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Intrinsic, Future-oriented Goal Awareness and Two-year College Graduation

Brent A. Stubbs
Georgia Southern University

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INTRINSIC, FUTURE-ORIENTED GOAL AWARENESS AND TWO-YEAR COLLEGE
GRADUATION

by

BRENT A. STUBBS

Under the Direction of Antonio Guitierrez de Blume

ABSTRACT

The two-year college graduation rate is at an all-time low. Curricular and program designs are not making the sweeping changes needed for the outcomes desired. While higher education continues to be sold as an economic good, research is pointing to the predictive nature of intrinsic, future-oriented goal (IFOG) awareness on sub-goal adoption and its relation to course success and intention to persist. This cross-sectional, correlational study desired to uncover the relation between IFOG and graduation. A modified version of the Aspirations index was provided to a group of new students and those on-target to graduate (last semester) in an effort to understand the variable relations and variable value difference, if any, between groups.

Despite previous studies, on-target to graduate students did not have a higher presence of IFOG than new students (was not predictive), and, while not statistically significant, new students did have a higher presence of IFOG than those on-target to graduate. Also, diploma (1 year) students did have a statistically significant higher presence of IFOG than degree students. Results are discussed within Boleman and Deal's (1999) meaning making framework. Implications for higher education leaders and recommendations for future research and design are discussed given the promise of prior research, the findings of this research, and the ongoing challenge of increasing two-year college graduation.

INDEX WORDS: Intrinsic motivation, Graduation, Two-year colleges, Short term programs

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by

BRENT A. STUBBS

BA, Oral Roberts University, 2003

MBA, Brenau University, 2007

A Dissertation Submitted to the Graduate Faculty of Georgia Southern University in Partial
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DOCTOR OF EDUCATION

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BRENT A. STUBBS

Major Professor: Antonio Gutierrez de Blume

Committee: Juliann McBrayer

Dan W. Calhoun

Electronic Version Approved:
May 2018

DEDICATION

I would like to dedicate this to my wife, Danielle. Thank you for all the steady and quiet support.

ACKNOWLEDGMENTS

I am here today because of others.

My father and mother broke cycles and gave me a life full of learning and love. Mr. Pawson in 7th grade talked to me like what I said mattered. Coach Blake taught me that you can get a lot done in the morning, and you can do it with a great attitude. Dr. Thorpe recognized a gift for teaching and cultivated in me a Socratic mindset. Friends and colleagues have encouraged me along the way. My children have inspired me to persevere. My wife has been a faithful friend. Dr. Boyd believed in me.

Thank you.

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CHAPTER 1

Introduction

The state of college completion in the United States (US) is in crisis. According to data collected in 2014, the graduation rate of America's two-year colleges is a mere 20% (US Department of Education, 2016), down 11% from 2011 figures. Adjusted for current levels of enrollment, that means that over six million students who enroll in classes at a two-year college this year will never earn a degree. Exacerbating the problem is the fact that most students who enroll at a two-year college are underprepared. In 2009, 68% of students enrolling in community or two-year colleges were required to take one or more development education courses (Ginder & Kelly-Reid, 2013). A study by Attewell, Lavin, Domina and Levey (2006) found that only 28% of students enrolled in remedial education go on to complete a college credential within 8.5 years.

Hensley, Galilee-Belfer, and Lee's (2013) discourse analysis showed that college executive leaders consistently frame the value of higher education in terms of its immediate and long-term economic benefits. Despite these proffered returns on investments, students are still failing to graduate college at pandemic levels, especially at two-year colleges. The implications of this failure for students to graduate are only exaggerated in socio-economically disadvantaged communities (Phelps, 2014). Moreover, quantitative research by Vedder (2014) showed that the problem is stifling low-income participation.

There is a growing body of research (Côté & Levine, 1997; Stage, 1989; Vallerand & Bissonnette, 1992; Abel, Guiffrida, Lynch & Wall, 2013) which points to the important implications of student motivation on critical student behaviors and outcomes. While much attention has been given to the problem of low rates of graduation, declining graduation results

warrant probing new lines of inquiry. The challenge when considering student motivation is the complex nature of human motivation in general. Approaches to educational reform that focus on easily measurable behaviors and techniques to manipulate those behaviors are often favored in comparison to research that focuses on internal psychological states. However, internal motivational qualities might provide higher education leaders and practitioners with critical information that could portend important higher education reforms.

Background

The Servicemen's Readjustment Act of 1944, commonly referred to as the GI Bill, introduced into American life the notion of higher education as a means of economic mobility (Mills, 1951). This idea has only become more popular since that time, and through various public policies, access has been created for an unparalleled number of students that enter higher education every year. The findings of Trow (1973) showed that within 40 years of the GI Bill, massive changes had occurred in higher education. A significant spike in enrollment coupled with changing demographic and socioeconomic dynamics within institutions created scale, skill and resource issues not foreseen by the leaders and designers of higher education. Over the last 20 years, the cost of higher education has skyrocketed; leaving students with excessive debt and in many cases no degree as evidence of their time and money (Campbell & Hillman, 2015).

Two-year colleges, or community colleges, historically emerged as a system designed for the growing demand of higher education among students not prepared to attend a residential campus. Traditional campuses required students to leave their hometown, but community colleges provided students an opportunity to learn close to home. The Truman Commission recommended the building of a robust community college system, and by the 1960s, a network of nearly 457 community colleges emerged as a powerful force in the higher education

ecosystem (Phillippe & Patton, 2000). In fact, from 1970 to 1980, the number of associate degree awards conferred at two-year colleges doubled from 206,023 to 400,910 (Dillow & Snyder, 2007). In turn, two-year colleges can be seen as a means for keeping the economic stimulus of higher education close to home.

However, Deresiewicz (2015) argued that higher education has sold its soul to market forces that have narrowly defined its value as an instrumental good, a trend that started in the middle of the 20th century (Veysey, 1965). Specifically, higher education is now universally understood as the singular means for entering economic life. Moreover, higher education is consistently presented in media to potential students in ways that promote its immediate and long-term economic benefits, even ranking programs of study by return on investment (Caudle, 2016). This is consistent with Hensley, Galilee-Belfer, and Lee's (2013) discourse analysis that showed that college presidents overwhelmingly communicate the value of higher education in terms of short-term and long-term economic benefits.

Bolman and Deal (1997) suggested that the basic leadership challenge is how leaders create faith, develop meaning, and inspire beauty. In addition, Bolman and Deal (2003) showed the importance of the role of leadership in thinking about and developing the symbolic nature of the institution. Their model provides a powerful way of conceptualizing the relationship between the leadership function and the contemporary meaning of higher education as an economic instrument for upward mobility. In fact, no studies were found that considered the function or impact of the instrumental view of higher education on student motivation.

Instead, most studies have focused on curricular changes (Edgebombe, Cormier, Bickerstaff & Barragan, 2013), the financial implications of student loan default (Campbell, & Hillman, 2015), or student support systems (Smith, Baldwin, & Schmidt, 2015). Only four

studies were found to have ever considered the role of motivational factors in a higher education setting (Côté & Levine, 1997; Stage, 1989; Vallerand & Bissonnette, 1992; Abel, Guiffrida, Lynch & Wall, 2013), only one of which considered motivation from within the framework of intrinsic motivational theory (Abel et al., 2013). In a study of 1,558 two-year college students, Abel et al. (2013) showed a significant positive correlation between intrinsic, future-oriented motivation and grade point average (GPA) and persistence. However, persistence, a function of what is requisite to graduate, was only measured in relation to intent to persist and not actual persistence. This is important because the symbol or meaning of higher education functions as the goal for which students orient their motivation. The literature suggested more research is needed to understand the empirical relation between the meaning that motivates student success and the meaning of higher education popularized by leadership rhetoric in higher education.

Conceptual or Theoretical Framework

This study proceeded with a number of theoretical frameworks. First, the study was grounded in the philosophical insights of Polanyi (1958). Drawing from Gestalt psychology (1935), Polanyi's work focused on understanding the fundamental nature and motivation of human inquiry. According to Polanyi, the intuition of a whole or bigger picture was a prerequisite for the intelligibility of perceptible constituents parts. Moreover, the perception of the bigger picture emerged from a commitment to the discovery of preexisting reality, but also the perception of the bigger picture informed subsequent perceptual renderings of reality.

Miller and Brickman (2008) showed that intrinsic, future-oriented goal awareness (IFOG) had the strongest relation to sub-goal attainment. Drawing from Polanyi, this portends that IFOG may provide students with the greatest intelligible space to perceive the meaning of a sub-goal. Moreover, a study by Abel, Guiffrida, Lynch and Wall (2013) showed that IFOG also predicts

the perceived instrumentality of coursework. Both research models provide the researcher with a solid practical framework for understanding the relation between student goals and the perception of student graduation as a goal within a student's motivational schema.

Finally, in trying to conceptualize the meaning of higher education, student goals, and their impact on student outcomes, a motivational framework was needed. In keeping with the philosophical commitment, Self-Determination Theory provided the researcher with a useful framework for understanding the issues. Self-Determination Theory is comprised of six micro-theories: Cognitive Evaluation Theory, Organismic Integration Theory, Causality Orientation Theory, Basic Psychological Needs Theory, Goal Contents Theory, and Relationships Motivation Theory. Goal Contents Theory (GCT) was most appropriate because it provides a theoretical way for thinking about the relation between intrinsic motivation and the behaviors evinced by a student that persists to graduation. Going forward, GCT was the primary theory referenced in relationship to this research.

Statement of the Problem

College leaders are tasked with building the symbolic meaning of the institution. Consistently, higher education leadership has been portraying the immediate and long-term economic benefits of higher education as the primary motivation to attend and graduate from college. By the same token, the graduation rate of two-year colleges is low and on the decline. Research showed that the presence of intrinsic, future-oriented goal awareness is a significant predictor of sub-goal attainment. There is currently no evidence of research being conducted to understand the relationship that may exist between student graduation and the presence of intrinsic, future-oriented goal awareness. The implications of such research would be instructive

to academic and student supports, but would also have implications on the way in which college leaders frame the value and purpose of higher education.

Purpose Statement

The purpose of this correlational study was to examine the relation between intrinsic, future-oriented motivation and two-year college graduation to better inform the decisions of leaders in institutions of higher education. Current research points to the overwhelming fact that higher education is currently being presented as an economic good, specifically, a means to a job (Hensley, Galilee-Belfer, & Lee, 2013). However, there is a body of social science research, within the GCT theoretical framework and within an educational context that has identified the unique motivational role of intrinsic, future-oriented goal awareness in positively predicting sub-goal adoption (Miller, Relyea & Tabachnick, 2008; Abel, Guiffrida, Lynch & Wall, 2013). Given the significant sub-goal adoption graduation crisis in two-year higher education, this study considered the implications of the variance of the prevalence of intrinsic, future oriented goal awareness among new and on-target to graduate students. Given the accepted reality of the positive economic implications of postsecondary credential attainment, developing a more meaningful understanding of students who graduate seems paramount.

Moreover, for college leaders, this study might suggest a need to reframe the goal of higher education. The goal of a job or personal wealth might be too shortsighted and its value too extrinsically derived. In fact, these shortsighted and extrinsically valued goals may inhibit the development of the motivation needed to truly energize the behaviors that actually lead to the sub-goal of graduation and the subsequent economic opportunity it portends. In turn, this study may be suggestive of a needed shift in the type of rhetoric higher education leaders engage.

Higher education's developing historical marriage with business and industry, while beneficial on many fronts, may be promoting a too short-term approach to the higher education value proposition. Instead, leaders may need to return to a more holistic view of the meaning and purpose of higher education, one that harkens from early years. If higher education truly is to provide a path to economic prosperity, leaders must find new ways to frame the intrinsic and long-term benefit of learning connected deeply to the universal human plight or else higher education will fail to make good on its most fundamental promise.

Research Questions

This study sought to answer two fundamental research questions:

1. To what extent is the awareness of an intrinsic, future-oriented goal among students who are on-target to graduate from a two-year college greater than among incoming new students?
2. To what extent does the length of a program of study moderate the awareness of an intrinsic, future oriented goal among students who are on-target to graduate?

The concept of incoming new students is important as opposed to the concept of on-target to graduate. Given low rates of graduation in two-year colleges, it is most likely that students who are on-target to graduate possess some unique characteristics distinct from all of the students who start at a college. If students who are on-target to graduate from a two-year college possess an awareness of an intrinsic, future-oriented goal at a statistically significant greater level than incoming new students, the research may portend the need to significantly reframe the relationship between the institution and student and the ways in which the institution and student interact around goal development.

Significance of the Study

For one, the notion that higher education primarily exists to provide an immediate, better income for students, or at the least is what should motivate attendance, is nearly hegemonic in higher education culture. If this message is counterproductive to the college graduation agendas pervasive in higher education, then this messaging should be jettisoned in favor of messaging that promotes the student development of intrinsically valued, long-term goals. In addition, admissions processes, student services, and instructional practices should be designed to promote this type of motivation. As can be seen, the implications of this research on this level of analysis could student affairs professionals and spokespersons for the institutions, the least of which is the college president. Student affairs professionals may need to adapt their advising and career exploration services to better meet student motivational profiles. Presidents and other executive leadership may need to redesign institutional spaces and all aspects of the college that communicate implicitly or explicitly the value and meaning of education.

There are also secondary but important implications for higher education think tanks and policy makers. Many have had significant influence in promoting the idea of higher education as a kind of auxiliary corporate training. This research might suggest that approach is counterproductive to the long-term employee pipeline, and further, students educated more holistically might become better-prepared students for the evolving nature of work.

Secondly, this study is significant because no research has specifically measured the differences between the population of students who actually graduate from two-year colleges and those that are newly admitted. Previous studies have only considered intent to persist in relation to intrinsic motivational factors. No study has actually measured perceived intrinsic motivational factors in students who have actually persisted to graduation. This study may act as a theoretical

bridge between research that has considered intention toward a specified sub-goal and research that has considered intrinsic motivational factors on actual sub-goal attainment. In turn, this study could spawn additional research, especially longitudinal, that could provide underlying causal insights.

Procedures

The research questions imply the desire to discover measurable relations between variables. In addition, the researcher is committed to an epistemological position of an emergent yet discoverable reality distinct from but related to the perceptions of the researcher. In turn, a quantitative approach was most appropriate (Cresswell, 2016) for the study. This approach provided the researcher with empirical evidence that was both replicable and generalizable. A quantitative approach is also consistent with the methodological approaches in the literature that support this research.

The study was conducted at a southern, urban, mid-size, two-year college. It was selected because of the researchers affiliation with the institution. A sample of incoming students and a sample of students on-target to graduate were surveyed. All of the data was available through the student data system and easily exportable. Each term, new students are identified in the system, and each term, faculty submit to the registrar the names and identifying information of those who have met all of the requirements to graduate.

Research suggests survey data can provide meaningful, self-reported insights into the perceptions of a given constituency (Cresswell, 2012; Fink, 2002). In turn, a modified version of the latest version of the Aspirations Index was used (Kasser & Ryan, 1993, 1996) because it parses its seven categorical aspirations, or goals, conceptually into extrinsic and intrinsic aspirations. The extrinsic aspirations include those for wealth, attractive image, and fame, and

the intrinsic aspirations included those for health, personal growth, affiliation, and community contribution. The original instrument was validated in a sample of over 1,800 college students from 15 nations (Kasser, & Ryan, 1993). In a pilot study of the modified version of the most recent Aspirations Index that was used in this study (Tabachnik, 2005), there was a high alpha-reliability for all seven life-domain items. The alpha reliability coefficient for Fame was .94, Relationships .84, Image .93, Health .93, Wealth .93, Personal Growth .83, and Community involvement .95. Nevertheless, internal consistency reliability coefficients for the present sample of students were provided.

The researcher refined the Aspirations Index in order to improve response rate and in an effort to more accurately measure the characteristics relevant to this study. Only 27 questions were used; more specifically, those questions which measure extrinsic goal orientation (popularity, image, and financial success) and intrinsic goal orientation (affiliation, self-acceptance, and community). The following diagram in Figure 1 evidences the rationale for the aforementioned selections.

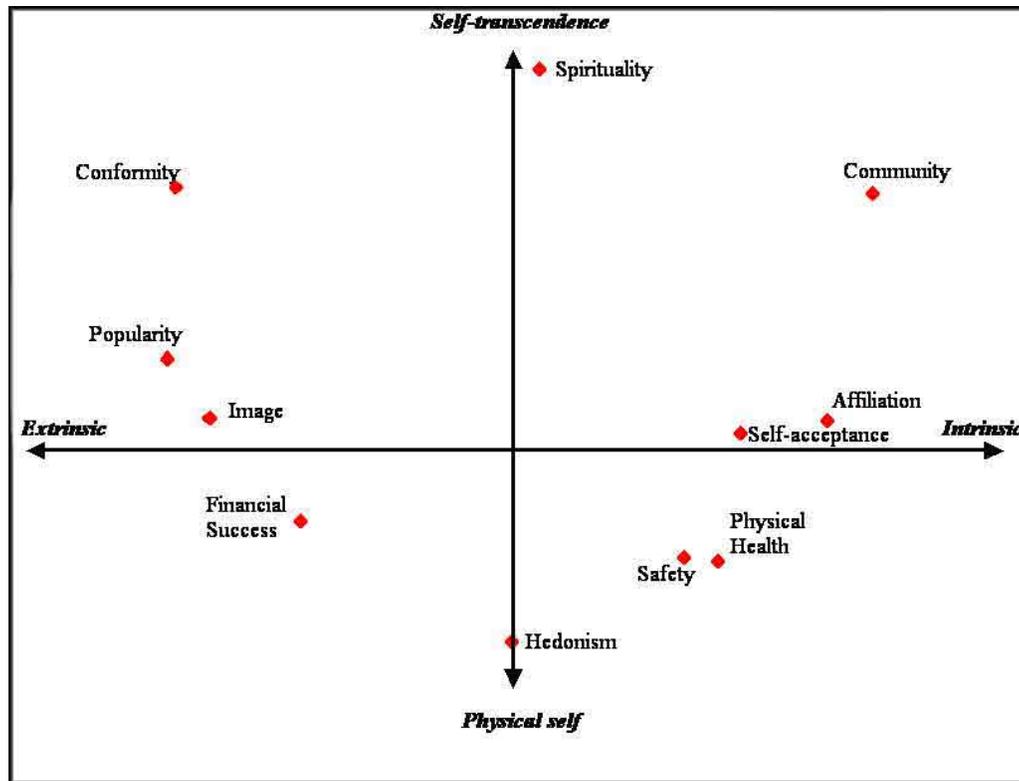


Figure 1: Circumplex results of factor analysis and MACS analysis

Approval by the Institutional Review Board (IRB) of the college for this study was obtained prior to implementation, although this study posed no physical or emotional harm to the subjects involved other than what can be encountered in daily life. After IRB, an email was sent to all new, incoming students. Those students were offered to have their names entered into a drawing to win one of two \$50 gift cards to voluntarily participate in the study. A link was provided in the email to complete the survey. The email was sent from the researcher's Qualtrics account, which allowed for anonymity. The 'from' address was be noreply@gmailserver.com. One week later, an email was sent to all students who currently have a graduation application on file in the Registrar's office. These applications are submitted by departmental administration at the two-year college. This group of students, the on-target to graduate students, were also offered

to have their names entered into a drawing to win one of two \$50 gift cards to voluntarily participate in the study, and a hyperlink was provided in the email to complete the survey.

Survey data was gathered within four weeks of the emails being sent to the students. Students completed the survey online. Since the researcher is also the Dean of Adult Education at the college, the researcher remained anonymous so that the students did not feel compelled to participate. The modified Aspirations Index questions were administered electronically (See Appendix A). The Aspirations Index was digitized in Qualtrics, and the link provided in the email. Students also provided major type and basic demographic information.

The two responses per question in the assessment were averaged. Descriptive statistics were reported for each variable. For the first research question, an independent samples *t*-test was conducted on a sub-section of both samples, specifically, all students whose program of study is an associate degree. This test determined if the presence of an awareness of an intrinsic, future-oriented goal is different in the sample of on-target to graduate students compared with incoming new students. The *t*-test assessed the difference in mean responses for the intrinsic and extrinsic constructs measured on the Aspirations Index. For the second research question, a one-way analysis of variance (ANOVA) was planned to determine the moderating effect of length of program (.5 years, 1 year, 2 years) on the presence of IFOG. The moderating analysis is appropriate because length of program is a categorical variable.

Definitions of Key Terms

Sub-goal - A sub-goal for the purpose of this study will be understood as any achievement that is a prerequisite of some other goal. The goal to which the sub-goal is oriented is fixed in the future.

Intrinsic, future-oriented goal - Intrinsic, future-oriented goal (IFOG) is any goal for which a sub-goal applies, and for which its value is derived for its intrinsic, not extrinsic, value.

Therefore, there are two components: time and goal sequence. If a goal is in the future and that goal can be conceptualized as having a sub-goal it meets the requirement of the concept. Further, that goal must also be valued for its intrinsic, non-hedonic value (Kasser, 2016). The term “aspiration” is also interchangeable with goal.

Chapter Summary and Organization of the Paper

Two-year college graduation is in crisis. This is true even while college leaders consistently frame the value of higher education in terms of its economic benefits. This type of motivation is often couched in extrinsic and short-term language, and leaders clearly believe that it is sufficient to enroll, retain and graduate students. However, there is a growing body of research which points to the powerful, motivational role of intrinsic, future-oriented goals in a higher education context, but no research has considered its implications on graduation.

The purpose of this cross-sectional, correlational study was to consider the implications of the motivational differences among new and on-time to graduate two-year college students. The study considered the mediating and moderating effects, if any, of length of program of study on the presence of intrinsic, future-oriented goal awareness. The study used questions from a reliable, statistically validated instrument that is consistent with prior research. In addition, the results of this study provide leaders with a possible impetus to change the language they use in creating the meaning and value of higher education. It also offers valuable insights to admissions, student affairs, and instructional leaders on the nature of the student motivation required for persistence that leads to graduation.

The proceeding chapter will cover the relevant literature in relationship to the historical, economic, and leadership issues as well as the theoretical framework. Chapter 3 will detail the methodology and data analysis, which will provide the evidential component of the study. Chapter 4 will be a reporting of the data. Finally, chapter 5 will consider the findings, conclusions, implications and suggestive future research.

CHAPTER 2

REVIEW OF THE LITERATURE

In order to understand the college graduation crisis in context, it is necessary to probe four key areas of inquiry. Figure 2 provides a way of visualizing the review of the literature.

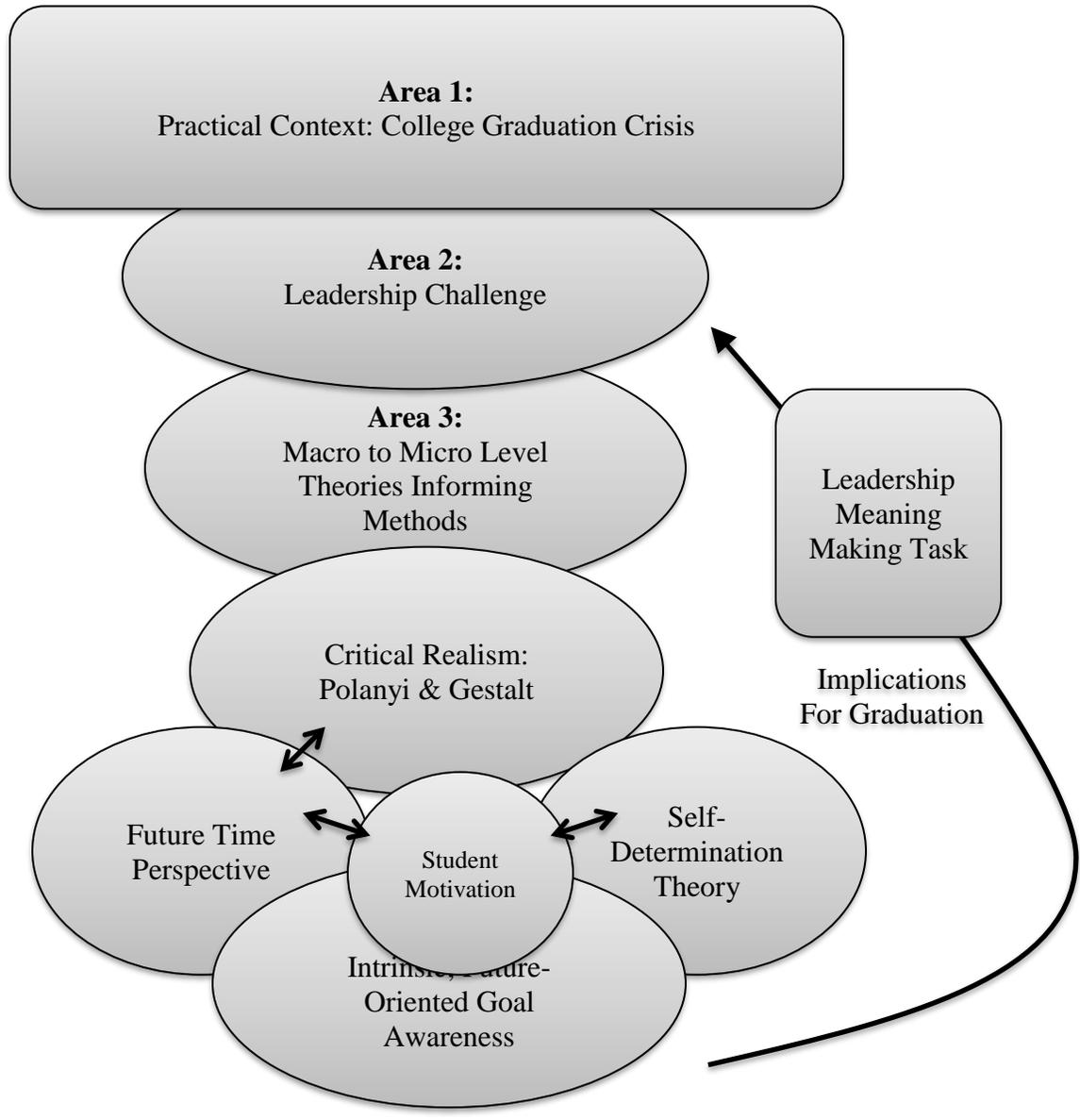


Figure 2. Visualization of the relationship of the literature

Figure 2 shows that the inquiry is grounded in the context of the graduation crisis in higher education, particularly in two-year colleges. The paucity of graduation success across the system motivates the research. From there, the leadership challenge will be examined in relationship to the meaning making frame within Bolman and Deal's model (2003), specifically highlighting the motivational features of the ways in which current higher education leaders are framing how students should perceive the meaning of higher education. Next, the macro to micro level theories that support the research will be examined within a critical realist framework leading to an examination of self-determination theory and the research that provides the impetus for examining intrinsic, future-oriented goal (IFOG) awareness and its implications for persistence that leads to college graduation. Particularly, the relation between IFOG and college graduation will be demonstrated as an important gap in the literature that this proposed study will attempt to inform, and for which its findings should provide insights into the nature of student motivation and a potential corrective to current trends in higher education leadership.

Three primary lines of inquiry were conducted for the review of the literature. First, the key concepts and ideas in the two studies (Miller, Relyea & Tabachnick, 2008; Abel, Guiffrida, Lynch & Wall, 2013) that ground this research were examined. Studies that cited those studies were also points of interest. Additional searches were conducted for the academic literature surrounding the history of two-year colleges, the graduation crisis, and the relationship between higher education and business. What emerged from the research was the importance of Self-Determination theory and its underpinning constructs. The researcher found a website that is maintained by a community of scholars (Home, 2017) dedicated to curating research related to Self-Determination theory. Those curated articles served as a springboard for further discoveries. Finally, the researcher contacted the developer of the Aspirations Index, Kasser, and was

provided the most up-to-date review of the current literature surrounding extrinsic versus intrinsic aspirations.

College Graduation Crisis

Only 20% of students who start at a 2-year college ever graduate, a statistic that has not improved in the last 5 years (US Department of Education, 2016). On the surface, the problem of so many students failing to graduate appears to be overwhelming. However, a more nuanced understanding of the problem is important in order to situate it properly. The failure of so many students to graduate should be understood within a historic and economic context. This situation can be compared to an educational arms race especially among those with low socio-economic status. Further, the emergence of alternative higher education institutions in relationship to the traditional four-year comprehensive and research institutions is a concomitant feature of the problem. Moreover, the complex implications of these low rates of graduation intensify and provide focus for leadership in 2-year higher education.

Historical Contingencies

The history of the graduation crisis must be understood as a part of the general expansion of higher education and its changing mission. For example, the founder of the University of Virginia considered degrees to be superfluous to aim of higher education (The Short History, 2010). This sentiment clearly demonstrated an idea of higher education that is foreign to one where a graduation crisis could even exist. In fact, the college degree as a means for entering economic life is a relatively modern phenomenon. Despite late 19th century expansions of higher education, enrollment growth was insignificant during this period of time, as the majority of rural Americans still viewed higher education as unnecessary.

In a seminal work on the changing face of labor in America, Mills (1951) showed that a new, urban middle class emerged during the first four decades of the 20th century. This group of people sought the benefits of industrialization and urbanization. However, war had a containing effect on the role of urbanization. Nevertheless, at the close of World War II, the Servicemen's Readjustment Act of 1944 (i.e., GI Bill) introduced into the American psyche the idea of higher education as the means self-improvement and economic prosperity. Its goal was straightforward: use higher education as the vehicle for integrating soldiers into society.

Bound and Turner (2002) examined cohort participation in higher education during the post-war era and found that veterans graduated at a higher rate than non-veterans. They also confirmed that the legislation clearly increased participation and credential attainment. However, their research suggested that the effects of the GI Bill has been overstated given a variety of mitigating economic factors and pre-war trends. Nonetheless, it cannot be overstated how much this perception of success – real or otherwise – shaped the US culture's perception of the economic utility of higher education.

Subsequent civil rights and higher education legislations expanded this concept beyond the military to almost all segments of American society. The Higher Education Authorization Act (HEA) of 1965 provided a new context – poverty – for understanding the economic potential of higher education in terms of entry into the mainstream of society. This was a tipping point, wherein the development of the orientation of higher education administration to business interests married perfectly to students' growing hope that college was the guarantee of a job. In 1978, Pell Grant funding was extended to middle class families in the form of a small loan. As a new kind of entitlement, it is ironic that in the decades that preceded HEA's reauthorization in 1978 the focus of funding would shift towards loans. In fact, college loan debt doubled in the

1990s (Doyle, Hearn & McLendon, 2010) and has nearly doubled again in the last 15 years (Sparshott, 2015).

During this period of constant change, the Truman Commission recommended the development of a dynamic community college system, and by the 1960s, a network of approximately 457 community colleges emerged as a powerful force in the higher education market space (Phillippe & Patton, 2000). From 1970 to 1980, the number of associate degree awards conferred doubled from 206,023 to 400,910 (Dillow & Snyder, 2007). Veysey (1965) pointed out that an administrative class emerged in higher education during the enrollment ramp up period. At that time, the paradigm of higher education was starting to shift from what students wanted to learn to what businesses needed students to know.

Trow (1973) provided the most thorough evaluation of the emerging challenges in higher education during this time period. Figure 3 shows the major challenges identified by Trow in the Carnegie Report and the effect of those issues on the higher education system.

Event/Issue	Effect
Significant enrollment growth	Scale issues associated with larger enrollments.
Shift from elite to mass education	Underprepared students enrolling in college, possible implications for the quality of education.
Decreasing birth rate in the 1970s	Lower tax revenues.
Diverse enrollments	Systems designed for legacy students would not suffice.

Figure 3: The Findings of the Carnegie Report (Trow, 1973)

It is important to consider the unique implications for all of the effects referenced in the Carnegie Report, as all of these issues provide a historical backdrop for the crisis of low rates of graduation. First, massive enrollment increases presented both scale and system challenges for higher education. The two-year college system, or community college system, should be

understood as a kind of response to this reality. However, the importance of the shift from elite to mass education cannot be understated. As underprepared students enrolled at never before seen rates, the systems in place were both novel and inadequate. One of the most obvious missing aspects of the system seems most basic: graduation tracking. However, basic research reveals little data even available for analysis. In fact, the most significant study of its kind to that date (Snyder, 1993), produced by the National Center for Education Statistics, failed to show graduation rate data.

A study by Bowen, Chingos, and McPherson (2009) provided for the public for the first time an analysis of college graduation rates for cohort data for four major states. The data looked at 95,923 first-time freshmen, 107,951 freshmen, and 42,207 transfer students, and correlated graduation outcomes to an array of personal and academic data. Analyses of the data were conducted and graduation outcomes were represented that controlled for socio-economic status (SES), parental educational attainment, and other factors. Two findings are significant for the purposes of this research. First, SES had the strongest predictive effect on student outcomes. Second, first year grades were significantly predictive of persistence to graduation. In that regard, the researchers mentioned that the fundamental question is whether or not first year grades were explainable by student motivation or particular behaviors. The researchers believed that a focus on behaviors was most productive.

This research and literature review will take up the nature of the question of student motivation shortly. At this point, it is important to note that there seems to be a relationship between the nature of the two findings in Bowen, Chingos, and McPherson (2009) and the explanatory power of student motivation. As Payne (1995) showed in what has become the landmark work on poverty and education, poverty creates a survival mentality that inhibits the

ability to see opportunity. Given that SES was most predictive of student graduation, the idea that low-income student motivation varies precisely in its horizontal scope is not a stretch. What this implies is that students from low-income families are not afforded the same motivational vision that provides an intelligible space to see opportunities where they reside. This idea will be addressed in the section discussing the theoretical framework.

Returning to the historical context, the failure to track graduation rates, as a key metric, is explainable if understood within an economic context. The economics of the problem are best understood if first the relational dynamics of institutions and students is provided. As previously mentioned, an administrative class emerged during the 1960s and 1970s. This administrative class managed the various financial, political, and bureaucratic functions of the institution. This emerging gap between students and institutions was both obvious and significant, and existed on at least two levels: (1) experiential and (2) purpose/goal. For one, faculty and administrators did not share a common educational experience with their students. Often, these leaders came from traditional higher education institutions, and were often on track for lives in academia since secondary school. In contrast, the emergence of the ‘non-traditional’ students, first referenced by Cross (1981), by definition embodied an experience very different from the average leader in higher education.

In addition, the purpose of preparing students for the needs of business was very different than the educational experience of those working in higher education. Embedded in that disconnect is an assumption about what students’ need in relationship to what they might want. If a non-traditional student wanted to follow the same path as those in college leadership, the emerging model of business-oriented higher education did not appear to directly support that career path. Further, this development embedded into the system a kind of paternalistic

relationship; yet something very different than the historical concept of *in loco parentis* that is traditionally understood as appropriate between student and higher education institutions.

As has been seen, the graduation crisis emerges within a historical context of the evolving relationship between society and higher education institutions and those institutions and students. In terms of the former, higher education was increasingly viewed in its instrumental ability to provide access to individuals seeking full participation in American economic life. In terms of the latter, the impact of massive enrollment increases resulted in the development of a public two-year college system and a business-oriented relationship between students and institutions that intended to align higher education outcomes to gainful employment. However, in this rush to develop an approach appropriate to the burgeoning needs, graduation outcomes were overlooked. In order to better understand this oversight, the economics of the problem must be considered.

Economic Contingencies

Like any product that is in high demand, the market for higher education has become extremely competitive. The factors driving price higher should be understood as being influenced by a “winner takes all” socio-economic backdrop (Ehrenberg, 2000). Moreover, Dereseiwicz (2015), a critic of current trends in education, suggested that higher education has given up or forgotten its intellectual and moral purposes in favor of only its commercial one. Speaking of commercial enterprise, the emergence of the central and emblematic role of for profit institutions cannot be understated. These institutions target many of the same non-traditional students that two-year colleges recruit. An analysis of spending revealed that while grants make for profit institutions and private nonprofit institutions comparable in terms of net price, research by Radwin and Wei (2015) showed that loans make up nearly 61% of revenue for

the for profit institutions. To add to this picture, Johnson (2014) showed that the range of costs, or spending per student, has significant variance across institution type.

On the other end of the institutional landscape, Blumenstyk, Labert and Supiano (2015) showed that state flagship institutions, known for being barons of affordability and access, are becoming increasingly unaffordable. Two types of evidence help to make sense of this trend. For one, Larriviere and Biswas (2015) showed that the presence of state lottery systems, a state's attempt at increasing revenue to support higher education, actually have a negative correlation to public enrollments. Second, Doyle, Hearn and McLendon (2010) pointed to a strong correlation between pre-paid college tuition programs – which are approved at the state level – and lower state revenue contributions. Thus, if enrollments are declining in states with state lottery systems, and the presence of these systems serve as evidence of challenges in state funding models, and nearly half of states show declining state revenue, state flagships are making up that revenue through tuition increases.

These cost trends are important to consider in light of the position of two-year colleges. For starters, two-year college tuition and fees are still, on average, 36% the cost of public four-year college tuition and fees (Average, 2017). Further, over the last 30 years, two-year college tuition and fee increases have actually declined when adjusted for inflation (Baum, Little, Payea, 2011). In turn as could easily be predicted, two-year college enrollment has skyrocketed over the last 30 years. Of interest is a study by Denning (2017) that analyzed the effects of price lowering on the Texas Community College system. The data spanned 1994 to 2012 and encompassed demographic, cost, and student educational outcomes. The study observed that price lowering increased the likelihood of attending for those who dropped out of four-year college and had a

diversion effect for African American students. The study also found that price lowering had no significant impact on degree completion.

Despite Kane's (1995) warnings nearly two decades earlier that the price of higher education was getting out of control, higher education spending in 2012 rose to nearly 60% of the average per capita income (National Center, 2012). In the shadow of these extremely unsustainable figures, higher education institutions have been promoting shorter and more affordable programs, which have gained in popularity. Two-year public colleges provide most of these very short-term certificate or diploma programs. However, recent work by Dagar and Trimble (2014) showed that many of these short-term programs do not positively impact the future wage earnings of their graduates.

A study by Hoxby and Turner (2015) revealed that low-income college students consistently lacked information about the net price of college. In turn, a study in Iowa showed that 90% of the students that took out loans that they could not repay never earned a college credential (Campbell & Hillman, 2015). As Denning (2017) showed, even declines in cost do not positively impact degree completion. However, the overall environment is toxic for those with low income. Nevertheless, higher education does in fact have a net positive effect on long-term earnings, especially for the low-income (Mitnik & Grusky, 2015).

Phelps (2014) suggested that low SES students are impacted the most by the cost increases. This is demonstrated by the summary of the quantitative research by Vedder (2014) despite Hoxby and Turner's (2015) qualitative research that suggested the poor economy was mostly to blame. Nonetheless, research by St. John, Paulsen and Carter (2005) might offer a possible synthesis between the two perspectives – economy vs. the college. Their quantitative study demonstrated the negative impact of low-information on African American students and the

inequitable positive impact of student loans. Thus, the unaffordability of college is a problem not just grounded in a struggling economy but in the institutions and processes that guide students through the admissions process.

Given the realities considered up to this point, some conclusions can be drawn. First, higher education revenue models are devolving. This is impacting student's ability to procure the resources they need to graduate. As previously implied, revenue inputs are less reliable and more complex (State University System of Florida, 2014). Second, delinquency on student loans is disproportionately affecting low-income and minority students (Sparshott, 2015; Campbell & Hillman, 2015). Two-year public colleges enroll a majority of minority and low-income students who choose higher education. In fact, minority students earn twice as many associate degree and certificates as compared to bachelor's degrees while non-minority students earn more bachelor's degrees than associate degrees and certificates combined (Bailey, Jenkins, Leinbach, 2005).

In their seminal work, Phillippe and Sullivan (2005) summarized the landscape of two-year colleges in the 20th century. Three interesting facts emerged from their study. For one, all two-year colleges pride themselves on open enrollment, low tuition costs, and their distinct mission. Second, these institutions are facing a combination of limited funding and substantial enrollment growth in an environment of increased accountability. Third, two-year colleges have embraced remedial education and concomitant teacher preparation. These three dynamics evince an important institutional profile as it relates to the economics of the graduation issue. The logic model can be understood simply as fewer resources into the system and more expected out of it. Two-year colleges are expected to serve more students, with less, align their programs strategically to constantly changing workforce demands, all while increasing graduation rates

under costly and time consuming accountability measures that are often tied to political situations apt to change.

The surrounding economic milieu and historic emergence of two-year colleges has uniquely positioned them as natural partners with local industries. Their position as local institutions has evolved from one of ramp into the university to ramp into the workforce. Of course, this is consistent with the general historical motif of higher education as a means to full participation in American economic life. In fact, it might be understood as the logical consequence of the trajectory of higher education after the GI Bill and the Truman Report. Nevertheless, analysis of all available data by Jenkins and Fink (2016) showed that half of students who earn a bachelor's degree started at a two-year college. However, of students seeking to obtain a degree who entered in 2007, only 10% graduated and transferred to a bachelor's degree program. Moreover, lower income students were approximately 25 percent less likely to transfer to four-year colleges than were students with higher incomes. This fact reinforces the observation made previously that lower-income students perceive a narrower horizon of opportunity.

It is now important to consider the leadership challenge the problem of extremely low-rates of graduation among two-year college students presents. The economic and historic contingencies of the problem provide an appropriate avenue of leadership inquiry. What has evolved over the last century is a concept of higher education, exaggerated in the two-year college world, which positions it as a product that can deliver on economic prosperity. Naturally, those who need that product the most are the least mobile, choosing two-year public colleges as the most affordable and accessible option in the marketplace. Leaders have an important role in establishing the position and meaning of higher education as a goal or aspiration. This idea

becomes a natural segue for the discussion of the leadership challenge in light of the actions and role of leaders in this goal or meaning creation process.

Leadership Challenge

The far reaching implications of the college graduation crisis in higher education at large and two-year colleges in particular are extensive. With much at stake, higher education leaders at all levels have reason to give the problem attention. As will be discussed in the theoretical framework section of this literature review, the focus of this section for the purpose of this research will be to consider the symbolic, metaphoric or narrative aspects of leadership. In all organizations, individuals come to work to experience something. Customers come to those organizations to respond to a value proposition that the organization intends to convey or sell. Higher education is no different.

In the case of higher education, students come to purchase through various financial means an education that they hope will provide for them some improvement to their lives. It would be erroneous to believe that the value proposition of higher education is discoverable simply by attending to students. In the business analogy, customers come to organizations in *response* to an intentional value proposition. In the case of higher education, students are responding to a conveyed value proposition. As has been uncovered both historically and economically, that value proposition has been uniquely positioned and shaped as a good way of exceeding value to an expanded audience of potential consumers.

The concept of 'brand' best embodies the idea of the value proposition being put forward by an institution. It is the symbol of the institution (Akers, 1996). For example, when someone thinks of the international retailer Walmart, they think of lower-price, mass-market, and retail. Of course, other ideas may come to mind, some even pejorative, but this central concept is

Walmart's brand. In this case, the brand of higher education is what is under examination. This concept of 'brand' is an important term because leaders in higher education have an important meaning-making function (Bolman and Deal, 1999). Like in the Walmart example, higher education has developed a unique brand that can be evidenced through simple research of what institutions publicize and what their leaders communicate.

Before we examine the brand or goal of higher education as communicated by the institutions themselves, Bolman and Deal's (1999) Four Frame model of leadership will be discussed in order to properly contextualize the leadership challenge. Of those four-frames, the meaning-making aspect of leadership will be emphasized because it directly relates to the concept of the brand or goal of higher education. The emphasis on goal orientation will become more meaningful as the literature review mines the theoretical framework of the study culminating in the construct of intrinsic, future-oriented goal awareness.

The Four Frame Model

The Four Frame model of leadership is an approach to understanding leadership as the metaphorical or analogical way in which leaders conceive of an organization to include the structural, human resource, political and symbolic components (Bolman & Deal, 1999; 1984; 2003; Monham & Shah, 2011). The focus of this model is to seek to understand the impact of how leaders frame these various aspects of an organization. In turn, the Four Frame model can easily be adapted to other models of leadership. For example, the Transformational Leadership model (Downton, 1973) focuses on change from an emotional, values, ethics, standards and goals perspective. The Four Frame model can explain and help leaders understand the framework in which their exercise of transformational leadership occurs. It is a kind of meta-theory that provides insight into the structures of leadership thinking and action.

Other theories of leadership can be demonstrated as relevant to the problem of low-rates of graduation. The aforementioned Transformational Leadership is an obvious choice given the demand for significant change surrounding the problem of low rates of graduation. However, Servant Leadership (Greenleaf, 1970; Liden, Penaccio, Hu & Mesuer, 2014) is another good candidate to be applied to the problem under consideration given its focus on empathy, attentiveness, listening, and conceptualization. However, Bolman and Deal's Four Frame model provides the best approach because it gets to the underlying concept a leader has in which all other concepts and actions emerge. Meaning, the Four Frames model is the best framework for approaching the conceptual issues associated with a problem; whereas, other models and theories focus on leader behavior.

The meaning-making task. The symbolic or meaning-making frame of leadership within Bolman and Deal's theory focuses on the leaders role in the creation of the meaning of the institution. In an analysis of higher education in Denmark, this meaning-making function has been described by Degn (2015) to comprise both the creation and communication of meaning in the face of evolving impulses, disruptions, and uncertainties in an effort to increase the likelihood of positive outcomes (Rouleau, 2005; Hope, 2010). In the face of daunting challenges, leaders connect events to cognitive models they possess.

The meaning-making function of the leader, in turn, has an inward and outward component. It involves the leader's reflection on existing conceptual models and then application of those models on concrete situations within an organizational context. Moreover, leaders transmit those cognitive models to others in the organization (Eddy, 2003a). Those models serve as both means for accessing meaning and bringing into focus the intelligible meaning of objects that make up the institution (Bolman & Deal, 1997). In turn, the constituents

of the organizations go about developing their own sense of meaning. That process is significantly shaped by the contexts in which the individual member identifies (Kezar, 2000). Weick (1995) described this process as consisting of seven components: identity construction, retrospective, enactive of sensible environments, social, ongoing, extracted cues, and plausibility rather than accuracy.

As will become apparent in the discussion of the literature supporting the theory and methods of this study, extracted cues are a relevant concept. The importance of extracted cues should also be apparent given the historical and economic context of the problem. The importance of the short-term, economic benefits of college is an easily extractable clue from its natural history. In turn, two-year colleges are positioned as the entry point for those who have bought into the message of higher education's necessity but have been priced out of traditional university or college choices. Leaders find themselves in a position where their symbolic, meaning-making role is supported by the surrounding cues of history and the momentum of the economy. In turn, the stakes are high for leaders given that they are running downhill and not uphill. The 20% graduation rate (US Department of Education, 2016) for two-year colleges may be the best evidence for the recklessness of students following leaders 'downhill.'

Presidential role. Wood (2001) suggested that the background, expectations, and tenure of college presidents neutralize their ability to make any lasting impact on the problems that face higher education today. This is consistent with a study by Cohen and March (1974) that interviewed forty-two college presidents. Subsequent literature has tried to address these sentiments, focusing on the complexity of the job (Kerr & Grade, 1986; Balderston, 1995; McLaughlin, 2004). In fact, Bowles (2013) suggested in jest that college presidents wear a myriad of hats ranging from minister to boxer. The overarching idea from all of this literature is

that the president is the face of the institution, and as colleges have become more complex in the ways that they interface with their communities, the job has become almost impossibly complex.

As the face of the institution, the president is the symbolic leader of the college campus (Birnbaum, 1988). The president is the “chief persuader” and “influencer” (Kerr & Gade, p.133). This role cannot be understated. In fact, one might think of the president as the chief brand officer of the institution. The president’s job is to communicate the value proposition or meaning of the institution and embed into institutions the extractable clues that students, faculty, and the community use to create their sense of meaning for those institutions.

Hensley, Galilee-Belfer, and Lee (2013) analyzed the speech of 13 executive leaders at colleges and university systems. They were interested in understanding how leaders were framing the meaning of higher education. Their study consisted of three research questions that considered the functions and benefits of higher education at the individual level and societal level, and the implications of those findings on the contemporary framing of higher education. Overall, each leader framed higher education as a private good, something that could primarily “act as an economic resource by producing educated workers...[that] would either create more tax revenue for the state or serve as attractive human capital to entice businesses to move to the state” (Hensley, Galilee-Belfer, & Lee, 2013, p.562). Therefore, both the private and public good of higher education was framed in economic terms.

Of note is that most of the leaders in the aforementioned study were speaking to potential funders, and therefore, one may suppose that their language focusing on the economy was just a matter of appealing to an audience. The researchers also suggested that the leaders’ appeal to the economic benefits of higher education was due in part to the tangible nature of the appeal. Fundamentally, it is just easier to understand. However, their analysis begs a question, namely,

the ease to which society readily accepts higher education primarily as a means to economic opportunity. As many scholars have pointed out (Deresiewicz, 2015; Newfield, 2011), higher education is now in a position that assumes itself as a product for individual consumption. This rhetoric assumes the dialog in higher education proceeds as if the debate has already concluded and that the goal of higher education can be understood as solely economic.

The Goal of Higher Education.

However, while the rhetoric may belie a debate about the goal of higher education that has ended, the literature is far from conclusive. In fact, one might characterize the present moment as one of intense debate. On the one hand, there is a neo-liberal or globalist ‘school’ which one might argue is the chief architect and contemporary supporter of the private good and economic value themes in higher education. On the other hand is a conglomerate of critics, from various fields, resisting this trend (Chomsky, 2000; Engel, 2000; & Giroux & Giroux, 2004).

Relevant to this study, Ayers (2005) conducted a discourse analysis of the language that has contributed to the evolving missions statements of community colleges. Ayers showed that for the last 30 years, community colleges have drifted in their focus to align more explicitly with the market. Some community college programming even fell under the Department of Labor, whereas historically all programming fell under the Department of Education. Ayers showed that in numerous systems, the concept of ‘workforce’ dominates, and this language emerges out of the human capital rhetoric that is a part of the neoliberal tradition. Further, Ayers showed that in language publicly available in numerous states, the mission language of community colleges positions the student as an economic entity and condenses education to a market function. This is consistent with concerns noted by others (McMahon, 2009; Deresiewicz, 2015).

At the same time, economic psychology research has been examining health and well-being outcomes as they relate to goal orientations. Specifically, current research points to the poorer health outcomes for those that pursue materialist goals (Dittmar et al., 2014). Moreover, as Kasser (2016) has pointed out, studies consistently point to the antithetical nature of materialist, extrinsic, short-term aspirations like wealth or fame and goals associated with more holistic well-being. Specifically, people who evince high materialist goals are more lonely (Pieters, 2013), help others less (Briggs, Landry, & Wood, 2007), and have a harder time navigating the challenges of home and work (Promisio, Deckop, Giacalone, & Jurkiewicz, 2010). Further, Ku, Dittmar, and Banerjee (2012, 2014) have demonstrated that children with extrinsic goal orientation, synonymous with a materialistic bent, have poorer learning outcomes and lower mastery goals.

The historical, economic, and cultural inertia of the last 50 years has positioned higher education, and especially two-year colleges, in the main of an ideological debate about what exactly the goal of higher education is. There is a notion of higher education as an economic commodity, sold by a variety of diminishingly public and growing private institutions. The higher education commodity, under one definition, is bought by individual consumers looking to improve their short and long-term economic well-being. However, a growing number of critics are suspicious of this definition. Educational psychological research has identified both the negative correlation between a materialist value system and well-being outcomes and the strong correlation between intrinsic, non-materialist goals and positive educational outcomes (Kasser, 2016).

The literature review will now examine the theoretical framework for which the study will proceed. The theoretical framework of this research proceeds logically from its basic

assumptions to important theories and finally to its emphatic construct. Using this logical procession, it will become apparent why both the theoretical and methodological approaches are both consistent with each other and most appropriate for examining the problem as defined heretofore.

Theoretical Framework

The researcher is committed to critical realism (Archer et al., 2016). There are two axiomatic assumptions to critical realism: (1) that reality is external to perceptions of it but that (2) perception of reality limits the ability of one to understand it fully, thereby implying reality's emergent and transient properties. From these assumptions, the insights of philosopher Polanyi (1958) will be considered along with the ideas of Gestalt psychology and future-time perspective. Emerging research that synergizes these insights will be discussed which will open the way for a discussion of self-determination theory, its general principles, and micro-theories. In turn, one micro-theory will emerge as most compatible with this research and its surrounding academic literature.

Critical Realism

Critical realism can best be understood as a view of reality that takes into consideration the insights of positivism and constructivism, but rejects both as the appropriate vantage for understanding reality. Positivism claims that one can only know empirical facts, and that knowledge of empirical facts is totalizing. On the contrary, constructivism claims that one's knowledge of reality is a consequence of social and personal structures imposed upon reality. In turn, knowledge of reality apart from this social or personal construct is not possible. Against both positions, critical realism is committed to moving beyond both, positioning social science

research within a framework committed to empirical facts but epistemologically neutral to the methodology that aids in arriving at those facts (Rutzou, 2016).

An early forerunner to contemporary critical realism, Polanyi (1958) suggested that the motivation for inquiry is grounded in a tacit understanding of some perceived, distal whole. It is this perception of an intelligible ‘bigger picture’ that fosters meaning for the more proximal experiences. In turn, the presence of a distal goal is a prerequisite for the intelligibility of a more proximal goal. In this observation, Polanyi acknowledges both the empirical, pre-existing reality that motivates inquiry, but ultimately the personal perception that creates a horizon for interpreting the object of inquiry. Polanyi’s language relates terminologically in the academic literature to the concept of Future Time Perspective (FTP; McGrath & Kelly, 1986, Nuttin, 1985, Lewin, 1942). However, Gestalt psychology (Koffka, 1935) very much influenced the thinking of both Polanyi (1958) and Lewin (1942). In turn, a brief summary of Gestalt theory will be provided.

Gestalt Theory

Gestalt psychology significantly influenced Polanyi’s theories. Koffka (1935) described Gestalt psychology famously as “the whole is greater than the sum of the parts” (p.179). The *subjective contour* is what one sees that is in fact not in the field of vision but is rather a part of one’s perceptual inclination to fill in what is missing (Wong, 2010). Polanyi (1958) argued that Gestalt theory showed the fundamental requirement for the intelligibility of an object, namely, the intuition of a whole. An object’s intelligibility, the capacity of an object to be discovered, is directly related to our understanding of the whole or framework by which the individual parts gain intelligibility. For example, a map is not merely the collection of symbols but rather a whole that communicates a potential for providing guidance to get to some destination. In this context,

the collective symbols obtain meaning but more importantly, a person is motivated by the meaning of the whole to engage the process of discovering the parts.

In the context of this research, distal goals can be understood as the intelligible space in which a person gains the meaning of more proximal goals or sub-goals. The future-oriented nature of distal goals motivates the discovery of sub-goals in relation to the more distal goal. More specifically, students develop the meaning of sub-goals in relation to the more broadly perceived whole. For example, a student may exert tremendous effort in an uninteresting course because they perceive it as instrumental to a distal goal.

The concept of “future” is important in understanding the notion of the relation between proximal and distal goals and goal attainment. In the literature, this relational concept is defined as Future Time Perspective (FTP). Zimbardo and Boyd (1999) pointed to Lewin (1942) as the most influential in the field of empirical psychology in their survey of the thinkers who contribute to the academic literature regarding the concept of time. Like Polanyi, Lewin was influenced by Gestalt theory. While Polanyi focused on the epistemological relation between distal and proximal objects, Lewin focused on the relation between proximal and more distal goals; thus, Lewin’s focus on time.

Following Lewin, Nuttin and Lens (1985) made the connection between the future and motivation. Specifically, the amount of time a goal is in the future is understood as the time value it possesses. Therefore, goals that are more distal accrue more of this time value. According to Nuttin and Lens (1985), it is in this time-space that goals operate and appear achievable. Further, a meta-analysis of the available literature (Lens, et al., 2012) showed that a more distal orientation, long FTP, resulted in a more proximal experience of a time interval and thus the easier to anticipate the effects of present behavior on future goals.

Self Determination Theory

Self-determination theory should be understood as the way in which the ideas discussed to this point coalesce. Self-determination theory was developed as a reaction to the emerging, dominant view of behaviorism in the 20th century (Watson, 1913; Skinner 1938) that sought to eliminate the need to consider internal psychological states as explanations for behavior. According to behaviorism, all human action is determined either by reflex or history. Self-determination theory is a contemporary counter-theory to behaviorism, which seeks to uncover the role of motivation in human agency. Self-determination theory is a dynamic theory that starts with the assumption of the organismic nature of human beings as opposed to behaviorisms mechanistic approach. There are six micro-theories that function within self-determination theory: Cognitive Evaluation theory, Organismic Integration theory, Causality Orientations theory, Basic Psychological Needs theory, Goal Contents theory, and Relationships Motivation theory (Deci & Ryan, 1985, 2000; Ryan & Deci, 2000). A brief overview of each of these theories is presented in Table 4.

Table 4
Self-Determination Theory Micro-Theories

Micro-Theories	Description
Cognitive Evaluation Theory	A theory that accounts for the internal motivational effects of external events.
Organismic Integration Theory	A theory that accounts for the degree to which a behavior is self-determined and the corresponding motivation.
Causality Orientations Theory	A theory that accounts for the various ways a behavior is oriented toward autonomy, control, or amotivation.
Basic Psychological Needs Theory	A theory that applies the broad self-determination framework of autonomy, competency, and relatedness in the relationship to health and well-being.
Goal Contents Theory	A theory that distinguishes between intrinsic and extrinsic goals and associates well-being with the former.
Relationships Motivation Theory	A theory that posits the essential nature of personal relationships for well-being.

This study focused primarily on the constructs within Goal Contents Theory, which focuses on the motivational distinctions between intrinsic and extrinsic goals (Vansteenkiste, Lens, & Deci, 2006; Kasser & Ryan, 2006). Applied more specifically to student inquiry, the motivation needed for student persistence is contingent upon the presence of such an intrinsically valued distal goal. From this theoretical commitment, the work of Miller, Relyea and Tabachnik (2008) was used as a current, validated research model for exploring the role of distal goals in motivating proximal active inquiry that culminates in graduation.

Intrinsic, Future Oriented Goal Awareness

Miller and Brickman (2004) developed a model of future-oriented motivation and self-regulation that presupposed a dynamic relation between future and proximal motivation and self-regulation variables. Future and proximal motivation deals with the objects, or goals, that affect action. The self-regulation variables are the active context in which one chooses behaviors that help to achieve some goal. For example, a self-regulating behavior might be abstaining from joining one's friends at a party in favor of studying for a test the next day. Sub-goals are any goal prior to some more distal goal, and integral to achieving it. For example, graduation could be a distal goal, and a sub-goal would be passing a college math course. On the other hand, graduation could be a sub-goal of living a happy life.

The Miller/Brickman future-oriented motivation and self-regulation model relied upon social-cognitive theory (Bandura, 1997), self-determination theory (Ryan & Deci, 2000), personal investment theory (Maehr, 1984), FTP theory (Nuttin, 1985), and the future-oriented extension of achievement motivation theory (Raynor, 1974; Raynor & Entin, 1982). The model sought to establish the interrelationship between the socio-cultural context in which decisions are made, the process of goal emergence, the regulating behaviors associated with acquisition of the

goal, and the extent to which a goal is future-oriented. The Miller/Brickman future-oriented motivation and self-regulation model is as follows in Figure 5.

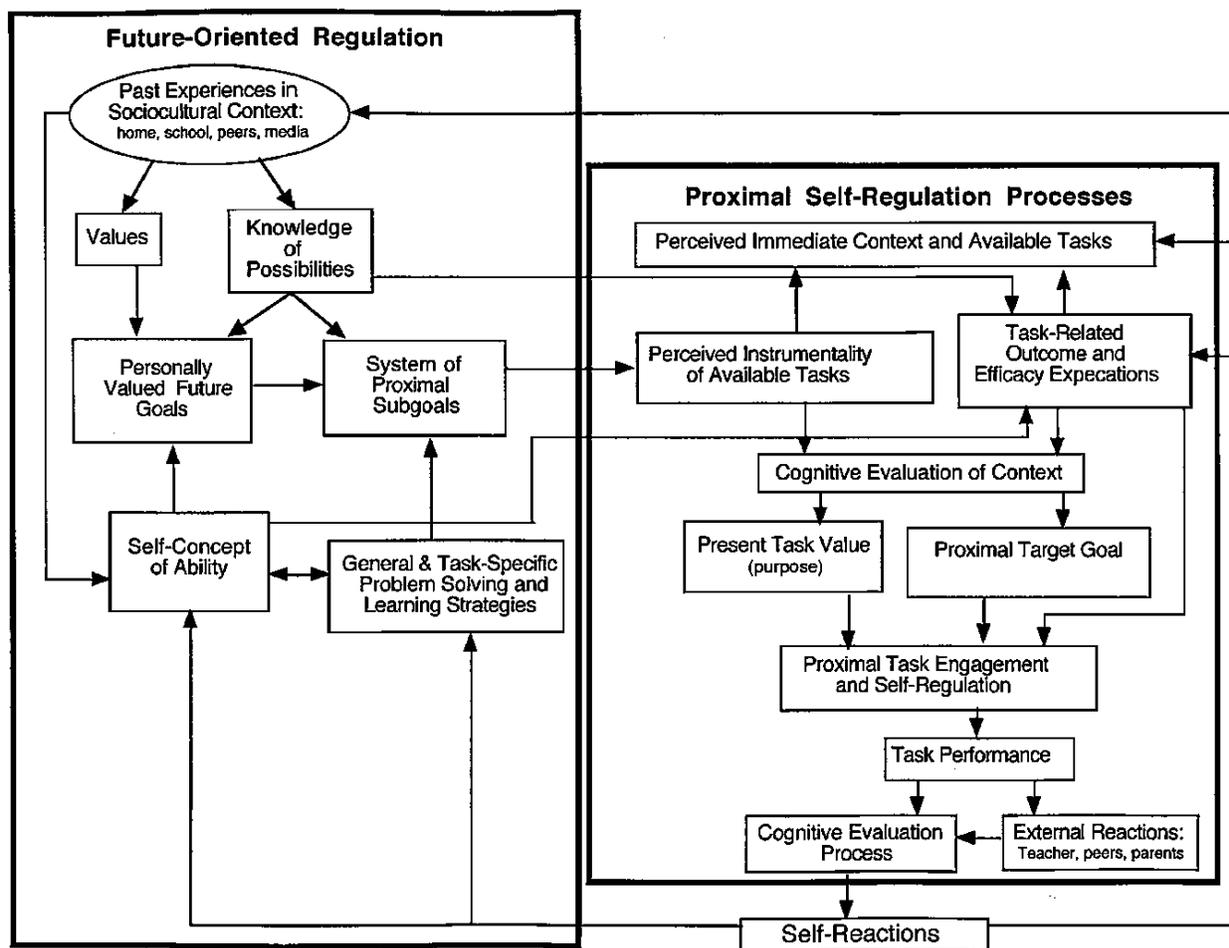


Figure 5. Miller and Brickman (2004) model of future-oriented motivation and self-regulation.

Figure 5 is the Miller and Brickman model shown as a matrix wherein the proportional effects of each attribute are unknown, although directional relations are evident. For precisely this reason of directionality, Miller, Relyea and Tabachnick (2008) did a path analysis to determine the predictive relations between the variables in the Miller and Brickman model. Their study consisted of 421 volunteer students in a second year English course. In the study, they noticed the strongest association between intrinsic, future-oriented goals and sub-goal attainment. The

association was strong enough to imply importance ($r = .39, p < .01$). Consequently, they identified two implications of note from this study: (1) the importance of students clarifying their future goals and (2) sub-goals and the importance of emphasizing the intrinsic value of education.

The research by Miller and Brickman (2008) is corroborated by further studies. Brickman, McInerney, and Martin (2009) concluded that valuing education for future goal attainment was critical for sub-goal attainment. Their study focused on a historically at risk demographic of American Indians. Griffin, Moser and VanVuren (2013) conducted a study at a southern four-year university, which showed a very strong association between setting short and long term goals and self-discipline. This is important because it connects goal setting, which is future orientated, and self-discipline, which is a self-regulating behavior. Also, their study showed that intrinsic motivation had the strongest association to Grade Point Average (GPA). Conversely, Bridges, Flowers and Moore (2011) determined that test taking strategies and test anxiety were the only significantly related variables to positive student outcomes. However, their study only used college admission test scores as the measurable dependent variable. Due to its narrow focus on a high stakes assessment, the study could not predict the potential for persistent effort over the duration of a course or a program of study. In fact, current research by Hiss and Franks (2014) dispelled the value of high stakes examinations and instead pointed to the more dependable predictive variable of GPA. Moreover, a study by Abel, Guiffrida, Lynch and Wall (2013) that surveyed 1,558 community college students, showed that intrinsic motivation had the strongest association to GPA ($r=.168, p < .001$) and intent to persist ($r=.314, p < .001$).

From a theoretical framework, the major construct of future-oriented goal orientation is emergent and critical. It portends positive student outcomes and has been unexamined in

relationship to the outcome of college graduation. It is consistent with theorists who maintain the importance of internal motivation, and in particular, the unique features of distal, intrinsically valued goals.

Chapter Summary

This chapter surveys the historical and economic contingencies of the graduation crisis in two-year public colleges. It examines the evolving relationship between business and higher education, and the two-year college position of providing market-oriented education with dwindling resources and rising stakes. Higher education has for centuries ignored tracking graduation outcomes. Available data and literature support the dual conclusion that graduation rates are low and declining despite many efforts and focus, and those economically disadvantaged are suffering the most from those effects.

Higher education leaders, in an effort to motivate students to attend and graduate, have sold higher education as a means to economic purchase. At the same moment in time, researchers from divergent fields of study are questioning both the well-being and motivational features of extrinsic rewards. Instead, there is a growing body of research which supports the powerful effects of a person having intrinsic goals. Moreover, research and theory supports those goals being future-oriented. While studies have considered the impact of intrinsic, future oriented goals on course success and intention to persist, no research has considered its relation to student graduation. Looking at leadership and its meaning making role, this study intends to provide leaders important insights as to the motivational characteristics of students who graduate from a two-year college. In turn, those insights can impact how leaders frame the meaning of higher education. For practitioners, those insights may shape the services and interventions provided to the now at risk to drop out at two-year colleges.

This research is important because what we know about two-year college graduating students has currently been insufficient to rescind the trend of declining graduation rates. How and what motivates students, when it motivates them, and the implications of that motivation are critical components of the knowledge needed to increase student graduation outcomes. Increased student graduation outcomes means better well-being outcomes among those most vulnerable in society. It means economic mobility for those in poverty and for those historically marginalized. It means better neighborhoods, cities, and society. A society that is good for the most vulnerable and the most in need is better for everyone.

CHAPTER 3

METHODOLOGY

Extremely low graduation rates in higher education, especially in two-year colleges, have left the systems in need of dramatic reform for decades. Today, rising tuition costs and concomitant student debt are in direct and objective conflict with the increased expectations of two-year colleges to provide the direct impact of higher education on the short and long term economic prospectus of its graduates. Leaders in higher education have an increasingly business oriented view of the institution, and this view has informed the singular way in which higher education is framed as a means to a job. At the same time, there is emerging social science research, grounded in an organismic view of human motivation, which supports the powerful relation between the presence of an awareness of intrinsic, future-oriented goals (IFOG) and the successful attainment of sub-goals.

This research sought to further uncover the possibilities of that relation by focusing on what has not been studied. Specifically, prior studies have recognized the relation between IFOG and course completion and intention to persist. This study considered graduation as the defined sub-goal and actual evidence of persistence. It compared the prevalence of IFOG between graduating students and new students. It also considered the impact of length of program on the prevalence of IFOG. In turn, two research questions were be examined.

1. To what extent is the awareness of an intrinsic, future-oriented goal among students who are on-target to graduate from a two-year college greater than among incoming new students?
2. To what extent does the length of a program of study moderate the awareness of an intrinsic, future oriented goal among students who are on-target to graduate?

This chapter will provide the details of the methodology, population and sample, instrumentation, data collection process, analysis procedures, and the constraints for the study.

Research Design

Miller, Relyea and Tabachnick's (2008) path analysis showed that the awareness of intrinsic, future-oriented goals had the strongest correlation to sub-goal adoption in the Miller and Brickman model (2004). A study by Lynch and Wall (2013) showed that intrinsic motivation had the strongest correlation to intent to persist. This study examined the relation between IFOG and college graduation. Implicit in graduation is the obvious presence of the actual kind of persistence that leads to graduation, which is of fundamental interest to both the researcher and the literature that discusses college graduation. While perceptions of desire to persist are important, one can recognize the gross disconnect between human intention and human action. In turn, this study provides an empirical bridge between the academic literature of intrinsic motivation and the performance of the kinds of behaviors that culminate in a student graduating from college.

A cross-sectional, correlation study was selected in order to get a point-in-time comparison between a sample of new students and a sample of those on-target to graduate. This is important because the college experience is not under investigation. In turn, what effects the college experience have on new students is not of interest, and consequently, a longitudinal study is not appropriate. Further, a longitudinal study would warrant a paired-samples analysis, and would provide conclusions about categories of students within the new student sample. The cross-sectional design allows the researcher to gather information about two groups and compare the prevalence and variance of a feature in those groups (Lavrakas, 2008).

Specifically, the study considered ‘student status’ (graduate versus new) as the independent variable and the presence of an awareness of intrinsic, future-oriented goals (IFOG) as the dependent variable. If and to what extent a correlational relation exists between the two was measured, and the moderating effect of length of program was evaluated. The correlation showed if graduating students possess IFOG to a greater extent than new students. The moderating effect analysis evinced if and to what extent length of program served as either an explicit representation of IFOG or moderating variable of IFOG. Measuring for these relations strengthened the implications of the study’s findings since a failure to do so would present clear alternative explanations of the potential measurable relation between length of program, graduation and IFOG.

For the first research question, an independent samples *t*-test was conducted on the sub-sample of participants whose program of study is a two-year degree. The independent samples *t*-test is appropriate because it provides a way of determining if two independent sample means are different in ways that are statistically significant (Moore & McCabe, 2012). Moreover, this analysis is fitting given the cross-sectional design of the study, since the new students and on-target to graduate students are different students.

The focus on just the two-year degree students is important for two reasons. First, focusing just on students pursuing a two-year degree controls for the possible outcomes discovered by the second research question. Namely, if length of program were a representation of IFOG, then any variance in the distribution of length of program between the new and graduating student samples would impact the integrity of the findings. Second, the graduation crisis is most associated with the completion of a two-year degree. Focusing on those students pursuing a two-year degree narrows the results of the research in a way that makes it more generalizable to the

problem under consideration. Cohen's d was interpreted as the measure of effect for the analysis. Cohen's d represents the standardized mean difference of the two samples, and hence, is a representation of the magnitude of the difference in the two independent groups. Because d represents a standardized mean difference, it can be either positive or negative and ranges from 0 to infinity (theoretically) in absolute value, with higher absolute values indicating a greater effect. Cohen (1988) provided the following guidelines for interpreting d : 0.10-0.49 as small; 0.50-0.79 as medium; and $\geq .80$ as large.

For the second research question, a one-way analysis of variance (ANOVA) was planned to determine the moderating effect of length of program (.5years, 1 year, 2 years) on the presence of IFOG. For this analysis, all available data from the sample of those students who are on-target to graduate was used. Students who possess IFOG may externalize that through the selection of longer-term programs of study. However, if length-of-program does not moderate IFOG for those students that are on-target to graduate, and if the independent samples t -test shows a significantly strong difference in sample means, even still the importance of IFOG in relationship to graduation would be demonstrated. The chosen effect size for the ANOVA is η^2 (eta-square). Like d , higher values of η^2 represent a stronger magnitude of the strength of the association between the independent and dependent variables. Explained differently, higher values of η^2 indicate that the difference between the groups is much more pronounced, and hence, membership in the distinct groups better discriminates levels of IFOG. Unlike d , however, η^2 can only be positive and ranges from 0 to 1. Cohen (1988) recommended the following guidelines for interpreting η^2 : 0.01-0.059 as small; 0.06-0.139 as medium; and ≥ 0.14 as large.

Lastly, this research design fits the epistemological paradigm of the researcher. Namely, the research is taking a critical realist or post-positivist framework as its theoretical starting

point. This position assumes an independent reality from the observer exists, but the knowledge of that reality is transitory. In turn, empirical, quantitative methods are appropriate to obtain data that provide insights into the relations and nature of the measured phenomena. However, the conclusions of the research are understood as approximations of reality, and that those approximations are always open to correction provided by new discoveries.

Population and Sample

The sample was a derivative of a student population at an urban, 2-year, public, technical college. The institution was selected because of the researcher's affiliation with the institution. The majority of the students were intended to be of low socio-economic status (National Center, 2016) consistent with the general student population of the institution. These demographic features of the institution made its selection ideal as it represented the population of students most at-risk to the effects of the graduation crisis. In addition to its primary and secondary urban campuses, the college also has students at two rural campuses. However, student campus location data was not collected because no literature has been found to support the significance of differentiating by rural or urban in relations to the predictive nature of IFOG. Further, such a question is not of interest to the researcher.

It was estimated that approximately 1,400 students would receive the survey. The survey took approximately 15 minutes to complete, and the researcher hoped for a 30% response rate. This is a conservative estimate given that the survey is being given to an internal audience (Hamilton, 2003; Sheehan, 2001). A sample of new and on-target to graduate students was collected. The new students and on-target to graduate students identified their program of study by its type: certificate, diploma, or degree. Those programs represented specific durations, namely, a certificate represented .5 years, a diploma represented one year, and a degree

represented two years. For the first research question, both new students and on-target to graduate students who have selected a degree were analyzed. For the second research question, only those on-target to graduate students were analyzed.

Instrumentation

The Aspirations Index by Grouzet, Kasser, et al. (2005) was used to measure the construct of intrinsic, future-oriented goal awareness. This study updated the pre-existing Aspirations index (Kasser & Ryan, 1996), affirming its constructs across 15 cultures. The survey has 57 questions. In order to increase response rate and in an effort to more narrowly measure the constructs under consideration, only the extrinsic goal constructs of popularity, image, financial success and the intrinsic constructs of affiliation, self-acceptance, and community were measured. This resulted in a 27-question survey, which should increase the likelihood of participation and completion (see Appendix A for a complete list of items).

Validity and Reliability

The instrument was validated in a study (Grouzet, Kasser, et. al., 2005) of 1,854 undergraduate students from 15 cultures around the world, and demonstrated that goals are consistently organized on an extrinsic versus intrinsic continuum consistent with the self-determination theory tradition (Deci & Ryan, 2000; Kasser & Ryan, 1996). Further, the research suggested that all people, regardless of culture, possess a motivational system that orients many if not most goals toward psychological needs (intrinsic) and physical survival and pleasure (extrinsic). Reliability coefficients were computed using Cronbach's alpha and the extrinsic and intrinsic constructs showed the following desirable consistency.

Table 6
Computed Mean Reliability of Intrinsic and Extrinsic Constructs

Constructs	Alpha reliability
Intrinsic	
Affiliation	.81
Self-Acceptance	.79
Community	.75
Extrinsic	
Popularity	.73
Image	.76
Financial Success	.84

Grouzet, Kasser, et al.'s study (2005) noted that in poorer countries, financial success was not as strongly associated with the extrinsic construct. In poorer countries, financial goals were more closely associated with personal health. However, the lower income nature of the sample under examination should not be associated with this finding. The poverty described in the study by Grouzet, Kasser, et. al. (2005) was not consistent with the poverty identified in this research. In turn, the constructs consistent with intrinsic and extrinsic goal orientation portend findings consistent with the reliability of previous research.

Data Collection

In order to obtain email lists for both populations of students, the following procedure was conducted. New, first time student cohort data was available in the BANNER reporting system at the college. The researcher had access to this data through a request to the data manager at the college. This data included the students' identification number. This report was compared to a contact list report available in BANNER for all students enrolled during that semester. A Vlookup function in Excel was performed to identify only those student records on the contact list report that corresponded to the new, first time student report. This list of emails generated the eventual sample of new student data. For the second sample data, data were exported from the college's graduation application system to include student identification

numbers for those students with an application on file to graduate. The same Vlookup function in Excel was performed to identify only those student records on the contact list report that correspond to the students on-target to graduate. This list of emails generated the eventual sample of on-target to graduate students.

Research has demonstrated the cost, use, and flexibility advantages of web-based surveys (de Vaus, 2014). In turn, the 27-question Aspirations index was loaded in Qualtrics. Qualtrics is a reliable and secure, universally recognized web-based platform for delivering surveys for social science research. After loaded, a survey link was created. The survey link was included in an email generated from within the Qualtrics system to students asking them to participate in the survey that would help further knowledge about students in two-year public colleges. Students were offered to have their names entered into a drawing to win one of two \$50 gift cards to voluntarily participate in the study. A copy of this email is included in Appendix A. The survey was kept open for 4 weeks, and students were sent two email reminders. In addition, basic demographic and length of program information was collected. Length of program was identified as certificate, diploma and degree representative of 6 months, 1-year and 2-year program lengths respectively.

Data Analysis

First, the intrinsic and extrinsic goal orientation scores were calculated for each respondent. Respondents were asked to rank their perception of both the “Importance” and “Chances” of obtaining a particular outcome. The values ranged from “1” meaning “not likely” to “9” meaning “extremely likely.” A mean of the scores for each response associated with a given construct were calculated. Descriptive statistics were reported for each variable, including correlation coefficients Pearson’s r . For the first research question, an independent samples t -test

was conducted on all students whose program of study is an associate degree to determine if the presence of an awareness of an intrinsic, future-oriented goal is different in the sample of on-target to graduate students compared with incoming new students. The *t*-test assessed the difference in mean responses for the intrinsic and extrinsic constructs measured on the Aspirations Index. From the literature, it is expected that those students on target to graduate would possess IFOG to a greater extent than new students. Cohen's *d* was interpreted as the measure of effect for the analysis. Cohen's *d* represents the standardized mean difference of the two samples, and hence, is a representation of the magnitude of the difference in the two independent groups. Because *d* represents a standardized mean difference, it can be either positive or negative and ranges from 0 to infinity (theoretically) in absolute value, with higher absolute values indicating a greater effect. Cohen (1988) provided the following guidelines for interpreting *d*: 0.10-0.49 as small; 0.50-0.79 as medium; and $\geq .80$ as large.

For the second research question, a one-way analysis of variance (ANOVA) was planned to determine the moderating effect of length of program (.5 years, 1 year, 2 years) on the presence of IFOG. It was not clear what relation length of program would have to the presence of IFOG. No literature was found that suggested a relation, however, it was apparent to the researcher that length of program selection could be acting as an empirically verifiable externalization of IFOG. However, it may also be the case that length of program is not indicative of IFOG and that major selection has no intentional relation to IFOG. The chosen effect size for the ANOVA is η^2 (eta-square). Like *d*, higher values of η^2 represent a stronger magnitude of the strength of the association between the independent and dependent variables. Explained differently, higher values of η^2 indicate that the difference between the groups is much more pronounced, and hence, membership in the distinct groups better discriminates levels of

IFOG. Unlike d , however, η^2 can only be positive and ranges from 0 to 1. Cohen (1988) recommended the following guidelines for interpreting η^2 : 0.01-0.059 as small; 0.06-0.139 as medium; and ≥ 0.14 as large.

Limitations/Delimitations and Assumption

This study was restricted by the following limitations. First, those identified as on-target to graduate had not received a final audit from the registrar's office. This assumes the general accuracy of the department's submitting their audited graduation applications. However, the fact that students do not submit their own applications mitigates the possible effect of the registrar not auditing the data. Second, human motivation is complex. Given that survey participants were asked a narrow set of questions related to intrinsic, future-oriented, goal (IFOG) awareness, the effects of other factors, such as perceived task instrumentality, may have moderated or mediated whatever effects are uncovered of IFOG awareness.

The study was limited by the self-report nature of the data collection process, and in turn, participants may not have accurately or honestly responded. Also, the population of students surveyed was from a technical, two-year college that by statute is limited in its ability to serve the traditional *community* college function sometimes synonymous with two-year colleges. In turn, the absence of some community college supports, degree options, and transfer articulations may have impacted either positively or negatively the results of the study. Also, the prevalence of one-year and six-month programs at the institution may have attracted a disproportionate number of short-term, extrinsically motivated goal seekers resulting in selection bias. For example, a traditional two-year college might have more students exploring programs of study, whereas a technical college may attract a more short-term, narrowly focused student. Lastly, causality cannot be uncovered given the study was cross-sectional.

Ethical Considerations

Data from this study were collected anonymously and IP addresses were deleted from the data set to further anonymize the data. Data were kept within the researcher's university provided cloud-based storage. All localized data used for analysis were deleted after analyses were conducted. Students were notified in the informed consent statement of these facts and provided contact information to request additional information or ask questions about the study

Chapter Summary

The gap in the literature between pressing graduation crises in higher education and the literature evidencing the importance of IFOG on student outcomes merits the focus of this study. Consequently, the study has been designed to measure an established construct, IFOG, in a design schema that is consistent with the empirical goals of the researcher and adequate to further understanding regarding students who successfully graduate college. Moreover, the findings have significant practical implications for leadership rhetoric, the meaning of higher education, and the design of student educational experiences.

CHAPTER 4

FINDINGS

The graduation rate at two-year colleges is unacceptably low. Intrinsic, future-oriented goal awareness (IFOG) has been shown to be a strong predictor of sub-goal adoption in a higher education setting. However, there is no research that has examined the relationship between IFOG awareness and college graduation. In order to better understand this relationship, this study intended to examine through a cross-sectional design, the comparative motivational features of new students and those on-target to graduate. The research study considered two questions:

1. To what extent is the awareness of an intrinsic, future-oriented goal among students who are on-target to graduate from a two-year college greater than among incoming new students?
2. To what extent does the length of a program of study moderate the awareness of an intrinsic, future oriented goal among students who are on-target to graduate?

These questions were examined using a modified version of the Aspirations Index by Grouzet, Kasser, et al. (2005). The survey was redacted to narrowly measure only the extrinsic goal constructs of popularity, image, and financial success and the intrinsic constructs of affiliation, self-acceptance, and community. The survey was delivered using the software program Qualtrics to the email addresses of 762 new students and 655 on-target to graduate students at the college where the research was conducted. Two reminder emails were sent to the students. The first reminder was sent two weeks after the first email was sent, and the final notice was sent a week later. The survey was closed after a four-week window of time. The following chapter provides the results of the survey findings to include: response rate, demographic data,

correlations and descriptive statistics, a report of the data analysis, and findings for each research question.

Response Rate

A total of 118 students started the survey, and 88 students completed the survey. Of the 762 new students surveyed, 56 completed the survey. That is a 7.3% response rate. Of the 655 on-target to graduate students, 32 responded. That is a 4.9% response rate. The overall response rate was 6.2%, lower than the desired response rate of 30%. While the lower than expected response rate acted to diminish the strength of the findings, the statistical power of the data still made the analyses possible and valid. The low response rate may have been a result of the Institutional Review Board requiring the consent statement to be posted into question one of the survey. This language could have overwhelmed potential participants and so they simply declined due to their alarm. In addition, it was discovered through discussions with representatives of the institution that other web-based outreach had historically received low rates of response. Further, at the time of the research, the institution was also implementing its quality enhancement plan, which had an online survey component. Finally, the institution had recently gone through a learning management system migration that resulted in a significant increase in email traffic for students.

Respondents and Demographics

All new students and all on-target to graduate students for the active semester under investigation were surveyed at the institution. This data were extracted from the student database system. Table 6 is a summary of the demographic and grade point average (GPA) data of those who responded.

Table 7
Demographic and GPA characteristics

	Frequency (N)	Percentage (%)
Sex		
Male	35	39.7
Female	53	60.3
Age		
Under 18	4	4.7
18-24	43	50
25-34	23	26.7
35-44	8	9.3
45-54	7	8.1
55-64	1	1.2
Ethnicity		
Asian	3	3.4
Black or African American	20	22.7
Native Hawaiian or Pacific Islander	1	1.1
White	49	55.7
Other	15	17
GPA		
2.0-2.5	3	3.5
2.5-3.0	11	12.6
3.0-3.5	23	26.4
3.5-4.0	31	35.6
None	19	21.8

Descriptive Statistics for Variables Studied

The variables under examination were the constructs of intrinsic and extrinsic goal awareness derived from the Aspirations Index (Grouzet, Kasser, et al., 2005). The values of the sub-constructs of popularity, image, and financial success were measured and then combined in the overall mean score for the extrinsic construct. The values of affiliation, community, and self-acceptance were measured and then combined in the overall mean score for the intrinsic construct. All data were examined using Cronbach's alpha and met the assumption of normality.

Table 8
Computed Mean Reliability of Intrinsic and Extrinsic Constructs

Constructs	Alpha reliability
Intrinsic	.80
Affiliation	.71
Self-Acceptance	.86
Community	.64
Extrinsic	.85
Popularity	.82
Image	.82
Financial Success	.78

As a part of this process, the data were evaluated for outliers. High kurtosis was identified in Affiliation, Self-Acceptance, and Intrinsic. Consequently, three responses were redacted because they were identified as an outlier in multiple construct results. After removal of these outliers, data met the normality assumption.

Correlations and Descriptive Statistics

Below is the report of the correlations and descriptive statistics for each construct measured. The data are reported in total and disaggregated by new and on-target to graduate students. Strong correlations were found throughout the variables.

Table 9
Correlations and Descriptive Statistics for Aspirations Index Survey Results - ALL

	1	2	3	4	5	6	7	8
1. Popularity	---							
2. Image	.77**	---						
3. Financial Success	.59**	.61**	---					
4. Affiliation	.63**	.52**	.49**	---				
5. Community	.23*	.05	.21*	.48**	---			
6. Self-Acceptance	.33**	.24*	.41**	.49**	.61**	---		
7. Intrinsic	.49**	.33**	.45**	.81**	.84**	.83**	---	
8. Extrinsic	.91**	.91**	.81**	.63**	.18	.37**	.48**	---
<i>M</i>	5.51	5.31	6.04	7.15	7.74	7.68	7.52	5.62
<i>SD</i>	2.20	1.97	1.71	1.27	1.19	1.07	.97	1.73
Scale Min/Max Values	1 to 9	1 to 9	1 to 9					

Note. $N = 85$

* $p < .05$. ** $p < .01$

Table 10
Correlations and Descriptive Statistics for Aspirations Index Survey Results – New Students

	1	2	3	4	5	6	7	8
1. Popularity	---							
2. Image	-	---						
	.81**							
3. Financial Success	.71**	.65**	---					
4. Affiliation	.67**	.56**	.56**	---				
5. Community	.26*	.11	.18	.51**	---			
6. Self-Acceptance	.31*	.19	.38**	.39**	.60**	---		
7. Intrinsic	.51**	.35**	.46**	.78**	.87**	.80**	---	
8. Extrinsic	.94**	.91**	.86**	.66**	.21	.33**	.49**	---
<i>M</i>	5.42	5.27	5.89	7.16	7.77	7.74	7.57	5.53
<i>SD</i>	2.26	1.96	1.91	1.26	1.28	1.16	1.00	1.85
Scale Min/Max Values	1 to 9	1 to 9	1 to 9					

Note. $N = 54$

* $p < .05$. ** $p < .01$

Table 11
Correlations and Descriptive Statistics for Aspirations Index Survey Results – Graduating Students

	1	2	3	4	5	6	7	8
1. Popularity	---							
2. Image	.69**	---						
3. Financial Success	.25	.57**	---					
4. Affiliation	.57**	.46**	.38*	---				
5. Community	.16	-.07	.32*	.41*	---			
6. Self-Acceptance	.38*	.34*	.59**	.72**	.62**	---		
7. Intrinsic	.46**	.30*	.49**	.87**	.77**	.91**	---	
8. Extrinsic	.85**	.93**	.66**	.58**	.13	.50**	.49**	---
M	5.66	5.37	6.31	7.12	7.68	7.58	7.46	5.78
SD	2.12	2.03	1.27	1.30	1.02	.90	.91	1.51
Scale Min/Max Values	1 to 9	1 to 9	1 to 9					

Note. $N = 31$

* $p < .05$. ** $p < .01$

While, overall, strong correlations existed for most variables reported, there was deviation worth noting. For graduating students, popularity was not related to financial success. However, popularity was strongly related to financial success ($r = .71, p < .01$) for new students. For new students, the importance of community was not related to financial success. However, community was related to financial success ($r = .32, p < .05$) for graduating students. Also of note, for graduating students, image is less associated with popularity, although still strongly related in both groups. Lastly, self-acceptance is more strongly correlated with community for graduating students than it is for new students.

Report of the Data Analysis

For the first research question, the data were submitted to an independent samples t -test to determine whether the presence of IFOG varied between new and on-target to graduate students for those students pursuing at least an associate degree. The results of the analysis demonstrated that there were no statistically significant differences in the presence of IFOG

between the new students and those on-target to graduate. All effect sizes for the analyses were reported as Cohen's d , as the standardized mean difference between two independent groups. Thus, these are interpreted in standard deviation units. Cohen (1988) provided the following interpretive guidelines for Cohen's d : .010-.499 as small; .500-.799 as medium; and $\geq .800$ as large. Even though the difference in IFOG between new students and those on target to graduate was not statistically significant, the effect size was modest. The lack of statistical significance is likely due to a lack of statistical power (i.e., small sample size). It is important to note, nevertheless, that new students' IFOG was approximately .30 of one standard deviation higher than students on-target to graduate, tentatively indicating that new students reported modestly lower levels of IFOG compared to those on-target to graduate.

Table 12

Results of t-test and Descriptive Statistics for Motivation by Student Type – Degree Only

	Student Type						95% CI for Mean Difference	t	df	d
	New Students			On-Target to Graduate						
	M	SD	n	M	SD	n				
IFOG	7.44	1.13	33	7.15	.78	19	-0.88, 0.29	-.99	50	.29

Note. Results of the t -test do not show a statistically significant mean difference in IFOG between new students and those on-target to graduate. On-target to graduate students do not evince a greater degree of IFOG than new students. However, the mean IFOG value for new students was .29 of one standard deviation higher than students on-target to graduate.

Because only one respondent in the sample reported being in a certificate program (i.e., .5 year), this individual was omitted from the final analysis, as no variability was available for inclusion of this person. Hence, rather than conduct an ANOVA to answer the second research question, the analysis defaulted to an independent samples t -test with the two remaining groups (i.e., diploma, degree). Evidently, those seeking a diploma reported significantly higher IFOG than those seeking a degree, and this difference was .87 of one standard deviation higher for diploma students.

Table 12

Results of t-test and Descriptive Statistics for Motivation by Degree Type – Graduating Students

	Degree Type						95% CI for Mean Difference	<i>t</i>	<i>df</i>	<i>d</i>
	Diploma			Degree						
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>				
IFOG	7.90	.94	11	7.15	.78	19	0.09, 1.40	2.36*	28	.87

Note. Results of the t-test show a significant mean difference in IFOG between degree students and diploma students. Diploma students evince a greater degree of IFOG than degree students.

* $p < .05$

Chapter Summary

The response rate was unexpectedly low and the demographic data skewed young, female, and higher grade point average. The correlations uncovered relations consistent with prior research but also demonstrated unexpected differences between new students and on-target to graduate students. There was no statistically significant difference in IFOG for new students compared to on-target to graduate students. There was a practical difference, and new students had a higher IFOG value than on-target to graduate students, but that difference was not consistent with what the researcher anticipated from the literature. On-target to graduate diploma students did possess a greater IFOG awareness than degree students.

CHAPTER 5

SUMMARY, FINDINGS, IMPLICATIONS AND RECOMMENDATIONS

Summary of the Study

Two-year colleges have emerged as the frontline service providers of higher education for those in society least ready for college and least likely to graduate. Today, less than one in five students who start at a two-year college will finish. Transfer out statistics cannot account for the difference between those who start and those who finish. In turn, college leaders have been searching for answers. Curricular and programmatic redesigns coupled with data mining efforts have yielded some insights, limited isolated results, but the overall picture remains stark. Further, higher education leaders have consistently framed the value of higher education over the last 50 years as an economic, market-driven good. Despite proffered returns on investment, students at two-year colleges still fail to finish.

An emerging field of research is the relationship between intrinsic motivation and the types of behaviors supporting persistence and graduation. Some research is promising, at least at a course level (Abel, Guiffrida, Lynch, & Wall, 2013), to indicate intrinsic, future-oriented motivation as a strong predictor of sub-goal adoption and the concomitant self-regulating behaviors. However, no research has considered the motivational features of students who start a two-year college as compared to those who actually graduate.

The grounding theoretical framework for this study developed along three intellectual lines of thought. First, self-determination theory and its sub-theory of goal contents theory emerge within a general reaction to and rejection of behaviorist psychology. Moreover, these theories are strongly related to the concept of time as an emerging field of motivational intelligibility. Simply, objects with more time value provide to the person a greater motivational quality.

Second, two-year colleges are a part of a general history of higher education that has positioned two-year colleges, often referred to as community colleges, as the main service providers for those priced out of the mainstream educational market or those seeking a more local and convenient choice. Through that economic history, the ballooning size of the market for easy to access and affordable education has risen dramatically. Lastly, the higher education leadership challenge can be understood within one aspect of the Four Frames model (Bolman & Deal, 1999), specifically, the leader's meaning making function. At the center of the two-year college graduation crisis is the important question, "What is higher education?"

This study approached these topics utilizing the Aspirations Index (Grouzet, Kasser, et. al, 2005) designed to measure intrinsic and extrinsic aspirations (future-oriented). This tool has been validated in multiple studies across multiple cultures and continents. This study utilized a redacted version of the Aspirations Index for the purposes of answering two research questions:

1. To what extent is the awareness of an intrinsic, future-oriented goal among students who are on-target to graduate from a two-year college greater than among incoming new students?
2. To what extent does the length of a program of study moderate the awareness of an intrinsic, future oriented goal among students who are on-target to graduate?

The psychometric properties of the survey response items were consistent with that obtained in previous studies. The analysis of the data found no difference in the presence of intrinsic, future-oriented goal (IFOG) awareness between on-target to graduate students and incoming new students. The data did show a *practically* significant difference with a modest effect size. New students reported a higher IFOG value than those students on-target to graduate. Regarding the second research question, the data demonstrated a statistically and practically significant

difference of the presence of IFOG between diploma students and degree students. Graduating diploma students, those taking generally a one-year program, reported a greater presence of IFOG than did graduating degree students.

Major Findings

The results of the statistical analyses of the data collected for this study illuminate the theoretical and methodological research supporting this study. Below is a discussion of the major findings both in their relationship to the two main research questions but also other considerations.

Correlations and Descriptive Statistics of the Sample

The analyses revealed no significant difference in the presence of IFOG between new students and those on-target to graduate. These results are suggestive of four conclusions. First, the small sample size ($N=88$) would make a small but meaningful difference hard to detect. Prior studies surveyed thousands of students. Further, those studies primarily focused on correlating IFOG to some other behavior, outcome or preference. This study used a between group analysis of the same variable IFOG in an attempt to better understand the presence of the trait.

Second, the finding of no motivational difference is suggestive of the homogeneity of those who responded to the survey. Again, given the small sample, the students responding were likely of similar motivational make-up. Thus, motivational differences between the groups were harder to detect. Further, the promise of a possible monetary reward of a \$50 dollar visa gift card for completing the survey may have created a bias in the sampling. This is consistent with the greater presence of extrinsic goal orientation in the graduating students as compared to the new students. This conclusion is also consistent with the demographic homogeneity of the survey

respondents, the majority of which were white, female, under 25, and having a 3.0 or greater grade point average.

Third, the finding of no statistically significant motivational difference is consistent with the general notion of the importance of IFOG. The presence of IFOG in each group was both greater than the corresponding extrinsic construct and near the very top of the IFOG scale ($M = 7.52$). Generally, these findings are consistent with the idea that students who enroll as well as students who graduate have a high IFOG awareness or valuation.

Fourth, while the difference in IFOG awareness was not statistically significant, it was modestly practically significant. Previous research (Côté & Levine, 1997; Stage, 1989; Vallerand & Bissonnette, 1992; Miller, Relyea & Tabachnick, 2008; Abel, Guiffrida, Lynch & Wall, 2013) suggested that the presence of IFOG would be consistent with behaviors associated with graduation. This study found that new students at a two year college reported a practically greater IFOG value than did those on-target to graduate. From a goal contents theory perspective, this may imply that the actual process of obtaining a degree modestly fatigues a student's awareness of IFOG. Also, graduation involves the decision of determining what is the immediate next goal, especially in terms of obtaining a job. In turn, students at the end of the learning experience may possess less IFOG awareness simply because of the exigencies of looking for work. This shortsighted, near-term goal is only temporary.

The correlations presented are also of import. For one, the associations between construct variables were consistent with what was expected, namely, there were very high associations and all were in the expected theoretical direction (i.e., positive). Additionally, the community variable was related to the financial success variable for graduating students but not new students and the image variable was less associated with the popularity variable for graduating students.

Figure eleven shows the variable perceived relations of new students and on-target to graduate students on financial success.

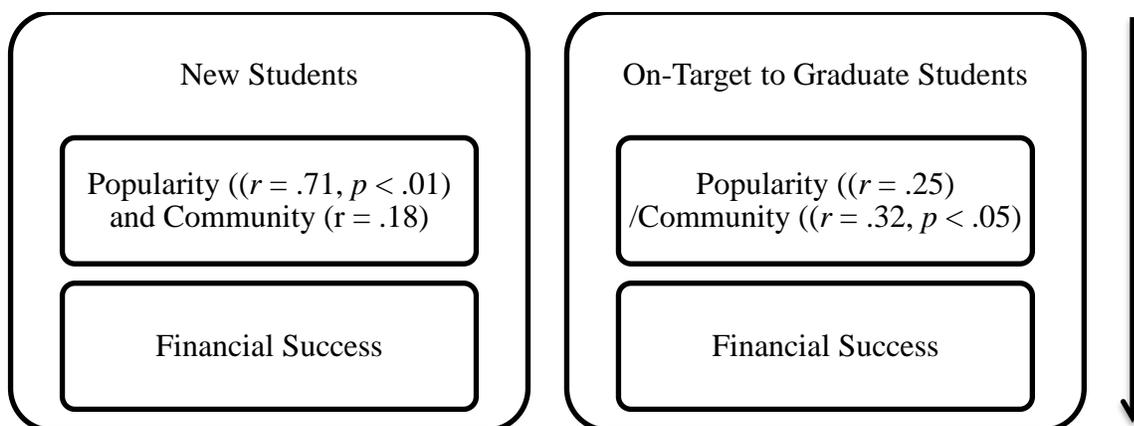


Figure 13. Variable Relations of Variables Between Groups

These measurements are what one would expect given the cohort nature of the two-year college experience. Moreover, the institution under investigation was a technical college, specializing in industry-driven education, and those programs follow much more closely to a cohort model of study. As students progress through their programs, developing relationships centered on their professional careers, the findings suggest students see image as less important and community more closely aligned with personal wealth.

IFOG Variance

The study did find a greater presence of IFOG among graduating diploma students than it did graduating degree students. The effect size was very large ($d = .87$). This finding related to the second research question. Moreover, the second research question was important because it sought to discover if program of study was an externalization of IFOG. The idea is that students who are less long-term oriented will demonstrate this orientation by choosing a shorter-term program of study. This research does not support that claim.

The greater presence of IFOG for diploma students is suggestive of a number of considerations. For one, if the two-year degree represents the breaking point for long-term economic self-sufficiency (Dadgar & Trimble, 2014), it is possible that the presence of shorter-term programs is diverting degree capable students onto program of study paths that do not allow them to reach their full potential. As previous studies have shown, low socio-economic and minority students are affected more by price adjustments to programs (Denning, 2017). The findings of this study, as they relate to the second research question, suggest that program length is merely another version of price manipulation, and that, like in other cases, two-year college students are likely to modify their behaviors based upon those offerings.

However, the findings could also suggest that students with a strong sense of their future goals understand the risks of longer-term programs and elect to take paths with more certain outcomes. Given that the sample showed signs of selection bias and was overly skewed toward high achieving, younger, and academically prepared traits, the greater presence of IFOG among diploma students could simply be consistent with the demographic characteristics of the sample.

Lastly, the findings of a greater presence of IFOG among graduating diploma students could suggest the fatigue that occurs in the degree completion process. The research demonstrates that two-year degree students take nearly 3 years to complete their degree (National Student Clearinghouse, 2015). The finding that the degree completion process depletes students of their intrinsic motivation is supported by this research that found that new students had a greater mean value of IFOG as compared to graduating students, although not statistically significant, coupled with the research that found that graduating diploma students had a greater presence of IFOG as compared to graduating degree students.

Implications

The findings and data analyses provide the literature with important contributions to both the conceptual framework and what is known about intrinsic motivation in a higher education context.

Conceptual Frameworks

The greater valuation of intrinsic versus extrinsic goals was supported by this study. However, this study did not find that IFOG was a predictor of graduation. This is important because it may support the course level outcomes of prior studies (Miller, Relyea, & Tabachnik, 2008; Abel, Guiffrida, Lynch & Wall, 2013). More specifically, motivational differences matter at the level of the course or specific curricular outcomes. Certainly, these variations can add up to an overall successful outcome of graduation. However, when viewed from the vantage of the actual macro-level outcome, the motivational differences may not be perceptible.

The valuation of the intrinsic goals by the survey respondents adds to our understanding of what students perceive as valuable and meaningful. For the entire sample, IFOG was valued the highest. The sub-variables of IFOG of community and self-acceptance were valued the highest; new students valued both of those variables the highest of any measured variable. This is consistent with Tinto's work (Tinto, 1987 & 1993) on student persistence, specifically the importance of student connectedness. Students value community, and in fact, the data from this study suggested that students shift their association of community's value to actual financial success.

The presence of IFOG was associated with the presence of a high value for extrinsic aspirations. The variables measured were all associated with the extrinsic construct except the sub-variable of community. Again, this observation supports the idea of the importance of

students making connections at institutions. If the basic motivational profiles of students who start and finish are relatively the same, this study provides evidence that the experience and perception of community makes a difference.

The concept of higher education as merely an economic commodity is not supported by this study. It is not supported by this study for two reasons. For one, the study suggested that students who start and finish at a two-year college value intrinsic aspirations over extrinsic aspirations. Secondly, the community variable was valued the most while the image variable was valued the least. Financial success was the highest valued sub-variable of the extrinsic construct. Similarly to what was demonstrated in developing countries (Grouzet, Kasser, et. al, 2005), two-year college students see financial success as a more integrated and holistic concept associated with survival in a society with increasing financial requirements – not merely the goal of material wealth.

Further, the importance of community, as stated, undermines the notion that higher education is merely about a transaction between two economic actors. Instead, higher education remains to be perceived as a means for developing a social sphere that is supportive to professional goals. This professional community that students seek supports their graduation goals. This study suggests that new students do not perceive the force of this fact.

In sum, while previous literature pointed to the possible predictive quality of IFOG, this study did not find a predictive relationship between IFOG and those on target to graduate. However, the small sample size mitigates the strength of that finding. Nonetheless, the strong presence of IFOG and the relation among the variables suggested the importance of IFOG, and in particular, the importance of community within the intrinsic construct. As the response items for community show, students want to make a better world for others much more than they want to

be attractive. Two-year colleges need to tap into this strong desire and then build community around it that moves students toward graduation.

Implications for Leadership

Higher education leaders are tasked with creating the meaning within the institutions they serve. This meaning establishes the cues that students derive as they develop their meaning of higher education. Leaders need to be aware that community matters to students. For example, the desire to belong to a professional community working towards a common goal is much more desirable to students than merely entering a field with high earnings. In turn, leaders should develop comprehensive communication strategies that reinforce the former versus the later.

The communication strategies should be comprehensive, starting with external messaging and carrying throughout the matriculation process. This will require student affairs staff and faculty to work in concert with marketing and communication to develop messages and media that support students developing professional community. Within student affairs, career services, often integrated at the end of a student's learning journey, should begin engagement with students at the beginning. The possible burden on the department should be alleviated with more resources, but the additional resources may not be too costly, as services during the beginning of a program of study would focus on cohort level services. Students would be challenged to not just find a friend to study with but find a group with which to graduate. Further, as more students matriculate to graduation, revenues will increase, and in turn increased students services would be possible.

These cues also extend to the way in which an institution is designed. Entrances should be inviting, leading a student to natural places of community. Spaces should be found throughout campus and in each department that communicates to students that collaboration and community

are not just welcomed but encouraged. Staff should work in team environments, eat in shared common spaces, and collaborate across departments. Ultimately, institutions cannot offer to students what they, themselves, do not enjoy. If students are to develop professional community, then institutions must possess it as an example. In turn, faculty and staff will be able to imbibe, organically, a culture of professional learning and cohort support.

Going further, this study supports the idea that intrinsically valued, non-materialist goals are overwhelmingly more important to students ($M = 7.52$) than merely hedonic or extrinsic goals ($M = 5.62$). Higher education leaders need to balance their language about the economic benefits of higher education with the social, personal, and well-being benefits of higher education. The latter goals are what students are seeking (Kaser, 2016), and two-year colleges need to meet students where they are.

Therefore, college presidents must be the storytellers of the institution, both to students but also to all the other stakeholders. College should be understood as a partnership to help a student achieve self-actualization in the world in a community of persons seeking a common good. While this less than utilitarian or instrumental view of education may seem at odds with business or economic concerns, two-year college presidents and institutions in general should take a progressive stance. In fact, current business environments are even now beginning to realize the importance of autonomy, relatedness, and self-direction within a self-determination theory framework. So ultimately, this work may not be met with as much resistance as might be anticipated.

Moreover, college presidents would have to help businesses understand the importance of this partnership with students. While employers need employees, people want to be more than just employees. They want satisfying lives. People with satisfying lives do better work, are

happier at work, and have longevity and mobility within companies. Two-year college presidents, through strong communication in all forms, can help re-position their institutions and students as more than just workforce partners with industry. Often, these institutions view the employer and the student as a kind of mutually exclusive customer. Instead, two-year colleges should position themselves as the long-term business interest partners of companies, not just short-term workforce need solutions. By doing so, they will better align the long-term goals of both industry and individuals.

This study also suggests that higher education leaders need to resist the temptation to believe that students fail to graduate because of motivational reasons. Instead, leaders need to work hard to determine and eliminate the barriers to graduation while at the same time encouraging students in their already established motivational frameworks. Institutions should shift their emphasis from extrinsically valued goals (e.g., a degree leads to “x” salary) to more intrinsically valued goals that reflect the purpose and fulfillment derived from a career that makes a difference in the world.

As aforementioned, this starts in the type of communication an institution develops. Language about come here, get a job, and make more money, should be supplemented with language that supports the development of a fully integrated life. Every job has dignity and can provide a person with a chance to make a difference in the world. Nevertheless, this study did suggest that students in two-year colleges view financial success in a more holistic way. In turn, more intrinsically oriented value propositions should not completely supplant the marketing of the economic outcomes of degrees.

However, institutions must realize the impact of price manipulation on minority and low social economic status students. While it can be a positive force to promote enrollment, it can

also have a negative impact on major selection. In turn, advisement at institutions should be designed to both eliminate the tangible barriers to graduation but also promote a major selection process that does not infringe upon uninhibited decision making. At the least, students should fully understand the long-term, positive impacts of a two-year degree, be helped to create plans that assist them in achieving that goal, and be provided follow up for when those plans face setbacks.

Faculty and staff should be trained to uncover their negative beliefs about students. Often, working in an industry over a long period of time can make one less empathetic to the needs of the customer. There can be a ‘we have heard this all before’ mentality, and faculty and staff stop listening to the actual stories students tell and simply categorize them within a pre-existing framework of excuses. It is easy to blame the lack of motivation of someone else, instead of focusing on what one can do to change. In this vein, faculty and staff in two-year colleges need to be trained to provide their students with high quality education and support that benefits their long-term success. This starts with a belief that every student desires to graduate.

This injunction in no ways means to imply that there are not a great number of faculty and staff at two-year colleges doing what was just prescribed. However, those who occupy positions within two-year colleges on average, by definition, are dissimilar to those who attend and graduate from a two-year college. Data suggests that a very small minority of students who graduate with a two-year degree or less ever complete a four-year degree. Oftentimes, this leads to paternalistic advice giving or the setting of low-expectations motivated by a desire to help.

Instead, faculty and staff at two-year colleges need to develop systems of listening. These systems of listening to their students, collecting the data, sharing those stories, using the stories to uncover barriers to graduation, measuring variables where appropriate, and then acting on

subsequent findings presents a viable model of change and improvement in graduation outcomes. While it is safe to assume that students who start at two-year colleges are motivated to graduate for the right reasons, it is not safe to assume that two-year colleges understand the barriers that prevent students from finishing. Of course, there are literature and common or colloquial senses of what those barriers might be, but institutional understanding does not exist to the level to which it should. Institutional awareness is evidenced by a mission focus, a culture, pushing in the same direction, with a common vision of student success, and a common perception of the general inability to meet students' needs without first listening to them. The examples of such institutions are far too rare as the graduation rate at two-year colleges strongly demonstrates.

Recommendations for Further Research

The results of this study are suggestive of a need for additional research. The small sample size mitigates the force of its findings. In turn, it is curious what effects might be discovered if a larger, more nationally representative sample size was surveyed.

Sampling. The sampling could have been improved both in terms of size and also conformity to the demographics of the institution. The current sample was demographically diverse, yet skewed to the Caucasian, young and high achieving categories. Given the low-income and minority implications of the graduation crisis, it would be interesting to recruit a sample that was more diverse and representative of the institutional profile as well as to students in two-year institutions more generally. Such a sample would suggest more generalizable findings.

Research Questions. After looking at the data, additional research questions emerged. For example, what sub-variable differences exist between majors? Some majors are more easily identifiable as intrinsically rewarding: nursing and education. These programs of study lead to

helping careers, are often underpaid, and are in the service of those vulnerable and in need. Some majors are not as obviously intrinsically rewarding: business and industrial technology. These programs of study can often lead to solitary work that can appear to only benefit business economies or efficiencies. With a large enough sample, research could help uncover the motivational characteristics of students by major type. It could see if those characteristics were predictive of keeping a major. Changing a major, and the setbacks associated with major changes, could be consequential to graduation outcomes. Such research could suggest the need for motivational profiles in the major selection process. To this end, it would be helpful to examine whether IFOG mediates the relation between major and certain key demographic characteristics (e.g., gender, socio-economic status, race/ethnicity) and graduation and/or persistence.

Research Design. There are four recommend research design changes that could help improve both this study and subsequent research. First, samples should be obtained from within classes. This should increase response rate, which was an issue in this study. Second, research should focus on just graduating students. The between group comparison of this study implied a difference that may not be as important as the characteristics discovered among students graduating. Longitudinal work that follows a student through their college experience, possibly measuring their motivational characteristics by semester would also be insightful. Finally, assuming these findings could be repeatable, and that IFOG variance is not predictive of graduation, interview questions of survey participants might illustrate the actual role of IFOG in relation to various student attitudes and behaviors. It may very well be that IFOG, when interacting with a certain matrix of other motivational traits, personality characteristics, or demographic characteristics, is predictive of graduation. The interviews might help better

uncover what interacting variables manifest and how those interact. This could be appropriately done through a grounded theory approach. In turn, research could be conducted that measured both IFOG but also additional interacting variables, controlling for them, and consequently more accurately measuring the predictive nature of IFOG on college graduation.

Impact Statement

The graduation crisis in two-year colleges is dismal. Leadership matters, and this study showed that there is an opportunity for leaders to reposition two-year colleges as the partners in holistic student success. Further, the study challenges institutions to redesign their spaces and processes to encourage the development of student social integration into the campuses. Two-year colleges are often commuter-based, filled with students with complicated lives. The exigencies of life make it hard for them to stop long enough to truly realize their goal of graduation. This research challenges all and encourages all to build campuses that allow students to develop meaningful, professional relationships to promote the holistic and financial success found through an education that opens the door to economic independence.

Concluding Statement

The results of this study show two-year college leaders how important intrinsically valued goals are to their students. While not predictive of graduation, intrinsically valued goal aspiration should inform how leaders communicate about higher education with their students because this is the framework by which their students start. Two-year college students are looking for community that enriches those goals. Moreover, two-year colleges should consider how shorter-term programs act as a kind of price lowering mechanism that could divert many students who could earn an associate degree into shorter-term programs. Given the economic

implications of higher education on long-term earnings, any student who can earn an associate degree deserves that chance.

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Appendix A

Modified Aspirations Index

The questions below correspond to the extrinsic aspirations of Popularity (9, 13, 18), Image (3, 8, 16, 20, 28), Financial Success (7, 17, 21, 27), and the intrinsic aspirations of Affiliation (6, 9, 14, 22, 26), Self-acceptance (2, 5, 11, 15, 19, 23, 24), and Community (4, 12, 25). Below is the actual survey students will see, slightly modified for this format. It includes a consent statement, survey items, demographic data to include length of program of study. Actual items appear as below:

▼ IFOG Survey
Block Options ▼

Q2
⚙️
⌘

For each survey item, rate how "important" a statement is to you and the "chances" you believe you will achieve that statement

I will be efficient.

	not at all	a little	moderate	very	extremely					
0	1	2	3	4	5	5	6	7	8	9
Importance										
Chances										

Q1 Thank you so much for participating in this study! Please look over the consent form before proceeding.

COLLEGE OF EDUCATION DEPARTMENT OF OF LEADERSHIP, TECHNOLOGY, and HUMAN DEVELOPMENT

Dear Participant:

My name is Brent Stubbs and I am a graduate student completing my doctoral degree at Georgia Southern University. This research will be used for my dissertation as a part of that program. The purpose of this research is to understand better the relationship between student goals and graduation.

Participation in this research will require you to respond 27 items. Participation is completely voluntary, and there is no penalty for not participating. . Each item will involve a statement like “I will deal effectively with problems in my life.” In response to that sentence, you will rate how important that statement is to you and also what the chances are that you believe you will achieve that statement. The survey link will be open for two weeks for you to complete the survey. There are no risks associated with completing this survey other than what you might encounter in everyday life.

Your participation will help to increase knowledge about the relationship between student goals and graduation. Hopefully, colleges will be able to use this information to serve you and other students better.

Deidentified or coded data from this study may be placed in a publically available repository for study validation and further research. You will not be identified by name in the data set or any reports using information obtained from this study, and your confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies, which protect the anonymity of individuals and institutions. Participants have the right to ask questions and have those questions answered.

If you have questions about this study, please contact the researcher named above or the researcher’s faculty advisor, whose contact information is located at the end of the informed consent. For questions concerning your rights as a research participant, contact Georgia Southern University Office of Research Services and Sponsored Programs at 912-478-5465. Only participants who complete this survey will be eligible to win one of two \$50 Visa Gift cards. If you are an employee of Georgia Southern University, the compensation you receive for participation will be treated as taxable income and therefore taxes will be taken from the total amount. If you are not employed by the University, total payments within one calendar year that exceed \$600 will require the University to annually report these payments to the IRS. This may require you to claim the compensation that you receive for participation in this study as taxable income.”

Copies of this informed consent will be provided only upon request. Results of this survey will be archived for 3 years. This project has been reviewed and approved by the GSU Institutional Review Board under tracking number H18012.

Title of Project: Intrinsic, Future-Oriented Goal Awareness as a Predictor of Two-Year College Graduation

Principal Investigator: Brent A. Stubbs bs05388@georgiasouthern.edu 912-443-4150

Faculty Advisor: Antonio P. Gutierrez de Blume, Ph.D. Assistant Professor of Research
Department of Curriculum, Foundations, and Reading Georgia Southern University P.O. Box
8144 Statesboro, GA 30460-8144 agutierrez@georgiasouthern.edu

I have read the informed consent and voluntarily consent to participate in the survey

- Yes (1)
 No. I choose not to participate (please close your browser if you wish not to participate in the survey). (2)

Q2 For each survey item, rate how "important" a statement is to you and the "chances" you believe you will achieve that statement I will be efficient.

_____ Importance (1)
 _____ Chances (2)

Q3 My image will be one other's find appealing.

_____ Importance (1)
 _____ Chances (2)

Q4 I will assist people who need it, asking nothing in return.

_____ Importance (1)
 _____ Chances (2)

Q5 I will choose what I do, instead of being pushed along by life.

_____ Importance (1)
 _____ Chances (2)

Q6 People will show affection to me, and I will to them.

_____ Importance (1)
 _____ Chances (2)

Q7 I will have many expensive possessions.

_____ Importance (1)
 _____ Chances (2)

Q8 I will achieve the "look" I've been after.

_____ Importance (1)

_____ Chances (2)

Q9 I will be admired by many people.

_____ Importance (1)

_____ Chances (2)

Q10 I will feel that there are people who really love me.

_____ Importance (1)

_____ Chances (2)

Q11 I will feel free.

_____ Importance (1)

_____ Chances (2)

Q12 The things I do will make other people's lives better.

_____ Importance (1)

_____ Chances (2)

Q13 My name will be known by many different people.

_____ Importance (1)

_____ Chances (2)

Q14 Someone in my life will accept me as I am, no matter what.

_____ Importance (1)

_____ Chances (2)

Q15 I will deal effectively with problems in my life.

_____ Importance (1)

_____ Chances (2)

Q16 People will often comment about how attractive I look.

_____ Importance (1)

_____ Chances (2)

Q17 I will be financially successful.

_____ Importance (1)

_____ Chances (2)

Q18 Most everyone who knows me will like me.

_____ Importance (1)

_____ Chances (2)

Q19 I will feel good about my abilities.

_____ Importance (1)

_____ Chances (2)

Q20 I will successfully hide the signs of aging.

_____ Importance (1)

_____ Chances (2)

Q21 I will have enough money to buy everything I want.

_____ Importance (1)

_____ Chances (2)

Q22 I will express my love for special people.

_____ Importance (1)

_____ Chances (2)

Q23 I will overcome the challenges that life presents me.

_____ Importance (1)

_____ Chances (2)

Q24 I will have insight into why I do the things I do.

_____ Importance (1)

_____ Chances (2)

Q25 I will help the world become a better place.

_____ Importance (1)

_____ Chances (2)

Q26 I will have a committed, intimate relationship.

_____ Importance (1)

_____ Chances (2)

Q27 I will have a job that pays well.

_____ Importance (1)

_____ Chances (2)

Q28 I will keep up with fashions in clothing and hair.

_____ Importance (1)

_____ Chances (2)

Q29 What kind of program are you pursuing?

Associate of Science or Associate of Applied Science Degree (2 year) (1)

Diploma (less than 2 years) (2)

Certificate (less than one year) (3)

Q30 What is your gender?

Male (1)

Female (2)

Q31 What is your ethnicity?

White (1)

Black or African American (2)

American Indian or Alaska Native (3)

Asian (4)

Native Hawaiian or Pacific Islander (5)

Other (6)

Q32 What is your age?

Under 18 (1)

18 - 24 (2)

25 - 34 (3)

35 - 44 (4)

45 - 54 (5)

55 - 64 (6)

65 - 74 (7)

75 - 84 (8)

85 or older (9)

Q33 What is your grade point average (GPA)?

3.5-4.0 (more As than Bs) (1)

3.0-3.5 (more Bs than As) (2)

2.5 to 3.0 (more Bs than Cs) (3)

2.0 to 2.5 (more Cs than Bs) (4)

I do not have a GPA yet. (5)

Q34 If you would like to be eligible to win a \$100 gift card, please enter your email below.

Appendix B

Email to Students

Dear Student,

You have been selected to take a short, five-minute survey. This survey will help further research in understanding two-year college students. Anyone who completes this survey will be entered into a drawing to win one of two \$50 VISA debit card prizes. This information will be used for research purposes only.

Thank you for participating.

Go [HERE](#) to take the survey.

<survey link goes here as well.