more depth to add to the growing body of literature.

Purpose and Research Questions

Researchers have posited that there is a link between students with higher levels of self-determined motivation and increased academic persistence. While there continues to be increasing interest in researching the educational journey first generation students take, and the struggles and challenges each first generation student has to overcome in order to reach

graduation, little research has been conducted to explore the role of self-determined motivation on academic persistence in first generation students. This study attempted to explore a possible link between levels of self-determination and its link to academic persistence in both first generation and non-first generation students utilizing the self-determination theory as its theoretical framework. The quantitative portion of the study sought to identify the student's motivational orientation towards education (intrinsic, extrinsic, and amotivation) among the students selected while the qualitative portion of the study sought to explore the various motivational components within each orientation for select students. More specifically, research questions 1-4 were quantitative in nature and Research Question 5 was qualitative in nature.

The five research questions to be explored in this study are:

1. What are the motivational orientations of first-time, first-year college students overall?
2. Is there a difference in the motivational orientations of these students by first generation status?
3. Is there a difference in the motivational orientations of these students by institution type: two-year versus four-year?
4. Do any such difference in motivational orientations interact between first generation status and institution type?
5. What factors do students attribute to their overall motivational orientation toward education?

Participant Selection

This mixed methods study used a strategy within the explanatory design, the participation selection model. In this model, the quantitative data is used to identify and purposefully select

the students for the qualitative phase of the study (Creswell & Planko-Clark, 2011). Pairing both the quantitative and qualitative methods yielded a more robust analysis of the motivational orientations towards education among a two-year and a four-year institution in southeastern region of the US.

Quantitative

The selection of the students in the quantitative phase of this study utilized a purposeful non-random sampling frame as the purpose of this study is to add to the body of knowledge surrounding first generation students and academic motivation (Onwuebuzie & Collins, 2007). A convenience sampling was selected for the quantitative phase of the study. The study was only administered to those students whose professors who gave me access to administer the survey during their schedule class time. However, there was a purposeful sampling component as the only professors targeted were those who taught the freshman seminar courses in the fall 2016 semester. This was done to ensure the study gets a good representation of freshman students by purposefully selecting a freshman course.

In each of the targeted public higher education institutions, a first-year seminar course is provided for each incoming first-time, first-year students. For the targeted four-year institution, the course was titled Student Development and Learning in Higher Education and was identified as COAD 1000. For the targeted two-year institution, the course was titled College Student Success and was labeled as ACA 122. The basis of these courses was to help students adjust to their university and to aid in each students' overall academic success by providing additional support and guidance in additional areas that include, but not limited to, career mapping, enhancing study skills, finding balance in life, wellness, goal-setting, and enhancing critical thinking skills. The courses were optional yet strongly encouraged at each institution. These

courses provided a unique opportunity to capture as many first-time, first-year freshmen in one place.

There was no publicly available data concerning the number of sections offered each semester, therefore, the Office of the Registrar at each institution assisted in obtaining the possible number of students served by these classes. I worked with the required IRB offices, higher education administrators, and specific faculty to gain permission to administer the survey in person for each institution as well as to conduct follow-up interviews with any selected student. Information on the IRB process will be provided later in this chapter.

According to public records, with census day, which occurred on September 5, 2016, the targeted four-year institution had a record breaking fall enrollment of 28,962 students which included 4,320 freshman enrolled for the 2016-2017 academic year. With that population size, a sampling calculation was conducted to determine 353 freshmen needed to be included in the survey results to yield a valid study. In working with the Office of the Registrar for the institution, there are 63 identified sections of COAD 1000 that were taught in the fall 2016 semester. Due to the varying sizes of each section, approximately 18 classes with 20 students in each class needed to be surveyed. Personally going to each course during class-time allowed for a quicker response time and a potential higher response rate. However, upon the completion of the data collection phase, the sampling size was unable to be met. I was able to survey 136 students, which is a difference of 217 students.

According to the 2015 fact sheet provided on the targeted two-year institution's website, the total first-time, first-year population for the fall semester was approximately 1,038 students. With that population size, a sampling calculation was conducted to determine 281 freshman needed to be included in the survey to yield a valid study. Course offerings for fall 2016 semester

were publically available through the schools' website. Upon reviewing all offerings, there were 21 identified sections of ACA 122 offered in the fall 2016 semester. Each course had a total of 27 available seats which needed approximately 14 classes to be surveyed to ensure the sampling size to be met. As with the four-year institution, personally going to each course during class-time allowed for a quicker response time and a potential a higher response rate. Online surveys tend to receive lower overall response rates as well as an underlined racial and gender bias in survey results given who tends to respond (REF). As a result, face-to-face administration of the survey was selected rather than administering an online survey. However, upon the completion of the data collection phase, the sampling size was unable to be met. I was able to survey 249 students, which is a difference of 32 students.

Qualitative

A purposeful sampling strategy was also selected for the qualitative portion of the study. At the end of the survey, a question was asked to gauge the students' interest in a brief five question follow-up interview. Only those students who indicated "yes" to the answer were included as possible interview subjects. Each selected student was given one semi-structured interview. A semi-structured interview design was chosen to allow a deeper insight into the perspective of others for "ascertaining respondents' thoughts, perceptions, feelings, and retrospective accounts" (Goodwin & Goodwin, 1996, p. 134). The semi-structured interview design also allowed for follow-up questions to be asked when appropriate to gain further understanding and elaboration (Rubin & Rubin, 2005). The interviews were given face-to-face on their individual campuses so they could receive their gift card upon the completion of the interview. Before the start of the interview, verbal informed consent from the students was conducted. The verbal consent explained the purpose of the study, how the information gathered

will be used in the study, the level of their confidentiality, how confidentiality was maintained and the voluntary nature of this study for each student. The interviews were audio recorded with the permission of the students and were transcribed (see Appendix D) to preserve the integrity of the information gathered (Creswell & Plano Clark, 2007). All students of the interview were given the opportunity to review both their survey results and a transcript of their interview upon request. Each interview was guided by the following five focal questions:

1. What motivated you to pursue your education?
2. What are some of the challenges you have faced so far in your educational journey?
3. What are some of things you enjoy about your education journey up to this point?
4. What made you choose your current institution? Was this your first choice, why or why not?
5. Is there anything you feel you need to add/share that is important to understanding the motivation behind you attending college?

Ethical Considerations

In order to meet ethical guidelines, an informed consent process was also utilized (Holloway, 1997; Johnson-Bailey & Cervero, 1996; Kvale, 1996). The informed consent made clear to all parties that participation was on a volunteer basis and the information provided will remain confidential. A demographical informational sheet accompanied the survey. This informed consent agreement apprised students of several key factors including but not limited to the following, they were volunteering to participate in a research project and they could request to be removed from the project at any point with no consequences, the purpose of the research, the procedures of the research, and the procedures for confidentiality (Arksey & Knight, 1999; Bless & Higson-Smith, 2000; Kvale, 1996; Street, 1998). For the sake of validity and accuracy,

each student was given the opportunity to receive a text copy of their transcribed interview to validate that their views and perspectives were unbiasedly reflected. The identity of the students remained confidential by utilizing a coding system that provided a representation for their participation in the study. Since there were seven interviews from the two-year institution, they were coded in order of the interview as 2y-Student 1, 2y-Student 2, 2y-Student 3, 2y-Student 4, 2y-Student 5, 2y-Student 6, and 2y-Student 7. There were also seven interviews from the four-year institution; they were also coded in the same manner 4y-Student 1, 4y-Student 2, 4y-Student 3, 4y-Student 4, 4y-Student 5, 4y-Student 6, and 4y-Student 7.

Instruments for Data Collection

"One of the most important psychological concepts in education is certainly that of motivation" (Vallerand et al., 1992). The previous quote is the foundation of The Academic Motivation Scale: A Measure of Intrinsic, Extrinsic, and Amotivation in Education created by Vallerand et al. (1992) (see Appendix A). This study utilized the college version of the Academic Motivation Scale (AMS) (Vallerand et al., 1992) as it was designed to measure the students' motivational orientation towards education by identifying their level of motivation (intrinsic motivation, extrinsic motivation or amotivation). This survey instrument was also selected as it is one of the first scales to assess motivation towards education on all three constructs. Previous scales focus in great part on intrinsic motivation, extrinsic motivation, or a combination of the two, specifically in post-secondary education studies (Vallerand et al., 1992). Vallerand et al. (1989) first created and validated the French Echelle de Motivation in Education (EME) which is based specifically on the SDT as described by Deci and Ryan (1985). It was later translated into English using a three step process which included a cross-cultural scale translation, review by a select committee, and a pre-test with confirmatory factor analysis to

ensure scale relatability (Vallerand et al., 1989). The results of the confirmatory factory analysis laid the foundation for the structure of the AMS. The AMS is composed of 28 individual questions subdivided into seven separate sub-scales. The scale uses these sub-scales to evaluate the three motivational levels identified by the SDT of intrinsic motivation, extrinsic motivation and amotivation and broke them down into the seven motivational orientations. Intrinsic motivation is broken down into the three orientations; IM-Knowledge (questions 2, 9, 16, 23), IM-Accomplishment (questions 6, 13, 20, 17), and IM-Stimulation (questions 4, 11, 18, 25). Extrinsic motivation is broken down into the three orientations; EM-Regulation (questions 1, 8, 15, 22), EM-Introjected (7, 15, 21, 28), and EM-Identified (3, 10, 17, 24). The scale does not provide any specific types within amotivation so it is its own motivational level and orientation (questions 5, 12, 15, 22). Students responded to a 7-point Likert scale ranging from 1 (does not correspond at all) to 7 (corresponds exactly) for 28 questions. The scale is designed with certain questions rating the student's level of motivation (see Appendix C).

The following elements were used to conduct the survey:

1. Demographic Information Sheet
2. Academic Motivation Scale: College Version
3. Supplemental Question

Data Collection

Quantitative

On August 16, 2016, the researcher submitted an application for the approval of this study to the Internal Review Board (IRB) of the four-year institution for permission to administer the survey to their students. The study was approved by IRB on November 14, 2016 (see Appendix E). The two-year institution required approval of the application from the four-year

institution before submission to their institution, therefore, the application to administer the study to their students was submitted on November 14, 2016 also. Approval from the two-year institution was granted on November 22, 2016 via email correspondence. Once approvals were granted, I sent an email to all professors identified as teaching the COAD 1000 course at the four-year institution to request time to enter their classroom to administer the survey (see Appendix D). Emails were sent to 72 professors with a response from 11 professors. Since the approval was granted so close to the end of the semester, many professors were unable to respond. Of the eleven professors who did respond, eight granted me permission to survey their classes. This yielded a total of 137 surveys collected. For the two-year institution, the administrator for the institution scheduled the researcher as a guest speaker in each of their remaining eight ACA 122 courses (many of the courses were taught hybrid, face-to-face the first half of the semester and online the second half of the semester) for the survey to be administered. This yielded a total of 265 surveys collected.

To increase the response rate, a hard-copy of the AMS was provided to each student in each of the classes in which I was granted permission to enter. The survey was administered during the end of the Fall 2016 semester and I remained in the classroom until all surveys were completed and turned in. By completing the survey, the students gave consent to voluntarily participate in the study, however, during verbal informed consent they were reminded they could contact me at any point to request to have their information withdrawn. Contact information was left with each student. Upon the completion of all surveys, I manually entered the data in the quantitative statistical software, Statistical Package for the Social Sciences (SPSS), to obtain results.

Qualitative

The students in this portion of the study were first-time, first-year freshman who completed their first semester of their freshman year and returned for their second semester. Utilizing the information provided in SPSS, I manually entered the information of all students who answered "yes" to the supplemental question at the end of the survey into Microsoft Excel to run a random number generator to identify five random students from each institutional type and five from each generational status to begin scheduling the interviews. This process began February 5, 2017 and on February 7, 2017, I began contacting the first set of students. The students provided either his/her email addresses and/or telephone numbers as the best means of contact. Many email addresses were illegible and many phone numbers were disconnected. This presented a challenge in the original strategy to obtain equal representation of first generation and non-first generation students as I found myself down to student 15 with no scheduled interviews. I noted a greater response rate to those students who requested the best method of contact be via texting; therefore, I expanded beyond the first round of randomly selected students and shifted my strategy to obtaining saturation (Mason, 2010). By February 27, 2017, I was able to schedule and conduct seven interviews from the four-year institution and seven interviews from the two-year institution before saturation was met.

The students who participated in the interviews were eligible to receive a gift card upon the completion of the interviews and a total of 14 gift cards were distributed to the interviewees. The interviews were held face-to-face and recorded at the student's permission at the student's corresponding institution to ensure convenience for the student and they would be able to receive their gift card. Upon the completion of all the interviews, the data used for this approach was collected via face to face semi-structured interviews which were audio taped and manually

transcribed. Transcribed interviews were then uploaded into a Computer Assisted Qualitative Data Analysis Software program known as NVivo Pro version 11.

Those 5 focal interview questions were:

1. What motivated you to pursue your education?
2. What are some of the challenges you have faced so far in your educational journey?
3. What are some of things you enjoy about your education journey up to this point?
4. What made you choose your current institution? Was this your first choice, why or why not?
5. Is there anything you feel you need to add/share that is important to understanding the motivation behind you attending college?

The information was used in conjunction with the quantitative data to construct the findings and results in the next chapter.

Data Analysis

Using a sequential explanatory mixed methods research design, this study collected the quantitative and the qualitative data separately and analyzed the data simultaneously. To address the understanding and analysis of first generation students and non-first generation students' motivational orientations towards education at both the four-year institutional level and the two-year institutional level, guided by the five research questions, this study will utilize both quantitative and qualitative software.

Quantitative

The data was coded and manually entered into the Statistical Package for the Social Sciences (SPSS) software tool for analysis. Descriptive statistics were utilized to summarize and organize the data. The quantitative data was summarized using mean and standard deviation with

the demographical factors represented in the study identified in percentages (age, gender, and ethnicity). For the purposes of this study, the responses to the variable parental/guardian level were then transformed through recoding into new dichotomous values to represent generational status (first generation and non-first generation). Initially, parental/guardian level of education consisted of 9 values ranging from "no schooling completed" to "doctorate degree". In order to provide an understanding of generational status for statistical analysis, students who indicated the response to parental/guardian highest level of education being either "no schooling completed", "some high school, no diploma", "high school graduate, diploma or the equivalent" and "some college credit, no degree" were recoded to the value of first generation and those students who indicated the response to parental/guardian highest level of education being either "associate degree", "bachelor's degree", "master's degree", "professional degree" and "doctorate degree" were recoded to the value of non-first generation. I constructed the appropriate quantitative analytical tools address research questions 1-4:

Research Question 1: What are the motivational orientations of first-time, first-year college students overall?

This question was addressed through descriptive statistics to describe the various comparisons within the groups represented using means and standard deviations of the academic motivation variables within the survey. The AMS measured academic motivation towards education for students based on the three motivational levels of intrinsic motivation, extrinsic motivation and amotivation. Each motivational orientation consisted of four questions each that measured the respond on a 7-point Likert scale with 1 being "does not correspond at all" to 7 being "corresponds exactly". Each student was instructed to use the Likert scale (range of 1-7) to indicate to what extent each of the items corresponds to the reasons why they go to college. This

gave a range of each subscale from 4-28 depending on how the student rated each question on the Likert scale. A frequency distribution table is provided with the breakdown of each question on the AMS (see Appendix F). Additionally, linear regression analysis was also utilized to test if the demographic identifiers (institutional type, generation status, gender, and ethnicity) could predict the outcome of the motivational orientations (extrinsic, intrinsic, and amotivation).

Research Question 2: Is there a difference in the motivational orientations of these students by generational status?

This question was addressed also through descriptive statistics analyzing student motivational orientations overall and then by generational status. Statistically significant similarities were then analyzed using an independent samples t-test to test any statistically significant differences. The research hypothesis and null hypothesis are presented as follows:

H_1: There is a difference in the motivational orientations of these students by generational status.

H_0a: There is no difference in the motivational orientations of these students by first generation status.

Research Question 3: Is there a difference in the motivational orientations of these students by institution type: two-year versus four-year?

This question was addressed also through descriptive statistics analyzing student motivational orientations overall and then by generational status. Statistical similarities were then analyzed using an independent samples t-test to test any statistically significant differences. The research hypothesis and null hypothesis are presented as follows:

H_2: There is a difference in the motivational orientations of these students by institution type: two-year versus four-year.

H_0b: There is no difference in the motivational orientations of these students by institutional type: two-year versus four-year.

Research Question 4: Do any such difference in motivational orientations interact between first generation status and institution type?

This question was addressed utilizing the two-way analysis of variance (ANOVA) analytical tool. This type of analysis was chosen separate of the previous tools as this question asked specifically about any interactions between the two groups of first generation and non-first generation students as well as two-year and four-year institutions. The research hypothesis and null hypothesis are presented as follows:

H_3: There is an interaction between first generation status and intuitional type.

H_0c: There is no interaction between first generation status and intuitional type.

Qualitative

The semi-structured interviews were audio recorded and manually transcribed. NVivo, a qualitative data analysis software computer package, was used to further analyze the data to be able to present the factors utilizing narrative analysis as a tool to provide a descriptive perspective. Adams, Khan, Raeside, and White (2007) states that narrative analysis "seeks to put together the big picture about experiences or events as the students understands them" (p. 339). This allowed for a unique opportunity to better understand how students connect motivation to their educational journey and provided the foundation to address research question 5. The narrative analysis of the qualitative data also provided a more in-depth understanding than just utilizing the quantitative survey results alone. In order to provide this narrative, this study will follow Creswell's (2005) steps to analyze qualitative data:

Step 1 – Read the whole transcription carefully to obtain understanding

Step 2 – Identify text segments

Step 3 – Assign a code word or phrase to describe the meaning of the text segments

Step 4 – Make a list and group the code words

Step 5 – Reduce the codes into themes (in this case, factors) to form the major concepts within the transcription

Research Question 5: What factors do students attribute to their overall motivational orientation toward education?

After responses were gathered during the semi-structured interviews and imported into NVivo, Research Question 5 was addressed using an inductive coding strategy to identify the factors.

Assumptions and Limitations

There are several assumptions and limitations present within this study and the study design. The first assumption lies with the students volunteering to participate in the interviews. As students they are self-identifying as either first generation or non-first generation students based on the established definition, so the first assumption is towards their truthfulness. The second assumption lies with the remainder of the answers within the survey and interview. The assumption holds the students are giving truthful answers. There are also several research limitations presented with this project. As far as limitations, first, this study was limited to only one local public higher education institutions in the two-year sector and one public higher education institutions in the four-year sector; it did not include any private institutions. Second, this study only included students on a regional basis, so the variable of region was removed from the findings. Third, this study only included students who are of legal age, therefore, any

freshman who is under the age of 18 was excluded. Fourth, this study only included first-time, first-year freshman; therefore, any student classified as a sophomore, junior, senior or continuing education student was purposefully excluded from the study. Finally, the interviews were conducted with students and evaluated on their perspective on what motivates them. As such, there presents a lack of the faculty/staff and administrator perspectives of student academic motivation.

Summary

This explanatory sequential mixed-methods study attempted to identify students' motivational orientation towards education through the use of the Academic Motivation Scale: College Version survey instrument and student interviews. The target population for this study was first-time, first-year freshman at a public two-year institution and a public four-year institution in southeastern region of the US. This study sought to add to the current literature surrounding the topics of first generation students and academic motivation utilizing both quantitative and qualitative research methods. This study also seeks to increase the literature pertaining to academic motivation at the various institutional levels by adding the student perspective in the findings and results. The mixed methods design was identified as the best design for this study as it allowed for not only statistical data, but also a descriptive account of the topics explored which provided a more well-rounded and in-depth analysis rather than using either qualitative or quantitative analysis alone.

CHAPTER 4: QUANTITATIVE AND QUALITATIVE RESULTS

The purpose of this sequential explanatory mixed-methods study was to identify the motivational orientation towards education of first-time, first-year freshman at a public two-year institution and a public four-year institution in the southeastern region of the United States (US). Using a mixed methods design, this study utilized a combination of administering a survey instrument (the AMS) and semi-structure interviews to provide an analysis of the motivational orientation of students and how they differ between self-identified first generation students and non-first generation students at both the two-year and the four-year institutional levels.

Research Questions

This chapter contains the results revealed through the analysis of the data presented in the order of the five research questions that guided this study:

1. What are the motivational orientations of first-time, first-year college students overall?
2. Is there a difference in the motivational orientations of these students by first generation status?
3. Is there a difference in the motivational orientations of these students by institution type: two-year versus four-year?
4. Do any such difference in motivational orientations interact between first generation status and institution type?
5. What factors do the students attribute to their overall motivational orientation?

Demographics of the Study

Quantitative Demographics

Frequency distributions were utilized to provide a descriptive analysis of the students who participated in the survey (n = 385). Results are summarized in Table 1. Additionally,

Table 1

Descriptive Breakdown of Survey Population

Variable		Total Sample (384)	Institutional Type		Generational Status	
			Two-year (136)	Four-year (249)	First generation (123)	Non-first generation (261)
Gender	Male	177 (46.0%)	117 (47.6%)	60 (44.1%)	45 (36.9%)*	132 (51.0%)*
	Female	205 (53.2%)	129 (52.4 %)	76 (55.9%)	77 (63.1%)	127 (49.0%)
Ethnicity	White/Caucasian	225 (58.4%)	127 (51.2%)	98 (72.1%)	46 (37.4%)	179 (68.8%)
	Hispanic/Latino	24 (6.2%)	18 (7.3%)	6 (4.4%)	18 (14.6%)	6 (2.3%)
	Black/African American	100 (26.0%)	83 (33.5%)	17 (12.5%)	48 (39.0%)	51 (19.6%)
	Native American/American Indian	5(1.3%)	2 (0.8%)	3 (2.2%)	1 (0.8%)	4 (1.5%)
	Asian/Pacific Islander	5(1.3%)	1 (0.4%)	4 (2.9%)	1 (0.8%)	4 (1.5%)
	Bi/Multiracial	21(5.5%)	14 (5.6%)	7 (5.1%)	6 (4.9%)	15 (5.8%)
	Other	4(1.0%)	3 (1.2%)	1 (0.7%)	3 (2.4%)	1 (0.8%)
Motivational Orientation	Intrinsic – to know	21.00 (5.00)	21.06 (5.22)	0.91 (4.61)	21.52 (4.99)	20.76 (5.01)
	Intrinsic – toward accomplishment	19.24 (5.59)	19.1 (5.80)	19.42 (5.20)	19.84 (5.60)	18.95 (5.58)
	Intrinsic – to experience stimulation	13.99 (5.69)	14.58 (5.78)	12.93 (5.38)	14.91 (5.88)	13.55 (5.56)
	Extrinsic - identified	24.43 (3.57)	24.20 (3.64)	24.87 (3.42)	24.69 (3.45)	24.31 (3.64)
	Extrinsic - introjected	22.02 (5.56)	21.94 (5.79)*	22.17 (5.13)*	23.06 (5.33)	21.51 (5.61)
	Extrinsic –external regulation	25.25 (3.47)	25.08 (3.68)*	25.56 (3.02)*	25.23 (3.46)	25.26 (3.48)
	Amotivation	6.39 (4.05)	6.15 (3.37)*	6.52 (4.37)*	6.69 (3.83)	6.22 (4.12)

Note. *p-value < 0.05.

independent *t*-tests were utilized to test if there presented a statistically significance difference (see Appendix J). Results revealed statistically significant differences in the variables of gender (t= 2.59, p= .000) by generational status, EM-Introjected (t= .34, p= .045), EM-Regulation (t= 1.29, p= .032), and Amotivation (t= -.855, p= .041) by institutional type.

Additionally, demographic distributions data was gathered for both the four-year institution and the two-year institution to analyze if the students within the study were a comparable representative of the first-year class at each institution (see Table 2). Findings show that the gender population within the study can represent the gender population at both the four-year institution and the two-year institution as the percentages were comparable to each other. When analyzed based on ethnicity, the students within the study can represent the ethnic population at both institutional levels. It is noted that there is a slightly higher percentage of Native American/American Indian students represented in the study than at the four-year institution and a slightly lower representation than at the two-year institution. There was no data received from the two-year institution on the generational status as that is not data they currently track, so no comparison could be made. However, from the four-year institution, there is a lower percentage of first generation students represented in the study than at the institutional level and a slightly higher representation of non-first generation students represented in the study. Overall, the student sample within the study can be a representation of the first-time, first-year student population at both the four-year institution and the two-year institution.

Qualitative Demographics

The students were purposefully selected from the listing of those who only answered "yes" to the supplemental question at the end of the survey. There were a total of 213 students who selected "yes" to a follow-up interview and 172 "no" (see Table 3). Of the 14 students

Table 2

2016-2017 Representative Demographic Distributions Layered by Institutional Type

Variable		Four-Year Demographics Study (136)	Four-Year Demographics Institution (4,244)	Two-year Demographics Study (248)	Two-year Demographics Institution (1910)
Gender	Male	60 (44.1%)	1785 (42.1%)	117 (47.2%)	819 (42.8%)
	Female	76 (55.9%)	2459 (57.9%)	129 (52.0%)	1091 (57.1%)
Ethnicity	White/Caucasian	98 (72.1%)	3093 (72.9%)	127 (51.2%)	870 (45.5%)
	Hispanic/Latino	6 (4.4%)	260 (6.1%)	18 (7.2%)	153 (8.0%)
	Black/African American	17 (12.5%)	587 (13.8%)	83 (33.5%)	758 (39.7%)
	Native American/American Indian	3 (2.2%)	28 (0.6%)	2 (0.8%)	29 (1.5%)
	Asian/Pacific Islander	4 (2.9%)	126 (2.9%)	1 (0.4%)	22 (1.1%)
	Bi/Multiracial	7 (5.1%)	122 (2.8%)	14 (5.6%)	73 (3.8%)
	Other	1 (0.7%)	n/a	3 (1.2%)	n/a
Generational Status	First generation	22 (16.2%)	1247 (29.4%)	101 (40.7%)	n/a
	Non-first generation	114 (83.8%)	2997 (70.6%)	147 (59.3%)	n/a

Table 3

Demographic Breakdown of Interviewed Students

Students		Four-year institution	Two-year institution	Total
First generation	Yes	15	55	70
	No	7	46	53
Non-first generation	Yes	66	77	143
	No	48	70	118

selected for the interview, demographic grouping of the students interviewed included, four-year institution students (*n*=7), 2-year institution students (*n*=7) and first generation students (*n*=6), non-first generation students (*n*=8).

Data Analysis of Research Questions

Research Question 1

What are the motivational orientations of first-time, first-year college students overall? The findings indicate students showed higher levels of EM-Regulation (M = 25.26, SD = 3.47) than any of the other six orientations (see Table 4 and Figure 2). Students scored lowest in the motivational orientation amotivation (M = 6.39, SD = 4.05).

The findings revealed students within the study showed a trend of higher levels of motivation moving down from EM (descending from regulation, to identified, then to introjected), to IM (descending from to know, to toward accomplishment, and then to experience stimulation), with amotivation being the lowest indicated levels. To get a better understanding of the trend of higher EM-regulation than any other motivational orientation, deeper analysis was conducted. Using descriptive statistics, each demographic group (institutional type, gender, generational status, and ethnicity) represented in the same descending trend, EM (external regulation, to identified, then to introjected), to intrinsic motivation (to know, toward accomplishment, then to experience stimulation) then to amotivation for all groups, with the exception of those students who identified themselves as "Other". For those students, their scores reported higher in EM-identified (M = 25.25, SD = 4.27) over EM-regulation, but the remaining orientations fell in the same order as the other comparison groups. The findings are summarized in Appendix G.

Table 4

Overall Motivational Orientations

Motivational Orientation	Mean	Standard Deviation
IM-Knowledge	21.00	5.00
IM-Accomplishment	19.24	5.59
IM-Stimulation	13.99	5.69
EM-Identified	24.43	3.57
EM-Introjected	22.02	5.56
EM-Regulation	25.25	3.47
Amotivation	6.39	4.05

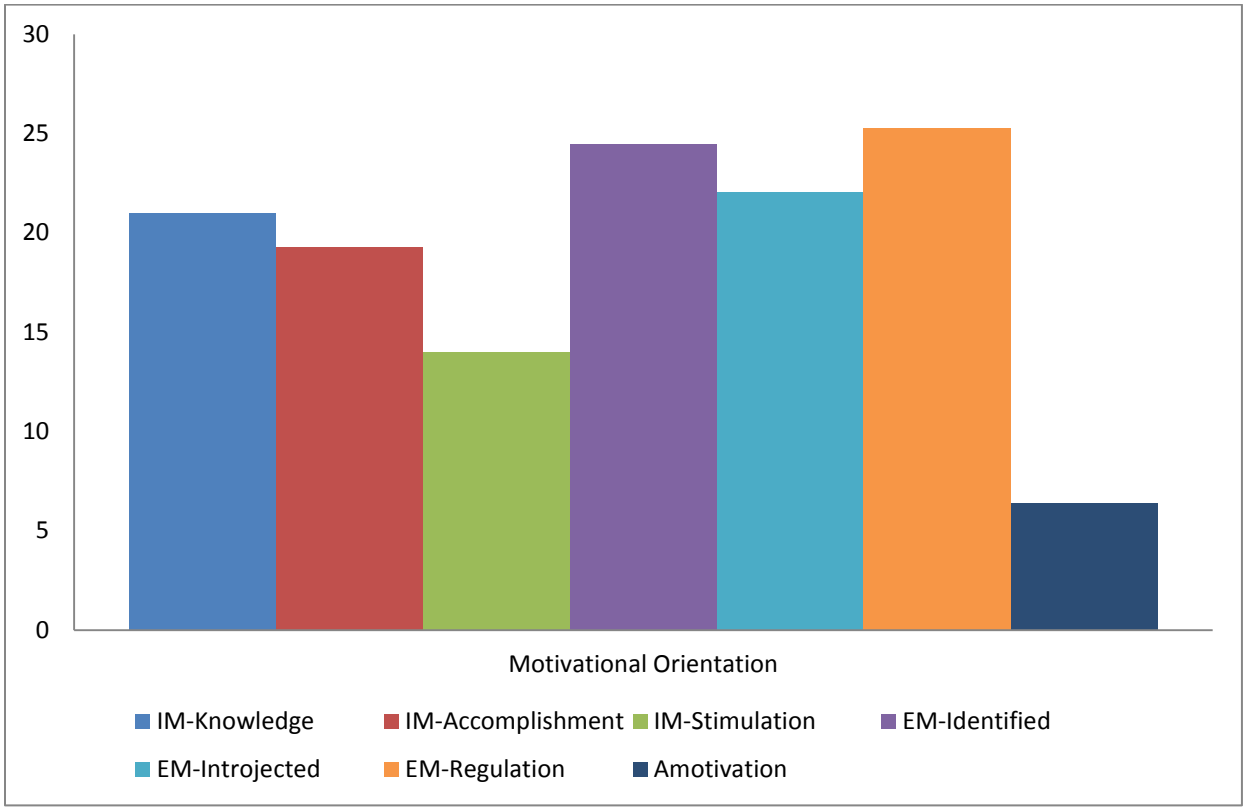

Figure 2. Overall motivational orientation (n=385).

Additionally, linear regression analysis was also utilized to test if the demographic identifiers (institutional type, generation status, gender, and ethnicity) could predict the outcome of the motivational orientations (extrinsic, intrinsic, and amotivation) (see Appendices H). Gender was the only statistically significant predictor on the linear regression analysis ran to predict IM-knowledge *($F=25.97$, $p<.000$, $R^2=.064$)*, IM-accomplishment *($F=24.83$, $p<.000$, $R^2=.062$)*, EM-identified *($F=33.13$, $p<.000$, $R^2=.080$)*, EM-introjected *($F= 38.13$, $p<.000$, $R^2=.091$)*, and EM-regulation ($F =13.13$, $p<.0000$, $R^2=.033$).

For the linear regression analysis ran to on IM-stimulation, institutional type *($F=7.49$, $p<.006$, $R^2=.019$)*, generational status *($F=4.76$, $p<.030$, $R^2=.012$)*, and gender *($F=7.68$, $p<.006$, $R^2=.020$)* were all shown as predictors.

For amotivation, ethnicity *($F=6.70$, $p<.010$, $R^2=.017$)* and gender *($F=10.29$, $p<.001$, $R^2=.026$)* both showed predictors for the motivational orientation.

Research Question 2

Is there a difference in the motivational orientations of these students by first generation status? Analyzing academic motivation towards education for both first generation students and non-first generation students separately. Findings held consistent with research question 1, EM-regulation shows higher than any other motivational orientation for both first generation students and non-first generation students (see Figure 3).

Independent t-tests for each individual orientation was utilized to answer this research question, specifically to determine the mean and standard deviation as well as to determine if there were any cases of statistical significance between the correspondences of first generation students and non-first generation students. Since this question measured differences, if any, the corresponding research hypothesis and null hypothesis for this question is presented below.

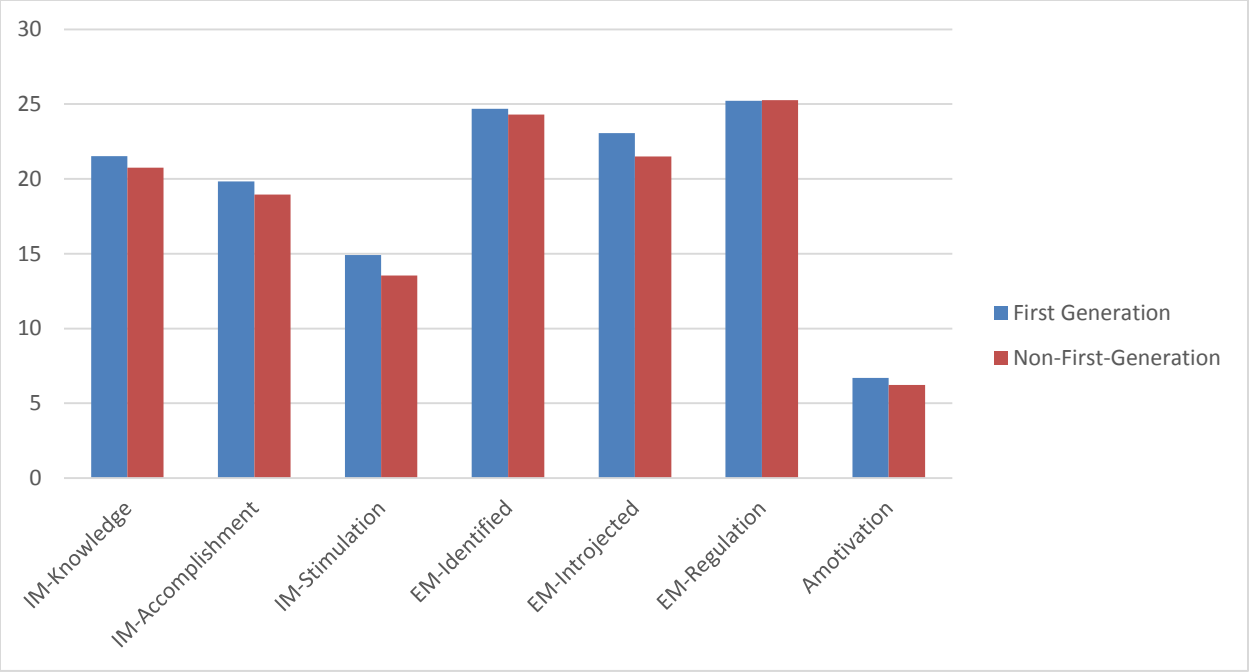

Figure 3. Motivational orientations by generational status.

H_0: There is no difference in the motivational orientations of these students by generational status.

H_1: There is a difference in the motivational orientations of these students by generational status.

For this question, each overall motivational level (intrinsic motivation, extrinsic motivation, and amotivation) was analyzed in the sections below, to determine if any statistically significant differences are present.

Intrinsic Motivation by Generational Status

Table 5 summarizes the overall intrinsic motivation by generational status for each of the motivational orientations.

The results reveal there is no statistically significant differences present in intrinsic motivation between first generation students and non-first generation students.

Extrinsic Motivation by Generational Status

Table 6 summarizes the overall extrinsic motivation by generational status for each of the motivational orientations.

The results reveal there is no statistically significant difference in extrinsic motivation between first generation students and non-first generation students.

Amotivation by Generational Status

Table 7 summarizes the overall amotivation by generational status. The results reveal there is no statistically significant difference in amotivation between first generation students and non-first generation students.

Table 5

Intrinsic Motivation by Generational Status

Orientation	First generation (n=123)	Non-first generation (n=259)	p-value
IM-Knowledge	21.52 (4.99)	20.76 (5.01	.685
IM-Accomplishment	19.84 (5.60)	18.95 (5.58)	.988
IM-Stimulation	14.91 (5.88)	13.55 (5.56)	.214

Table 6

Extrinsic Motivation by Generation Status

Orientation	First generation (n=123)	Non-first generation (n=261)	p-value
EM-Identified	24.69 (3.45)	24.31 (3.64)	.410
EM-Introjected	23.06 (5.33)	21.51 (5.61)	.182
EM-Regulation	25.23 (3.46)	25.26 (3.48)	.751

Table 7

Amotivation by Generational Status

Orientation	First generation (n=123)	Non-first generation (n=260)	p-value
Amotivation	6.69 (3.83)	6.22 (4.12)	.584

Research Question 3

Is there a difference in the motivational orientations of these students by institutional type: two-year versus four-year? Analyzing academic motivation towards education for both first generation students and non-first generation students separately. Findings held consistent with research question 1, EM-Regulation shows higher than any other motivational orientation for both first generation students and non-first generation students (see Figure 4).

Independent t-tests for each individual orientation was utilized to answer this research question, specifically to determine the mean and standard deviation as well as to determine if there were any cases of statistical significance between the correspondences of students at the four-year institutional level and students at the two-year institutional level. Since this question measured differences, if any, the corresponding research hypothesis and null hypothesis for this question is presented below.

H_0: There is no difference in the motivational orientations of these students by institutional type: two-year versus four-year.

H_A: There is a difference in the motivational orientations of these students by institutional type: two-year versus four-year.

For this question, each orientation was analyzed individually to determine any areas of statistical significance.

Intrinsic Motivation by Institutional Type

Table 8 summarizes the overall intrinsic motivation by institutional type for each of the motivational orientations.

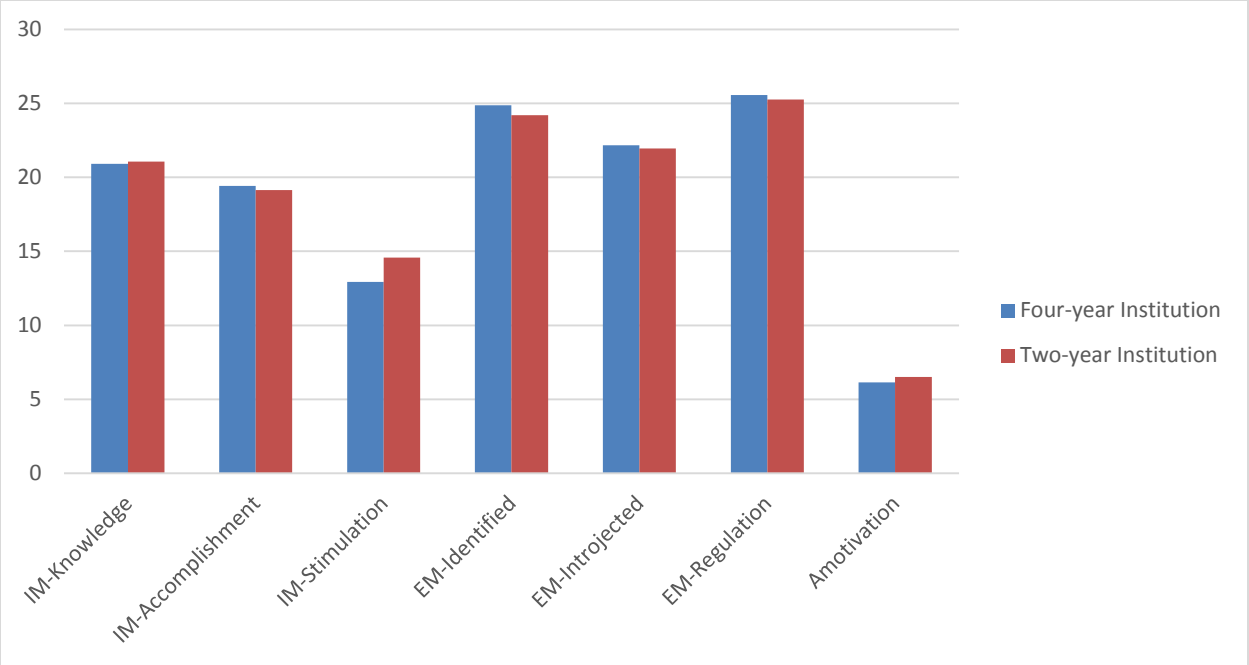

Figure 4. Motivational orientations by institutional type.

Table 8

Intrinsic Motivation by Institutional Type

Orientation	Four-year Institution (n=136)	Two-year Institution (n=247)	p-value
IM-Knowledge	20.91 (4.61)	21.06 (5.22)	.194
IM-Accomplishment	19.44 (5.20)	19.14 (5.80)	.059
IM-Stimulation	12.93 (5.38)	14.58 (5.78)	.295

The results reveal there is no statistically significant differences present in intrinsic motivation between students at the four-year institutional level and students at the two-year institutional level.

Extrinsic Motivation by Institutional Type

Table 9 summarizes the overall intrinsic motivation by institutional type for each of the motivational orientations. The results reveal there is no statistically significant differences present in EM-Identified orientation between students at the four-year institutional level and students at the two-year institutional level, however, statistically significant difference was found in EM-Introjected (p= .045) and EM-Regulation (p= .032).

Amotivation by Institutional Type

Table 10 summarizes the overall amotivation by institutional type. The results reveal there is a statistically significant difference (p= .041) in amotivation between first generation students and non-first generation students at the four-year institutional level and students at the two-year institutional level.

Research Question 4

Does any such difference in motivational orientations interact between generational status and institutional type? In order to analyze the possible interactions between motivational orientations and their interactions between generational status (first generation/non-first generation) and institutional type (four-year institution/two-year institution), this study utilized a two-way ANOVA analysis with interaction (see Appendix I). The two-way analysis is used to understand whether there is an interaction between two independent variables and a dependent variable. For the purpose of this specific research question, this analysis was used to determine if there was an interaction

Table 9

Extrinsic Motivation by Institutional Type

Orientation	Four-year Institution (n=136)	Two-year Institution (n=249)	p-value
EM-Identified	24.87 (3.42)	24.20 (3.64)	.342
EM-Introjected	22.17 (5.13)	21.94 (5.79)	.045*
EM-Regulation	25.56 (3.02)	25.08 (3.68)	.032*

Note. *p-value < 0.05.

Table 10

Amotivation by Institutional Type

Orientation	Four-year Institution (n=136)	Two-year Institution (n=249)	p-value
Amotivation	6.15 (3.37)	6.52 (4.37)	.041*

Note. *p-value < 0.05.

between generational status and institutional type (independent variables) and motivational orientation (dependent variable).

Since this research question measured differences, if any, the corresponding research hypothesis and null hypothesis is presented below.

H_3: There is an interaction between first generation status and intuitional type.

H_0c: There is no interaction between first generation status and intuitional type.

For this question, each subscale was analyzed and will be presented separately to determine any differences.

Interactions with IM-Knowledge

A two-way ANOVA with interaction was conducted that examined the effect of generational status and institutional type on IM-knowledge. There was no statistically significant interaction between the effect of generational status and institutional type on intrinsic motivation – to know *(F=.329, p= .567).* Figure 5 illustrates a lack of a statistically significant interaction between the two independent variables.

Interactions with IM-Accomplishment

A two-way ANOVA with interaction was conducted that examined the effect of generational status and institutional type on IM-accomplishment. There was no statistically significant interaction between the effect of generational status and institutional type on intrinsic motivation – toward accomplishment *(F=1.29, p=.256).* Figure 6 illustrates a lack of a statistically significant interaction between the two independent variables.

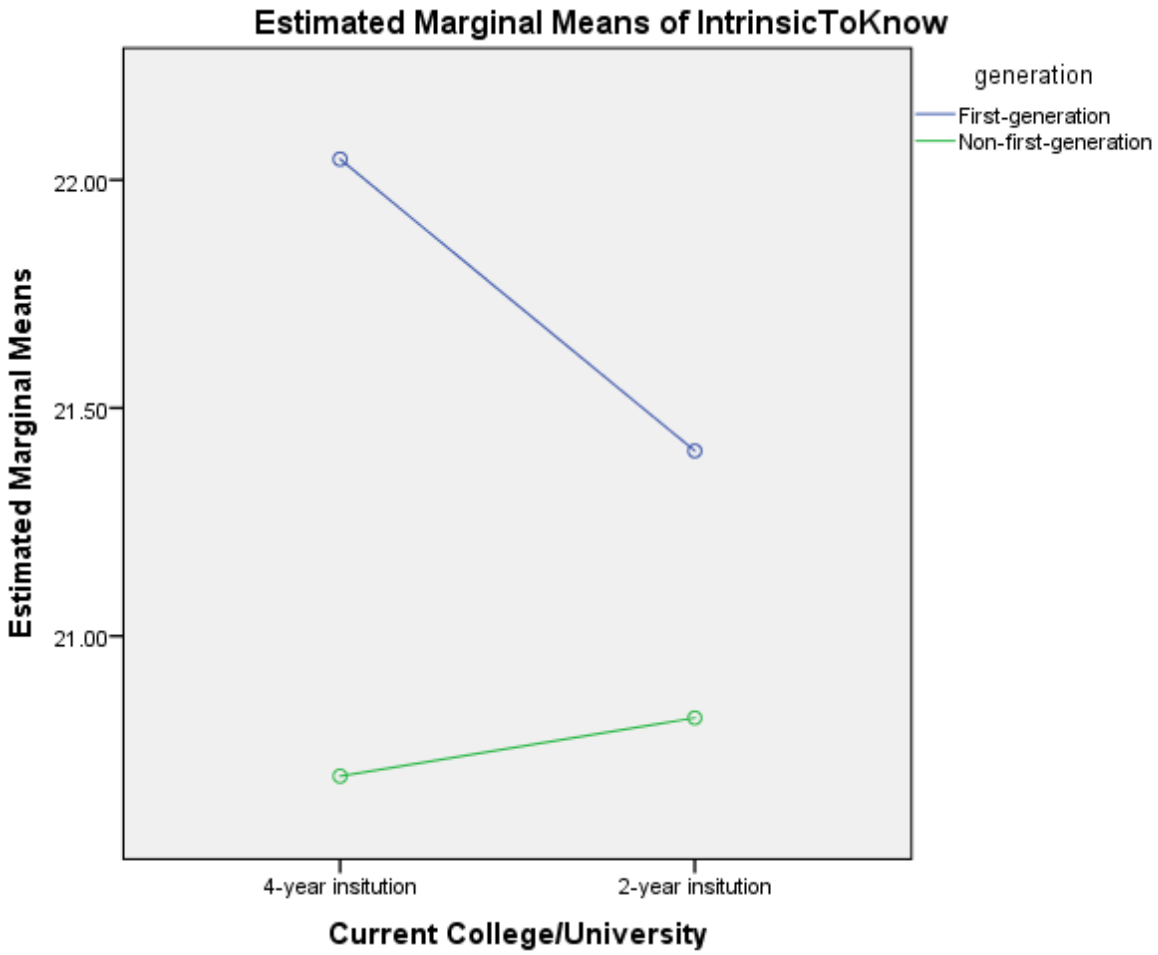

Figure 5. Two-way ANOVA plot for IM-Knowledge.

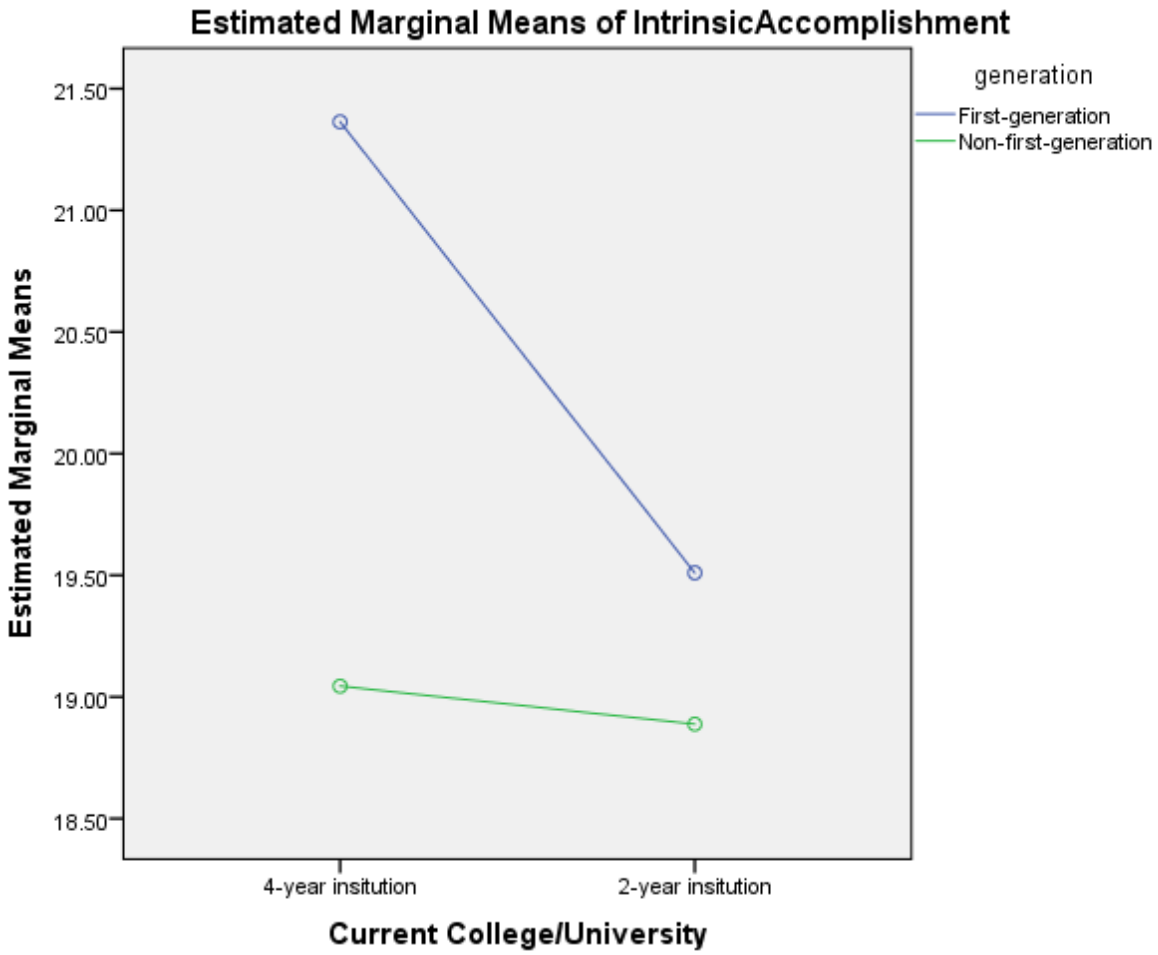

Figure 6. Two-way ANOVA plot for IM-Accomplishment.

Interactions with IM-Stimulation

A two-way ANOVA with interaction was conducted that examined the effect of generational status and institutional type on IM-stimulation. There was no statistically significant interaction between the effect of generational status and institutional type on intrinsic motivation – to experience stimulation *(F=2.626, p=.106).* Figure 7 illustrates a lack of a statistically significant interaction between the two independent variables.

Interactions with EM-Identified

A two-way ANOVA with interaction was conducted that examined the effect of generational status and institutional type on EM-identified. There was no statistically significant interaction between the effect of generational status and institutional type on extrinsic motivation – identified *(F=.441, p=.507).* Figure 8 illustrates a lack of a statistically significant interaction between the two independent variables.

Interactions with EM-Introjected

A two-way ANOVA with interaction was conducted that examined the effect of generational status and institutional type on EM-introjected. There was no statistically significant interaction between the effect of generational status and institutional type on extrinsic motivation – introjected *(F=.004, p=.951*. Figure 9 illustrates a lack of a statistically significant interaction between the two independent variables.

Interactions with EM-Regulation

A two-way ANOVA with interaction was conducted that examined the effect of generational status and institutional type on extrinsic motivation – external regulation. There was no statistically significant interaction between the effect of generational status and institutional

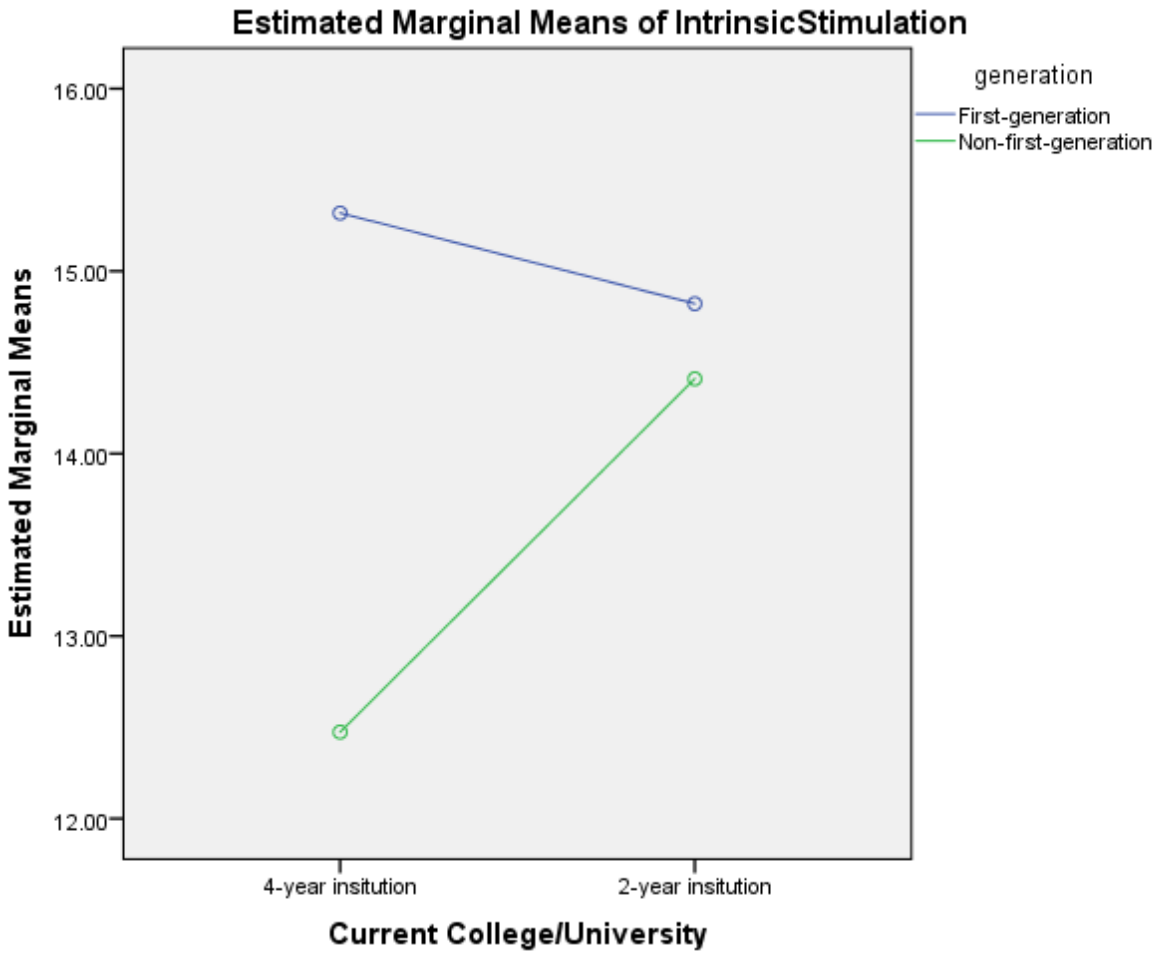

Figure 7. Two-way ANOVA plot for IM-Stimulation.

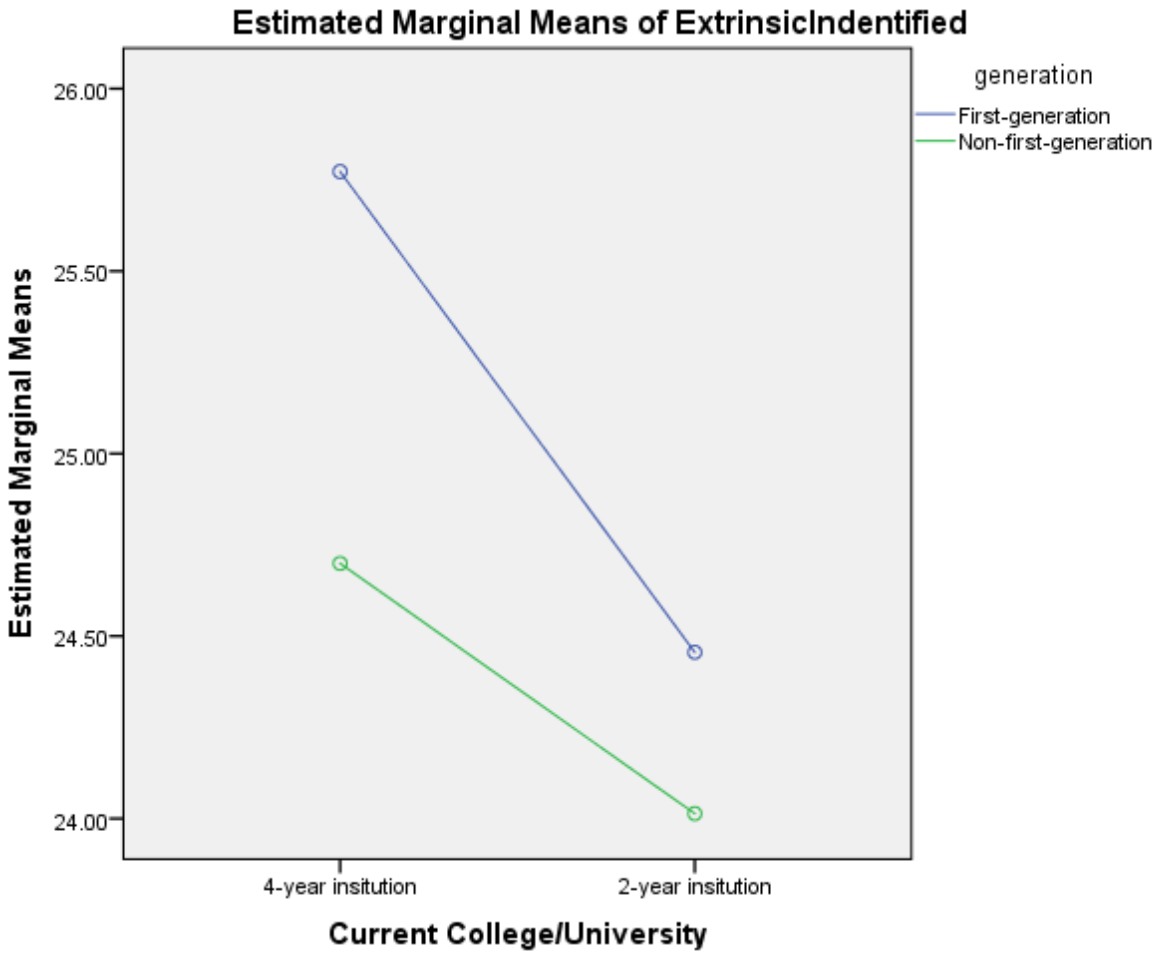

Figure 8. Two-way ANOVA plot for EM-Identified.

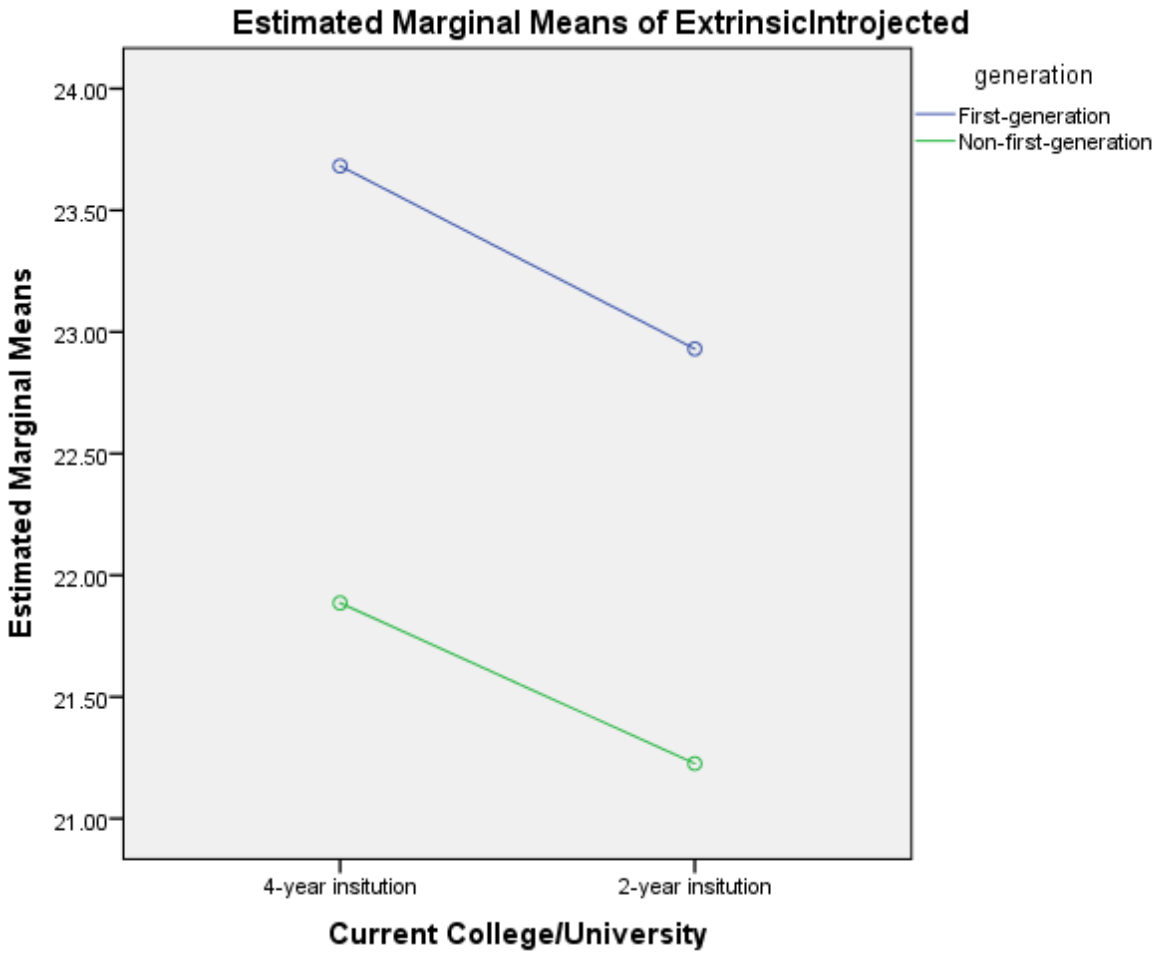

Figure 9. Two-way ANOVA plot for EM-Introjected.

type on EM-regulation *(F=.547, p=.460).* Figure 10 illustrates a lack of a statistically significant interaction between the two independent variables.

Interactions with Amotivation

A two-way ANOVA with interaction was conducted that examined the effect of generational status and institutional type on amotivation. There was no statistically significant interaction between the effect of generational status and institutional type on amotivation *(F=.442, p=.507).* Figure 11 illustrates a lack of a statistically significant interaction between the two independent variables.

Research Question 5

What factors do the students attribute to their overall motivational orientation? This question was addressed utilizing a descriptive qualitative interview approach. NVivo constructed over 100 codes utilizing the 14 transcribed interview transcripts. I took those codes and deductively coded the transcripts based on the literature review and the conceptual framework that guided this study. Utilizing this tactic, the over 100 codes generated using NVivo were broken down and 12 nodes, or factors, were generated. These nodes were arranged by the interview questions to be able to better present the information in a constructive format. Other forms of analyzing the data included pre-cycle coding, in which I read through each of the fourteen interviews transcripts and highlighted information which was paired with the 12 nodes generated through NVivo to confirm the existing factors. There were five focal interview questions asked in each semi-structured interview and the results were generated and presented below in order of identified node/theme.

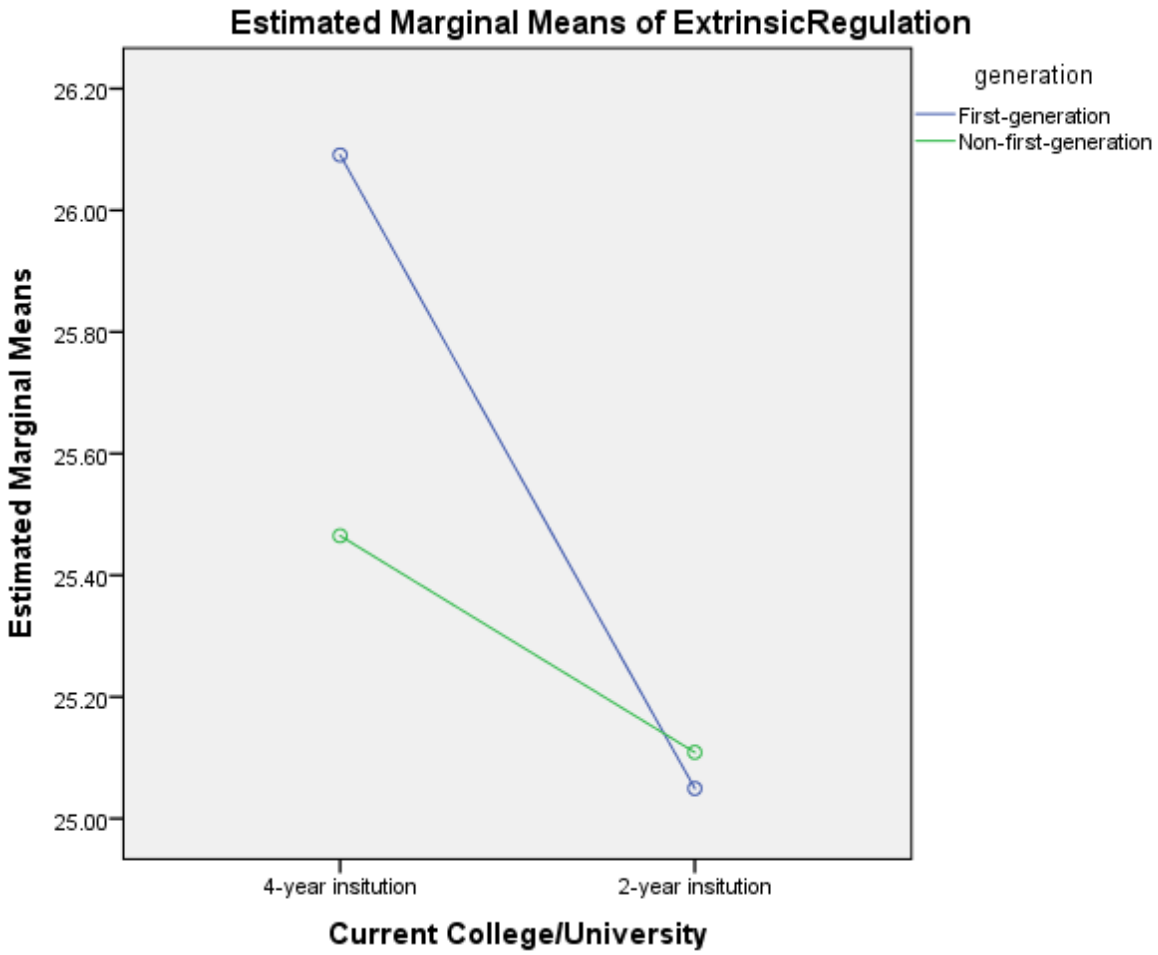

Figure 10. Two-way ANOVA plot for EM-Regulation.

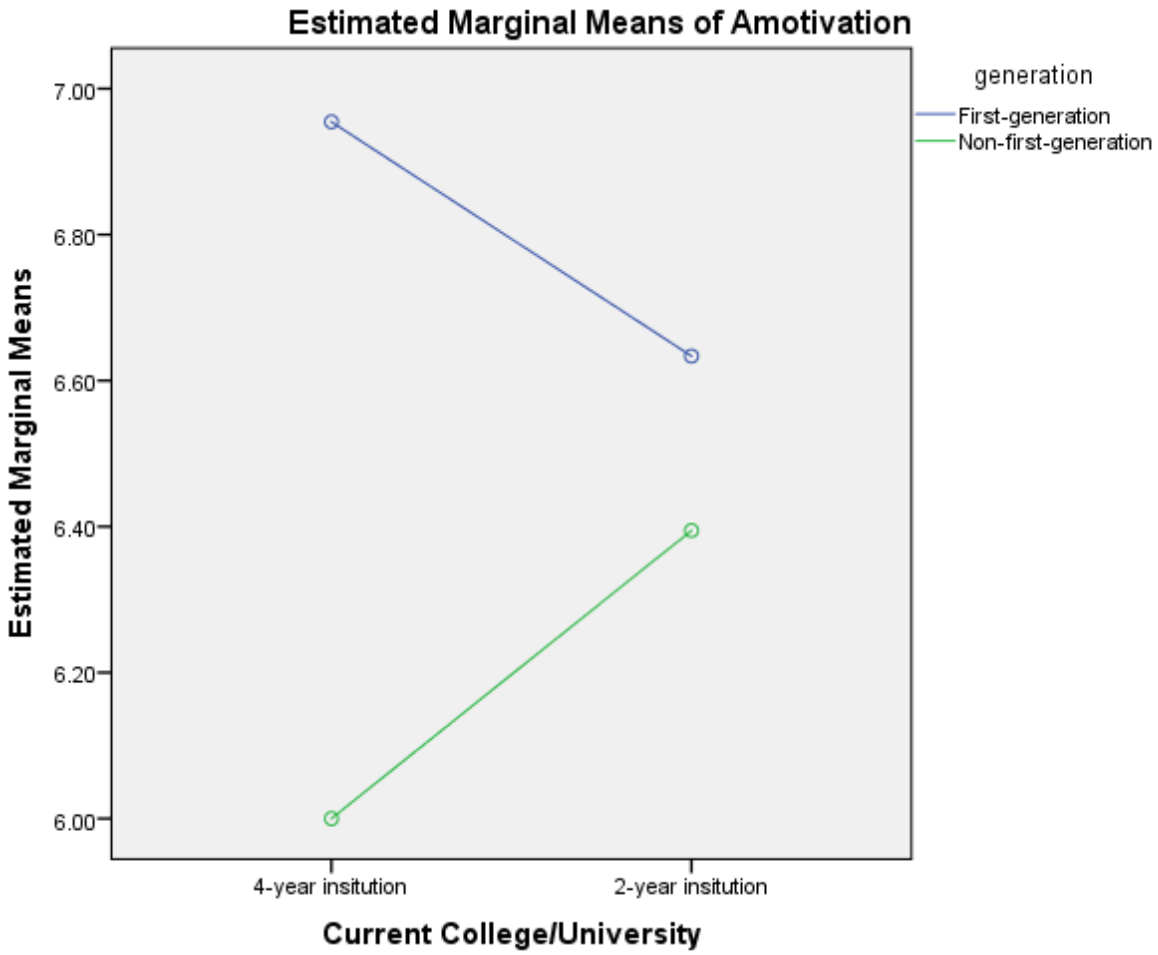

Figure 11. Two-way ANOVA plot for Amotivation.

Qualitative semi-structured interviews are considered "field research" (Babbie, 2007) that allows the students a chance to share their personal experiences and affords the responsibility of interpreting, analyzing and presenting the responses to the researcher (Warren & Karner, 2005). Consistent with the qualitative data analysis procedure of this form of field research, a total of 12 factors (see Figure 12) were derived from the data analysis as it relates to academic motivation; more specifically, how these factors relate to either hindering or promoting academic motivation among the students.

The 12 factors were determined to center on the concepts that were addressed throughout the interview and were guided by the literature review and conceptual framework which included: (1) Parental/Family influences, (2) Internal ambition, (3) Career focus/aspiration, (4) Adjustment, (5) Finances, (6) Internal struggle, (7) Time management, (8) Meeting new people, (9) Freedom/Becoming own person, (10) Campus environment, (11) Sports/Athletics, (12) Other influences. The details of each of the above factors are explained further in the following paragraphs.

Factors

Parental/Family Influences

The first question in the interview simply asked these students what motivated them to pursue their education as a way to get a sense of the factors that played into their decision making process. In speaking with the students about their motivation to pursue their education, 6 of the 14 interviewed expressed the motivation came from their parents/guardians or close family members. However, this influence forged itself in various forms. For example, students expressed:

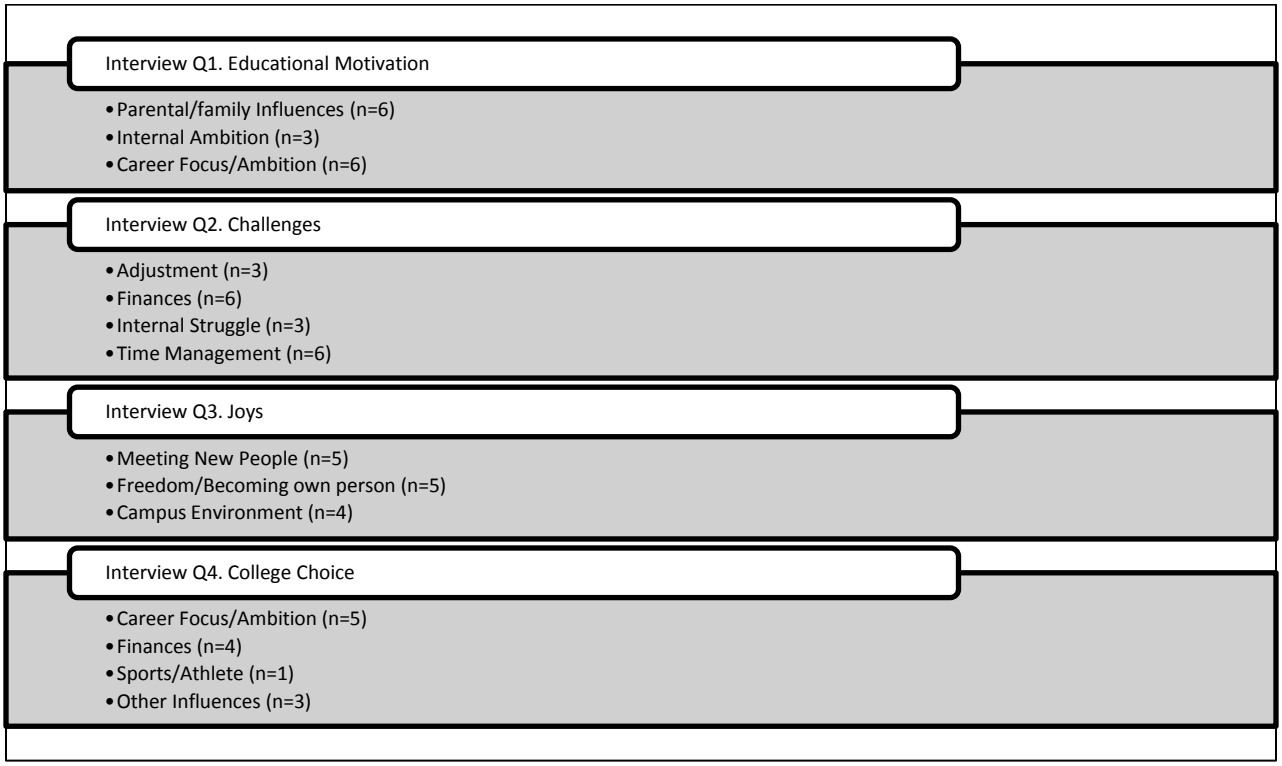

Figure 12. Factors within interview questions.

2y-Student 3: My parents had me at a very, very young age, and it was hard, hum, moving back and forth with my parents because my parents didn't have their lives together raising me. But the one thing both of my parents did tell me is that school is my way to do better for my life. They never wanted me to go through what they went through…I don't know how to do anything else to not have that life but to go to school. I want to learn so that's the way I was raised.

4y-Student 6: I think most of it was probably my family. So my parents are immigrations. They are from Cameroon. My dad has his PhD in business administration and my mom has her masters in social work. So I, them being like education driven, so they wanted me to kind of like have the opportunity to be here and get an education. So take advantage of it and not put it to waste. So when we go back to Cameroon to visit like family, it's like a lot of kids who don't have the opportunity that I have. I feel that while sometimes it's stressful, it might be stressful but I feel like that's probably most of my motivation.

Internal Ambition

Internal ambition falls in line with that of intrinsic motivation. Students who were interviewed expressed this internal ambition in various forms as to the leading factor in their decision to pursue their education, stating:

2y-Student 6: More so because everyone told me that I couldn't do it. I was diagnosed with Asperger's at a very young age and everyone told my mom that I would spend my entire life living at home not really making anything for myself. Hum, I wanted to pursue it because I felt like it was something that I could do and I had dreams and aspirations that I wanted to fulfill for myself.

Career Focus/Aspiration

This particular factor was expressed by several students across both interview question 1 (what motivated you to pursue your education?) and interview question 4 (what made you choose this institution? Was it your first choice, why or why not?). When interviewed, students expressed:

> 4y-Student 5: I would say just because I always wanted to be in the medical field since I was in the eighth grade and my dad is the medical field and I just realized that one I won't be able to get into the medical field if I don't get a good education.
>
> 4y-Student 1: No it definitely was not my first choice. I did not want to go to this four-year school at all. I really wanted to go to, well I went to a charter school in high school so a lot of people looked down on this four-year school as not being a prestigious college when that is not true at all. I mean they have one of the best nursing programs so when I decided that Nursing was going to be my major, this four-year school sort of made its way up there more.

Adjustment

Transition from high school to college can be exciting and stressful at the same time. Adjustment came up as a factor and students admitted that the adjustment to college, while a challenge, they have found a way to navigate through the challenge and press through. Students answered interview question 2 (What are some of the challenges you have faced so far in your educational journey?) stating:

> 4y-Student 1: Adjusting at the beginning for sure. I was really homesick, ready to come home. I was ready to just give it up, go home, go to State or a community college there or

something like that. Humph, because I just really missed my family, my own bedroom, my own personal space and my dog.

4y-Student 2: First semester, I thought skipping classes wouldn't affect my grade because it didn't in the beginning. But when it came down to finals, hum, finals were a lot harder than I thought they would be cause they weren't really, like the classes were easy but then the finals were difficult so my grades weren't as high and teachers were really willing to help me because I was like, my attendance wasn't good.

Finances

Finances continue to be an area of concern for many students. This particular factor was expressed in the interviews as not only an answer to college choice but to also the challenges faced, for interview question 2 (What are some of the challenges you have faced so far in your educational journey?) stating:

2y-Student 1: Well every college student is finances, paying for college.

For interview question 4 (What made you choose this institution? Was this your first choice, why or why not?), it was expressed:

2y-Student 3: No this was not my first choice, my original plan was to go to William Peace university but due to money I had a few scholarships to go there but I'm going to school to get my master's in business management so this was the cheaper route because like I said, my family had me when they were kids. So my mom and my dad never graduated high school. They dropped but then my mom went back to college after she had my sister. But she never got to go to the four-year school. She never got to do her masters. She never got to get into the nursing program because she had two kids to raise. So I decided to come to this two-year school because of money mostly.

2y-Student 6: It wasn't my first choice. I was actually accepted into an Art school in Durham. The problem there is that they were asking for a lot of money that I just didn't have.

Internal Struggle

This lack of preparedness can manifest itself in various forms and it becomes an internal struggle, a challenge to overcome. Students addressed this internal struggle in answering interview question 2 (What are some of the challenges you have faced so far in your educational journey?), saying:

2y-Student 5: I was originally planning on going to William Peace and that is a smaller school even then the high school I went too so it was challenging to be able to come to find a different environment. I was kind of expecting a different environment but when I visited I wasn't able to find what I was looking for. I kind of became depressed and for the first part of making the transition to college I found it hard. But when I had the opportunity to come here, hum, I liked wiped the slate clean and was like I will never let that happen again. You know that depression, and I have kind of pushed myself to not let my feelings get in the way of my school.

Time Management

Time management struggles is another example of how students can often times find themselves not as academically prepared for college as they would have thought. Several students expressed the challenge this factor has on their college experience in answering interview question 2 (What are some of the challenges you have faced so far in your educational journey?), saying:

2y-Student 3: I've had to really learn how to do time management. I've really had to take my time and buy a planner and sit down and schedule. Like I have a test today or I have something going on. Like I really break down and balance life where I have time for all full student credit hours stuff, you know.

2y-Student 6: I think it's time management. I know I have different classes at different time and its different work that I have to do instead of having four classes throughout the week in the semester and going to each class every single day like I did in high school.

Meeting New People

Social connections is an important factor within cultural capital, as such, developing new friendships and social connections is essential to the college experience. Students voiced this aspect of the college experience as being one of their most enjoyable experiences in answering interview question 3 (What are some of things you enjoy about your education journey up to this point), saying:

4y-Student 1: Making new friends, definitely for sure. The girls that live on the same hall as I do, we all became like best friends. And I think they helped my adjustment period, just knowing that I had like my own family to come back to here definitely helped.

2y-Student 5: I've met a bunch of new people through school and different environments and built relationships that I hope will last for much longer than I am in school. It's gotten me to be able to see that I am here for one reason so it's helped me to kind of lift myself up and to enjoy being here.

Freedom/Becoming Own Person

This freedom, and the transition from living and being under parental supervision, was expressed as being one of their most enjoyable in answering interview question 3 (What are some of things you enjoy about your education journey up to this point), saying:

> 4y-Student 2: I like finding myself. I know that might sound like super cheesy but like taking a step away from living under my like mom and like, I don't know and being able to make decisions on my own like, I don't know, like what I eat, like when I go to bed, and like when I study, like I don't have someone like telling me "you should go do that right now" like, like it's my choice and it's giving me a chance to kind of like figure out who I am as a person if that make sense.
>
> 2y-Student 1: You know I think it's more like the independence, I don't have to rely on mommy and daddy for everything. You know you go do your own thing.

Campus Environment

This factor can go a long way in promoting academic motivation. Students had this to say regarding the campus environment when answering interview question 3 (What are some of things you enjoy about your education journey up to this point),

> 4y-Student 3: I definitely like that atmosphere of the campus. It's very friendly and like if you have a question I feel like you if you have a question you can like ask anyone, that's another thing about being in the south that I like. And, hum, I've made a lot of great friends through like being in my dorm and stuff.

Sports/Athletics

Sports/athletics was not a theme explored in the paper, however, when asked about college choice, it was the answer in one of the student interviews. This opens up another point of

interest as there are researchers who focus on motivation in athletics (Braddock, Ly, and Dawkins, 2008). While this answer would have been expected from a student at the four-year institutional level, interestingly enough, the answer came from a student at the two-year institutional level. This is an interesting point as community colleges are not typically known for their athletic programs. The student answered interview question 4 (What made you choose your current institution? Was this your first choice, why or why not?) saying:

> 2y-Student 1: Well see I play softball here at this two-year school so the reason, really the only reason I'm here is because of softball because when I was looking I started the recruiting process my sophomore year of high school and it was down to a couple of colleges and the reason I chose this two-year school is because it's a two-year and basically I didn't want to commit to a four-year softball program when I can commit to a two-year program so that's really the only reason I chose this two-year school. So it was more athletic than anything.

Other Influences

There were other influences that could not be broken down into the factors addressed in the literature review and conceptual framework, however, they were important to add depth to the conversation of academic motivation in first-time, first-year freshman. Each addressed the interview question 4 (What made you choose your current institution? Was this your first choice, why or why not?), in what informed their college choice. One student visited with friends and another just didn't feel right at their first college of choice. Both were motivated to attend their current four-year institution and could not be excluded. The students voiced:

> 4y-Student 5: Originally no, I didn't even really know about this school that much. My friend that goes here and is a sophomore here now told me about it. I play ice hockey

with him at home and I came and visited. A four-year, I've always wanted to go to a four-year to get away from home really but I never really had a first choice I was looking at Maryland, Townson and here but those two are in Maryland and I was like well, I really liked this school, I visited it twice, maybe three times, twice, like one by myself with a friend, one with another friend that goes here now visiting that same kid and my parents wanted to come see it.

Interview Question 5

Is there anything you feel you need to add/share that is important to understanding the motivation behind you attending college? An important piece in the conversation of academic motivation is student perception of what motivates them, in their own words. The first part of this study provided a quantitative account of how students are motivated. However, the second part of this study was purposefully created in a way to bring in the student voice regarding their individual perspective of motivation and how motivation plays a role in their educational journey. Below are the responses from each student interviewed to begin to bridge the gap in that missing piece in the literature. A word cloud was created to represent the responses from interview question 5 to provide a visual examination of the data presented. It is represented in Figure 13.

4y-Student 7: I think different things can motivate you and you can find like motivation in almost anything every day. I mean like different people motivate me throughout my day. It could just be a friend, I mean it could be Mother Teresa, she motivates me. And I mean different songs motivate me, quotes and I think it's good to have motivation and inspiration to encourage you not to give up.

Figure 13. Word cloud for interview question 5 (created in Nvivo).

4y-Student 6: I think like motivation. I mean everyone is different, but with motivation it's like your will to do something. I think everyone is motivated in different ways but for me, those are the ways I am motivated to want to accomplish stuff. I want a better life for me and my future family so those are the kind of things I'm looking at. I feel like I look down towards the future maybe a little too much. I think I worry about that a lot and I think that's where my motivation comes from. I know if I want to what I want in life and the future I know I can't, this moment now counts so that's how I kind of see motivation.

4y-Student 5: When I look at what I need to do in the future it motivates me to study harder. I see the grades that other kids are getting to get into PT school and PA school and I'm like I really need to stay up there. I don't want to let myself slip and like when I go home I usually work in an office this past break and I'm going to work there over the summer too in a PT office and I don't know, like seeing them motivates me to work harder to get there myself.

4y-Student 3: I think the big thing is in our society we are veered like to go get a higher education now a days. Cause typically, like, the simpler jobs its like not necessarily good, like looked down upon in a way… people are sometimes forced to get a higher education to get out of like a worse situation and there is a lot of scholarships and things offered to students now to get that higher education.

4y-Student 2: So, my father went through, he went and got his four-year degree from State and then he got his master's at Wilmington and he worked at like Duke Energy for like fifteen or twenty years. I mean, he worked a long time there so it was just always like seeing him succeed in life based on college. My mom on the other hand, she didn't go through any college. She went to work straight out of high school and then she met my

dad. They both happened to be working at the same place but he like kept progressing and they got married and whatever but she has never gone through college. And it's not like she didn't succeed but like she was the stay at home mom and I just want to be like someone who can carry my family. I kind of want to be like my dad, so I just want to follow in his footsteps.

4y-Student 1: Motivation. I think nursing school itself is a huge motivation factor because it is so competitive. So once I got into college that was like my ultimate goal for my family and I and then when I got in it's like I still have more to work towards which is getting into nursing school because it is so competitive. That's kind of my motivation right now, to get good grades, to have a good GPA, to not get in trouble, to have school as my main focus.

2y-Student 7: I think what motivated us and like being freshmen coming to college you are expecting more than high school. You are always told that college is something that you have to serious about because if you don't you won't be there long so being serious and staying on top of things and keeping focus in enough motivation to keep me successful hopefully.

2y-Student 6: I guess motivation for me is the willingness to be here. If I really didn't want to be here I probably won't be here. I'm striving to better myself as an individual and continue learning to make myself a better person.

2y-Student 5: I just think you have to stay motivated if you want an education. It's not an easy thing. A lot of people think just coming to a community college it like oh that's easy or whatever. But it takes determination. Its takes wanting to get up when you live an hour away every day and drive and come and take your classes and make good grades

and study hard. If you don't you're not ever going to be able to move to really succeed. I mean, you can succeed with other things but being motivation to further your education will go a long ways to furthering your career choices and your options. And kind of broadening it so that you have a bigger safety net if something happens the way you don't want it to.

2y-Student 4: I really just want to be able to have a good life. I want to be able to provide for my kids good, to make sure they have everything that I had as I was growing up and with college I can get a good job.

2y-Student 3: I feel like I really want to live a luxurious life, is that bad? I feel like I want to just like be able to spend money one day and not worry about my bank account like ah don't worry about it I got it here's dinner on me. I mean I just want to have big dreams and I feel like the only way to accomplish them is to get through school.

2y-Student 2: I am an expensive girl. I need a good job, hum, something that pays well. And really I feel like there's nothing out here that's going to get me that if I don't come to school. And my mom… She letting me know she is not going to be taking care of me so I have to get out here and do what I need to do.

2y-Student 1: My future goal is law school. And I mean I am the type of person that when I make a goal I am trying, I want to achieve that goal. And then like I said my mom had and associate and dad didn't go past high school. So you just want to make them proud because through my own life they have been pushing me as like their daughter and you just want to fulfill something to make them proud.

Summary

This sequential explanatory study presented an opportunity to explore academic motivation of first-time, first-year freshman at across a four-year higher education institution and a two-year institution utilizing both quantitative research methods and qualitative research methods in an attempt to provide a descriptive analysis of motivation between self-identified first-generation students and non-first-generation students. The findings revealed students within the study showed a trend of higher levels of motivation moving down from EM (descending from regulation, to identified, then to introjected), to IM (descending from to know, to toward accomplishment, and then to experience stimulation), with amotivation being the lowest indicated levels. This trend was consistent across student demographics. There were, however some differences by institutional type. While there were no statistically significant differences present in EM-Identified orientation between students at the four-year institutional level and students at the two-year institutional level, statistically significant difference in EM-Introjected and EM-Regulation were found. In addition, differences in amotivation between first generation students and non-first generation students at the four-year institutional level and students at the two-year institutional level, no other statistically significant differences between groups were found.

Qualitative data analysis revealed 12 factors contributing to student motivation. They were: (1) Parental/Family influences, (2) Internal ambition, (3) Career focus/aspiration, (4) Adjustment, (5) Finances, (6) Internal struggle, (7) Time management, (8) Meeting new people, (9) Freedom/Becoming own person, (10) Campus environment, (11) Sports/Athletics, (12) Other influences. The next chapter will expand upon the findings from both the quantitative and

qualitative analysis as well as provide interpretations, implications of the study, and recommendations for future action.

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This final chapter will provide a summary of the previous chapters included in this study as well as an in-depth discussion of each research question that guided this study. To that discussion, interpretations of the data will also be provided as the quantitative and qualitative data information were both presented in separate sections, a verbal account of what the data could possibly mean will bridge the gap between the two methods. This chapter will end with implications of this study and proposed future directions for this research.

Discussion

Interpretations of Research Question 1

Research question 1 (what are the motivational orientations of first-time, first-year college students overall) attempted to identify the motivational orientations of the students who participated in the study. The AMS identified 7 motivational orientations a student could score. With a range of 4-28 for each motivational orientation, students in the study overall showed higher levels of the motivational orientation, EM-Regulation with the lowest motivational orientation of the students being Amotivation.

The literature review defines EM-Regulation as acts that occurs when an individual performs a task either to reach a positive end state or to avoid a negative end state but the end state is separate from the task itself (Deci & Ryan, 1985; Vallerand & Ratelle, 2004). Existing literature recognizes extrinsic motivation or lower-levels of self-determined motivation (like the items listed above) as performance goal orientations and associates them with higher levels of negative educational outcomes. Researchers have also posited that students begin their first year of college with higher levels of intrinsic motivation. Students who are intrinsically motivated are considered to have higher levels of self-determined motivation with intrinsic motivation

associated in the literature with higher levels of positive educational outcomes (Ames, 1992; Ames & Archer, 1988). This study found higher levels of extrinsic motivation in all three subscales for student comparison groups (students at the four-year institutional level, students at the two-year level, males, females, White/Caucasian students, Hispanic/Latino students, Black/African American students, Native American/American Indian students, Asian/Pacific Islander students, Bi/Multiracial students, students who identify as Other, first generation students, and non-first generation student). External factors of job/career aspirations play a bigger role in what is motivating students to attend college and with those factors accepted as associated with higher levels of negative educational outcomes, more research needs to be conducted to further explore this trend. While the students are still classified as extrinsically motivated, their orientation differences and the value they attach to each individual still needs further exploration. If researchers and practitioners looked solely at the extrinsic motivation level alone, that additional piece would be missing. Programs and initiatives set to increase a student's motivation cannot be successful if the program/initiative do not take into account the different degrees to which individuals are motivated and even the differences in the student body in how students are motivated. This question was designed to bring attention to that piece of the conversation as well as begin to identify exactly how students are motivated and begin to look at those differences more closely. With students identifying as more extrinsically motivated than intrinsically motivated, this allows for deeper conversations surrounding why students are coming to college now and where those differences stem from. The first step to these deeper conversations is identification. For example, exploring what the average motivational orientation for males at the two-year institution and seeing if it differs for females at the two-institution, this is something this study did not aim to research. Layering the data can potentially provide for

more in-depth analysis and can possibly yield motivation specific programs/initiatives that target certain student populations and tailor to their individual motivational needs.

Interpretations of Research Question 2

Research question 2 (is there a difference in the motivational orientations of these students by first generation status), attempted to identify the motivational orientations specifically of first generation students and identify if those differ from the overall motivation of first-time, first-year freshman. First generation students showed higher levels of motivation in each orientation expect EM-Regulation. This shows that first generation students are more intrinsically motivated than non-first generation students, however, there are instances in which first generation students does show higher levels of extrinsic motivation and amotivation. There were no statistically significant differences in the responses in each individual category between first generation students and non-first generation students.

Understanding even these small differences can be utilized in the classroom setting as a motivational tool to engage and motivate first generation students more. Without analyzing the differences in motivational orientations, pieces of information specially targeting improved ways to motivate first generation students could be overlooked. This question sought to highlight those pockets of information to add to the conversation surrounding motivating first generation students and how that differs from motivating non-first generation students.

Interpretations of Research Question 3

Research question 3 (is there a difference in the motivational orientations of these students by institutional type), attempted to identify the motivational orientations between the two institutional types and identify if those differ from the overall motivation of first-time, first-year freshman. Students at the four-year institution showed higher levels in the motivational

orientations identified as: IM-Accomplishment, EM-Identified, EM-Introjected, EM-Regulation while students at the two-year level showed higher levels in the motivational orientations: IM-knowledge, IM-Stimulation, Amotivation. This shows that students at the four-year are more extrinsically motivated than students at the two-year institution. There were statistically significant differences in the responses between the students in the orientations of EM-Regulation and EM-Introjected with students at the four-year showing higher levels in both orientations.

An understanding of these differences can be utilized to enhance motivation efforts targeted at both four-year institutions and two-year institutions even at the institutional level. Having the literature to support what motivation looks like for incoming freshman and having the statistical data can go a long way to improving the motivational outlook for freshman classes no matter the institutional type. This question sought to highlight those pockets of information to add to the conversation surrounding motivating first generation students and how that differs from motivating non-first generation students. The common assumption in the literature is that students are more likely to be internally, or intrinsically, motivated their freshman year (Jurisevic, 2012); however, the results of this study from the 385 students surveyed is showing a trend of freshman students being extrinsically motivated. Identifying this trend can begin the conversation to start understanding what is causing this shift of motivational orientation. This is also identified as an area for future research.

Interpretations of Research Question 4

Research question 4 (Do any such difference in motivational orientations interact between generational status and institution type), attempted to build off the data from the previous three questions to see if there were any interactions between the groups of students

presented in the study. By interaction, this question sought to see if either generation status or institutional type had a direct effect on the motivational orientation the students responded too. After the data analysis was run, the data showed no such statistically significant interaction is present after utilizing a two-way ANOVA analysis. Therefore, the null hypothesis was accepted for this question. This is not the end of the conversation. One thing to point out is that sample size was not met in this study and the ratio of both first generation students to non-first generation students and students from the four-year institution and students from the two-year institution was about 1/3 to 2/3 so a 50:50 ratio was not met. However, this is also another area for future research. It may prove beneficial to rerun the survey in an attempt to reach sample size to see if any differences arise.

Interpretations of Research Question 5

Research question 5 (what factors do the students attribute to their overall motivational orientation) was designed as the only qualitative question within the study. This question attempted to present an important piece in the conversation of academic motivation, the student perception of what motivates them, in their own words. To be able to add the student voice, semi-structured interviews were conducted with 14 students across both the two-year institution and the four-year institution with both first generation students and non-first generation students included. The 12 factors that were identified throughout the interviews: (1) Parental/Family influences, (2) Internal ambition, (3) Career focus/aspiration, (4) Adjustment, (5) Finances, (6) Internal struggle, (7) Time management, (8) Meeting new people, (9) Freedom/Becoming own person, (10) Campus environment, (11) Sports/Athletics, (12) Other influences. The SDT is used throughout educational research as it not only addresses and defines the various motivational levels and orientations, but it also explore factors that either hinder or promoted academic

motivation in both positive and negative ways. The 12 factors identified throughout the interviews are all influences to motivation, however, the impact of the influence is determined on an individual basis, as seen in the interview responses. Existing literature identify many of the factors explored throughout the interviews as factors that can enhance or hinder a student's motivation both in and out of the classroom. Forbus et al. (2011) and Hahs-Vaughn (2004) posit that increased parental level of involvement in their child's education promotes positive academic success while Nunez and Cuccaro-Alamin (1998) and Pike and Kuh (2005) link increased engagement on campus to positive academic success. As seen in the literature review, researchers have shown that parental level of education has the greatest influence on whether a student attends college or not and researchers have also drawn the connection to the struggle first generation students experience to their parental level of education.

In addition to parental influence, campus environment played a factor into students' overall college experience. Researchers have suggested that first generation students are less integrated in the college environment; however, this is also seen with two-year students as well. The four-year campus has more a more active environment that can engage a student and keep a student present longer, for example the dorms. Researchers have also posited a positive link between engagement on campus and level of academic engagement (Pike & Kuh, 2005). Likewise, having a newfound sense of freedom was also discussed as a positive motivational factor. Within the self-determination theory (SDT) of motivation, the concept of freedom and the process wherein a person takes on the journey to understanding their freedom is expressed. Within the free will vs determinism argument, researchers argue if our actions are to be seen of our own free will or pre-determined by outside factors (Wehmeyer et al., 2003). The journey from one side of the argument to the other can be an exciting one as one's motivational journey

also takes a shift. If you feel your actions are pre-determined, your motivation to do certain tasks may appear along the lines of one motivational orientation, however, if you begin to shift to thinking free will, or rather you have the freedom to make your own choices, you may see your motivation shift. As students transition from high school to college, there is a certain level of freedom that comes with that transition. For students at four-year institutions and certain two-year institutions, that freedom is also enhanced as one moves from living with their parents/guardians and gets their first taste of living on their own.

On the opposite spectrum, worries about finances (Warburton et al., 2001), doubts about academic skills (Dennis et al., 2005; Forbus et al., 2011), and difficult transitioning and adjusting to the new environment (Prospero & Vohra-Gupta, 2007) are factors that has been seen to hinder positive academic outcomes. As expressed in the literature review, many students struggle in various ways once accepted to college. Some students are not academically prepared for college so they struggle to adjust and work their way through the system (Swail et al., 2003). The literature posits that many students make their college selection based of their financial needs and concerns, as well as needing to make a choice that will allow them to stay close to home or even continue to stay at home while they are in school (Nunez & Cuccaro-Alamin, 1998). These factors can make it difficult for students to reach the level of academic success they aspire to.

Researchers have suggested that first generation students have lower levels of career aspirations than that of their non-first generation counterparts (Bui, 2002; Dennis et al., 2005; Elkins et al., 2000; Forbus et al., 2011; McConnell, 2000). Interestingly enough, career focus/ambition was a factor that was addressed in both motivation to pursue college and college choice interview questions as well as the highest motivational orientation within the survey questions. Researchers posits that lower career ambitions (an extrinsic motivation factor) is

linked to negative educational outcomes (Bui, 2002; Dennis et al., 2005; Elkins et al., 2000; Forbus et al., 2011; McConnell, 2000). Within the study population, students show high levels of career ambitions and these higher levels from the survey results are echoed throughout the interviews. Intrinsic motivation is one of the key motivational concepts focused on in this study. Intrinsic motivation, often types seen as the internal forces (satisfaction, pleasure, interest, enjoyment) that push us toward an activity, is accepted as the motivational concept most linked to higher levels of academic success. However, the trend in this study for these students showing higher levels of extrinsic motivation, one could question what this will mean for their academic achievement. Questions do arise from theory to practice, does this trend mean these students are set up for lower levels of academic achievement from the beginning of their academic now as opposed to generations before, does this mean shift in how extrinsic motivation plays a role in academic achievement, are there ways to make a student more intrinsically motivated as a way to increase academic achievement? With the economic challenges we continue to face on a day to day bases, individuals are no longer seeking education for pleasure and satisfaction, but rather out of necessity to secure a better future. Does this shift to more extrinsic reasons for attending college mean students are going to be less successful than the students who are in college for those internal rewards? Even more specifically, this does cause one to revisit the very definition of academic success and achievement.

Implications and Future Directions

As higher educational leaders continue to grapple with the economic state that constantly shape the wellbeing of higher education institutions both nationally and internationally, tackling issues such as identifying the factors that motivate first generation students to return to their institutions will become increasingly important as leaders search for innovative ways to increase

retention from semester to semester. With the higher education system in the United States viewed as one of the most open organizational systems to date, there continue to be critical issues that require effective leadership to build a strong foundation for success (Sandeen & Barr, 2006; Swail et al., 2003). While there are several limitations to this study, there are also many opportunities present for future exploration of the link between the factors that motivate students and student retention. For instance, while this study will specifically look at first generation students upon their return following their first semester, the study can be expanded to compare motivational factors among first generation students and their non-first generation student counterparts to explore any differences. Overall, this study is designed to expand upon the existing dialogue surrounding first generation students and the relationship between motivation and student achievement and persistence while also exploring possible links not previously discussed.

The results from the research questions also presented areas of future studies on this topic. Research question 1, while it sought to identify the overall motivational orientations of first-time, first-year students, additional research can be conducted to review the various layers within the demographics represented to further identify motivational levels. While this study explored the motivational orientations of students by institutional type, by gender, by ethnicity, and by generation status, further research can be done to identify, for example, the motivational orientation of males overall at the two-year level, and then layer those results by ethnicity. This would add even more depth to the existing literature. Also, the results of the study revealed that the students within this study are more extrinsically motivated. As the literature review shows researchers posit students are more intrinsically motivated their freshman year of college, further

research could be conducted to see if the trend found in this study can be found in other populations of students.

Research questions 2 and 3 looked specifically at students by generational status and by institutional type and found only a few areas of statistical significance. While neither institutional type nor generational status was shown to have an overall statistically significant difference in motivational orientations, the areas of statistically significant difference by gender. Exploring motivational orientation by gender may prove to be another area of interest based on the data results from this study as well. The limitations presented in this study narrowed the research parameters. Broadening out the research parameters to include region as a demographic identifier, or even adding more two-year and/or four-year institutions to the study can also prove to deepen the conversation surrounding motivational orientations of first-time, first-year students.

Recommendations

While there are certainly other areas to explore, faculty, academic advisors, and student affairs staff can incorporate these findings into academic and parent curriculum programming in order to assist students in developing intrinsic motivations. First, this study showed a statistically significant difference in how first generation students are motivated towards activities that involved reading, showing higher levels of intrinsic motivation. This finding supports shared reading activities across campuses and accompanying events such as author book tours, signings, and group discussions among students, faculty, and staff. To further utilize this, these common reading activities can be incorporated into the first year curriculum beyond student success courses, including into areas such as mathematics and the natural sciences with students are less likely to be intrinsically motivated.

Second, with further research into the student population of first generation students, administrators can look to ways to incorporate those motivational differences in creating programs/initiatives both in the classroom and outside the classroom that target how students are academically motivated. As the literature review indicated that freshmen students are historically more intrinsically motivated, the results of the students in this study show a trend of being more extrinsically motivated. With efforts coming out of the National Governors Association and other groups emphasizing the instrumental benefits of education - education for career readiness - it may behoove administrators to emphasize the joys of learning for knowledge sake and kindling internal student passion for various academic disciplines. Through this love of learning, students will willingly, as opposed to begrudgingly, become the lifelong learners needed in today's ever changing global economy and technological environment.

A third and final recommendation is to continue the research into understanding the differences in how students are motivated and continuing to compare how motivation can and does differ across various demographic identifiers, but using more of the student's voice to guide the understanding. When we can gain a more granular and organic sense of how students are actually motivated, curriculum and paracurriculum programming can be adjusted accordingly.

Study Limitations

Several limitations within the study were presented upon implication of both the quantitative and qualitative phases. First, upon receiving final IRB approval from the four-year institution, it was challenging gaining access to COAD 1000 classes to administer the survey. The survey invitation email was sent to 72 professors to which only 11 professors responded to the email. Therefore the first limitation to the study was timing. Since IRB approval was not received until the end of the semester, many professors were near the completion of their

teaching semesters and many professors were no longer holding regular class hours as students were given opportunity to prepare for final exams. While the response rate of 11 professors yielded 137 completed surveys, the sample size was not met. Secondly, due to internal campus policies, IRB approval for the 2-year institution could not be granted until final IRB approval from the 4-year institution was obtained. This also presented a limitation of timing. The 2-year institution worked diligently to schedule me access to as many of their ACA 122 classes as possible and the institution as a whole welcomed this study with open arms. I was able to be schedule for 8 classes and yielded a total of 265 completed surveys as the professors were much more open to allowing me access to their classes, yet sample size still was not met for this institution.

Third, in scheduling the interviews for the qualitative phase, the quantitative phase yielded a low response of amotivated students. The students who did identify as amotivated based on their survey results either did not return to their institution the following semester or they answered no to the follow-up interview question. Having their voice present in both the quantitative and qualitative phase would have provided a more well-rounded study, but as the nature of these students is to question the educational experience and their presence in college, it is understandable to see the difficulty in capturing their perspective in the qualitative phase.

Lastly, scheduling the interviews also presented a limitation. The initial design was to interview one student from each institution from each of the motivational orientations, however, with disconnected phone numbers and undeliverable email addresses, I found myself switching strategies to focus on saturation among the two institutional types and generational statuses as opposed to seeking out an equal representation in motivational orientations. While this led to

almost a 50:50 ration among institutional type and generational status, the same cannot be said for motivational orientations.

Summary and Conclusion

First generation students are a growing body in the overall student population enrolling in both public two-year higher education institutions and public four-year higher education institutions in the United States; yet, little research has been conducted to examine the initial motivational orientation of these students as they start their academic journey. Even less research explores motivational differences among students both first generation student and non-first generation students enrolled in public two-year institutions in comparison to students enrolled in public four-year institutions. Existing literature reports that as of eight years ago, the percentage of two-year students who completed a degree within their first six years was 38.1%. This is comparable to the 39.8% of four-year students who completed their degrees in four years. Over the past eight years there has been more higher education policy conversations discussing access to higher education paired with discussions of how long it takes students to complete their degree once they have been enrolled. One small piece in the conversation of higher education attainment and persistence is that of motivation. While researchers posit that one of the most important predictors of college success is that of parental level of education, there are those students (first generation students) who are the first to obtain a college degree in their families. What motivates them to succeed and does that motivation look different from those who are not first generation students? There are various researchers who look specifically at motivation in students and researchers posit that students start their educational journey with higher levels of intrinsic "or internal" motivation than extrinsic motivation. Is this the same for first generation students? Is

this the same for students at the two-year institutional level? And if it's not, what are the differences? These are the questions that sparked this research study.

Self-determination theory is widely used in educational research to explore motivation among individuals and the factors that both enhance and decrease motivation in students. It is an effective theory in identifying a student's motivation towards education based on the three motivational orientations including intrinsic motivation, extrinsic motivation, and amotivation. Motivation is important as there is a positive correlation between higher level of self-determined motivation (expressed as intrinsic motivation) and higher levels of academic achievement. The purpose of this sequential explanatory study presented an opportunity to explore academic motivation of first-time, first-year freshman across a four-year higher education institution and a two-year institution utilizing both quantitative and qualitative research methods in an attempt to provide an analysis of self-determined motivational orientations between self-identified first generation students and non-first generation students.

There were a total of 385 students included in the quantitative phase of the study and 14 students in the qualitative phase. Quantitative data analysis indicated first-time, first-year students on average are more extrinsically motivated with both student groups scoring higher averages in the extrinsic motivation – external regulation orientation than either of the other six orientations identified with no statistically significant difference present. Qualitative data will be collected via 14 student interviews provided a descriptive exploration of the motivational factors that influence academic motivation yielding 12 identifiable factors which included: (1) Parental/Family influences, (2) Internal ambition, (3) Career focus/aspiration, (4) Adjustment, (5) Finances, (6) Internal struggle, (7) Time management, (8) Meeting new people, (9) Freedom/Becoming own person, (10) Campus environment, (11) Sports/Athletics, (12) Other

influences. An understanding of the differences between the motivational orientations and the factors that influence that motivation could inform the development of specialized programs for students identified with lower levels of self-determined motivation, and potentially increase overall academic achievement.

Reflections from the Researcher

At the very heart of this study is the question someone once asked me, "why are you in college?" Surprisingly, I could not give that person an answer then but today I can say I am here because someone once told me that I would never obtain a 4-year degree so I should just go to work straight out of high school. I did not realize then how much it affected me and upon reflection I have pursued my education to prove to them that they were wrong about me. That is classified as extrinsic motivation, an external force that drives my will to complete a task. But that one question sparked my interested in studying what motivation looks like for college students. As a first generation college student myself, I can relate to the difficulties, the challenges and the joys that population of students face. In reading through the literature, I read over and over how intrinsic motivation is linked to higher levels of academic success, but I am here and I made it through two degrees, so am I not counted as successful because I had an external drive pushing me? To me, growth comes from challenging what is commonly accepted and pushing past what is considered normal. The path has not been easy but well worth it. This study started with a question, and in turn, provided me a small space to ask 385 the very same question to better understand what academic motivation means for first-time, first-year students in 2016-2017. The results show that for those students, career focus/ambition is their driving factor, that they are extrinsically motivated. And while this is different from what the research

literature says they are, at least for these 385 students, they survived their first semester of college, came back for a second semester and if for nothing else that is success, at least for them.

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APPENDIX A: ACADEMIC MOTIVATION SCALE: COLLEGE VERSION (AMS-C 28)

Robert J. Vallerand, Luc G. Pelletier, Marc R. Blais, Nathalie M. Brière, Caroline B. Senécal,

Évelyne F. Vallières, 1992-1993

Educational and Psychological Measurement, vols. 52 and 53

SECTION 1: DEMOGRAPHIC INFORMATION

Current College/University: _____

Q. Age: What is your age?
- 12-17 years old
- 18-24 years old
- 25-34 years old

Q. Gender: What is your gender?
- Male
- Female

Q. Ethnicity origin (or Race): Please specify your ethnicity.
- White/Caucasian
- Hispanic/Latino
- Black/African American
- Native American/American Indian
- Asian/Pacific Islander
- Other

Q. Parent/Guardian Level of Education: What is the highest degree or level of school your parents/guardians have completed?
- No schooling completed
- Some high school, no diploma
- High school graduate, diploma or the equivalent (for example: GED)
- Some college credit, no degree
- Associate degree
- Bachelor's degree
- Master's degree
- Professional degree
- Doctorate degree

SECTION 2: WHY DO YOU GO TO COLLEGE?

Using the scale below, indicate to what extent each of the following items presently corresponds to one of the reasons why you go to college.

Does not correspond at all	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds exactly
1	2 3	4	5 6	7

WHY DO YOU GO TO COLLEGE ?

1. Because with only a high-school degree I would not find a high-paying job later on.

   1 2 3 4 5 6 7

2. Because I experience pleasure and satisfaction while learning new things.

   1 2 3 4 5 6 7

3. . Because I think that a college education will help me better prepare for the career I have chosen.

   1 2 3 4 5 6 7

4. For the intense feelings I experience when I am communicating my own ideas to others.

   1 2 3 4 5 6 7

5. Honestly, I don't know; I really feel that I am wasting my time in school.

   1 2 3 4 5 6 7

6. For the pleasure I experience while surpassing myself in my studies.

   1 2 3 4 5 6 7

7. To prove to myself that I am capable of completing my college degree.

   1 2 3 4 5 6 7

8. In order to obtain a more prestigious job later on.

   1 2 3 4 5 6 7

9. For the pleasure I experience when I discover new things never seen before.

   1 2 3 4 5 6 7

10. Because eventually it will enable me to enter the job market in a field that I like.

    1 2 3 4 5 6 7

11. For the pleasure that I experience when I read interesting authors.

    1 2 3 4 5 6 7

12. I once had good reasons for going to college; however, now I wonder whether I should continue.

1 2 3 4 5 6 7

13. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments.

1 2 3 4 5 6 7

14. Because of the fact that when I succeed in college I feel important.

1 2 3 4 5 6 7

15. Because I want to have "the good life" later on.

1 2 3 4 5 6 7

16. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.

1 2 3 4 5 6 7

17. Because this will help me make a better choice regarding my career orientation.

1 2 3 4 5 6 7

18. For the pleasure that I experience when I feel completely absorbed by what certain authors have written.

1 2 3 4 5 6 7

19. I can't see why I go to college and frankly, I couldn't care less.

1 2 3 4 5 6 7

20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.

1 2 3 4 5 6 7

21. To show myself that I am an intelligent person.

1 2 3 4 5 6 7

22. In order to have a better salary later on.

1 2 3 4 5 6 7

23. Because my studies allow me to continue to learn about many things that interest me.

1 2 3 4 5 6 7

24. Because I believe that a few additional years of education will improve my competence as a worker.

1 2 3 4 5 6 7

25. For the "high" feeling that I experience while reading about various interesting subjects.

1 2 3 4 5 6 7

26. I don't know; I can't understand what I am doing in school.

1 2 3 4 5 6 7

27. Because college allows me to experience a personal satisfaction in my quest for excellence in my studies.

1 2 3 4 5 6 7

28. Because I want to show myself that I can succeed in my studies.

1 2 3 4 5 6 7

SECTION 3: SUPPLEMENTAL QUESTION

Q. Would you be willing to participate in a five question follow-up interview?

- Yes
- No

If yes, please provide the best method to contact you to schedule the interview (e.g., cell phone or email).

Preferred Method of contact: _____

Academic Motivation Scale Answer Key

# 2, 9, 16, 23	Intrinsic motivation - to know
# 6, 13, 20, 27	Intrinsic motivation - toward accomplishment
# 4, 11, 18, 25	Intrinsic motivation - to experience stimulation
# 3, 10, 17, 24	Extrinsic motivation - identified
# 7, 14, 21, 28	Extrinsic motivation - introjected
# 1, 8, 15, 22	Extrinsic motivation - external regulation
# 5, 12, 19, 26	Amotivation

APPENDIX B: INTERVIEW PROTOCOL

Thank you for your willingness to help me in this study. You can opt out of this interview at any time, even if we have already begun. Before we begin the actual interview let me tell you a little about myself. My name is Sharon Smith and I am in the final year of my Ed.D. in Educational Leadership program. Can you please tell me a little about yourself, for example what school you attend?

Interview Questions

1) What motivated you to pursue your education?

2) What are some of the challenges you have faced so far in your educational journey?

3) What are some of things you enjoy about your education journey up to this point?

4) What made you choose your current institution? Was this your first choice, why or why not?

5) Is there anything you feel you need to add/share that is important to understanding the motivation behind you attending college?

APPENDIX C: INTERVIEW TRANSCRIPTS

Interview Transcript - 2y-Student1

Researcher: My first question to you is, what motivated you to pursue your education?
Student: Since I was little my parents it has always been college, college, college. And one of the reasons is my mom, like her highest degree she just got her associates, my dad just graduated high school and he went straight in to the work force and so since I was little it's been college, college, college. And like me personally, I have always had the motivation to go to college. I've never not wanted to go to college.
Researcher: What did you have in mind, how far do you want to go in school?
Student: Right now I want to go to law school so that's like seven years

Researcher: So what are some of the challenges you have faced so far in your educational journey like on a day to day bases?
Student: Well every college student is finances, paying for college. You know you got financial aid there, you have loans that can help you, you got scholarships. Other than that here at this two-year school they have a great tutoring program so if you do have like problems, I'm pretty sure like every person in the tutoring center knows me by name by now because I go so much but I have a 4.0 GPA so I'm going to keep going.

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most about being in college?
Student: You know I think it's more like the independence, I don't have to rely on mommy and daddy for everything. You know you go do your own thing.
Researcher: So you like that freedom?
Student: Yes I really do. I enjoy that.

Researcher: Okay so what made you choose this 2-year institution? Was this your first choice, why or why not?
Student: Well see I play softball here at this two-year school so the reason, really the only reason I'm here is because of softball because when I was looking I started the recruiting process my sophomore year of high school and it was down to a couple of colleges and the reason I choice this two-year school is because it's a two-year and basically I didn't want to commit to a four-year softball program when I can commit to a two-year program so that's really the only reason I chose this two-year school. So it was more athletic than anything.

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you feel you can add to the conversation of motivation and what brought you here to college?
Student: My future goal is law school and I mean I am the type of person that when I make a goal I am trying, I want to achieve that goal and then like I said my mom had and associate and dad didn't go past high school so you just want to make them proud because through my own life they have been pushing me as like their daughter and you just want to fulfill something to make them proud.

Interview Transcript – 2y-Student2

Researcher: My first question to you is, what motivated you to pursue your education?
Student: To get a good career
Researcher: What is your career path?
Student: Nursing, a labor and delivery nurse. I am really fascinated by birth, I love it.

Researcher: You survived your first semester at this 2-year institution, so what are some of the challenges you have faced so far in your educational journey since you started?
Student: Making myself come to class.
Researcher: Why is that a challenge?
Student: I got to say I'm not a morning person.
Researcher: So are your classes are majority in the morning?
Student: Yes because I work in the afternoon and night
Researcher: So you get off work, go home rest, get up in the morning and come to class and that's a challenge?
Student: Yes because sometimes I pull all-nighters because of homework.
Researcher: So you get off work, do homework, get some rest, get up and go to class in the morning?
Student: Yes and that's hard

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most up to this point?
Student: Meeting new people
Researcher: What do you enjoy about that?
Student: I just love meeting new people I guess

Researcher: Okay so what made you choose this 2-year institution? Was this your first choice, why or why not?
Student: In high school I don't know, in high school my GPA wasn't that high so I knew I would have to go to a community college weather it was this one or another one I knew I had to go to a community college so I decided to just stay home

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you feel you can add to the conversation of motivation and what brought you here to college?
Student: I am an expensive girl, I need a good job, hum, something that pays well and really I feel like there's nothing out here that's going to get me that if I don't come to school. And my mom
Researcher: Why is she a motivation to you?
Student: She letting me know she is not going to be taking care of me so I have to get out here and do what I need to do.

Interview Transcript – 2y-Student3

Researcher: My first question to you is, what motivated you to pursue your education?
Student: My parents had me at a very very young age, and it was hard hum moving back and forth with my parents because my parents didn't have their lives together raising me but the one thing both of my parents did tell me is that school is my way to do better for my life, they never wanted me to go through what they went through.
Researcher: So school is the way to escape and not live that same life
Student: Yes, I don't know how to do anything else to not have that life but to go to school, I want to learn so that's the way I was raised.

Researcher: So what are some of the challenges you have faced so far in your educational journey since you started?
Student: I have learned that you cannot BS college, you just cannot do that. I've had to really learn how to do time management. I've really had to take my time and buy a planner and sit down and schedule like I have a test today or I have something going on, like I really break down and balance life where I have time for all full student credit hours stuff, you know. Hum, last semester was a lot easier for me so then this semester has not been so I've had to do a lot of tutoring as well and trying to force myself to actually, okay this class is hard but you have to push yourself, like you've got to do it
Researcher: So what is it that causing you to push yourself
Student: Well, math right now is really hard, but in like pushing myself in like the bigger picture, it's like I feel I have a lot of potential

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most up to this point?
Student: I love being, having freedom, like I love being able to do what I need to do not based off of someone else schedule
Researcher: Anything else you enjoy about being in college
Student: I really just love college, it's just a lot better than high school

Researcher: Okay so what made you choose this 2-year institution? Was this your first choice, why or why not?
Student: No this was not my first choice, my original plan was to go to William Peace university but due to money I had a few scholarships to go there but I'm going to school to get my master's in business management so this was the cheaper route because like I said, my family had me when they were kids so my mom and my dad never graduated high school, they dropped but then my mom went back to college after she had my sister but she never got to go to the first year school, she never got to do her masters, she never got to get into the nursing program because she had two kids to raise so I decided to come to this two-year school because of money mostly but then I ended up realizing that this two-year school was more one on one than most colleges was going to be with me and I came to the realization that I needed that.

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you feel you can add to the conversation of motivation and what brought you here to college?
Student: I feel like I really want to live a luxurious life, is that bad? I feel like I want to just like be able to spend money one day and not worry about my bank account like ah don't worry about it I got it here's diner on me. I mean I just want to have big dreams and I feel like the only way to accomplish them is to get through school.

Interview Transcript – 2y-Student4

Researcher: My first question to you is, what motivated you to pursue your education?
Student: I don't know, all of my family has been to college so it's like following all of their footsteps. My parents expect me to go to college and I really wouldn't be able to do anything without going to college.
Researcher: So was not going to college ever an option
Student: Not really, I mean I know if I want to get a good job I can't do that without getting a good education
Researcher: So you are not just doing this for your college
Student: No, I mean I need to and they want me to but they would be okay if I didn't go to college

Researcher: So what are some of the challenges you have faced so far in your educational journey since you started?
Student: Motivating myself to get up in the morning. And I've had some troubles with some professors so but well just one professor really
Researcher: But you are navigating through it, so what's the challenging aspect of that?
Student: I come from small town where everybody knows everybody so coming here you don't really know how someone will react to certain situations so learning to navigate through dealing with that.

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most up to this point?
Student: I have the freedom, I mean not having class from 8-3 every day is really nice and you're still getting the same stuff done
Researcher: Anything else you have enjoyed about the experience?
Student: Not really, just the freedom, that's kind of the best thing about college.

Researcher: Okay so what made you choose this 2-year institution? Was this your first choice, why or why not?
Student: This, well, I was either going to go to State for four years or come here and my, well, I guess to save my parents money I decided to come here and they kind of pushed me to come to a community college first instead. I came to this two-year school because my mom lives in Washington so I'm close to her.

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you feel you can add to the conversation of motivation and what brought you here to college?
Student: I really just want to be able to have a good life. I want to be able to provide for my kids good, to make sure they have everything that I had as I was growing up and with college I can get a good job.

Interview Transcript – 2y-Student5

Researcher: My first question to you is, what motivated you to pursue your education?
Student: I guess just to further my education so that I would be more prepared for whatever job I wanted in the future. Hum, and to kind of have a little bit more stability and the knowledge of what I wanted to pursue.
Researcher: So is education something that was talked about within our family?
Student: Oh absolutely. I grew up in a really small family so we are always all connected. I played sports growing up my whole life, I played volleyball, soccer, softball, I swam, I took ti-kwon-do, and yea I played sports. It was always a rule in our house that I couldn't make anything less than a B if I wanted to play sports so when the time came that I got into high school I got offered scholarships to play sports in school unfortunately I wasn't able to take them, I got hurt my senior year but I still wanted to be able to come and further my education. I still wanted to come and develop a new lifestyle.
Researcher: So what have you put in place of that, because you said your parents had the rule that if you made less than a B you couldn't play sports so what's keeping you from making less than a B now that you are no longer playing?
Student: Hum, it's the same thing because I help coach now so I tell my students the same thing. Most of my kids are in middle school and some are in high school and I say the same thing, I say if you make less than a B you won't be able to practice and they respect that and their parents know that and they respect that from me. And so I have that as a sense of I don't want to make less than a B because if feel like if I do I will be letting my players down so that's the mindset that I have of that. Just knowing that if I can do it, they can do it too.

Researcher: So what are some of the challenges you have faced so far in your educational journey since you started?
Student: I was originally planning on going to William Peace and that is a smaller school even then the high school I went too so it was challenging to be able to come to find a different environment, I was kind of expecting a different environment but when I visited I wasn't able to find what I was looking for I kind of became depressed and for the first part of making the transition to college I found it hard but when I had the opportunity to come here, hum, I liked wiped the slate clean and was like I will never let that happen again, you know that depression, and I have kind of pushed myself to not let my feelings get in the way of my school.

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most up to this point?
Student: I've met a bunch of new people through school and different environments and built relationships that I hope will last for much longer than I am in school. It's gotten me to be able to see that I am here for one reason so it's helped me to kind of lift myself up and to enjoy being

here. You know a lot of people complain about a lot happening in class, like I have an anatomy class that I don't want to go to and I understand where they are coming from. I live an hour away so I have to get up early to come but I don't let that affect me so I just really here and I enjoy being here.

Researcher: Okay so what made you choose this 2-year institution? Was this your first choice, why or why not?
Student: I chose here because it was a) cheaper and b) to be able to get the necessary classes that I needed before going to this four-year school. I was going to transfer straight from William Peace straight to this four-year school but Peace did not work out so a friend of mine actually told me to come here before this four-year school and that would help me because this two-year school has a good nursing program. So I came.

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you feel you can add to the conversation of motivation and what brought you here to college?
Student: I just think you have to stay motivated if you want an education. It's not an easy thing, a lot of people thinks just coming to a community college it like oh that's easy or whatever but it takes determination, its takes wanting to get up when you live an hour away every day and drive and come and take your classes and make good grades and study hard. If you don't you're not ever going to be able to move to really succeed. I mean you can succeed with other things but being motivation to further your education will go a long ways to furthering your career choices and your options. And kind of broadening it so that you have a bigger safety net if something happens the way you don't want it to.

Interview Transcript – 2y-Student6

Researcher: My first question to you is, what motivated you to pursue your education?
Student: More so because everyone told me that I couldn't do it. I was diagnosed with Asperger's at a very young age and everyone told my mom that I would spend my entire life living at home not really making anything for myself. Hum, I wanted to pursue it because I felt like it was something that I could do and I had dreams and aspirations that I wanted to fulfill for myself.

Researcher: What are some of the challenges you have faced so far in your educational journey since you started?
Student: I think it's time management. I know I have different classes at different time and its different work that I have to do instead of having four classes throughout the week in the semester and going to each class every single day like I did in high school. Definitely the night classes.
Researcher: How many of those do you have?
Student: I have one
Researcher: Does it last the three hours long?
Student: Yes mam, and I have to adjust

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most up to this point?
Student: It's, I think its meeting the different people. There's people that come from different states and different sides of the city and it's just interesting to learn stuff that I didn't learn in high school
Researcher: So you like the learning aspect of it?
Student: Yes mam
Researcher: What is the class that you have enjoyed the most?
Student: English 111 and Drawing 1

Researcher: Okay so what made you choose this 2-year institution? Was this your first choice, why or why not?
Student: It wasn't my first choice. I was actually accepted into an Art school in Durham, the problem there is that they were asking for a lot of money that I just didn't have. I was thinking about going here in high school but I didn't think I had the grades to do it but then once I graduated this two-year school was there and I saw that I could go and I thought I could get like an AFA here and then I can maybe take that somewhere else and continue my education
Researcher: So you want to continue your education after this?
Student: Yes, I want to at least get a bachelors and if possible I would like to get a Masters

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you feel you can add to the conversation of motivation and what brought you here to college?
Student: I guess motivation for me is the willingness to be here. If I really didn't want to be here I probably won't be here. I'm striving to better myself as an individual and continue learning to make myself a better person.

Interview Transcript – 2y-Student7

Researcher: My first question to you is, what motivated you to pursue your education?
Student: I think my parents motivated me, because of their lives and how far we came I guess and sort of a sense of our family and what we want to do with our lives.
Researcher: Did both of your parents go to college?
Student: Yes, well my dad didn't finish but he went back and we are in school together
Researcher: How is that experience?
Student: Pretty good, it's kind of hard because everyone is always gone we have little kids in the house.
Researcher: Does that fall on you to care for them?
Student: Yes it does, I have to pick up since everyone is busy.
Researcher: How has that affected your college life?
Student: Kind of juggling but not really I guess, it's not just me in the house so I'm just getting through it

Researcher: So what are some of the challenges you have faced so far in your educational journey since you started?
Student: Not enough sleep, I work too so I don't get enough sleep. In general but with school definitely because I study a lot and I end up late at night studying a lot.

Researcher: What other challenges have you experienced?
Student: Sleeping, staying on top of classes as far as what class I have homework in or what I should be studying for ahead of time and stuff like that.

Researcher: So we have talked about your challenges, so what have been some of things you enjoy so far about being in school?
Student: How the professors are really hands on here and they're helpful to me
Researcher: What do you mean hands on?
Student: Because I don't have to wait, I can stay out of class and talk to them and get help with whatever I need help with.
Researcher: Okay, so would you say they are accessible?
Student: Yes, definitely, they are very accessible.

Researcher: Okay so what made you choose this 2-year institution? Was this your first choice, why or why not?
Student: No, I'm a transfer student and meaning I was wanting to transfer to this four-year school when I finish here so this is a pit stop before I transfer there but I have really liked it here.
Researcher: What do you want to do when you transfer to this four-year school?
Student: I'm studying university transfer but I plan on being a Kinesiology major. I was actually doing athletic training but they said this semester was the last one accepting that major so I was a transfer student doing that one but I have to change it up I guess so I'm studying Kinesiology
Researcher: So Physical Therapy might be in your future?
Student: Yes, that's my plan, I think I can deal with the reading and everything needed for that.

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you feel you can add to the conversation of motivation and what brought you here to college?
Student: I think what motivated us and like being freshmen coming to college you are expecting more than high school, you are always told that college is something that you have to serious about because if you don't you won't be there long so being serious and staying on top of things and keeping focus in enough motivation to keep me successful hopefully
Researcher: You said for a person to be successful, what you be a successful outcome for you?
Student: I would say as long as I stay consistent, if you are consistent I think that means you are going in the right direction and as long as you are then you are being successful. It is the most important step because without consistency you come up short every time.

Interview Transcript – 4y-Student1

Researcher: My first question to you is, what motivated you to pursue your education?
Student: Both my parents went to college. It was kind of like how I was raised, my goal in the very end was to go to college to get a higher education to have a career that would have support a family one day.
Researcher: So that has been something that you family, your parents has pushed, to go to college?

Student: Yea, it's not something that they really pushed, I mean they would have been okay if I had like went to a community college or went down another pathway but that was their ultimate goal for me.
Researcher: To go to college?
Student: Yea, that is how they were raised and how I was raised.
Researcher: So was going to college ever not an option?
Student: No, not for me, no. My grades has always have always been normal, fine. I've never had to be pushed to do my homework or schoolwork or anything like that so I've always just been motivated to do that.

Researcher: You are here at a 4-year institution, so what are some of the challenges you have faced so far in your educational journey since you started?
Student: Adjusting at the beginning for sure. I was really homesick, ready to come home. I was ready to just give it up, go home, go to State or a community college there or something like that, umph, because I just really missed my family, my own bedroom, my own personal space and my dog. I've always had a hard time adjusting to change but after a while it kind of went away. After Christmas break I thought I would have a hard time and I didn't so I'm kind of used to it now, but that was like the most trouble I went through.
Researcher: How long did that adjustment phase last?
Student: Probably after fall break, yeah a couple of months, three months maybe. And then when I went home for Thanksgiving I was fine, came home for Christmas, came back and I was fine. I thought I would have to start all over but no.

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most up to this point?
Student: Making new friends, definitely for sure. The girls that live on the same hall as I do, we all became like best friends. And I think they helped my adjustment period, just knowing that I had like my own family to come back to here definitely helped. I also joined a sorority so that was really enjoyable. It was a stressful experience juggling school and that but I think it taught me how to juggle things which is good to happen.
Researcher: So did being in a residence hall, being surrounded by students who are sort of going through the same things you were going through help ease the process for you?
Student: Exactly

Researcher: Okay so what made you choose this 4-year institution? Was this your first choice, why or why not?
Student: No it definitely was not my first choice. I did not want to go to this four-year school at all. I really wanted to go to, well I went to a charter school in high school so a lot of people looked down on this four-year school as not being a prestigious college when that is not true at all. I mean they have one of the best nursing programs so when I decided that Nursing was going to be my major this four-year school sort of made its way up there more. I really wanted to go somewhere is SC but obviously I didn't get instate tuition or a scholarship or anything like that so it was not reasonable for me to go there when I could go here and get a better education from the Nursing program and not have so much debt.

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you feel you can add to the conversation of motivation and what brought you here to college?
Student: Motivation. I think nursing school itself is a huge motivation factor because it is so competitive. So once I got into college that was like my ultimate goal for my family and I and then when I got in it's like I still have more to work towards which is getting into nursing school because it is so competitive. That's kind of my motivation right now, to get good grades, to have a good GPA, to not get in trouble, to have school as my main focus.

Interview Transcript – 4y-Student2

Researcher: My first question to you is, what motivated you to pursue your education?
Student: I wanted to have a career that I knew I could flourish in and I knew the only way I can do that is with a college education. So nursing is what I want to do so that's something that I know you can do in a short degree but I wanted to do all four years and then go even further.
Researcher: So how far do you want to go?
Student: My doctorate
Researcher: What area are you most interested in in nursing?
Student: Well, I want to me, so how it works is I want to be a nurse anesthetist, hum, but I have to work in critical care so I will be a critical care nurse first and before I can get my doctorate like after years of being a critical care nurse.
Researcher: So it sounds like you have a good plan, so is education something or college something that your parents talked about?
Student: Yea it was kind of something that was just like the next step, I mean it was kind of something like that was like, I mean I was never really thinking like I won't go to college, you know what I mean, it was just like go.
Researcher: So it has always been the foundation, you have to go to college?
Student: Yes

Researcher: You survived your first semester and now you are in your second semester, so what are some of the challenges you have faced?
Student: First semester, I thought skipping classes wouldn't affect my grade because it didn't in the beginning, but when it came down to finals, hum, finals were a lot harder than I thought they would be cause they weren't really, like the classes were easy but then the finals were difficult so my grades weren't as high and teachers were really willing to help me because I was like, my attendance wasn't good. So this semester I focus and I'm like you have got to go to class, like you just got to do it. So yeah that was a big mistake in thinking.
Researcher: Slightly different than high school, if you miss a day or two you can play catch up but not really like that in college
Student: Exactly
Research: Any other challenges you have faced so far?
Student: It was kind of hard finding friend groups, like solid friend groups to stay in. It was kind of jumpy in the beginning but I found my two best friends and I've been hanging out with them ever since.
Researcher: So you have built a support system?
Student: Oh yeah, oh yeah, a very close one.

Researcher: But at first it was challenging just finding that support system?
Student: Yea, because I would think I was happy with one group and then things would sort get like huh, is this what I want you know and it was just like bouncing around from group to group to find someone like me.
Researcher: Was it like that in high school?
Student: To an extent, I mean high school, I feel like high school friends, I don't know, I knew the same people in high school so it was like everyone I saw I kind of knew already so and like here I didn't so it was like I don't know. In high school I feel like the friends weren't as serious because it's like you knew more people, does that make sense?
Researcher: Yes it does, so now you are finding a deeper value in friendships at this level?
Student: Yes because you are not close to home anymore, I mean if you want to go get food you can't just sit down and know the people around you, you have to like, ask people around you if it's okay until you have that friendship developed.

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most up to this point?
Student: I like finding myself. I know that might sound like super cheesy but like taking a step away from living under my like mom and like, I don't know and being able to make decisions on my own like, I don't know, like what I eat, like when I go to bed, and like when I study, like I don't have someone like telling me "you should go do that right now" like, like it's my choice and it's giving me a chance to kind of like figure out who I am as a person if that make sense. Because, I don't have someone trying to control me, like I kind of just, I mean don't think I'm wild like I party all the time or anything like that, it's just different.
Researcher: Yes it is different when you have been home and under mom and dad's shadow but you get to step out and be your own person but not really knowing who that person is.
Student: Exactly, yes.
Researcher: That whole process is interesting. But have you been enjoying that process?
Student: Oh yea, I love it so much. Like a hundred percent. Like I am so glad I am here.

Researcher: Okay so what made you choose this 4-year institution? Was this your first choice, why or why not?
Student: Yes, this four-year school was my first choice when I decided nursing. Up until junior year I wanted to be a vet and I planned on going to NC State I mean like literally from childhood to the eleventh grade and then when I realize that veterinarian school wasn't my thing I found out about anesthesiology essentially and I realized that there's like a great branch through nursing so like I toured this four-year school once and I was like this is it. Like this is my place and ever since it's been like nonstop this four-year school and nursing. I know you can get like a two-year degree but you're not really doing as much and it's not like obviously the pay is a major difference and stuff and I feel like it's worth it to just go all four years and just like fight through it and then get paid based off of that and then obviously like get my doctorate because I want to do anesthesiology more than I want to do like bedside nursing but I would be happy either way, just helping people is just like really my goal.
Researcher: How was that transition mentally for you to go all the way through the eleventh grade and say I want to go to UNC, I want to be a vet, and then all of a sudden shift?
Student: It was like so scary. Because I had looked up, I mean I had never really looked that much in to veterinarian school, I had just like looked more so into like, hum, just the, like, the

schooling part. I never really looked into the actual job requirements and I realized that everyday spatting and neutering was like a daily normal task and I was like what, I don't want to spend my life like doing that. So I was terrified. I was sitting in class and I was like its junior year, like you have to choose colleges and hum, this sounds so cheesy, but like I was literally sitting in English and the word anesthesiology popped in my head and I was like what is this, I don't even know what this is and I looked it up and it was so intriguing to me, like to just the thought of like being able to meet with people and you have like fifteen minutes to talk with them and then they literally like give you their life to like put them under and make them feel like safe and stuff like that, I mean I don't know like them giving me that trust is something I look forward to having and then nursing versus, because you can do anesthesiology in med school or you can go through nursing but there are like, just the path through nursing is like, I don't know I feel like nurses help people more than doctors and not to say that doctors don't but I feel like it's more hands on and you get a chance to like change someone because you are always with them. I don't know, I just want to you that aspect of helping someone, I think that will be really fun.

Researcher: So my whole paper is focused on first year freshmen and what motivated them to go to college, so is there anything else you feel is important to share when we speak in terms of motivation and the college journey?
Student: So, my father went through, he went and got his four-year degree from State and then he got his master's at Wilmington and he worked at like Duke Energy for like fifteen or twenty years, I mean he worked a long time there so it was just always like seeing him succeed in life based on college. My mom on the other hand, she didn't go through any college. She went to work straight out of high school and then she met my dad. They both happened to be working at the same place but he like kept progressing and they got married and whatever but she has never gone through college and it's not like she didn't succeed but like she was the stay at home mom and I just want to be like someone who can carry my family. I kind of want to be like my dad, so I just want to follow in his footsteps.

Interview Transcript – 4y-Student3

Researcher: My first question to you is, what motivated you to pursue your education?
Student: I think the most, the most important thing that has motivated me is that I want to like, I want to be able to get a job and like make money and like make a life for myself. And also my parents. Both went to college and the both went to this four-year school and that like really motivated at well
Researcher: So that was something that was always been talked about, something that they wanted you to do?
Student: Yes, yes, I mean I didn't know if I wanted to come to this four-year school or not but like college for sure for PA
Researcher: I know you said you wanted to do PA school, anything in particular about PA school that drew you to that
Student: I used to want to be a doctor and then I figured how much school there was going to be so it kind of like narrowed me down to being a PA. I've talked to a couple of people like my parents and friends and they are like PA is growing and needed everywhere so like, that like motivated me

Researcher: So this is your second semester, you made it through your first semester, what are some of the challenges you have faced so far in your educational journey since you started?
Student: Time management was definitely a challenge, I mean like I consider myself a pretty organized person but like being on my own made me have to be like extra organized, especially like with like meals and when to do this and this and working out and like basic things.
Researcher: How far are you away from home?
Student: I'm like two hours?
Researcher: So any other challenges? Distance from home maybe?
Student: No not really

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most since you have been here?
Student: I definitely like that atmosphere of the campus. It's very friendly and like if you have a question I feel like you if you have a question you can like ask anyone, that's another thing about being in the south that I like. And, hum, I've made a lot of great friends through like being in my dorm and stuff
Researcher: Anything else you have enjoyed about being in college?
Student: The football game for sure

Researcher: Okay so you said your parents came here so was that the reason you choose this this 4-year institution? Was this your first choice, why or why not?
Student: Actually Carolina was my first choice. But I looked into like PA programs and this four-year school is big in accepting their students that attend like the undergrad and then go into PA school and I was like that's good and I didn't get into Carolina but it's okay it was like a sign that I needed to go here.

Researcher: So my whole paper is about is about motivation, what motivates students to go to college in the first place and looking at differences in motivation so is there anything else you feel you feel you can add to the conversation of motivation and your education.
Student: Yea, I think the big thing is in our society we are veered like to go get a higher education now a days. Cause typically, like, the simpler jobs it's like not necessarily good, like looked down upon in a way
Researcher: So society and your place in society is determined by your education level?
Student: Yes, people are sometimes forced to get a higher education to get out of like a worse situation and there is a lot of scholarships and things offered to students now to get that higher education.
Researcher: So you think its easier access to get to college now because of those scholarships and the push to go to college?
Student: Yes exactly.
Researcher: Okay so is there anything else you want to add to the conversation?
Student: No I think that's it.

Interview Transcript – 4y-Student4

Researcher: My first question to you is, what motivated you to pursue your education, why are you here?
Student: Because I think it would be nice to actually to like do something with my life. I have always wanted to be a doctor and I know it takes a lot to get there so it motivated me to more to come to school and for my family to because most did not go to college or make it all the way through college.
Researcher: So you have a history of your family members going to college?
Student: Yes but they dropped out or never started
Researcher: So will you be the first one to actually finish with a college degree
Student: Yea I will
Researcher: How does that make you feel?
Student: It feels pretty good. It is life changing, a lot more responsibility being here but to have the support of my family
Researcher: Are you doing this for yourself or for your family?
Student: Honestly for my family
Researcher: So what is it that you want to do with your life?
Student: I still want to be a doctor but I'm trying to figure out what kind of medicine I want to be like I've looked into Plastic surgery or maybe a Pediatrician or an OBGYN
Researcher: So either way, med school is a goal
Student: Yes mam either way

Researcher: So this is your second semester here, so what are some of things that have been challenges for you?
Student: I think like studying a lot more, I mean I used to didn't have to study and now here I just have to kind of put hours and hours. And now I've realized that it's hard and trying to balance my social life as well and study
Researcher: How far are you away from family?
Student: I'm like an hour and a half, so not too bad.

Researcher: So what have been some of things you enjoyed since you've been here?
Student: I've enjoyed like making lots of friends and meeting new people, also trying to be more involved in like clubs and stuff so I'm hoping next year to be in more activities and stuff
Researcher: Were you involved in lots of activities in high school?
Student: Somewhat I was a cheerleader for three years and I was in a few health science clubs
Researcher: So you want to get more involved here now?
Student: Yes, that will be nice

Researcher: Okay so what made you choose this 4-year institution? Was this your first choice, why or why not?
Student: I think this was my first choice. It was either this or Charlotte or Chapel Hill. I don't know why I chose this school, I found it because I doing a research project and I didn't know this four-year school had so much to offer and I was like okay this is nice and it's not too far from home

Researcher: So you like the fact that you were close to home?
Student: Yes, definitely!

Researcher: So my whole paper is about is about motivation as I shared with you and understanding motivation in freshmen so is there anything else you feel you can add to what motivation means in your education
Student: I don't know, I can't think of anything right now, I'm just very determined to finish and I think I have always been very determined.

Interview Transcript – 4y-Student5

Researcher: My first question to you is, what motivated you to pursue your education?
Student: I would just because I always wanted to be in the medical field since I was in the eighth grade and my dad is the medical field and I just realized that one I won't be able to get into the medical field if I don't get a good education and I want to extend my knowledge to the point where like I know everything that I want to know.
Researcher: So you enjoy the process of learning
Student: Yes I do

Researcher: You survived your first semester, you are back for a second semester, what are some of the challenges that you have faced up to this point?
Student: Definitely time management, which is improving a little bit. My study habits in high school were terrible. I just didn't, I felt like I didn't need to study it was so much easier than college is. But then Now I'm learning that study at least 4 days before my exam start getting that and then study hard at least 4 days like in a row like before an exam.
Researcher: Any other challenges?
Student: Not really, being far away from home, I'm like four and a half hours away from home which is really bad, I can make a weekend trip every three weeks and so it's really not bad at all
Researcher: Not really home sick or anything like that?
Student: No not really

Researcher: So we have talked about your challenges, so what have been some of things you enjoy most up to this point?
Student: Definitely freedom, like not having to have to ask somebody to do anything. Like I can go on my own and do things. It's kind of cool just too like live on your own, it's not as tight.
Researcher: It's the first taste of being an adult?
Student: Yea, I can go get your groceries and things like that.
Researcher: So how do you find those things, is it different than what you had in mind?
Student: Oh yea, cause if I went grocery shopping with my parents they are like come pick out what you want and I'm like that's easy and go pick out this or this but when I'm spending my own money I'm like I'm getting peanut butter and jelly and pizza rolls. So it makes you look at things slightly different.

Researcher: So what made you choose this 4-year institution? Was this your first choice, why or why not?

Student: Originally no, I didn't even really know about this school that much. My friend that goes here and is a sophomore here now told me about it. I play ice hockey with him at home and I came and visited. A four-year, I've always wanted to go to a four-year to get away from home really but I never really had a first choice I was looking at Maryland, Townson and here but those two are in Maryland and I was like well, I really liked this school, I visited it twice, maybe three times, twice, like one by myself with a friend, one with another friend that goes here now visiting that same kid and my parents wanted to come see it.

Researcher: So my whole paper is about is about motivation and how motivation plays into your education journey, so is there anything else that you feel you want to share about the importance of motivation and education.
Student: When I look at what I need to do in the future it motivates me to study harder. I see the grades that other kids are getting to get into PT school and PA school and I'm like I really need to stay up there, I don't want to let myself slip and like when I go home I usually work in an office this past break and I'm going to work there over the summer too in a PT office and I don't know, like seeing them motivates me to work harder to get there myself.

Interview Transcript – 4y-Student6

Researcher: My first question to you is, what motivated you to pursue your education?
Student: I think most of it was probably my family so my parents are immigrations, they are from Cameroon. My dad has his PhD in business administration and my mom has her masters in social work so I, them being like education driven, so they wanted me to kind of like have the opportunity to be here and get an education so take advantage of it and not put it to waste so when we go back to Cameroon to visit like family, it's like a lot of kids who don't have the opportunity that I have. I feel that while sometimes it's stressful, it might be stressful but I feel like that's probably most of my motivation.
Researcher: How often do you get to go back home?
Student: The last time I was home was like 5 years ago, its expensive to go back but when we can we do. My dad goes most of the time but to take the whole family is a lot, it's like five people.

Researcher: You are here at a 4-year institution, so what are some of the challenges you have faced so far in your educational journey so far?
Student: I think like, being younger when I moved here it was a little difficult to get used to the system, but I think so far it's like stay on task with things that's been my biggest problem. Like getting too side tracked like forgetting things, even though I know I shouldn't forget it but little stuff like that, that's been like my biggest problem.

Researcher: So what have been some of things have you enjoyed most?
Student: I think it has been interesting. I like, like I think I have like wherever I have been like throughout elementary, middle school and high school, I've enjoyed being there I've enjoyed the people, like I've enjoyed the experiences. Like meeting all the new people, like learning the new stuff I think like that is still cool and like I'm excited because I know I'm going to get somewhere in life, one more step, one more semester out of the way, so it's kind of like what I

am looking at, like one more step, I'm done with this semester, and then the next, like this semester is almost done and I'm just happy with that.

Researcher: Okay so what made you choose this current 4-year institution? Was this your first choice, why or why not?
Student: my first choice was actually UNC Charlotte but then they didn't have an OT program then I looked into this four-year school and I came here and then I liked it. I thought maybe I didn't want like to do all the work to move to a different school if it went to Charlotte because I would have to leave to go to a graduate program somewhere. I'm trying to stay here at this four-year school to do if I can, but I will apply to other schools but that was one of the reasons I choose here and I liked it.
Researcher: How many times did you visit before you were accepted?
Student: I visited once before I got accepted then I came back twice. A total of three visits

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you can add about what motivation means to you and how it has impacted your educational journey?
Student: I think like motivation, I mean everyone is different, but with motivation it's like your will to do something. I think everyone is motivated in different ways but for me those are the ways I am motivated to want to accomplish stuff. I want a better life for me and my future family so those are the kind of things I'm looking at, I feel like I look down towards the future maybe a little too much, I think I worry about that a lot and I think that's where my motivation comes from. I know if I want to what I want in life and the future I know I can't, this moment now counts so that's how I kind of see motivation.

Interview Transcript – 4y-Student7

Researcher: My first question to you is, what motivated you to pursue your education?
Student: I feel like I pursued higher education because I want to make a difference and I know it's hard like in today's time to like well I guess society has made it so to become anything you need education to like made a difference you need an education. So I came to this four-year school to get a higher education to learn more

Researcher: This is your second semester here, you survived through your first semester, what are some of the challenges you have faced so far since you started?
Student: I would day definitely like being in a new place, being around new people you kind of feel lost at first and that can be a can be a challenge to over especially for the first couple of weeks you may feel like you are kind of doing things by yourself but after you meet new people if gets better.
Researcher: Any other challenges
Student: Probably getting used to college courses like lectures, biology is a little hard, a bit challenging but I got through it. After the first test I learned what I needed to do better, I learned study habits.

Researcher: So we have talked about your challenges, so what have been some of things you enjoyed, what are some enjoyable moments?
Student: being around new people is a challenge but it is also something I enjoyed. I really like my dorm room that I live in Jarvis, I met a lot of great people and through the program and I think like what I found at this four-year school is just a really big community atmosphere.

Researcher: So what made you choose this 4-year institution? Was this your first choice, why or why not?
Student: this four-year school is not my first choice, I was planning on NC State but then I just didn't feel right about State, I don't know I felt I was just lead to this four-year school, I'm really glad I chose this four-year school.
Researcher: How many times did you visit this four-year school?
Student: I visited this four-year school in 7th grade and I also visited in 10th grade because my school did different college trips and I really liked the campus and my teachers also had a big influence too. I had quite a few teachers who went to this four-year school too and they talked about it a lot.
Researcher: So is college something that was talked about in middle and high school and pushed
Student: Ever since the 6th grade my school always took about two trips to visit colleges so it was something the school pushed also.
Researcher: So you had early exposure to college?
Student: Yes, always

Researcher: So my whole paper is about is about what motivates students to go to college so is there anything else you feel you feel you can add to the conversation of motivation and what brought you here to college?
Student: I think different things can motivate you and you can find like motivation in almost anything every day, I mean like different people motivation me throughout my day, it could just be a friend, I mean it could be Mother Teresa, she motivates me. And I mean different songs motivate me, quotes and I think it's good to have motivation and inspiration to encourage you not to give up.

APPENDIX D: BODY EMAIL TO PROFESSORS AT FOUR-YEAR INSTITUTION

From: Smith, Sharon
Sent: Friday, November 18, 2016 8:25 AM
To: Smith, Sharon
Subject: Dissertation Study: COAD 1000
Importance: High

Good morning!!!

I am pleased to announce that my dissertation study, "Exploring Academic Motivation Among a Two-Year and a Four-Year Institution in the Southeastern region of the US by Generational Status: A Sequential Explanatory Analysis" has been approved by this institutions IRB board.

The purpose of this mixed-method study is to identify the difference in the motivational orientations towards education among first generation students in comparison to that of non-first generation students at both public two-year and public four-year institutions.

Therefore, I would like to survey first-time first-semester freshmen in the COAD 1000 courses before the end of the semester. The survey would take anywhere between 15-20 minutes in pen/paper format so I will need to come into the classrooms during class time to administer the survey.

If you could spare class time before the end of the semester for me to come in and survey your class, please let me know!

Your consideration is greatly appreciated!

My Best,

Sharon Smith, MS

APPENDIX E: IRB APPROVAL

Notification of Initial Approval: Expedited

From:	Social/Behavioral IRB
To:	Sharon Smith
CC:	Crystal Chambers
Date:	11/14/2016
Re:	UMCIRB 16-001574 Exploring Academic Motivation: A Sequential Explanatory Analysis

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 11/14/2016 to 11/13/2017. The research study is eligible for review under expedited category # 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).
The approval includes the following items:

Name	Description
ACADEMIC MOTIVATION SCALE_updated.docx	Data Collection Sheet
ACADEMIC MOTIVATION SCALE_updated.docx	Surveys and Questionnaires
Interview Protocol.docx	Interview/Focus Group Scripts/Questions
SSmith_Dissertation_10.8.16.docx	Study Protocol or Grant Application
SURVEY Cover Consent 10.8.16.docx	Consent Forms

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418

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Study.PI Name:
Study.Co-Investigators:

APPENDIX F: FREQUENCY DISTRIBUTIONS OF AMS QUESTIONS TABLE

Frequency Distribution of AMS Questions

	Does not Correspond at all			Correspond Moderately			Corresponds Exactly	
Variables	1	2	3	4	5	6	7	N
Intrinsic Motivation – To Know								
Experience satisfaction in learning	6	20	35	73	91	95	65	385
Pleasure of discovery	8	18	34	77	89	84	74	384
Please broadening knowledge	5	14	24	53	73	98	118	385
Continue learning interesting things	3	14	19	48	67	104	129	384
Intrinsic Motivation – Toward Accomplishment								
Pleasure surpassing self in studies	21	31	44	91	95	60	42	384
Pleasure surpassing accomplishments	11	27	31	67	95	72	81	384
Accomplishing difficult activities	17	26	37	71	76	85	69	381
Personal satisfaction in quest for excellence	15	27	37	55	66	85	100	385
Intrinsic Motivation – To Experience Stimulation								
Feeling of communicating ideas	28	41	63	96	83	43	31	385
Pleasure reading authors	71	73	79	71	51	24	16	385
Pleasure in authors writing	74	82	63	73	47	29	14	382
“High” feeling in interesting subjects	67	66	63	78	45	41	24	384
Extrinsic Motivation – Identified								
Help prepare for career	0	4	7	10	28	83	253	385
Enter job market	3	3	5	7	29	88	250	385
Better career choices	4	6	14	28	60	121	152	385
Improve competence as worker	8	9	17	40	49	118	143	384
Extrinsic Motivation – Introjected								
Prove capability of completing	12	11	18	40	49	87	167	385
Importance of succeeding	14	19	28	45	64	98	117	385
Prove intelligence	20	16	22	50	67	94	116	385
Prove successful	8	16	21	34	38	89	179	385
Extrinsic Motivation – External Regulation								
HS degree not enough for high paying job	9	6	4	23	42	112	189	385
Obtain prestigious job	2	1	4	10	27	91	250	385
To have ‘the good life’	2	4	7	12	33	106	221	385
Better salary	1	4	5	7	21	106	241	385
Amotivation								
Feeling like time wasted	267	53	26	11	13	11	3	384
Once had good reasons, should I continue	232	64	33	24	17	11	4	385
Couldn’t care less	318	29	13	13	7	3	2	385
Don’t know what I’m doing in school	301	49	10	11	6	6	2	385

APPENDIX G: DESCRIPTIVE STATISTICS BY DEMOGRAPHIC GROUPS TABLES

Descriptive Statistics for Motivational Orientation by Institutional Type

Institutional Type		IM-Knowledge	IM-Accomplishment	IM-Stimulation	EM-Identified	EM-Introjected	EM-Regulation	Amotivation
4-year Institution	Mean	20.91	19.42	12.93	24.87	22.17	25.56	6.15
	N	136	135	136	135	136	136	135
	Std. Deviation	4.61	5.20	5.38	3.42	5.13	3.02	3.37
2-year Institution	Mean	21.06	19.14	14.58	24.20	21.94	25.08	6.52
	N	247	244	246	249	248	249	249
	Std. Deviation	5.22	5.80	5.78	3.64	5.79	3.68	4.37
Total	Mean	21.00	19.24	13.99	24.43	22.02	25.26	6.39
	N	383	379	382	384	384	385	384
	Std. Deviation	5.00	5.59	5.69	3.57	5.56	3.47	4.05

Descriptive Statistics for Motivational Orientation by Generational Status

		IM-Knowledge	IM-Accomplishment	IM-Stimulation	EM-Identified	EM-Introjected	EM-Regulation	Amotivation
First Generation	Mean	21.52	19.84	14.91	24.69	23.06	25.23	6.69
	N	123	122	123	123	123	123	123
	Std. Deviation	4.99	5.60	5.88	3.45	5.33	3.46	3.83
Non-first generation	Mean	20.76	18.95	13.55	24.31	21.51	25.26	6.22
	N	259	256	258	260	260	261	260
	Std. Deviation	5.01	5.58	5.56	3.64	5.61	3.48	4.12
Total	Mean	21.00	19.24	13.99	24.43	22.01	25.25	6.37
	N	382	378	381	383	383	384	383
	Std. Deviation	5.01	5.60	5.70	3.58	5.56	3.46	4.03

Descriptive Statistics for Motivational Orientation by Gender

		IM-Knowledge	IM-Accomplishment	IM-Stimulation	EM-Identified	EM-Introjected	EM-Regulation	Amotivation
Male	Mean	19.67	17.77	13.14	23.39	20.25	24.61	7.11
	N	176	174	176	176	177	177	176
	Std. Deviation	5.25	5.83	5.35	3.87	5.87	3.99	4.44
Female	Mean	22.20	20.57	14.76	25.40	23.62	25.86	5.79
	N	204	202	203	205	204	205	205
	Std. Deviation	4.41	5.05	5.90	2.93	4.78	2.75	3.60
Total	Mean	21.03	19.27	14.01	24.48	22.06	25.28	6.40
	N	380	376	379	381	381	382	381
	Std. Deviation	4.98	5.59	5.71	3.54	5.57	3.43	4.06

Descriptive Statistics for Motivational Orientation by Ethnicity

		IM-Knowledge	IM-Accomplishment	IM-Stimulation	EM-Identified	EM-Introjected	EM-Regulation	Amotivation
White/Caucasian	Mean	20.87	18.92	13.44	24.67	21.62	25.45	6.013
	N	224	223	224	224	224	225	224
	Std. Deviation	4.86	5.47	5.35	3.26	5.43	2.98	3.81
Hispanic/Latino	Mean	23.29	22.16	15.95	25.75	24.87	26.54	5.62
	N	24	24	24	24	24	24	24
	Std. Deviation	4.28	5.67	6.85	2.26	3.79	2.084	2.85
Black/African American	Mean	21.11	19.53	14.91	23.97	22.77	24.64	6.78
	N	99	97	98	100	100	100	100
	Std. Deviation	5.293	5.62	6.05	3.98	5.57	4.42	4.32
Native American/American Indian	Mean	18.60	17.20	10.60	21.40	24.40	22.80	10.20
	N	5	5	5	5	5	5	5
	Std. Deviation	6.06	6.57	4.50	2.30	3.84	3.70	4.20
Asian/Pacific Islander	Mean	21.40	18.40	16.20	24.40	20.80	24.80	10.60
	N	5	5	5	5	5	5	5
	Std. Deviation	4.21	6.65	6.97	5.50	9.57	4.86	5.94
Bi/Multiracial	Mean	21.19	19.70	14.19	23.61	20.67	25.42	7.23
	N	21	20	21	21	21	21	21
	Std. Deviation	4.70	5.51	5.69	4.57	5.65	2.80	4.92
Other	Mean	17.00	16.00	12.75	25.25	17.50	24.00	6.50

	N	4	4	4	4	4	4	4
	Std. Deviation	5.88	4.89	2.75	4.27	8.10	7.34	2.64
Total	Mean	21.03	19.26	14.01	24.46	22.05	25.25	6.37
	N	382	378	381	383	383	384	383
	Std. Deviation	4.97	5.58	5.69	3.55	5.53	3.47	4.03

APPENDIX H: LINEAR REGRESSION ANALYSIS

BY MOTIVATIONAL ORIENTATION

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.014[a]	.000	-.002	5.01573

a. Predictors: (Constant), Current College/University

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.946	1	1.946	.077	.781[b]
	Residual	9585.030	381	25.158		
	Total	9586.977	382			

a. Dependent Variable: IntrinsicToKnow

b. Predictors: (Constant), Current College/University

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	20.763	.917		22.630	.000	18.959	22.567
	Current College/University	.149	.536	.014	.278	.781	-.904	1.202

a. Dependent Variable: IntrinsicToKnow

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.254[a]	.064	.062	4.82495

a. Predictors: (Constant), What is your gender?

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	604.663	1	604.663	25.973	.000[b]
	Residual	8799.893	378	23.280		
	Total	9404.555	379			

a. Dependent Variable: IntrinsicToKnow

b. Predictors: (Constant), What is your gender?

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	17.146	.802		21.379	.000	15.569	18.723
	What is your gender?	2.530	.496	.254	5.096	.000	1.554	3.506

a. Dependent Variable: IntrinsicToKnow

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.015[a]	.000	-.002	4.98425

a. Predictors: (Constant), Please specify your ethnicity.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.157	1	2.157	.087	.768[b]
	Residual	9440.254	380	24.843		
	Total	9442.411	381			

a. Dependent Variable: IntrinsicToKnow

b. Predictors: (Constant), Please specify your ethnicity.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	21.142	.432		48.904	.000	20.292	21.992
	Please specify your ethnicity.	-.051	.174	-.015	-.295	.768	-.393	.290

a. Dependent Variable: IntrinsicToKnow

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.070[a]	.005	.002	5.01034

a. Predictors: (Constant), generation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.644	1	47.644	1.898	.169[b]
	Residual	9539.332	380	25.104		
	Total	9586.976	381			

a. Dependent Variable: IntrinsicToKnow

b. Predictors: (Constant), generation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	22.276	.956		23.310	.000	20.397	24.155
	generation	-.756	.549	-.070	-1.378	.169	-1.835	.323

a. Dependent Variable: IntrinsicToKnow

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.024[a]	.001	-.002	5.60005

a. Predictors: (Constant), Current College/University

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.755	1	6.755	.215	.643[b]
	Residual	11822.913	377	31.361		
	Total	11829.668	378			

a. Dependent Variable: IntrinsicAccomplishment

b. Predictors: (Constant), Current College/University

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	19.701	1.028		19.156	.000	17.679	21.723
	Current College/University	-.279	.601	-.024	-.464	.643	-1.460	.902

a. Dependent Variable: IntrinsicAccomplishment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.250[a]	.062	.060	5.42958

a. Predictors: (Constant), What is your gender?

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	732.033	1	732.033	24.831	.000[b]
	Residual	11025.645	374	29.480		
	Total	11757.678	375			

a. Dependent Variable: IntrinsicAccomplishment

b. Predictors: (Constant), What is your gender?

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	14.977	.908		16.503	.000	13.193	16.762
	What is your gender?	2.798	.562	.250	4.983	.000	1.694	3.903

a. Dependent Variable: IntrinsicAccomplishment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.012[a]	.000	-.003	5.58831

a. Predictors: (Constant), Please specify your ethnicity.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.819	1	1.819	.058	.809[b]
	Residual	11742.194	376	31.229		
	Total	11744.013	377			

a. Dependent Variable: IntrinsicAccomplishment

b. Predictors: (Constant), Please specify your ethnicity.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	19.172	.487		39.350	.000	18.214	20.130
	Please specify your ethnicity.	.048	.197	.012	.241	.809	-.340	.435

a. Dependent Variable: IntrinsicAccomplishment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.074[a]	.005	.003	5.59363

a. Predictors: (Constant), generation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	65.040	1	65.040	2.079	.150[b]
	Residual	11764.568	376	31.289		
	Total	11829.608	377			

a. Dependent Variable: IntrinsicAccomplishment

b. Predictors: (Constant), generation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	20.731	1.071		19.348	.000	18.625	22.838
	generation	-.887	.615	-.074	-1.442	.150	-2.097	.323

a. Dependent Variable: IntrinsicAccomplishment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.139[a]	.019	.017	5.64570

a. Predictors: (Constant), Current College/University

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	238.886	1	238.886	7.495	.006[b]
	Residual	12112.112	380	31.874		
	Total	12350.997	381			

a. Dependent Variable: IntrinsicStimulation

b. Predictors: (Constant), Current College/University

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	11.282	1.033		10.922	.000	9.251	13.313
	Current College/University	1.652	.603	.139	2.738	.006	.465	2.838

a. Dependent Variable: IntrinsicStimulation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.141[a]	.020	.017	5.66033

a. Predictors: (Constant), What is your gender?

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	246.125	1	246.125	7.682	.006[b]
	Residual	12078.809	377	32.039		
	Total	12324.934	378			

a. Dependent Variable: IntrinsicStimulation

b. Predictors: (Constant), What is your gender?

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	11.532	.941		12.251	.000	9.681	13.383
	What is your gender?	1.616	.583	.141	2.772	.006	.470	2.762

a. Dependent Variable: IntrinsicStimulation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.064[a]	.004	.002	5.68846

a. Predictors: (Constant), Please specify your ethnicity.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	51.045	1	51.045	1.577	.210[b]
	Residual	12263.889	379	32.359		
	Total	12314.934	380			

a. Dependent Variable: IntrinsicStimulation

b. Predictors: (Constant), Please specify your ethnicity.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	13.513	.493		27.387	.000	12.543	14.483
	Please specify your ethnicity.	.249	.198	.064	1.256	.210	-.141	.639

a. Dependent Variable: IntrinsicStimulation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.111[a]	.012	.010	5.67217

a. Predictors: (Constant), generation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	153.220	1	153.220	4.762	.030[b]
	Residual	12193.757	379	32.174		
	Total	12346.976	380			

a. Dependent Variable: IntrinsicStimulation

b. Predictors: (Constant), generation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	16.267	1.082		15.032	.000	14.139	18.395
	generation	-1.356	.622	-.111	-2.182	.030	-2.578	-.134

a. Dependent Variable: IntrinsicStimulation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.090[a]	.008	.005	3.57010

a. Predictors: (Constant), Current College/University

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.681	1	39.681	3.113	.078[b]
	Residual	4868.819	382	12.746		
	Total	4908.500	383			

a. Dependent Variable: ExtrinsicIndentified

b. Predictors: (Constant), Current College/University

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	25.547	.655		39.012	.000	24.260	26.835
	Current College/University	-.673	.382	-.090	-1.764	.078	-1.424	.077

a. Dependent Variable: ExtrinsicIndentified

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.284[a]	.080	.078	3.40175

a. Predictors: (Constant), What is your gender?

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	383.363	1	383.363	33.129	.000[b]
	Residual	4385.740	379	11.572		
	Total	4769.102	380			

a. Dependent Variable: ExtrinsicIndentified

b. Predictors: (Constant), What is your gender?

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	21.386	.565		37.838	.000	20.274	22.497
	What is your gender?	2.012	.350	.284	5.756	.000	1.325	2.699

a. Dependent Variable: ExtrinsicIndentified

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.092[a]	.009	.006	3.54129

a. Predictors: (Constant), Please specify your ethnicity.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.180	1	41.180	3.284	.071[b]
	Residual	4778.022	381	12.541		
	Total	4819.201	382			

a. Dependent Variable: ExtrinsicIndentified

b. Predictors: (Constant), Please specify your ethnicity.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	24.912	.307		81.104	.000	24.308	25.516
	Please specify your ethnicity.	-.223	.123	-.092	-1.812	.071	-.466	.019

a. Dependent Variable: ExtrinsicIndentified

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.050[a]	.002	.000	3.58402

a. Predictors: (Constant), generation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.027	1	12.027	.936	.334[b]
	Residual	4894.026	381	12.845		
	Total	4906.052	382			

a. Dependent Variable: ExtrinsicIndentified

b. Predictors: (Constant), generation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	25.071	.683		36.681	.000	23.727	26.414
	generation	-.380	.392	-.050	-.968	.334	-1.151	.392

a. Dependent Variable: ExtrinsicIndentified

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.020[a]	.000	-.002	5.57081

a. Predictors: (Constant), Current College/University

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.765	1	4.765	.154	.695[b]
	Residual	11854.974	382	31.034		
	Total	11859.740	383			

a. Dependent Variable: ExtrinsicIntrojected

b. Predictors: (Constant), Current College/University

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	22.409	1.019		21.996	.000	20.406	24.412
	Current College/University	-.233	.594	-.020	-.392	.695	-1.402	.936

a. Dependent Variable: ExtrinsicIntrojected

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.302[a]	.091	.089	5.31817

a. Predictors: (Constant), What is your gender?

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1078.366	1	1078.366	38.128	.000[b]
	Residual	10719.246	379	28.283		
	Total	11797.612	380			

a. Dependent Variable: ExtrinsicIntrojected

b. Predictors: (Constant), What is your gender?

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	16.881	.882		19.141	.000	15.147	18.615
	What is your gender?	3.373	.546	.302	6.175	.000	2.299	4.447

a. Dependent Variable: ExtrinsicIntrojected

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.011[a]	.000	-.002	5.54467

a. Predictors: (Constant), Please specify your ethnicity.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.509	1	1.509	.049	.825[b]
	Residual	11713.227	381	30.743		
	Total	11714.736	382			

a. Dependent Variable: ExtrinsicIntrojected

b. Predictors: (Constant), Please specify your ethnicity.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	22.144	.481		46.043	.000	21.198	23.089
	Please specify your ethnicity.	-.043	.193	-.011	-.222	.825	-.422	.337

a. Dependent Variable: ExtrinsicIntrojected

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.130[a]	.017	.014	5.52599

a. Predictors: (Constant), generation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	200.517	1	200.517	6.566	.011[b]
	Residual	11634.418	381	30.537		
	Total	11834.935	382			

a. Dependent Variable: ExtrinsicIntrojected

b. Predictors: (Constant), generation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	24.615	1.054		23.358	.000	22.543	26.687
	generation	-1.550	.605	-.130	-2.563	.011	-2.739	-.361

a. Dependent Variable: ExtrinsicIntrojected

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.066[a]	.004	.002	3.46767

a. Predictors: (Constant), Current College/University

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.082	1	20.082	1.670	.197[b]
	Residual	4605.461	383	12.025		
	Total	4625.543	384			

a. Dependent Variable: ExtrinsicRegulation

b. Predictors: (Constant), Current College/University

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	26.044	.634		41.079	.000	24.797	27.291
	Current College/University	-.478	.370	-.066	-1.292	.197	-1.205	.249

a. Dependent Variable: ExtrinsicRegulation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.183[a]	.033	.031	3.38400

a. Predictors: (Constant), What is your gender?

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	150.352	1	150.352	13.130	.000[b]
	Residual	4351.546	380	11.451		
	Total	4501.898	381			

a. Dependent Variable: ExtrinsicRegulation

b. Predictors: (Constant), What is your gender?

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	23.352	.561		41.630	.000	22.249	24.455
	What is your gender?	1.258	.347	.183	3.623	.000	.575	1.941

a. Dependent Variable: ExtrinsicRegulation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.076[a]	.006	.003	3.46849

a. Predictors: (Constant), Please specify your ethnicity.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.883	1	26.883	2.235	.136[b]
	Residual	4595.615	382	12.030		
	Total	4622.497	383			

a. Dependent Variable: ExtrinsicRegulation

b. Predictors: (Constant), Please specify your ethnicity.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	25.615	.300		85.290	.000	25.025	26.206
	Please specify your ethnicity.	-.180	.121	-.076	-1.495	.136	-.418	.057

a. Dependent Variable: ExtrinsicRegulation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.004[a]	.000	-.003	3.47953

a. Predictors: (Constant), generation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.068	1	.068	.006	.940[b]
	Residual	4624.921	382	12.107		
	Total	4624.990	383			

a. Dependent Variable: ExtrinsicRegulation

b. Predictors: (Constant), generation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	25.207	.663		37.996	.000	23.903	26.512
	generation	.029	.381	.004	.075	.940	-.720	.777

a. Dependent Variable: ExtrinsicRegulation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.044[a]	.002	-.001	4.05390

a. Predictors: (Constant), Current College/University

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.020	1	12.020	.731	.393[b]
	Residual	6277.814	382	16.434		
	Total	6289.833	383			

a. Dependent Variable: Amotivation

b. Predictors: (Constant), Current College/University

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	5.785	.744		7.780	.000	4.323	7.247
	Current College/University	.371	.433	.044	.855	.393	-.481	1.222

a. Dependent Variable: Amotivation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.163[a]	.026	.024	4.01373

a. Predictors: (Constant), What is your gender?

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	165.851	1	165.851	10.295	.001[b]
	Residual	6105.708	379	16.110		
	Total	6271.559	380			

a. Dependent Variable: Amotivation

b. Predictors: (Constant), What is your gender?

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	8.437	.667		12.652	.000	7.126	9.748
	What is your gender?	-1.323	.412	-.163	-3.209	.001	-2.134	-.512

a. Dependent Variable: Amotivation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.131[a]	.017	.015	4.00922

a. Predictors: (Constant), Please specify your ethnicity.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	107.737	1	107.737	6.703	.010[b]
	Residual	6124.122	381	16.074		
	Total	6231.859	382			

a. Dependent Variable: Amotivation

b. Predictors: (Constant), Please specify your ethnicity.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	5.648	.348		16.243	.000	4.965	6.332
	Please specify your ethnicity.	.361	.140	.131	2.589	.010	.087	.636

a. Dependent Variable: Amotivation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.054[a]	.003	.000	4.03311

a. Predictors: (Constant), generation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.287	1	18.287	1.124	.290[b]
	Residual	6197.322	381	16.266		
	Total	6215.608	382			

a. Dependent Variable: Amotivation

b. Predictors: (Constant), generation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	7.159	.769		9.308	.000	5.647	8.671
	generation	-.468	.441	-.054	-1.060	.290	-1.336	.400

a. Dependent Variable: Amotivation

APPENDIX I: TWO-WAY ANOVA ANALYSIS WITH INTERACTION BY MOTIVATIONAL ORIENTATION

Tests of Between-Subjects Effects for IM-knowledge

Dependent Variable: IntrinsicToKnow

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	56.073[a]	3	18.691	.741	.528
Intercept	101642.556	1	101642.556	4031.190	.000
College	3.688	1	3.688	.146	.702
Generation	52.866	1	52.866	2.097	.148
College * Generation	8.288	1	8.288	.329	.567
Error	9530.903	378	25.214		
Total	178175.000	382			
Corrected Total	9586.976	381			

a. R Squared = .006 (Adjusted R Squared = -.002)

Current College/University * generation

Dependent Variable: IntrinsicToKnow

Current College/University	generation	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
4-year insitution	First-generation	22.045	1.071	19.940	24.150
	Non-first-generation	20.693	.470	19.768	21.618
2-year insitution	First-generation	21.406	.500	20.424	22.388
	Non-first-generation	20.821	.417	20.001	21.641

Tests of Between-Subjects Effects for IM-accomplishment

Dependent Variable: IntrinsicAccomplishment

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	128.539[a]	3	42.846	1.369	.252
Intercept	87105.705	1	87105.705	2784.150	.000
College	56.653	1	56.653	1.811	.179
Generation	121.339	1	121.339	3.878	.050
College * Generation	40.415	1	40.415	1.292	.256
Error	11701.069	374	31.286		
Total	151806.000	378			
Corrected Total	11829.608	377			

a. R Squared = .011 (Adjusted R Squared = .003)

Current College/University * generation

Dependent Variable: IntrinsicAccomplishment

Current College/University	generation	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
4-year insitution	First-generation	21.364	1.193	19.019	23.709
	Non-first-generation	19.044	.526	18.010	20.079
2-year insitution	First-generation	19.510	.559	18.410	20.610
	Non-first-generation	18.888	.468	17.968	19.808

Tests of Between-Subjects Effects for IM-stimulation

Dependent Variable: IntrinsicStimulation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	396.164[a]	3	132.055	4.166	.006
Intercept	45751.757	1	45751.757	1443.284	.000
College	29.161	1	29.161	.920	.338
Generation	149.217	1	149.217	4.707	.031
College * Generation	83.250	1	83.250	2.626	.106
Error	11950.812	377	31.700		
Total	86939.000	381			
Corrected Total	12346.976	380			

a. R Squared = .032 (Adjusted R Squared = .024)

Current College/University * generation

Dependent Variable: IntrinsicStimulation

Current College/University	generation	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
4-year insitution	First-generation	15.318	1.200	12.958	17.678
	Non-first-generation	12.474	.527	11.437	13.511
2-year insitution	First-generation	14.822	.560	13.720	15.923
	Non-first-generation	14.410	.469	13.487	15.332

Tests of Between-Subjects Effects – EM-identified

Dependent Variable: ExtrinsicIndentified

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	73.396[a]	3	24.465	1.919	.126
Intercept	137862.297	1	137862.297	10811.821	.000
College	56.489	1	56.489	4.430	.036
Generation	32.343	1	32.343	2.536	.112
College * Generation	5.621	1	5.621	.441	.507
Error	4832.656	379	12.751		
Total	233554.000	383			
Corrected Total	4906.052	382			

a. R Squared = .015 (Adjusted R Squared = .007)

Current College/University * generation

Dependent Variable: ExtrinsicIndentified

Current College/University	generation	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
4-year insitution	First-generation	25.773	.761	24.276	27.270
	Non-first-generation	24.699	.336	24.039	25.360
2-year insitution	First-generation	24.455	.355	23.757	25.154
	Non-first-generation	24.014	.295	23.435	24.593

Tests of Between-Subjects Effects – EM-introjected

Dependent Variable: ExtrinsicIntrojected

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	238.589[a]	3	79.530	2.599	.052
Intercept	113424.228	1	113424.228	3707.011	.000
College	28.053	1	28.053	.917	.339
Generation	172.643	1	172.643	5.642	.018
College * Generation	.117	1	.117	.004	.951
Error	11596.346	379	30.597		
Total	197427.000	383			
Corrected Total	11834.935	382			

a. R Squared = .020 (Adjusted R Squared = .012)

Current College/University * generation

Dependent Variable: ExtrinsicIntrojected

Current College/University	generation	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
4-year insitution	First-generation	23.682	1.179	21.363	26.001
	Non-first-generation	21.886	.518	20.867	22.905
2-year insitution	First-generation	22.931	.550	21.848	24.013
	Non-first-generation	21.226	.458	20.326	22.126

Tests of Between-Subjects Effects – EM-regulation

Dependent Variable: ExtrinsicRegulation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	27.801[a]	3	9.267	.766	.514
Intercept	145858.525	1	145858.525	12056.551	.000
College	27.533	1	27.533	2.276	.132
Generation	4.527	1	4.527	.374	.541
College * Generation	6.622	1	6.622	.547	.460
Error	4597.189	380	12.098		
Total	249550.000	384			
Corrected Total	4624.990	383			

a. R Squared = .006 (Adjusted R Squared = -.002)

Current College/University * generation

Dependent Variable: ExtrinsicRegulation

Current College/University	generation	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
4-year insitution	First-generation	26.091	.742	24.633	27.549
	Non-first-generation	25.465	.326	24.824	26.105
2-year insitution	First-generation	25.050	.346	24.369	25.730
	Non-first-generation	25.109	.287	24.545	25.673

Tests of Between-Subjects Effects – Amotivation

Dependent Variable: Amotivation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	30.093[a]	3	10.031	.615	.606
Intercept	9507.463	1	9507.463	582.543	.000
College	.076	1	.076	.005	.945
Generation	20.065	1	20.065	1.229	.268
College * Generation	7.208	1	7.208	.442	.507
Error	6185.516	379	16.321		
Total	21773.000	383			
Corrected Total	6215.608	382			

a. R Squared = .005 (Adjusted R Squared = -.003)

Current College/University * generation

Dependent Variable: Amotivation

Current College/University	generation	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
4-year insitution	First-generation	6.955	.861	5.261	8.648
	Non-first-generation	6.000	.380	5.253	6.747
2-year insitution	First-generation	6.634	.402	5.843	7.424
	Non-first-generation	6.395	.333	5.739	7.050

APPENDIX J: INDEPENDENT T-TEST BY INSTITUTIONAL TYPE AND GENERATIONAL STATUS

Group Statistics by Institutional Status					
	Current College/University	N	Mean	Std. Deviation	Std. Error Mean
Gender	4-year institution	136	1.55	.49	.042
	2-year institution	246	1.52	.50	.031
Ethnicity	4-year institution	136	1.77	1.47	.126
	2-year institution	248	2.13	1.45	.092
IM-Knowledge	4-year institution	136	20.91	4.61	.396
	2-year institution	247	21.06	5.22	.332
IM-Accomplishment	4-year institution	135	19.42	5.20	.448
	2-year institution	244	19.14	5.80	.371
IM-Stimulation	4-year institution	136	12.93	5.38	.461
	2-year institution	246	14.58	5.78	.368
EM-Identified	4-year institution	135	24.87	3.42	.294
	2-year institution	249	24.20	3.64	.231
EM-Introjected	4-year institution	136	22.17	5.13	.439
	2-year institution	248	21.94	5.79	.368
EM-Regulation	4-year institution	136	25.56	3.02	.259
	2-year institution	249	25.08	3.68	.233
Amotivation	4-year institution	135	6.15	3.37	.290
	2-year institution	249	6.52	4.37	.277

Independent Samples Test by Institutional Type										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Gender	Equal variances assumed	1.79	.182	.645	380	.519	.0344	.053	-.07055	.13942
	Equal variances not assumed			.646	279.58	.519	.0344	.053	-.07055	.13941
Ethnicity	Equal variances assumed	.42	.514	-2.29	382	.022	-.3576	.155	-.66407	-.05130
	Equal variances not assumed			-2.28	274.53	.023	-.3576	.156	-.66576	-.04961
IM-Knowledge	Equal variances assumed	1.69	.194	-.278	381	.781	-.1489	.535	-1.20201	.90408
	Equal variances not assumed			-.288	308.02	.773	-.1489	.516	-1.16618	.86826
IM-Accomplishment	Equal variances assumed	3.58	.059	.464	377	.643	.2787	.600	-.90234	1.45990
	Equal varianc			.479	302.65	.632	.27878	.582	-.86702	1.42458

	es not assumed									
IM-Stimulation	Equal variances assumed	1.10	.295	-2.73	380	.006	-1.651	.603	-2.83771	-.46537
	Equal variances not assumed			-2.79	296.12	.006	-1.651	.590	-2.81415	-.48893
EM-Identified	Equal variances assumed	.90	.342	1.76	382	.078	.673	.381	-.07698	1.42352
	Equal variances not assumed			1.79	290.43	.073	.673	.374	-.06358	1.41012
EM-Introjected	Equal variances assumed	4.06	.045	.392	382	.695	.232	.594	-.93581	1.40165
	Equal variances not assumed			.406	307.75	.685	.232	.573	-.895	1.36
EM-Regulation	Equal variances assumed	4.63	.032	1.29	383	.197	.477	.369	-.249	1.20
	Equal variances not assumed			1.36	326.30	.172	.477	.348	-.208	1.16
Amotivation	Equal variances	4.19	.041	-.855	382	.393	-.370	.433	-1.22	.481

	assumed									
	Equal variances not assumed			-.922	337.833	.357	-.370	.401	-1.16	.419

Group Statistics by Generational Status					
	generation	N	Mean	Std. Deviation	Std. Error Mean
Gender	First generation	122	1.63	.484	.043
	Non-first generation	259	1.49	.500	.031
Ethnicity	First generation	123	2.37	1.46	.131
	Non-first generation	260	1.83	1.44	.089
IM-Knowledge	First generation	123	21.53	4.99	.450
	Non-first generation	259	20.76	5.01	.311
IM-Accomplishment	First generation	122	19.84	5.60	.507
	Non-first generation	256	18.95	5.58	.349
IM-Stimulation	First generation	123	14.91	5.88	.530
	Non-first generation	258	13.55	5.56	.346
EM-Identified	First generation	123	24.69	3.45	.311
	Non-first generation	260	24.31	3.64	.225
EM-Introjected	First generation	123	23.06	5.33	.481
	Non-first generation	260	21.51	5.61	.348
EM-Regulation	First generation	123	25.23	3.46	.312
	Non-first generation	261	25.26	3.48	.215
Amotivation	First generation	123	6.69	3.83	.345
	Non-first generation	260	6.22	4.12	.255

Independent Samples Test by Generational Status										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Gender	Equal variances assumed	18.60	.000	2.587	379	.010	.140	.054	.033	.247
	Equal variances not assumed			2.618	244.44	.009	.140	.053	.034	.246
Ethnicity	Equal variances assumed	.015	.901	3.400	381	.001	.539	.158	.227	.851
	Equal variances not assumed			3.385	236.78	.001	.539	.159	.225	.853
IM-Knowledge	Equal variances assumed	.164	.685	1.378	380	.169	.755	.548	-.323	1.83
	Equal variances not assumed			1.379	240.54	.169	.755	.548	-.323	1.83
IM-Accomplishment	Equal variances assumed	.000	.988	1.442	376	.150	.887	.615	-.322	2.09
	Equal variances not assumed			1.440	237.47	.151	.887	.616	-.326	2.10
IM-Stimulation	Equal variances assumed	1.54	.214	2.182	379	.030	1.35	.621	.134	2.57
	Equal variances not assumed			2.139	228.42	.033	1.35	.634	.107	2.60

EM-Indentified	Equal variances assumed	.68	.410	.968	381	.334	.379	.392	-.391	1.15
	Equal variances not assumed			.986	251.35	.325	.379	.384	-.378	1.13
EM-Introjected	Equal variances assumed	1.78	.182	2.563	381	.011	1.54	.604	.360	2.73
	Equal variances not assumed			2.609	250.80	.010	1.54	.593	.380	2.71
EM-Regulation	Equal variances assumed	.10	.751	-.075	382	.940	-.026	.380	-.773	.719
	Equal variances not assumed			-.075	240.77	.940	-.028	.379	-.776	.719
Amotivation	Equal variances assumed	.30	.584	1.060	381	.290	.467	.441	-.399	1.33
	Equal variances not assumed			1.088	256.05	.277	.467	.429	-.378	1.31