CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

Academic Success and First Generation College Students

A graduate project submitted in partial fulfillment of the requirements

For the degree of Master of Social Work

By

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Dedication

I want to dedicate this research project to my parents who provided me the support necessary to succeed in my graduate program. I also want to dedicate this to all first generation college students, whom had to learn along every step of the way and overcome the challenges that come with being the first in your family to go to college.

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Abstract

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Purpose: First generation college students encounter adversity throughout their path through college. It is of value then to study the factors that affect first generation college students' academic success. Research Questions: does academic resilience correlate with first generation college students' school involvement? Further are there differences between groups of students? Methods: The Academic Resilience Scale (ARS-30), student involvement questions, and demographics were used to explore these questions. Results: Findings from the study of first generation college students (N=193) suggested that students of color have less perseverance and help seeking behaviors when faced with adversity when compared to their white counterparts. In addition, school involvement significantly correlate with resilience. Further, female and trans students have less perseverance when faced with adversity, and trans students, additionally, have less help seeking behaviors when faced with adversity. Finally, the results suggest that students of color have less negative affect when faced with adversity when compared to their white counterparts. Discussion: Based on the results, it is important for colleges to outreach and better these groups of first-generation college students and increase student involvement. Search terms: first generation college students, students of color, resilience, and student involvement.

Introduction

First generation college students consistently have lower grades and higher dropout rates than those students who have parents with a college degree (Stephens, Hamedani & Destin, 2014; Cataldi, Bennett, & Chen, 2018). In fact, 33% of first-generation college students' dropout of college within three years compared to 14% of those who have parents with a college degree (Cataldi, Bennett, & Chen, 2018). With such a high rate of first-generation college students not succeeding academically, there are many barriers and factors left to explore. Research has shown that higher education leads to better life outcomes for first-generation college students including making more money over their lifetime (Brock, 2010). This can lead first-generation college students to have higher socioeconomic statuses and better opportunities in their lives. Therefore, universities have attempted to close the achievement gap between these students (Stephens, Hamedani & Destin, 2014). Yet studies show that first-generation college students continue to not have the same academic success as their counterparts as measured by grades, and college degree completion (Stephens, Hamedani & Destin, 2014; Cataldi, Bennett, & Chen, 2018). Further, the fact that many first-generation college students succeed and excel academically while others do not must be taken into consideration (Cataldi, Bennett, & Chen, 2018; Stephens, Hamedani, & Destin, 2014). Hence, further understanding of the factors and barriers that may play a role in first-generation college students' road to academic success is needed.

Literature review

Academic success has been defined in many ways in the literature; however, for the purposes of this research, we will identify academic success through college retention

and consequent completion of a degree (Stephens, Hamedani, & Destin, 2014). Research has found that interventions that are meant to help first-generation college students succeed in college are often built on the idea that this population simply does not have the academic skills or the money to succeed (Stephens, Hamedani, & Destin, 2014). Hence, why despite many of these interventions currently in place we still find an alarming rate of this population dropping out of higher education. In contrast, research has also found that other factors such as resilience, student involvement, peer and family support may contribute to the academic success of first-generation college students (Cassidy, 2016; Gamez, Lopez, Overton, 2017; Mitchall & Jaeger, 2018). Understanding these factors then is a crucial point in beginning to understand how to better provide support to these students.

Cassidy (2016) found that academic resilience correlated with positive academic achievement in college students through the use of the Academic Resilience Scale (ARS-30). Academic resilience is the degree to which an individual can surpass adversity in their educational advancement (Martin, 2013). Academic resilience then affects a student's academic success and development as first-generation college students face different adversities in higher education than those who are not first-generation students. Adversities such as having less awareness of academic support, resources and activities provided by the school might all lead to less student engagement (Petty, 2014). In addition, navigating family life with college life including employment, economic stressors, responsibilities, lack of or inadequate support from their family are all barriers that first generation college students face (Mitchall & Jaeger, 2018; Petty, 2014). Further, Gamez, Lopez & Overton (2017) found three crucial things necessary for college success

were having mentors, resiliency, and “ganas” which translate to grit or desire. Students having these three characteristics were found to be less likely to give up on their educational pursuits when faced with obstacles. When an obstacle arose, these students knew whom to seek support from or they sought for it until they found it. A crucial factor included having competent staff that could provide guidance to these students. In addition factors such as positive family support including direct involvement, encouragement and setting high academic standards have been found to be crucial factors in fostering academic success among first generation college students (Mitchall & Jaeger, 2018). Research regarding student involvement and support has found that peer support and student involvement correlated with higher academic success in higher education (Dennis, Phinney & Chuateco, 2005; Gamez, Lopez & Overton, 2017; Martinez, Bilges, Shabazz, Miller & Morote, 2012; Reynolds & Weigand, 2010). A study found that the lack of peer support correlated with a lower rate of students being able to adjust to their college environment (Dennis, Phinney & Chuateco, 2005). Research has also looked at the relationships between academic attitudes, psychological attitudes, and academic achievement among first-generation college students (Reynolds & Weigand, 2010). This study found students who were able to manage their stress were able to do so by engaging in both academic and social settings leading to higher academic success. Student engagement has been found to be a contributing factor in retention for first-generation college students, which ultimately leads to higher graduation rates. However, research has found that first-generation college students are less likely to be engaged in both an academic setting as well as in a social setting within the school (Soria, Stebelson, 2012). This includes study groups, talking to faculty, seeking services, or being involved in

extracurricular activities (Soria, Stebelson, 2012). This may suggest then, this lack of involvement and support may contribute to lower academic success among first-generation college students.

Limited research has also explored the correlation between student involvement and resiliency. A study looked at student employment, resiliency, and institutional engagement of low income, first-generation college students (Martinez, Bilges, Shabazz, Miller & Morote, 2012). The study found a significant difference between the resilience among those students employed off campus than those employed in work-study. In addition, it found that those with stronger systems of support including student involvement felt more prepared to overcome obstacles, which can lead to higher academic success among first-generation college students. This suggests that resilience was higher among those students with higher levels of support.

While there have been a number of studies that have shown lower levels of resiliency and lower levels of student involvement with their school correlate with lower academic success among first-generation college students (Cassidy, 2016; Dennis, Phinney & Chuateco, 2005; Gamez, Lopez & Overton, 2017; Martinez, Bilges, Shabazz, Miller & Morote, 2012; Reynolds & Weigand, 2010), few have focused on examining the relationship between student involvement among first-generation college students and student's academic resilience (Martinez, Bilges, Shabazz, Miller & Morote, 2012). Research has also focused on the population of first-generation college students in general, however, limited research has focused on differences between groups within this population (Dennis, Phinney, Chuateco, 2005). The population of first-generation college students has changed drastically over the years, hence, the need to further explore

this. The present study looks to further explore the achievement gaps found within Colleges and Universities by examining the differences in student's ethnicity and gender. Past research has found there are differences between the unique challenges faced by different groups of first-generation college students (Kim & Sax, 2009; Morales, 2008; Brock, 2010). One study found that when comparing first generation college students success based on gender, female students faced more resistance when attempting to achieve their goals including dedication towards their schoolwork and their attendance surpassed their male counterparts (Morales, 2008). A second study compared student involvement among different ethnicities of first generation college students including African American students, Asian American students, White students, and Latino students. The study found that among these groups Asian American students were most likely to assist faculty with research even though they had the least interaction with faculty (Kim & Sax, 2009). Moreover the study found that African American students interacted more with staff although they had the lowest amount of students assisting faculty in research. Lastly when compared to students attending four year institutes past studies have found that those attending a four year University are twice as likely to graduate than those students who start at a two year college (Brock, 2010). These studies provide further insight into the differences between different groups of first generation college students with a focus on student involvement and success in school. However, further research in this area is needed to compare the differences between groups of first generation college students and their resilience.

In addition, research has focused on the resiliency among students, however as Cassidy (2016) states, limited research has focused on specifically the academic

resilience among college students using the Academic Resilience Scale (ARS-30). To further explore these areas, more research is needed to identify and better understand the factors that help or hinder first-generation college students in their academic success and forward the knowledge needed to develop and create interventions that may lead to better outcomes for these students pursuing higher education.

Aims and objectives

The current study addressed this need by answering the following questions: Does student involvement with their school correlate with academic resilience? Further, are there differences between groups of participants among first-generation college students? To answer these questions, this study will utilize a quantitative analysis of data gathered from first-generation college students across the United States. In addition, the students' level of resiliency will be measured using the Academic Resilience Scale (ARS-30) (Cassidy, 2016). Further, student involvement questions and demographics will be utilized. It is hypothesized that the resiliency of first-generation college students will be highest among those who have higher levels of student involvement. The purpose of this study was to expand the knowledge base protective factors that can help first-generation college students in their academic success, with the hope that such knowledge will lead to more effective interventions, resources and support for college students pursuing higher education and their academic success. It is hoped that by improving our knowledge of how best to respond to the needs of these students, we will increase first-generation college student capacity to attain better jobs, and help end historic cycles of poverty and unemployment they often experience.

Method

Participants

The survey was administered to first-generation college students who are 18 years or older and have attended/attending a two year or four year college or university. Our sample size was of 162 participants (N=162). Participants were recruited through social media (Facebook and Instagram) where a flyer was posted with a link to the Qualtrics survey. The study population represented first generation college students from different backgrounds. 57% of the sample size were between 18 and 24 years old, 37% of the sample size were between the ages of 25 to 34 years old, 4% of the sample size were between the ages of 35 to 44 years old, 0.6% of the sample size were between the ages of 55 and 64 years old, and 0.6% of the sample size were 75 years or older. 24% of participants had some college, no degree, 4% of participants had an associate degree, 40% of the sample size had a bachelor's degree, and 32% of participants had a master's degree. 7% identified as White, 68% identified as Hispanic/Latino, 2.5% identified as Black/African American, 14% identified as Asian/Pacific Islander and 8% identified as other. 17% of the sample size identified as male, 83% identified as female, and 0.6% identified as transgender.

Measures

The study used an existing scale, The Academic Resilience Scale (ARS- 30). The scale measured resilience based on the literature. The student involvement questions, as shown in Appendix E, were given following the ARS-30. The demographic questionnaire consisted of five questions, as shown in Appendix B. These responses were then collected and analyzed using, *Qualtrics*, an electronics survey software. The study ran

different covariates to analyze the individual differences among individuals and groups in their resilience and their correlation to two different covariates: school involvement and individual demographic covariates.

Academic Resilience Scale (ARS-30*)*. The vignette designed to simulate an adversity a first generation college student can face, as shown in Appendix c, was first given to participants. After reading the vignette, the participants were given the thirty questions from the ARS-30, as shown in Appendix D. The responses were on a Likert scale, each statement was followed by a 5-point rating scale; score one was very likely, score two likely, score three was neutral, score four was unlikely, and score five was very unlikely (Cassidy, 2016). Within the ARS-30 there were three different factors, (1) measures perseverance, (2) measures adaptive help-seeking, (3) negative effect. Lower scores for factors 1 and 2 reflect higher resilience. Higher scores for factor 3 reflect less negative effects.

Student involvement-covariates. These covariates include: (1) extracurricular activities, (2) mentoring programs, (3) spending time on campus, and (4) use of resources on campus. These covariates allowed the researcher to better understand the participant's different level of student involvement ranging from (0) Yes I was involved to (1) No I was not involved. Lower scores reflect more involvement.

Individual/demographic covariates. Demographic covariates examined in this study include: (1) Race/ethnicity, (2) level of education, (3) Social Economic Status. These individual covariates showed the similarities and differences among groups. Further, this provided the researchers the data necessary to find patterns between groups.

Research Design

Qualtrics was used to download survey responses and was then placed into the *SPSS* files. The files were then checked to delete the responses that did not meet the eligibility requirements. The present study used a regression model to analyze the data using an existing survey that measures academic resilience (ARS-30) and the correlation to academic success was then analyzed. Further, using the same regression model the correlation between academic resilience and student involvement was analyzed. Lastly, the present study also explored age, race, gender, highest degree of education and employment as secondary factors.

By exploring these different factors, the similarities and differences among the different groups was analyzed. Using these methods, the research questions were answered as the present study aimed to study the correlation between these factors. The researchers predicted that academic resilience will be highest among those who have higher student involvement and support. Further, if the correlation has an upward trend between higher student involvement and higher academic resilience, then the hypothesis question will be realized.

Procedure

Participants were recruited using two social media outlets including Facebook and Instagram. A flyer was posted on these two social media outlets. Participants who were interested were able to use the link to the screener questions that asked whether they are a first-generation college student, 18 years or older and have attended/attending a two year or four year college or university. Those participants that passed the screener questions, were then given an electronic informed consent and then given a link to the primary

study. Participants were given instructions including that the survey will take approximately 15 minutes to complete and that they are able to withdraw from the survey at any time. Participants were then given the ARS-30 that consisted of a vignette followed by thirty questions and the student involvement questions. Participants were then given a demographic questionnaire. All data was collected anonymously. Lastly at the end of the survey the participants were asked to voluntarily provide their email if they wanted to be entered to win one of the four $50 Amazon gift cards. Winners were randomly chosen and gift cards were then distributed through e-mail to winning participants. This information was separate from the survey responses and was deleted once the gift cards were distributed.

Results

Final Sample

The aim of the study was to find any correlations with first generation college students and their level of perseverance, help seeking, and negative affect. In addition, these three were compared to students' level of school involvement to help determine if any significant relationships between these variables could be found. Students who met the following criteria took part of the survey: first generation college student, 18 years or older, and have attended or currently attending a two-year college or a four-year University. Students were recruited using social media posts. A total of 196 students started the survey and from those 162 students completed the survey and were used in the data analyses (N= 162). Table 1 provides a breakdown of the participants highest level of schooling currently enrolled in or the highest level completed. The percentage breakdown included 20.2% of students having some college or no degree, 3.6% reported having an associate degree at, 33.2% reported having a Bachelor's degree, and 26.9% reported having a Master's degree.

Academic Resilience

The results from the Academic Resilience Scale (ARS- 30) were tested based on the Likert scale which ranged from (1) likely, (2) somewhat likely, (3) neutral, (4) somewhat unlikely, (5) unlikely. Scores from student involvement questions were tested based on reporting being involved (0) and not being involved (1).

Perseverance. A multiple regression analysis was used to test if there was significance between different groups of students in terms of their perseverance when faced with adversity. As seen in Table 6 the results of the regression indicated that the

predictor explained 62.4% of the variance (R2=.624, F(10,182)=30.165, p<.000). The data found a statistical significance between all of the following different groups of students. As Table 9 shows Hispanic/Latino scored 1.01 points (Ḅ=1.01 , p<.000) less in perseverance, Black students scored 1.57 (Ḅ=1.57, p<.000) less, and Asian students scored 1.08 points (Ḅ=1.08 , p<.000) less when compared to their white counterparts. Females scored .264 (Ḅ=.264 , p<.034)less in perseverance when compared to male students. The most significant group impacted was found to be transgender students who were found to score 1.88 points (Ḅ=1.88 , p<.004) lower when compared to male students. The data thus shows that students of color, female and trans students were all more likely to lean closer to unlikely on perseverance questions in the 5-point Likert Scale. The results found a significant difference (.000) between Perseverance Average and School Involvement Average. It was found that student involvement significantly predicted negative affect (Ḅ=.912 , p<.000) or a .912 difference in perseverance as less student involvement was reported.

Help Seeking. A multiple regression analyses were used to test if there was significance between different groups of students in terms of their help seeking behaviors when faced with adversity. Table 7 shows that the results of the regression which indicated that the predictor explained 45.8% of the variance (R2=.458, F(10,182)=15.37, p<.000). The results found that there was significance in all of the following different groups of students as shown in Table 10. The data found that Hispanic/Latino scored .91 points (Ḅ=.91 , p<.000) less in help seeking behaviors compared to their white or male counterparts. Black students scored 1.29 points (Ḅ=1.29, p<.002) less in help seeking behaviors than their white counterparts. Asian students scored 1.03 (Ḅ=1.03 , p<.000)

less in help seeking behaviors than their white counterparts. Trans students again were found to be the most impacted, as they scored 2.42 (Ḅ=2.42 , p<.002) less in help seeking behaviors when compared to their male counterparts. The data thus shows that students of color, and trans students were more likely to report unlikely on help seeking behavior questions. In addition, a regression test revealed that student involvement significantly predicted negative affect (Ḅ=.754 , p<.000) or a .754 difference in help seeking behaviors as less student involvement was reported.

Negative Affect. A multiple regression analysis was done to assess whether student involvement significantly predicted negative affect and found a statistical significance (.000). Table 8 shows the results of the regression which indicated that the two variables explained 56.8% of the variance (R2=.568, F(10,182)=23.93, p<.000). As shown in Table 11 the results found that there was significant difference in the different groups of students' level of negative affect. The data found that Hispanic/Latino scored 1.01 (Ḅ=1.010 , p<.000) less in help seeking behaviors compared to their white or male counterparts. Asian students scored 1.08 (Ḅ=1.08 , p<.000) less in negative effect when compared to their white counterparts. The data thus shows that Hispanic/Latino and Asian students lean towards unlikely on help negative affect in the Likert Scale. It was found that student involvement significantly predicted negative affect (Ḅ=1.248 , p<.000) or a 1.248 difference in negative affect as less student involvement was reported.

Discussion

The primary findings of this study contribute to a better understanding of first-generation college students' academic resilience when faced with adversity. This study first aimed to find if there was a correlation between academic resilience and student involvement. The results found a significant difference between Perseverance Average and School Involvement Average that as students report less school involvement they also report less in the perseverance scale. We can then conclude that as participants reported less student involvement, they also reported lower levels of perseverance. This contributes to the importance of perseverance among specifically students of color as the statistical analysis revealed statistically significant differences between Latino/Hispanic, Black and Asian racial groups when compared to their White counterparts. In addition, a statistical significant difference was found between female and trans groups when compared to their male counterparts. The same significant statistical differences where found between help seeking behaviors among these racial groups and between trans and male counterparts. These results lead to this study's second hypothesis, which predicted there would be differences between groups of students. The study found that across the board Hispanic, Black, and Asian students continue to score lower than their white counterparts when comparing their level of perseverance and help seeking behavior. Moreover, for transgender students they were found to score lower than any group of students in these two categories. The only area in where white students were found to score lower than the other students was in their negative affect level.

It is then concluded that there are significant differences, as these marginalized groups of students had less perseverance and help seeking behaviors when faced with

adversity when compared to their White or male counterparts. As past research suggests, first generation college students, specifically minority students are found to be less likely to be involved both academically and socially in their schools (Petty, 2014; Soria, Stebelson, 2012). In addition, having a lack of knowledge of academic support and social support impacts these students to succeed in college (Petty, 2014). This study adds to the extent of research that demonstrates the challenges these students face. It is vital then, to further strengthen these different populations' support through school involvement, social and academic support.

Limitations

Limitations to this study included the demographics of participants. Participants were recruited through social media at times from the researcher's own social media connections. It is therefore, a limitation as many of the participants in the study are currently other Master in Social Work students. These students may be particularly resilient or under a stressful time in their education. Further, certain sample sizes were particularly small such as transgender students (0.6%), and Black/African American students, who only accounted for 2.5% of the sample size; while Hispanic/Latino students accounted for 68% of the sample size. Future research should further reach out to certain populations of students of color in order to get a stronger understanding of their specific experiences related to this study's focus.

Another limitation in the study may be that participants were able to choose to participate in the study or not. This could be a limitation as student's who lack resilience or are less involved in school, may be potentially less likely to have motivation or

participate in studies. It is therefore, important for future research to incorporate students who are less likely to participate in studies.

Lastly, the study utilized five questions to measure school involvement however the study did not use an existing measurement to capture the participant's level of school involvement. However, past studies have used similar questions to measure school involvement (Petty, 2014).

Conclusion and Future Study

Based on the results, students of color, female and trans students are more highly impacted by adversity faced as first generation college students. Students of color are less likely to persevere and seek help when faced with adversity when compared to their White counterparts. It is then, important to reach out to these populations in order to provide support to these students so they are better prepared to overcome the challenges they face. These implications are important for future research that can tailor to these specific populations. In addition, future research can look to compare this among students attending public vs. private Universities for instance to see what schools need to do in order to provide more support for these students to help them succeed academically. In order to provide the best support to first-generation college students, social workers must do further research to marginalized students. Social workers can provide direct services or help advocate to have these services available to students. In addition, policies need to be implemented that help these students overcome the various barriers that generations of students before them have faced. In order to challenge social injustices within education, the NASW states that it can be achieved when "Social change efforts are focused primarily on issues of poverty, unemployment, discrimination, and other forms of social

injustice" (Read Code of Ethics, n.d.) As social workers, it is important to understand how a lack of achieving higher levels of education will have a long-term impact on these students that will be unable to overcome the cycle of poverty and the oppression they have faced from achieving higher education.

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Appendix A: Results Tables

Table 1
Descriptives of level of schooling completed

Level of Schooling	Frequency	Percent	Valid Percent	Cumulative Percent
Some college, no degree	39	20.2	24.1	24.1
Associate degree	7	3.6	4.3	28.4
Bachelor's degree	64	33.2	39.5	67.9
Master's degree	52	26.9	32.1	100.0
Total	162	83.9	100.0	

N=162

Table 2
Student and age group

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-24 years old	93	48.2	57.4	57.4
25-34 years old	61	31.6	37.7	95.1
35-44 years old	6	3.1	3.7	98.8
55-64 years old	1	.5	.6	99.4
75 years or older	1	.5	.6	100.0
Total	162	83.9	100.0	

N=162

Table 3
The frequency and percentage breakdown based on students' ethnicity

Ethnicity	Frequency	Percent	Valid Percent	Cumulative Percent
White	12	6.2	7.4	7.4
Hispanic/Latino	110	57.0	67.9	75.3
Black or African American	4	2.1	2.5	77.8
Asian/Pacific Islander	23	11.9	14.2	92.0
Other	13	6.7	8.0	100.0
Total	162	83.9	100.0	

N=162

Table4

The frequency and percentage of student's gender identity

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	27	14.0	16.7	16.7
Female	134	69.4	82.7	99.4
Gender Nonconforming	1	.5	.6	100.0
Total	162	83.9	100.0	

Table 5

The frequency and percentage of students' employment status

Employment Status	Frequency	Percent	Valid Percent	Cumulative Percent
Employed for wages	56	29.0	34.6	34.6
Self-employed	3	1.6	1.9	36.4
Out of work and looking for work	6	3.1	3.7	40.1
Out of work and but not currently looking for work	1	.5	.6	40.7
A student	94	48.7	58.0	98.8
Retired	1	.5	.6	99.4
Other	1	.5	.6	100.0
Total	16	83.9	100.0	

Table 6

R results for questions pertaining to student's perseverance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	79.0	.624	.603	.63495

a. Predictors (Constant), MA, other, trans, Trade AA, school involvement average, Black, Asian, female, BA, Hispanic/Latino

Table 7
R results for questions pertaining to help seeking behaviors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.677	.458	.428	.74256

a. Predictors (Constant), MA, other, trans, Trade AA, school involvement average, Black, Asian, female, BA, Hispanic/Latino

Table 8
R results for questions pertaining to student's negative affect

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.754	.568	.544	.82478

a. Predictors (Constant), MA, other, trans, Trade AA, school involvement average, Black, Asian, female, BA, Hispanic/Latino

Table 9
Level of significance for perseverance based on student's ethnicity, gender

Model	B	Standard Error	Standard Coefficient Beta	T	Significance
Constant	.333	.105		3.176	.002
SchoolINAVG	.912	.138	.347	6.591	.000
Hispanic/Latino	1.010	.151	.498	6.703	.000
Black	1.572	.351	.223	4.474	.000
Asian	1.082	.190	.349	5.694	.000
Other	1.013	.219	.253	4.618	.000
Female	.264	.124	.121	2.130	.034
Trans	1.886	.654	.135	2.885	.004
Trade/AA	.078	.260	.015	.301	.764
BA	.170	.130	.080	1.311	.192
MA	.341	.137	.151	2.481	.014

Table 10
Level of significance for Help seeking behavior based on student's ethnicity

Model	B	Standard Error	Standard Coefficient Beta	T	Significance
Constant	.222	.122		1.809	.072
SchoolINAVG	.754	.162	.294	4.656	.000
Hispanic/Latino	.914	.176	.462	5.183	.000
Black	1.287	.411	.187	3.132	.002
Asian	1.033	.222	.342	4.649	.000
Other	1.187	.257	.304	4.626	.000
Female	.153	.145	.072	1.055	.293
Trans	2.424	.765	.178	3.171	.002
Trade/AA	.007	.304	.001	.023	.982
BA	.092	.152	.044	.607	.544
MA	.151	.161	.069	.942	.347

Table 11
Level of significance for Negative Affect based on student's ethnicity

Model	B	Standard Error	Standard Coefficient Beta	T	Significance
Constant	.328	.136		2.414	.017
SchoolINAVG	1.248	.180	.391	6.941	.000
Hispanic/Latino	1.010	.196	.410	5.160	.000
Black	.681	.456	.080	1.493	.137
Asian	1.082	.247	.288	4.384	.000
Other	.312	.285	.064	1.094	.276
Female	.121	.161	.046	.754	.452
Trans	1.311	.849	.077	1.543	.124
Trade/AA	.609	.338	.093	1.801	.073
BA	.254	.169	.098	1.508	.133
MA	.743	.179	.271	4.162	.000

Appendix B: Demographics

Demographics questions:

1.) What is your age?:

- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65-74 years old
- 75 years or older

2.) What ethnicity do you identify with?:

- White
- Hispanic or Latino
- Black or African American
- Native American or American Indian
- Asian / Pacific Islandern
- Other_____

3.) What gender do you identify with?

Female
Male
Other_____

4.) What is the highest degree or level of school you have completed or are currently enrolled in?:

- Some college, no degree
- Trade/technical/vocational training
- Associate degree
- Bachelor's degree

- Master's degree
- Professional degree
- Doctorate degree

5.) Are you currently …?:

- Employed for wages
- Self-employed
- Out of work and looking for work
- Out of work but not currently looking for work
- A homemaker
- A student
- Military
- Retired
- Unable to work

Appendix C: Academic Resilience Scale (ARS-30) Vignette

The following vignette was provided to study participants, adapted from:

Cassidy, S. (2015). Resilience building in students: the role of academic self-efficacy. *Frontiers in psychology*, *6*, 1781.

You have received your mark for a recent assignment and it is a "fail". The marks for two other recent assignments were also poorer than you would want as you are aiming to get as good a degree as you can because you have clear career goals in mind and don't want to disappoint your family. The feedback from the tutor for the assignment is quite critical, including reference to "lack of understanding" and "poor writing and expression," but it also includes ways that the work could be improved. Similar comments were made by the tutors who marked your other two assignments."

Following the vignette the participants will be provided these questions using a 5-point Likert scale. 1 likely, 2 somewhat likely, 3 neutral, 4 somewhat unlikely, 5 unlikely

Appendix D: ARS-30 Questions

(ARS-30) Academic Resilience Scale

(1) I would not accept the tutors' feedback

(2) I would use the feedback to improve my work

(3) I would just give up

(4) I would use the situation to motivate myself

(5) I would change my career plans

(6) I would probably get annoyed

(7) I would begin to think my chances of success at university were poor

(8) I would see the situation as a challenge

(9) I would do my best to stop thinking negative thoughts

(10) I would see the situation as temporary

(11) I would work harder

(12) I would probably get depressed

(13) I would try to think of new solutions

(14) I would be very disappointed

(15) I would blame the tutor

(16) I would keep trying

(17) I would not change my long-term goals and ambitions

(18) I would use my past successes to help motivate myself

(19) I would begin to think my chances of getting the job I want were poor

(20) I would start to monitor and evaluate my achievements and effort

(21) I would seek help from my tutors

(22) I would give myself encouragement

(23) I would stop myself from panicking

(24) I would try different ways to study

(25) I would set my own goals for achievement

(26) I would seek encouragement from my family and friends

(27) I would try to think more about my strengths and weaknesses to help me work better

(28) I would feel like everything was ruined and was going wrong

(29) I would start to self-impose rewards and punishments depending on my performance

(30) I would look forward to showing that I can improve my grades

Appendix E: Student Engagement Questions

Student Engagement Questions:

1. I talk or would talk to my professors outside of class.
2. I have/ had a mentor at school.
3. I am/ was aware of the resources provided at my school.
4. I like/liked to spend time at my school.
5. I am/was involved in extracurricular activities at school.

Appendix F: Addendum

ADDENDUM – **Academic Success and First Generation College Students**

Capstone Graduate Project- Academic Success and First Generation College Students is a joint graduate project between **Fatima Flores** and **Maritza Santiago.**

Fatima Flores is responsible for all the following tasks/document sections:

- Chapter 1-Introduction
  - Provided a definition of first-generation college students and statistics on this group of students.
  - Literature Review
    Provided a description and focus of past studies done.
  - Described how this research hopes to address achievement gaps by looking at students' level of resiliency and student involvement.
- Chapter 2-Methods
  - Worked on the Methods section by describing in detail the participants' descriptive, measures used, research design, and procedure.
- Chapter 4-Discussion
  - Went into detail to describe the significance found within the results.

Maritza Santiago is responsible for all the following tasks/document sections:

- Chapter 3-Results
  - Interpreted the results based on the different groups of students. This included analyzing the significant results found between student involvement and academic resilience.
- Chapter 4- Discussion
  - Editing and writing the following sections including the limitations, future research, and conclusion sections based on the data shown on the tables.
- Chapter 5- Appendix
  - Created all 11 APA tables of results

Both parties shared responsibilities for the following tasks/document sections:

- Creating the final edits for all sections
- Advertising study, recruiting participants, interpreting data, reference page, APA formatting

_____	_____	_____	_____
Fatima Flores	Date	**Maritza Santiago**	Date
_____	_____	_____	_____
Dr. Susan Love Committee Member	Date	**Dr. Eli Bartle** Graduate Coordinator	Date
_____	_____	_____	_____
Dr. David McCarty-Caplan Committee Chair	Date	**Dr. Eli Bartle** Department Chair	Date
_____	_____		
Dr. Wendy Ashley Committee Member	Date		