

Motivational Indicators of Community College Students Based on Familial Level of Educational Attainment

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Abstract

In the present study, the relationship between motivational factors and familial level of educational attainment were examined in students currently enrolled in a New York City community college. The Academic Motivation Scale, AMS-C (Vallerand et al., 1992) was the tool used as it had been applied to measure the academic motivation of several undergraduate student groups in both public and private higher education settings. Researchers did not reflect use with a population of students enrolled in a New York City community college which inspired the researcher to apply it here for this study. The Ryan and Deci (2017) self-determination theory model was used in to ascertain if there was a difference in the motivational levels of students based on familial level of educational attainment. Findings highlight the importance of demonstrating to potential students the rewards and possible achievements associated with community college enrollment. Similarly, community college students who had a family member attend college had higher levels of external regulation than first-generation college students.

Keywords: Motivation, First Generation, Community College

Introduction

To date, minimal research has been conducted on factors that motivate specific groups of students to enroll in a community college. The lack of information leaves community colleges in uncharted waters with regard to attracting and initiating new and creative ways to enroll and perhaps retain students. Motivational factors leading to enrollment among first generation community college students (FGCCS) was investigated in this study. The Academic Motivation Scale, College Version; AMS- C (Vallerand, Blais, Brière, & Pelletier, 1992) was previously implemented to determine both the intrinsic and extrinsic motivational factors influencing freshman college students. For this study's purpose, the AMS-C was amended to include a demographic question pertaining to familial level of educational attainment. Although there are many ways to characterize a student that is the first in family to enroll in college, regardless of how they are defined, FGCCS enroll and often graduate at lesser rates than do other students (Smith, 2015). For the purpose of this paper, FGCCS is defined as those not having parents, guardians, or siblings having attended college before them. Results from this study not only identified the motivational factors that influence

community college enrollment but also included justification for incorporating dimensions of motivation into a community college campus life for the retention of future students.

Theoretical Framework

This study utilized the Self-Determination Theory (SDT) to identify motivational factors of students enrolling in a community college. According to Ryan and Deci (2017), SDT focuses on a continuum of intrinsic and extrinsic motivators. The first category on the continuum is “amotivation, which is the lack of intention to act” (Ryan & Deci, 2017, p. 21). It is, in a sense, the direct opposite of what the authors deem as motivation. Following on the continuum is extrinsic motivation, which is broken down into four different categories, including external regulation, introjected regulation, identification, and integrated regulation.

External regulation is based on receiving a contingent reward or punishment for completing or neglecting to complete a given task and is the least autonomous of the four extrinsic rewards (Ryan & Deci, 2017). The next category of extrinsic reward is introjected regulation, fueled by motivation or pressure to please others. Then comes identification, which is based on personal importance and progress toward a goal. Lastly, integrated regulation occurs when the individual sees a connection between the activity and their values or needs. These different types of extrinsic motivators increase in autonomy as one progresses along the continuum toward intrinsic motivation.

Ryan and Deci (2017) believed that intrinsic motivation is instinctively based on experience yet is also embedded in the individual's relationship with a given activity. People are intrinsically motivated by the satisfaction and gratification of accomplishing a task or completing an activity. SDT suggests that the educational setting and home help facilitate students' intrinsic motivation for academic achievement through support and encouraging autonomy.

Review of Literature

Motivation in community college students' relation to educational pursuits is defined by McMillan and Forsyth (1991) as “purposeful engagements in classroom tasks and study to master concepts or skills” (p. 39). The major points of this definition are purposeful engagement and mastery. Purposeful engagement denotes a reason, intention, resolve, or rationale for thoughtful participation in some endeavor. This cognitive process calls for the student to pursue some objective that can be attained through mastery of specific goals. Mastery refers to the integral knowledge necessary to become competent in a specific discipline (Mukherjee, 2000). In education, competence is measured by assessment tools that provide an indication of the learning that has taken place (Mukherjee, 2000). Thus, motivation, from an educational perspective includes a purpose, a commitment, and a goal of some type.

In 2016, a total of 96,865 students (with unidentified motivational factors) enrolled in community colleges associated with the City University of New York (CUNY), which was a 0.4% increase from 2012 (CUNY Office of Institutional Research and Assessment, 2017). Cross (2001) explained that motivation is dependent upon two components: value and expectancy. She noted that for a student to be motivated, the student must first find value in learning, or value in a particular course he or she is interested in taking, or value in what the student is seeking to gain from the college (e.g., a college degree or a specific skill). If a student thinks that a certain college degree is important, he or she values the degree and thus possesses one component necessary for being motivated to enroll in the community college. Students must value something associated with their college curriculum to actually propel them into taking the risks associated with the pursuit of academic attainment (Cross, 2001). According to Dweck (2010), students she described as believing their intelligence was fixed were more concerned about their achievement and less concerned about actually learning than those students who believed that their intelligence was malleable. This aspect confirms Cross's idea of value as an important component of motivation. Cross's second component, expectancy, refers to the belief the student holds of what he or she thinks is attainable. An example is a student who believes that he or she has the ability to obtain a college degree. In believing in the ability to succeed, the expectancy component has been met. Cross noted that for students to be successful, they must be able to believe that they can succeed. However, many students at the community college level have doubts about their abilities and would rather be seen as expending little or no effort and not succeeding than expending great effort and not succeeding (Cross, 2001).

The latter belief affirms the self-perception that they have a diminished capacity for learning or low ability to learn (Dweck, 2010). It is apparently more acceptable for students to put forth no effort and use that as an excuse for failure than to put forth effort and risk failure that could be attributed to lack of ability. Cross (2001) explained that self-perceptions and beliefs contribute to the expectations that students harbor about their potential to succeed in college. Although self-perceptions and beliefs are integral in studying motivation, they can be difficult to assess.

Community College Enrollment

The Center for Community College Research located at Teachers College in New York has conducted published research about the persistence of community college students stating:

Among students who started college in fall 2014 at a two-year public institution, 60 percent were still enrolled at any institution in fall 2015. Nearly 49 percent returned to the same college. The one-year persistence rate of students who started full time was 69 percent; for part-time starters it was 55 percent. (National Student Clearinghouse Research Center, 2016, p. 3)

Despite these findings, there is limited research about identifying specific motivating factors influencing community college enrollment. The present study was designed to fill the gap. The information can be used by administrators, staff, and faculty to develop ways to attract and perhaps retain students based on their intrinsic and extrinsic motivational needs being met ensuring an inspirational, motivational, and developmental learning environment.

First Generation Students

Family support, monetary or otherwise, strongly influences students enrolling and succeeding in college. First-generation students often have little support, and some experience negative family reactions to their decision to attend college (Engle, 2007). In 2016, 51.8% of the previously mentioned 96,865 students enrolled in a community college at CUNY, were first-generation college students (CUNY Office of Institutional Research and Assessment, 2017). Programs specifically created for first-generation freshman that help fill the social and cognitive gaps experiences by lack of family support can reduce the impact of low familial support. Therefore, community college campus programs in admissions, advising, college-level skills, and peer tutoring designed around the specific needs of first-generation students are effective administrative responses to increasing enrollment (Strayhorn, 2007). Student activity programs have been successful at integrating the kind of academic and social support most beneficial to first-generation students, particularly those that emphasize peer relationships (Inkelas, Daver, Vogt, & Leonard, 2007).

Material and Method

Study Population and Sample Selection

As part of the quantitative method approach, students that were attending a community college in New York City and enrolled in introductory behavioral science courses including psychology and sociology were administered the AMS-C at the start of the Spring semester. According to data found on the specific college website, “approximately 70% of the college’s students are enrolled in a liberal arts or science degree program; the remaining students pursue degrees in specialized, career-oriented programs. The community college also maintains one of the most comprehensive adult and continuing education programs in New York City” (City University of New York, 2020, p.1).

The sample population of 126 first-year students currently enrolled in an introductory behavioral science course was selected. Students from all disciplines are required to take an introductory course in the behavioral sciences to meet college graduation requirements, which enabled the researcher to elicit responses from students in a variety of majors as well as from different backgrounds.

Research Analysis

In the 2018 – 2019 academic year, 65% of the 91,715 students enrolled at one of the community colleges at CUNY, were first-generation college students (CUNY Office of Institutional Research and Assessment, 2019). To assess the question, to what extent are there motivational differences between FGCCS when compared to students who have had a prior family member attend college were compared on all seven motivational factor subscales.

The appropriate statistical test was determined for each analysis, either the independent samples *t* test or the nonparametric equivalent, Mann-Whitney U test, by checking the statistical assumptions (see Table 1) of the independent *t* test. The null hypothesis posited that students with a family member who has attended college will not differ on the motivational

factor subscales from students who have not had a family member attend college. Alpha was set to .05 for tests of significant differences.

Table 1

Descriptive Statistics of Seven Motivational Factors for Attending College

Motivational Factors	Descriptive Statistics				
	<i>M</i> (<i>SD</i>)	<i>Mdn</i>	95% Confidence Interval	Inter-item reliability (Cronbach's α)	<i>n</i>
Intrinsic Motivation: To Know	20.16 (5.96)	20	[19.24, 21.54]	.913	123
Intrinsic Motivation: Toward Accomplishment	19.56 (5.91)	20	[18.62, 20.90]	.913	121
Intrinsic Motivation: Experience Stimulation	17.62 (6.52)	17	[16.49, 19.02]	.914	116
Extrinsic Motivation: Identified	22.69 (5.00)	24	[22.12, 23.94]	.832	125
Extrinsic Motivation: Introjected	20.51 (6.01)	21	[19.40, 21.67]	.915	121
Extrinsic Motivation: External Regulation	22.87 (5.01)	25	[22.14, 24.02]	.776	126
Amotivation	7.56 (5.38)	4.5	[6.81, 8.93]	.869	122

Results

To research for, to what extent are there motivational differences between students who are first in their immediate family to enroll in college when compared to students who have a prior family member attend college? In order to investigate this, students who have had a prior family member attend college and those students who have not had a family member attend college were compared. Prior to conducting the analysis, the appropriate statistical test was determined. The first step was to determine whether any of the motivational factors violated the assumption of normality for students who have had a family member attend college and students who have not.

Using an alpha level of $p = .05$, it was found that for students who had a family member attend college, only the intrinsic motivation – experience stimulation motivational factor approximated a normal distribution. For students who did not have a family member attend college, intrinsic motivation: to know, intrinsic motivation: toward accomplishment, and intrinsic motivation: experience stimulation approximated a normal distribution.

Within each motivational factor, only intrinsic motivation: experience stimulation approximated a normal distribution for both students who have had a family member attend college and FGCCS (see Table 2). Therefore, the comparative analysis between students who have and have not had a family member attend college for all motivational factors was the

Mann-Whitney U test. This is a nonparametric test that allows the two groups of students to be compared. Additionally, an independent samples *t*-test was conducted on the intrinsic motivation: experience stimulation motivational factor for reasons of conclusiveness.

Table 2

Results of Shapiro-Wilk Test of Normality for Each of the Seven Motivational Factors for Students Who Have Had a Family Member Attend College and Students Who Have Not Had a Family Member Attend College

Motivational Factors	Shapiro-Wilk test of normality			
	College	<i>p</i>	No college	<i>p</i>
Intrinsic motivation: to know	.942	.013	.955	.062
Intrinsic motivation: toward accomplishment	.943	.015	.964	.146
Intrinsic motivation: experience stimulation	.964	.121	.957	.078
Extrinsic motivation: identified	.912	.001	.899	.001
Extrinsic motivation: introjected	.925	.003	.936	.011
Extrinsic motivation: external regulation	.847	.001	.910	.001
Amotivation	.788	.001	.721	.001

The results of the Mann-Whitney U test demonstrated no significant differences ($p < .05$) among students who had an immediate family member attend college and those who did not have a family member attend college for any of the seven motivational factors for attending college (see Table 3). There was a marginally significant difference, however, between students who had a family member attend college and those FGCCS on the extrinsic motivation: external regulation motivational factor ($p = .052$), indicating that students who have had a family member attend college ($Mdn = 25$) scored marginally higher on that factor than FGCCS ($Mdn = 22$). As a measure of effect size, Cohen's *d* was calculated. On average, students who had a family member attend college scored .31 standard deviations higher than FGCCS (Cohen's $d = .31$). This was a small to moderate sized effect (J. Cohen, 1992).

Table 3

Summary of Results of The Mann-Whitney U Test Comparing Students Who Have Had a Family Member Attend College and Students Who Have Not Had a Family Member Attend College for All Seven Motivational Factors

Motivational Factors	College		No College		Mann-Whitney U	<i>p</i>
	<i>Mdn</i>	<i>n</i>	<i>Mdn</i>	<i>n</i>		
Intrinsic motivation: to know	20.0	68	21.0	53	1695.0	.575
Intrinsic motivation: toward accomplishment	20.0	67	19.5	52	1670.5	.701
Intrinsic motivation: experience stimulation	19	63	16.0	51	1370.0	.177
Extrinsic motivation: identified	24.5	68	23.0	53	1748.0	.777
Extrinsic motivation: introjected	21.5	66	21.0	52	1607.0	.553
Extrinsic motivation: external regulation	25.0	68	22.0	53	1431.5	.052

Amotivation	4.0	68	4.0	52	1598.0	.058
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Note. An independent-samples *t*-test was conducted on the intrinsic motivation – experience stimulation factor. The results were also non-significant, $t(112) = -1.18, p = .241$.

Discussion

On average, students who have had a family member attend college exhibited higher levels of external regulation than those who did not. There were no differences on any of the other motivational factors.

Research shows FGCCS have had lower enrollment rates and faced greater difficulties than those students who have had an immediate family attend college. This particular group of students may experience fewer external rewards, at least from family members, resulting in lower levels of external regulation as a motivational factor for attending college.

Another explanation for lower levels of external regulation in FGCCS to enroll in college students might be that they are more likely to internalize successes. For example, one study comparing first and second generation college students found that students whose immediate family members did not attend college had an increased belief that if they did well in school, there would be greater and more significant career option open to them (Perin, & Holschuh, 2019). Additionally, another study revealed that both first-generation and other students who have had an immediate family member attend college believe that college is important for a successful life (Allen, 2015). This would explain why there were no significant differences on the intrinsic motivational factors between FGCCS and students who have had a family member attend college.

Conclusion

This study sought to explore the academic motivation of first-generation college students enrolled in community college. The AMS-C (Vallerand et al., 1992) was used to investigate motivational factors of community college enrollment ranging from amotivation to intrinsic to extrinsic motivation. It also sought to examine differences in academic motivation by familial level of education attainment. It was determined that, for the sample as a whole, the most influential motivational factors were external regulation and identification, both within the extrinsic motivational spectrum. This finding reveals that enrollment in a community college is most influenced by extrinsic motivations, that is, external rewards and factors that are important to an individual.

As SDT posits, when an environment does not provide enough support for the satisfaction of autonomy, competence, and relatedness, an individual may experience non-self-determined forms of motivation: introjection and external regulation. Introjection and external regulation are grouped as controlled extrinsic motivation because people enact these behaviors due to external or internal pressures.

The data collected highlights the importance of demonstrating to potential students the rewards and possible achievements associated with community college enrollment. Similarly, community college students who had a family member attend college had higher levels of

external regulation than FGCCS. External regulation is when student's behaviors are driven by external factors, such as rewards or punishments.

This study provided specific information as to what motivated a sampling of students presently enrolled in a community college. Understanding the factors that influence enrollment can help universities attract and retain students in an increasingly competitive marketplace. This information may also lead to future studies about motivational factors impacting students in enrolling in specific programs and assessing how they are motivated by individual instructors. Programs specifically created for FGCCS that help fill the social and cognitive gaps experiences by lack of family support can reduce the impact of low familial support. Therefore, community college campus programs for FGCCS may include ongoing support groups, workshops, and advisory sessions geared toward providing necessary support for FGCCS to be successful.

While having intrinsically motivated FGCCS would be ideal, this may not be a realistic expectation. The rationale behind this is that there are numerous tasks required of students to meet specific learning objectives that may not be naturally pleasing or motivating. Instead, further studies would support learning about how to inspire this growing population of students which could lead to motivational growth along the SDT continuum.

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