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A Quantitative Analysis of Emergency Grant Persistence Rates

by

Rachel Mary Sherlock

A Dissertation

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

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Abstract

I conducted a correlational quantitative study to determine whether an emergency grant program at a four-year public institution is correlated with increased student persistence, and if students' socioeconomic status and race are correlated with their likelihood to persist after receiving an emergency grant. I studied how students' demographics influenced persistence rates based on race, socioeconomic status, gender, first-generation status, age and grade level. I found that Black or African students, students 24 years and older, and first-year students had significantly lower persistence rates than other categories of students after receiving the emergency grant. In comparison, white students, students 23 years or younger, and junior and senior level students had significantly higher persistence rates after receiving the emergency grant compared to other student demographic categories. There were no statistically significant persistence differences for students based on Pell grant eligibility, first-generation status, gender, or other racial categories. This study expands the existing literature on emergency grant programs by adding to the limited research on emergency grant programs at the four-year college level. The results of this study support the continuation of the emergency grant program and inform current emergency grant policies and practices with the goal of further improving college student persistence rates.

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Chapter 1: Introduction

More individuals are going to college now compared to prior generations because of the promise of higher earnings, lower unemployment rates, and higher job satisfaction rates for bachelor's degree recipients (Caumont, 2014; National Center for Education Statistics [NCES], 2020a; Tamborini et al., 2015). In 2014, 34% of 25-32 year olds had a bachelor's degree compared to 13% in 1965 (Caumont, 2014). However, while 68.4% of Americans enroll in college directly after high school, only 59% of those students who enroll go on to complete their degrees within 6 years (Herk, 2016).

Low-income students' complete college at much lower rates than their higher income peers, even if they have similar levels of academic preparedness (Gladieux & Perna, 2005; Herk, 2016). Only 14% of students in the lowest socioeconomic status (SES) quartile complete a bachelor's degree within 8 years of graduating high school (NCES, 2017). Low-income students drop out of college at a 16% higher rate than their higher income peers (Chen & DesJardins, 2007). Nineteen percent of student loan borrowers who drop out of college before completing their degree leave with debt and none of the benefits of a college degree to help them repay their loans (Chen & DesJardins, 2007; Gladieux & Perna, 2005).

Students' socioeconomic status and race correlate with degree completion rates (Titus, 2006). Students who leave college without a degree are more likely to be students of color, low-income, and come from families with lower education levels than students who graduate (Gladieux & Perna, 2005; Scott-Clayton & Li, 2016). African American and Hispanic students are twenty percentage points less likely to earn a college degree than their white peers (38% and 45.8% compared to 62%) and a significant portion of Black, Hispanic, and Native American

students live near poverty (23-26%) compared to only 14% and 15% of Asian and white young adults (Institute for Higher Education Policy [IHEP], 2010; Tate, 2017).

Students who drop out of college are “the forgotten half” of the student loan equation (Gladieux & Perna, 2005). Students who leave college before graduation do so with an average of \$7,000 in student loan debt and 22% have defaulted on at least one of their student loans (Gladieux & Perna, 2005). Students struggle to repay these loans, even when the balances are small, because it is challenging to find a stable, high paying job with only a high school diploma (Brown et al., 2015; Kelchen & Li, 2017). Borrowers who leave school without a degree are twice as likely to be unemployed than college graduates and ten times more likely to default on their student loan debt (Gladieux & Perna, 2005).

Over half of college students who leave higher education do so due to financial reasons, and oftentimes it is over a few hundred dollars or less (Scholarship America, 2015). Students run into issues with finances, employment, family obligations, family support, and enrollment status that work in conjunction to deter college completion (Cox, 2016; Wright et al., 2017). For low-income students, an unexpected car repair, illness, or delay in financial aid is often the difference between staying in school and leaving college (Wright et al., 2017). Low-income students are particularly impacted because they have no outside resources or support to help them stay enrolled if an emergency arises (Cox, 2016; Wright et al., 2017). Students of color are particularly impacted because of their lack of access or understanding of the financial resources available to assist them in staying enrolled and completing their degrees (Dulabaum, 2016; Kim, 2004).

Rising Costs and Limited Financial Support

One of the reasons students struggle to cover the cost of college is the significant increase in the cost of attendance (Mitchell et al., 2017). Between 2007-2017, the average cost of attendance, including tuition, fees, room, and board increased 31% at public institutions after adjusting for inflation (NCES, 2019). This increase is caused by a variety of economic factors including increased operating costs and decreased state support (Mitchell et al., 2017). State funding for 2- and 4-year public institutions decreased by over \$9 billion dollars nationally between 2008 and 2017, which is a 16% funding decrease per student after adjusting for inflation (Mitchell et al., 2017).

College costs are rising exponentially in response to neoliberal open market competition (Olssen & Peters, 2005). Neoliberalism is a political approach that focuses on free-market economies, limiting governmental powers, free trade, and self-interested individuals (Olssen & Peters, 2005). In neoliberal open markets, colleges compete for students because tuition is their primary funding source (Dugas et al., 2018; Olssen & Peters, 2005). Colleges compete in the open market by increasing administrative expenditures, which consist of institutional, academic, and student support structures, to make themselves more attractive to prospective students (Dugas et al., 2018; Hedrick et al., 2009). Colleges then raise tuition in response to state funding reductions and to cover the increased administrative expenditures to stay operational and combat funding deficits (Dugas et al., 2018; Olssen & Peters, 2005).

While there is a lot of public attention given towards the rising cost of college, less attention is given to the rising cost of living, transportation, childcare, etc. for which college students must also budget for (Smith, 2017). State funding decreases and cost of living increases

place a financial burden on low-income students and families because low-income students who receive federal and state grant aid often do not receive enough financial aid to cover the increased tuition and living expenses (Hiltonsmith & Huelsman, 2014). Thirty-eight percent of students reported that they borrowed money from family or friends to help pay for their living expenses while in college because they did not have enough money on their own to cover the costs (Broton & Goldrick-Rab, 2017). If families and friends are not able to provide the additional financial support, students are left with a funding gap that limits their ability to continue college and complete their degrees (Chen & DesJardins, 2007). Hispanic and Black students are disproportionately impacted by financial hardships in college compared to their peers, which influences their college graduation rates and contributes to the 12 and 22 percentage point completion gaps between Hispanic, Black, and white students (Flores et al., 2017; Macartney et al., 2013).

Nearly three quarters of Pell grant recipients have no savings on hand to handle a financial emergency (Douglas-Gabriel, 2015). African American and Hispanic students are more likely to be Pell grant eligible than their white counterparts and are more likely to be negatively impacted when an unexpected expense arises (Douglas-Gabriel, 2015). Housing insecurity is particularly prevalent for students of color which further impacts their persistence and graduation rates in higher education (Goldrick-Rab et al., 2017). Students facing a funding gap choose whether to meet their basic needs or continue on with their educational careers since financial aid and employment do not prevent students from going hungry or becoming homeless (Goldrick-Rab et al., 2017; Ronnkvist, 2019).

Over the last 15 years, low-income students attended college at increased rates which increased the demand for financial assistance (Smith, 2016; Wilkinson, 2005). In 2019, 34% of dependent college students received federal grant aid, compared to 19% of dependent students in 1999 (NCES, 2019; Smith, 2016). Even with financial aid assistance, families are expected to provide more financial support than what is estimated on students' financial aid award letters which creates a financial burden for low-income students and students of color (Douglas-Gabriel, 2015; Wilkinson, 2005).

Emergency Grant Programs

Emergency grant programs are institutional aid programs designed to help low-income students cover a one-time unexpected expense that would normally cause them to drop out of school (Wright et al., 2017). Emergency grant recipients often already asked their family and friends for help, which means they previously exhausted their social capital and have no one else to turn to once they hit their next financial emergency (Director of Scholarships, personal communication, March 13, 2020; Goldrick-Rab et al., 2017). Emergency grant programs provide financial assistance to address low-income students' funding gaps and increase low-income student persistence (Wright et al., 2017).

Background of the Study

There are currently over 100 student emergency grant programs in the United States, however most are small programs or pilot programs run out of community colleges (Herschbein, 2018). Emergency grant programs are a new type of institutional aid with the majority of programs beginning after 2010 (Anderson & Steele, 2016). The increase in emergency grant programs signifies shifting institutional values as colleges are starting to view student persistence

more holistically by keeping financial barriers in mind when looking at student success (Anderson & Steele, 2016).

History of Financial Aid

Historically, the majority of low-income students were unable to attend college due to financial and education barriers (Thelin, 2011; Wilkinson, 2005). Few colleges were able to provide scholarship programs to students because higher education received limited governmental support until well into the 20th century (Wilkinson, 2005). For the low-income students who were able to attend college, they relied on paid work, and loans, to cover the cost of education (Thelin, 2011; Wilkinson, 2005).

The Servicemen's Readjustment Act of 1944 (GI Bill) changed the financial aid landscape by providing veterans with college stipends to cover tuition and other related expenses (Thelin 2011; Wilkinson, 2005). The GI Bill expanded access to higher education and boosted long term economic growth in the United States (Wilkinson, 2005). However, due to racist policies and practices at the time, the GI Bill unequally benefitted white veterans, while excluding the majority of veterans of color from participating which exacerbated racial wealth and education access inequalities (Katznelson, 2006).

In 1966-67, after federal student aid programs were first created, the bottom financial quartile of students had 94% of their need met by financial aid, 44% of which was from grants (Wilkinson, 2005). This trend continued for multiple decades and in 1986-87, the average low-income student had their full tuition and some of their living expenses covered by grants (Wilkinson, 2005). Throughout the second half of the 20th century, low-tuition rates through state subsidies allowed many low-income students to afford college through grants and employment

(Wilkinson, 2005). However, during the 2000s, as state subsidies decreased and tuition rates rose, low-income students struggled to afford tuition and living expenses while in college (Mitchell et al., 2017; Wright et al., 2017).

Rise of Emergency Grant Programs

The rise of emergency grant programs correlates with rising tuition rates, decreased state support, and the implementation of the 600% Pell grant limit in 2012 (Anderson & Steele, 2016; Mitchell et al., 2017; Wright et al., 2017). The 600% Pell grant limit negatively impacts students by limiting Pell grant eligibility to six full-time years of undergraduate college attendance (Lieth, 2012). This legislative change caused many students to face unexpected financial emergencies towards the end of their college careers as they ran out of Pell grant eligibility and did not have other means to cover the cost of college to complete their degrees (Anderson & Steele, 2016). Many colleges responded to this legislative change by creating emergency aid programs that targeted students towards the end of their degree programs to try to resolve the funding gap caused by the 600% Pell grant limit (Anderson & Steele, 2016).

Emergency aid is a broad term that includes food shelves, emergency grants, emergency loans, completion grants, and vouchers (Kruger et al., 2016). As of 2015, more than 70% of the 523 campuses surveyed have an established emergency aid program for students and 82% of the campuses surveyed offered an emergency aid program for three or more years (Kruger et al., 2016). Of the institutions surveyed, 85% offered at least two types of emergency aid programs to students; with emergency loans being the most common at public 2- and 4-year colleges (Kruger et al., 2016). Unrestricted emergency grants were most common at private non-profit colleges, likely because they have more institutional funding available to them (Kruger et al., 2016).

Great Lakes Emergency Grant Funding

Great Lakes Corporation is a loan guarantor and servicer for the U.S. Department of Education that manages loans for more than eight million borrowers nationwide (Minnesota Council on Foundations, 2016). Great Lakes' non-profit branch has provided over \$174 million dollars in grant funding since 2006 to support their mission of "helping low-income, first-generation and students of color complete college degrees and certifications" (Great Lakes, 2016). Great Lakes states that they direct their philanthropic projects towards promoting higher education access and completion for low-income, first-generation, and students of color because these categories of students face the most challenges in obtaining their advanced degrees and repaying their loans after graduation (Great Lakes, 2016).

Great Lakes' philanthropic giving has the potential to provide significant profits for the parent corporation. At the end of 2018, over 45 million people owed over 1.6 trillion dollars in student loan debt and this debt is not equally distributed among demographic groups (Baker, 2019; Houle & Addo, 2018; Nadworny, 2019). Black students are twice as likely to have student loan debt compared to their white counterparts and 32% of Black student loan borrowers carry \$40,000 or more in student loan debt (Goldrick-Rab et al., 2014; Ma et al., 2020). Over seven million borrowers defaulted on their student loans and Black students are more likely to default on their student loans compared to white borrowers (7.6% compared to 2.4%) which creates a significant revenue loss for Great Lakes Corporation who is not receiving payments from those students (Nadworny, 2019; Scott-Clayton & Li, 2016).

Great Lakes' philanthropic focus on "helping low-income, first-generation and students of color complete college degrees and certifications" is a strategy for the corporation to increase

loan repayment revenue by decreasing student loan default and profit loss. The average defaulted loan borrower owes less than \$10,000 partially because the loan default rate is over three times larger for borrowers who did not graduate with a degree (Nadworny, 2019). If Great Lakes reduces the number of defaulted borrowers by increasing graduation rates, they have a high likelihood of obtaining a return on investment through increased loan repayment collections and an incentive payment through the U.S. Department of Education (Federal Student Aid, 2019b).

To support their mission of retaining low-income, first-generation, and students of color, Great Lakes awarded \$1,500,000 to 2-year public community colleges to create an emergency grant program to provide one-time grants of up to \$500 for community college students experiencing unexpected financial emergencies that would prevent them from staying enrolled in college (Great Lakes, 2015). Great Lakes chose to focus their aid dollars on community college students since their preliminary research noted that only 20% of full-time students at 2-year institutions earn their degree within 3 years and that financial emergencies were cited as one of the top reasons why students were unable to complete their degrees (Great Lakes, 2015).

From 2012-2015, the Great Lakes emergency grant program awarded over 2,700 students an emergency grant (Great Lakes, 2016). Seventy-three percent of grant recipients stayed enrolled or graduated, which is a 14% persistence increase compared to the national 2-year persistence rate of 59% (Great Lakes, 2016). This increased persistence rate shows incredible promise for emergency grant programs' effects on student persistence. Due to its preliminary success, Great Lakes expanded its funding to 4-year public colleges to determine whether their persistence rates are similarly impacted by one-time emergency funds (Great Lakes, 2017).

My research site is one of the 32 colleges and universities who received funding from Great Lakes to establish an emergency grant program during the 2017-2019 award years. Great Lakes intended the programs to increase low-income student persistence by addressing immediate financial emergencies that cause students to drop out of school. To be eligible for the program, undergraduate students must be enrolled in at least one credit and have an Expected Family Contribution (EFC) of 7,000 or less. In 2019, my research location continued the emergency grant program through institutional funds and donations and expanded eligibility to students with an EFC of 8,000 or less.

Problem Statement and Purpose of the Study

The purpose of this study is to determine whether an emergency grant program at a 4-year public institution is correlated with increased student persistence, and if students' socioeconomic status and race are correlated with their likelihood to persist after receiving the emergency grant. In this study, persistence is defined as students who continue to attend the university the following term(s) after receiving the emergency grant or students who graduate from their program of study after receiving the emergency grant. College persistence rates have remained static despite colleges and universities employing a variety of programs to increase persistence (such as first-year seminars, learning communities, and supplemental instruction) (Barefoot, 2004). My quantitative correlational study measures the relationship between the dependent and independent variables to determine if correlations exist between students' socioeconomic status and race and their likelihood of persisting after receiving or not receiving the emergency grant.

Significance of the Study

As emergency grant programs continue to grow and mature, more data-driven evidence is needed to understand their direct impact on persistence rates and overall student success (Anderson & Steele, 2016). Few emergency aid programs are rigorously evaluated to assess their impacts and many colleges, universities, and outside private entities are now conducting emergency aid program evaluations to determine their effectiveness (Herk, 2016). As emergency grant programs grow, more research is needed on how grant funding impacts persistence rates and how different student success programs work in conjunction with one another to promote college student persistence (Anderson & Steele, 2016).

My study adds to the existing literature on emergency grants to determine whether the emergency grant program successfully increased persistence rates for grant recipients at my 4-year public research location. My research is focused on a public 4-year institution since the majority of prior emergency grant research was conducted on public 2-year colleges where most emergency grant pilots occurred (Herschbein, 2018). The significance of my research is to provide more data on the effectiveness of emergency grant programs on persistence, since the literature on emergency grants is limited due to their recent expansion as a form of widespread institutional aid (Martinez, 2016).

Overview of Methodology

My data comes from completed and approved emergency grant applications from fall 2017 to spring 2021. As of May 2021, 451 students received funding, with 550 total grant applications within my demographic variables. I conducted descriptive statistics, Pearson's Chi-Square tests, and logistic regressions on application data elements using SPSS to test whether

students of color or Pell grant eligible students have a significant difference in term-to-term persistence after receiving the emergency grant at my research location.

Research Questions

R₁: How does socioeconomic status relate to persistence at the university after students receive the emergency grant?

R₂: How does race relate to persistence at the university after students receive the emergency grant?

Objectives and Outcomes

One of the strategic goals of my research site is to increase college access for underrepresented students, such as low-income students and students of color. My research provides data on whether the emergency grant program supports the university's strategic goal of increasing persistence rates for low-income students and students of color. My research also provides data on whether the emergency grant program has a financial benefit to the university through tuition and fee revenue from retained students who would have otherwise left the university due to unexpected financial emergencies.

Limitations

My research has multiple limitations due to the methodology and data used. While my data provides potential correlations for future research, my results are limited because I am unable to determine causation (Punch & Oancea, 2014). The pre-existing data used in this study was originally intended for admissions and aid eligibility which means that my data sample may be incomplete because the data sample may not be representative of the student population (Muijs, 2016).

My research is also limited to the pre-determined categories listed in the pre-existing data set (Punch & Oancea, 2014). The limited categories available for racial and gender and sex identity do not reflect the wide diversity of students' ethnicities or gender/sexual identities (Fonseca, 2017; McNairy, 1996). For example, my data set lists "Asian" as one category without recognizing the broad diversity and differences between individuals who are of Asian descent but who come from a broad diversity of cultural and geographic backgrounds which may influence their persistence in college (Lee & Ramakrishnan, 2020). My data also only includes the categories "male" and "female" which does not encapsulate trans* or nonbinary students (Fonseca, 2017).

The data are also limited due to students' reporting errors on applications which impacts the accuracy of my statistical analyses (Punch & Oancea, 2014). The data set also comes from one moment in time, and thus does not reflect the changes that students experience from year to year which may not reflect their accurate sexual identities or socioeconomic status (Punch & Oancea, 2014). Some demographic categories of students may not be included in the sample and others may be over- or under-represented due to the nature of the data sample which may influence my conclusions (Punch & Oancea, 2014).

Delimitations

My research site is one mid-sized public university and one emergency grant program; therefore, my research has limited generalizability to other emergency grant programs and other university types with different student populations. My research sample is also limited to the students who either sought out or were directly referred to the grant program which means that my sample does not include students who may benefit from the program but who never learned

that the program existed. My research is limited to citizens and eligible non-citizens who were able to submit a Free Application for Financial Aid (FAFSA) and does not include individuals who did not submit a FAFSA or to international students or non-citizens who were not eligible to apply. My research is also limited by how many individuals from different demographic groups received the grant which limits the statistical significance of my study. My demographic categories are also limited to the options listed on students' emergency grant and admissions applications, which do not encapsulate the wide diversity of races, ethnicities, and sexes that exist with the limited categories available (McNairy, 1996).

Assumptions

The first assumption in my study is that grant recipients stayed enrolled in college due to the emergency funding they received instead of finding an alternative way to pay their unexpected bill to stay enrolled. A second assumption is that my sample size is generalizable to the larger institution. My third assumption is that students accurately listed their demographic information on their admissions records and that the limited admissions demographic categories accurately represent the students being studied.

Assumptions for Pearson's Chi-Square

The Pearson's Chi-Square test assumes that the data comes from a random sampling of the population and that the sample is large enough for analysis (Muijs, 2016). The second assumption is that the data are comprised of two or more independent groups and that the variables are independent of one another with no overlapping cases (Muijs, 2016). Finally, the third is that there is a high enough frequency of all data points so that there are at least five cases listed in each cell (Muijs, 2016).

Assumptions for Logistic Regression

I confirmed my sample size was larger than the minimum recommended for logistic regressions of $n = 100 + 50i$ where i represents the number of independent variables in the final model (Bujang et al., 2018). My independent variables were tested for assumptions including the independence of errors, absence of multicollinearity, and lack of strongly influential outliers (Muijs, 2016). I examined the case processing summary, the Pearson's Chi-Square Goodness of Fit test, the cross tabulations, and the descriptive statistics including the frequencies, distributions, and outliers to determine if the assumptions were violated (Muijs, 2016). I ran the Durbin-Watson test to determine if the residual errors are consistently independent across the model to see if any of the regression assumptions were violated (Muijs, 2016). I also used the Wald test to test the significance for individual regression coefficients in logistic regression (Muijs, 2016).

Key Terms

Campus-Based Aid: Financial aid that is awarded by the university and paid from the university's general fund or the university's donor funds.

Cost of Attendance: The estimated price of attending college full time for one academic year.

Expected Family Contribution (EFC): An index number based on students' FAFSA applications that determines students' federal financial aid eligibility. EFC numbers range from 0-99,999, with 0 EFC students receiving the highest amount of need-based aid.

Financial Aid: Money awarded from state, federal, or campus-based sources that students use to help pay for college.

First Generation: A classification for students when neither parent has completed a 4-year college degree.

Free Application for Federal Student Aid (FAFSA): The yearly application that students and families complete to determine their federal financial aid eligibility.

Low-Income Students: Students who have an Expected Family Contribution level (EFC) of 8,000 or less as determined by the Free Application for Student Aid (FAFSA).

Need-Based Aid: Federal, state, and campus-based aid that is awarded based on students' financial need as determined by their EFC numbers.

Neoliberalism: A political approach that focuses on free-market economies, limiting governmental powers, free trade, and self-interested individuals.

Pell Grant: A need-based federal aid that students do not need to pay back after they graduate. Student's Pell grant eligibility is determined by their FAFSA application.

Persistence: Students who continue to attend the university the following term(s) after receiving the emergency grant or students who graduate from their program of study after receiving the emergency grant.

Satisfactory Academic Progress Standards (SAPS): Academic achievement standards that students are required to meet to stay enrolled and in good standing at the university. To meet SAPS, students must be meeting the required grade point average which varies depending on the level of credits earned (1.70 GPA for 0-30 credits, 1.85 GPA for 30-60 credits, and 2.00 for 60+ credits earned). Students must also maintain at least a 66.67% course completion rate to meet SAPS.

Students of Color: any student who identifies on their admissions application as an ethnicity other than white (non-Hispanic).

Student Success: Positive student outcomes including meeting Satisfactory Academic Progress (SAPS) standards, persisting at the university, and graduating from their program of study.

Unmet Need: The difference between students' EFC number and the amount of need-based aid they are awarded.

Organization of the Dissertation

This chapter provided an overview of the current emergency grant program and a brief methodological overview of how the study was conducted. Chapter 2 contains an overview of the relevant literature, including a review of financial aid awarding, persistence, students of colors' experiences with financial aid programs, and common emergency grant program structures. Chapter 3 provides a more thorough explanation of the methodology of this study including the research design, data collection, and data analysis procedures. Chapter 4 contains my research results, and Chapter 5 includes a discussion of the results including implications for future research, theory, and policies and practice.

Conclusion

Low-income students have more complicated financial situations and less resources available to address unexpected financial emergencies when compared to their higher-income peers (Herk, 2016). Students run into issues with finances, employment, family obligations, family support, and enrollment status that work in conjunction to deter college completion (Wright et al., 2017). Emergency grant programs are intended to help students overcome a one-

time financial barrier with the goal of helping students stay enrolled and graduate from college (Martinez, 2016).

Universities are funding emergency grant programs to actionably support increased graduation and persistence rates for low-income students and students of color (Anderson & Steele, 2016). Emergency grants work by creating connections between students, the institution, and the broader community to provide students with the financial and social resources they need to feel like a valued member of the campus community, persist in their degree programs, and succeed in higher education (Wright et al., 2017). The findings of my research provide statistical data on whether the emergency grant program at my research location is correlated with increased persistence rates for low-income students and students of color or whether the program needs be changed to better meet the needs of the students.

Chapter 2: Literature Review

Colleges navigate a delicate balance of providing what financial assistance they can to students, while considering what other financial resources are available to them to fund their education (Wilkinson, 2005). College administrators are launching and expanding emergency aid programs to financially support students who are struggling to stay enrolled due to unintended financial emergencies (Kruger et al., 2016). The purpose of this study is to determine whether the emergency grant program at a 4-year public institution is correlated with increased student persistence, and if students' socioeconomic status and race are correlated with their likelihood to persist after receiving the emergency grant.

In this chapter, I first review the rising cost of college and how students cover that cost. I then discuss the current barriers to graduation, including the additional economic, social, and cultural barriers that students of color face. I also review current emergency grant programs by discussing awarding and administration practices and programs' current marketing and outreach efforts to increase grant utilization and program success. Finally, I define my research site's program and its awarding criteria and administrative practices.

My research on emergency grant programs is framed by Sanford's Theory of Challenge and Support (1967). Sanford's theory states that students succeed in college based on how well universities provide support and the education they receive to address future emergencies (Patton et al., 2016). I use Sanford's Theory of Challenge and Support to frame whether my research site's emergency grant program provides the necessary support and educational tools to help students increase their persistence and graduation rates.

Cost of Attendance

Students' financial aid eligibility is limited by college's cost of attendance (Federal Student Aid, n.d.-b). The cost of attendance (COA) is the estimated price of attending college for one academic year (Federal Student Aid, n.d.-b). The COA limits how much financial aid students receive since students are only eligible for federal, state, and private aid up to the colleges' cost of attendance total (Federal Student Aid, n.d.-b). Colleges' average cost of attendance has risen significantly over the last twenty years (NCES, 2019). This increase has meant that college is no longer an affordable option for many low-income college students who do not qualify for enough federal and state aid to meet their cost of attendance needs (Chen & DesJardins, 2007).

Calculating Cost of Attendance

Cost of attendance is calculated by a financial aid administrator at each college to include direct educational expenses such as tuition, fees, and books; as well as indirect educational expenses such as room and board, transportation, and other miscellaneous expenses (Federal Student Aid, n.d.-b). Tuition, fees, living expenses, and miscellaneous costs vary from college to college and each college is required to create their own cost of attendance based on their individual calculations (Legal Information Institute, 2008). Direct educational expenses are included in the cost of attendance based on institutional averages (Legal Information Institute, 2008). Tuition and fees are calculated based on the average full-time rate at the institution, including any required equipment, materials, books, or supplies (Federal Student Aid, n.d.-b). Indirect costs are also calculated based on geographic location averages for living expenses (Legal Information Institute, 2008).

Many colleges create multiple cost of attendance models depending on students' enrollment and living situation because tuition rates and fees vary greatly between different attendance levels, residency statuses, and academic programs (Legal Information Institute, 2008). Living expenses and cost of attendance totals also vary depending on whether a student is living on-campus, off-campus, or with their parents (Legal Information Institute, 2008). These variations create different cost of attendance totals for different students even if they are attending the same institution.

Rising Costs

The average 4-year public institution cost of attendance has risen consistently over the last 20 years. From 1985-86, the national average for a 4-year public institution was \$3,859 (\$8,798 in today's dollars) (NCES, 2019). In comparison, in 2017-2018, the national average for a 4-year public institution was \$20,050, which constitutes a \$16,191 increase (a \$11,252 increase when considering inflation) (NCES, 2019). Private non-profit and for-profit costs of attendance are even higher since their tuition is not state subsidized. The national 2017-2018 cost of attendance average for a private non-profit or for-profit institution is \$43,139, which is more than double the public cost of attendance total (NCES, 2019).

The cost of attendance for public colleges and universities is rising largely due to decreased state support (Mitchell et al., 2017). State funding for 2- and 4-year public institutions decreased by over \$9 billion dollars nationally between 2008 and 2017, which is a 16% funding decrease per student after adjusting for inflation (Mitchell et al., 2017). Public institutions transitioned from being state supported to state assisted because they now must rely on tuition revenue to meet the majority of their operating expenses (Idemudia & Ferguson, 2014).

College costs are also rising due to increased administrative expenditures in response to increased market competition (Kelchen, 2018; Olssen & Peters, 2005). Neoliberalism operates in higher education by pushing for open market competition to increase colleges' accountability, productivity, and quality (Kelchen, 2018; Olssen & Peters, 2005). In neoliberal open markets, colleges must compete for students because tuition is their primary funding source (Olssen & Peters, 2005). Neoliberalism is currently impacting higher education through reductions in state funding and regulations, so colleges have more incentive to compete for students' tuition dollars to stay operational (Olssen & Peters, 2005).

After accounting for inflation, public research universities increased their administrative spending 24%-30% per full-time equivalent (FTE) from 2004 to 2012 (Greene et al., 2010; McClure & Titus, 2018). Administrative spending rose partially because public research universities use similar structures and practices to attract students which creates increased administrative expenditures as universities model their programs and structures after one another (McClure & Titus, 2018). While reduced state appropriations help to lower universities' administrative spending, it also leads to tuition and fee increases to cover operating costs which reduces college access and affordability for low-income students (McClure & Titus, 2018).

Affordability Concerns

Due to decreases in state support and increases in administrative and structural spending through neoliberal funding practices, students cover significantly higher tuition rates than previous generations (Mitchell et al., 2017; Olssen & Peters, 2005). Public 4-year colleges increased tuition by an average of 35% between 2008 and 2017 to make up for the shortfalls in state support (Mitchell et al., 2017). While financial aid and tax credits also increased during this

time to help deflect the cost, they did not increase enough to make up for the cost burden that students face (Mitchell et al., 2017).

The increased cost of attendance and decreased state support make paying for college without financial assistance nearly impossible for low-income students (Chen & DesJardins, 2007). In 1985-86, if a low-income student received the full Pell grant award of \$2,100 and worked a minimum wage job earning \$3.35 an hour, they would be able to pay the remaining estimated cost of attendance by working an average of 10 hours per week (U.S. Department of Education, 1986; U.S. Department of Labor, n.d.). By comparison, in 2017-18, if a low-income student received the full Pell grant award of \$5,920 and worked a minimum wage job earning \$7.25 per hour they would need to work an average of 37.5 hours a week to make ends meet without borrowing student loans (U.S. Department of Education, 1986; U.S. Department of Labor, n.d.).

Financing College

When students experience a gap between their financial aid eligibility and their cost of attendance, the financial burden on families is considerable and families often provide more financial support than what official need calculations estimate when determining students' aid packages (Wilkinson, 2005). If students' financial aid eligibility is not enough to cover their cost of attendance and families are unable to provide additional support, students are left with a funding gap that limits their ability to continue their college and complete their degrees (Chen & DesJardins, 2007).

Financial Aid Eligibility

Students' financial aid eligibility is determined based on their family's economic status, the college they choose to attend, and the availability of federal, state, and campus-based resources (Dynarski & Scott-Clayton, 2013). Students receive a financial aid package of different grants, loans, and campus-based aid programs to help meet their financial needs because no one source of financial aid is enough to cover the cost of college (Dynarski & Scott-Clayton, 2013). Students determine their yearly federal and state aid eligibility by completing the Free Application for Federal Student Aid (FAFSA) (National Association of Financial Aid Administrators [NASFAA], 2020). The FAFSA application calculates an Expected Family Contribution (EFC) number, which is the measurement of a family's ability to cover the cost of college. Colleges use the EFC number to determine students' financial need by subtracting the EFC number from the school's Cost of Attendance (COA) number (NASFAA, 2020). Students with low EFC numbers receive larger amounts of financial aid due to their documented high need, whereas students with high EFC numbers receive less financial aid because their families are expected to help financially contribute to cover the remainder (NASFAA, 2020).

The difference between a students' COA and EFC determines the amount of need-based aid a student is eligible to receive (NASFAA, 2020). Need-based financial aid includes federal grants, state grants, need-based scholarships, work-study, and subsidized loans (NASFAA, 2020). Need based aid is meant to increase opportunity, access, and student choice by easing the burden of college cost for low- and middle-income families (Dynarski & Scott-Clayton, 2013).

Students with the highest amount of documented need are eligible for the Federal Pell Grant, which ranged from \$652-\$6,092 for the 2020-2021 award year. The Pell grant is free

money that students do not pay back after they graduate (NASFAA, 2020). Pell grant recipients also receive other types of need-based aid due to their low EFC levels (NASFAA, 2020). In contrast, students directly outside of the Pell Grant range are still below their college's reported COA and do not receive a lot of other need-based aid, such as the Federal Supplemental Educational Opportunity Grant (SEOG) or work-study, to help assist with covering their unmet need totals (NASFAA, 2020).

Failure to Complete the FAFSA

An average of 23% of students do not complete the FAFSA each year (Jaschik, 2019). When that statistic is broken down demographically, Hispanic and Black students are the least likely to complete the FAFSA (34% and 27%, respectively), compared to white and Asian students' (18% and 22%) (Jaschik, 2019). Thirty-two percent of students reported that they did not complete the FAFSA application because they thought they were ineligible for financial aid, 28% reported that they did not want to take out debt, 23% did not have enough information on how to complete the FAFSA, and 9% thought the FAFSA form was too time consuming (Jaschik, 2019).

Students of color complete the FAFSA at lower rates because they self-reported a lack of access and understanding of financial resources as a significant barrier to college attendance and persistence (Dulabaum, 2016; Kim, 2004). Even when students receive information on financial aid, it is often only provided in English which is not helpful for parents who are only fluent in another language (Oliverrez & Tierney, 2005). With 65% of parents completing the FAFSA applications for their students, parents lack of understanding in the financial aid process is a

significant barrier to students' FAFSA completion rates and financial aid eligibility for college (Jaschik, 2019).

Unmet Need

Families often do not know how much college costs upfront, especially first-generation students with no experience with the aid system (Dynarski & Scott-Clayton, 2013). To adequately plan for college, students and families need to understand their financial aid award letter, state aid eligibility, tuition tax credits, and institutional aid programs to have an accurate picture of how much college costs (Dynarski & Scott-Clayton, 2013; Oliverez & Tierney, 2005). Different aid types also have different eligibility requirements and aid eligibility criteria changes from year to year, which makes it difficult for families to plan ahead on how to cover the cost of college (Dynarski & Scott-Clayton, 2013). The gap between financial knowledge and the skills to manage these complex and varying financial resources impacts students' college attendance and completion rates (Joo et al., 2003).

One way campuses have tried to increase students' enrollment rates is to provide early preliminary financial aid award notices to students so they can make an informed decision about college costs and to create a plan to address any unmet need listed (Kim, 2004). Even though students face high rates of financial unmet need, preliminary financial aid award letters showed no statistical impact on college attendance rates (Kim, 2004). Students' limited awareness of what financial aid packages mean is one possible explanation why receiving a financial aid award notice early has limited influence on first-year college attendance rates since students do not realize the implications of the unmet need listed (Kim, 2004). A large unmet need total has

implications on students' ability to continue college if they do not have the financial resources to pay the current term's bill to be able to register for the following term (Kim, 2004).

Families have limited funding options to cover direct and/or indirect educational expenses when financial aid and income from work are not enough to cover college costs (Wilkinson, 2005). When families experience a financial aid deficit, their options are limited to paying the remaining university bill with private educational loans, supplemental parent loans, or cash payment plans (NASFAA, 2020). While some families have the resources to cover additional college costs, lower income families struggle to cover students' university bills because they don't have the cash resources or creditworthiness to obtain additional loan funding, which hinders students' abilities to complete their higher education degrees (Chen & DesJardins, 2007).

On average, after accounting for federal, state, and institutional grant aid, students have approximately \$12,919 in unmet need per year to attend a public, 4-year institution (Hiltonsmith & Huelsman, 2014). Even low-income students who receive higher federal and state grant aid often have unmet need (Hiltonsmith & Huelsman, 2014). The average low-income student attending a 4-year public university has an unmet need of \$10,092 (Hiltonsmith & Huelsman, 2014). Low-income students struggle to cover the cost of college partially because tuition prices rose over 164% in the last 2 decades, and federal and state aid levels did not rise at the same rates to offset these rising costs (Hiltonsmith & Huelsman, 2014).

Unmet Need by Demographics. Students of color and low-income students are substantially more likely to face a high level of unmet financial need, even after being awarded all available grants and loans due to limited family contributions to cover the cost of college

(Long & Riley, 2007). Fifty-six percent of African American students faced an unmet financial need, compared to 40% of white students (Long & Riley, 2007). Even among students with unmet need, African American students' unmet need was higher than white students' (\$6,175 v. \$4,819, respectively) (Long & Riley, 2007).

Hispanic and Black students are disproportionately impacted by financial hardships in college compared to their peers, which influences their college graduation rates (Macartney, 2013). Hispanic and Black students have significantly lower college completion rates, with a 12 percentage-point gap between Hispanic and white students and a 22 percentage-point gap between Black students and white students (Flores et al., 2017). The three largest variables impacting college completion differences for students of color are attending a minority high school, poverty, and economic disadvantage (Flores et al., 2017).

Low-income students and students of color also struggle to cover living expenses while in college. A financial aid package that successfully attracts students to college may not be enough to keep them enrolled after they are faced with the cost of living (St. John, 2000). While there is public focus on the rising cost of college, there is less attention given the rising cost of living, transportation, childcare, etc. which college students also must budget for (Smith, 2017). Low-income students report challenges paying for housing and utilities, and 38% of students borrowed money from family or friends to help cover bills (Broton & Goldrick-Rab, 2017).

Basic Needs Security

Housing and food insecurity are barriers to degree obtainment (Broton, 2017; Broton & Goldrick-Rab, 2017). Housing insecurity in students' first year of college reduces the probability of degree attainment by 10% (Broton, 2017). Housing insecure students do not have physical

spaces conducive to school success or safety and these students spend more time commuting and have less time for sleep which stands in the way of their academic success (Goldrick-Rab et al., 2017). Students affected by housing and food insecurity on campus largely go unnoticed by faculty, staff, and other students because there is nothing visually that distinguishes them from their peers (Warnock & Hurst, 2016). Housing insecurity is particularly prevalent for students of color which further impacts their persistence and graduation rates in higher education (Goldrick-Rab et al., 2017).

More than half of 2- and 4-year college students experienced some form of food insecurity and many students experience food insecurity for the first time in college (Broton & Goldrick-Rab, 2017; Martinez et al., 2016). While there are public assistance programs available to assist students facing food insecurity, many students are ineligible due to program requirements (Goldrick-Rab et al., 2017). For example, many college students are ineligible for the Supplemental Nutrition Assistance Program (SNAP) because students without children must work 20 hours per week to maintain benefits which is not feasible for students with full-time course schedules (Goldrick-Rab et al., 2017). These persistence and graduation barriers due to housing and food insecurity have life-long consequences due to the long-term income differences between college and high school graduates (Kurtzleben, 2014).

Student Employment

Fifty-four percent of students surveyed work to support themselves in college to earn the difference between their expected family contribution and their financial aid award notice, since their families cannot or will not contribute (Johnson et al., 2009; King, 2003). Twenty-one percent of undergraduate students worked between 20 and 34 hours per week, and 10% of

students worked over 35 hours a week (Perna, 2010). Student employees struggled to balance classes, family obligations, and the number of hours they worked to make ends meet (Johnson et al., 2009; Soria et al., 2013). For low-income students, “work was not about getting ahead, but rather it was about staying in the race” (Martin, 2015, p. 284).

Employed students juggle multiple roles and demands as they try to be both college students and employees (Perna, 2010). The more time students spent working, the less time they have available to gain social and cultural capital that will help them grow their careers after college (King & Bannon, 2002). Even after controlling for demographic, environmental, and leadership interest variables, low-income students and first-generations students are significantly less likely to have leadership positions on campus due to working a high number of hours in off campus jobs to make ends meet (Soria et al., 2014; Walpole, 2003). Student leadership positions on campus help students build social capital, acquire soft skills, utilize support services, and develop social networks (Clauss-Ehlers & Wibrowski, 2007; Moschetti & Hudley, 2008). College students’ social engagement on campus also has a strong positive association with post-graduation early career earnings (Hu & Wolniak, 2010). These conflicting priorities cause stress and anxiety, which makes it less likely that students will graduate with their degrees or gain the social and cultural capital necessary to succeed in their career fields after graduation (King & Bannon, 2002; Perna, 2010).

Student Loan Debt

In 2018-19, 56% of bachelor’s degree recipients from the public and private non-profit sector graduated with student loan debt averaging \$28,800 per student (Ma et al., 2020). Americans currently owe over 1.6 trillion dollars in student loan debt and this debt is not equally

distributed among demographic groups (Baker, 2019; Houle & Addo, 2018). Students' age, time to degree completion, family income background, parental education, dependency status, institutional price, and race/ethnicity are all correlated with higher student loan debt levels (Avery & Turner, 2012; Houle, 2013; Ma et al., 2020).

Students of color and low-income students graduate with higher amounts of student loan debt when they leave college compared to their peers, which places them at an economic disadvantage after graduation since they have less available income to go towards other expenses (Engle & Tinto, 2008; Long & Riley, 2007). Students of color and low-income students face higher financial unmet need totals, resulting in higher student loan borrowing to cover their educational expenses compared to other categories of students (Long & Riley, 2007). Loan borrowing is associated with lengthened time to graduation which further increases low-income students' and students of colors' debt totals and reduces the amount of viable working years they have available (Chen & Hossler, 2017).

Student Loan Default Rates

The national student loan default rate continues to disproportionately impact nontraditional students (Looney & Yannelis, 2015). Students who did not earn a degree, have low earning levels, attended a for-profit institution, come from a low-income family, identify with an underrepresented racial/ethnic group, or are older are more likely to default on their student loans (Gross et al., 2009; Hillman, 2014; Looney & Yannelis, 2015). Students who come from low-income backgrounds, such as students from locations with lower median household incomes and higher poverty rates, experienced higher rates of loan non-repayment compared to students from higher income households (Kelchen & Li, 2017). First-generation students and

students of color have lower loan repayment rates partially because they statistically have less family financial support to assist with covering loan payments after graduation (Kelchen & Li, 2017).

Cultural and Socioeconomic Understanding of Debt

The ubiquity of loans in the United States financial aid package limits college attendance for students who are unwilling or unable to take on student loan debt (Perna, 2008). Students' willingness to borrow varies depending on ethnic and economic backgrounds (Perna, 2008). Differing cultural views on loan borrowing impacts persistence rates since students' avoidance of borrowing loans is associated with dropping out of college (Gladieux & Perna, 2005).

Parents' cultural backgrounds strongly influences students' views on loans (Perna, 2008). Asian and Hispanic students are more debt adverse than white students, even if they have a similar financial need, due to family and cultural norms and expectations on borrowing (Goldrick-Rab & Kelchen, 2015). Parents' and friends' personal experiences with loans also impacts students' likelihood of borrowing because negative borrowing experiences make students less likely to take out loans to cover their educational expenses (Perna, 2008). Students who avoid borrowing student loans even though they have financial need are at risk for dropping out because they may not have alternative resources to continue their higher education careers (Gladieux & Perna, 2005).

Students' socioeconomic status is positively associated with college enrollment and the likelihood of borrowing student loans (ECMC Group Foundation, 2003). Students from low-income backgrounds view loans as risky and are unaware of the economic benefits of a college degree and do not see it as something worth going into debt for (Christie & Munro, 2003).

Emergency loan programs are less enticing than emergency grant programs since students may prefer to leave college instead taking on any additional loan debt (Geckeler, 2008).

Low-income students are more debt-adverse than students that come from higher income backgrounds (Perna, 2008). Low-income minority students are often less willing to borrow than white students from higher income backgrounds, although this generalization varies when broken down by specific racial demographics (Baker, 2019; Houle & Addo, 2018; Linsenmeier et al., 2006). Students' willingness to borrow is often based on the expected benefits or costs with borrowing, which is why low-income students hesitate to borrow loans since they have less resources available and see a larger cost to borrowing than higher income students (Perna, 2008).

Black Student Loan Borrowing

Black students are more likely to borrow for college compared to other racial/ethnic groups even after accounting for family income level and type of college attended (Grinstein-Weiss et al., 2016; Gross et al., 2009; Scott-Clayton & Li, 2016). Black students are also more likely to borrow larger loan amounts which causes higher monthly debt burdens and higher student loan default rates compared to other student demographic groups (Hillman, 2014; Hillman, 2015; Jackson & Reynolds, 2013; Ma et al., 2020). Black students also default on their student loans at a three times higher rate compared to their white peers (7.6% compared to 2.4%) partially because of their higher debt burdens at graduation (Scott-Clayton & Li, 2016).

Black students are twice as likely to have college debt compared to white students and Black students' loan debt comprises a significantly higher percentage of their current family incomes and projected post-graduation earnings compared to white students (Goldrick-Rab et al., 2014). Thirty-two percent of Black student loan borrowers carry \$40,000 or more in student loan

debt and Black students, on average have \$52,726 in student loan debt 4 years after graduation (Ma et al., 2020; Scott-Clayton & Li, 2016). White students, in comparison, have \$28,006 in student loan debt 4 years after graduation (Scott-Clayton & Li, 2016). Forty-eight percent of Black graduates owe more on their federal student loans 4 years after graduation than they did at graduation, compared to only 17% of white graduates (Scott-Clayton & Li, 2016). This borrowing gap is twice as large as the debt gap between Pell grant and non-Pell grant eligible students and five times bigger than the debt gap by parental education (Scott-Clayton & Li, 2016).

Black families have lower family wealth and incomes compared to white families and thus have a greater overall need to borrow student loans to attend college (Goldrick-Rab et al., 2014). One third of the debt gap between white and Black students is due to family net worth and home ownership differences (Goldrick-Rab et al., 2014). Black students' high graduate school enrollment rates and for-profit college attendance are two additional reasons why they experience higher student loan debt totals (Scott-Clayton & Li, 2016). High student loan debt rates impact Black students in more significant ways than their white counterparts (Baker, 2019). Black students reported reevaluating their post-graduation plans, including whether or not to attend graduate school or what career to enter into, based off their student loan debt totals and repayment amounts (Baker, 2019).

Students' Financial Aid Experiences

Over 50% of students attending public schools in the United States are students of color which has created significant demographic shifts in higher education as these students graduate and attend college (Martin et al., 2018; U.S. Census Bureau, 2015). An increasing number of

first-generation students, students from low-socioeconomic class backgrounds, and students from racial/ethnic minorities are attending college now compared to prior generations but colleges are struggling to retain and graduate students of color despite their increase in college attendance rates (Duranczyk et al., 2004; Martin et al., 2018; Shapiro et al., 2017). The National Student Clearinghouse Research Center (NSC) (2019) found that only 52.1% of Black students and 59.5% of Hispanic students completed their degree at their starting institution compared to 62.2% of white students and 72.7% of Asian students.

Colleges must adapt and change to account for shifting student demographics to increase college access and completion rates for students from marginalized demographic groups (Perna, 2015). Financial aid plays a key role in students of colors' reduced graduation rates due to their limited access to financial literacy education, high financial aid unmet need totals, and higher student loan debt totals compared to their white peers (Dulabaum, 2016; Kim, 2004; Long & Riley, 2007). It is crucial to consider race when the effects of financial aid are examined because students of color self-report a lack of access or understanding of financial resources as a barrier to college attendance and persistence (Dulabaum, 2016; Kim, 2004).

Financial Literacy

Students' lack of financial aid education, including how to apply and use excess funds once aid is received, impedes their ability to stay enrolled and graduate from college (Dulabaum, 2016). Students who are not targeted for one-on-one counseling due to high school counselors' overwhelming caseloads fall through the cracks because they are unlikely to ask for help (Oliverez & Tierney, 2005). The students most in need of counseling are often the least likely to ask for help, and if they do, they are unlikely to know what questions to ask (Oliverez & Tierney,

2005). Students of color enter college with limited financial literacy education because they frequently come from large urban high schools where the college counselor to student ratio is as high as 1:800 (Oliverrez & Tierney, 2005). Even when students receive general information and pamphlets on financial aid, most program materials are only provided in English which is not helpful for parents who are fluent in a different language (Oliverrez & Tierney, 2005).

Students with low levels of financial literacy are more likely to make financial decisions that negatively impact them after graduation (Chen & Volpe, 1998). Women, students under 30, first-year and second-year students, students with limited work history, and non-business majors all have lower levels of financial literacy compared to their counterparts (Chen & Volpe, 1998). This is likely due to financial education exposure through life or classroom experiences (Chen & Volpe, 1998).

Financial Aid and Unmet Financial Need

All types of financial aid packages, even loan-only awards, were positively associated with African American student persistence (Carter, 2006). However, African American students were less likely to persist than white students if their financial aid packages were insufficient (Kaltenbaugh et al., 1999). The Georgia Hope Scholarship found that an additional \$1,000 in aid increased Georgia college attendance rates by 3.7 to 4.2 percentage points (Dynarski, 2000). However, Georgia's grant aid program unequally benefitted white students over students of color because it was attached to academic achievement and not to financial need (Dynarski, 2000). Targeting future aid programs towards financial need instead of academic achievement could increase students of color's persistence and graduation rates to close the gap between white students and students of color's persistence rates (Dynarski, 2000).

Hispanic Students' Experiences

Hispanic families are disproportionately impacted by the college financial aid process (Contreras, 2011). More than 70% of Hispanic parents never received information on the financial aid process before their child entered college, and when Hispanic parents do receive financial aid information, it is often only provided in English which creates unintended language barriers (Flores et al., 2017; Olivas, 2009; Zarate & Fabienke, 2007). The lack of available information limits Hispanic parents' abilities to help their children plan for college and directly impacted whether Hispanic students chose to attend a 2-year or 4-year college (Ceja, 2006; Taggart & Crisp, 2011). It also limits Hispanic families' abilities to request financial aid for college or to find financial aid opportunities, since Hispanic students receive less financial aid and lower grant amounts than White, Asian, and African American students even though they display similar or higher need levels (Contreras, 2011).

The financial aid application process has additional complications for students who come from undocumented or mixed-documentation households (Olivas, 2009). Students who are undocumented are not eligible for federal student aid, which significantly impacts their ability to pay for college (Olivas, 2009). Even if the student is a U.S. citizen, having undocumented parents significantly impacts the financial aid process (Olivas, 2009). Undocumented parents are required to file taxes using an ITIN number if they earn above the federal filing limit for students to be eligible for federal aid, which causes conflict for undocumented parents who do not want to share sensitive information to the IRS or to their children (Olivas, 2009).

Financial and Social Barriers in College

Low-income and non-traditional students must balance their own financial needs with the needs of their family (McDonough, 2006). Financial aid is frequently not enough to offset the loss of earnings that students give up when they decide to attend college, which places students and families in precarious financial positions (Hansen, 1983). While financial aid award packages are meant to contribute to the students' educational and living expenses, low-income students may feel pressured to use any financial aid overage funds to contribute to their family's economic needs which further challenges their financial stability and ability to afford college (McDonough, 2006). If students are unable to meet their family's financial needs while in college, they may choose to drop out and take a job where they are underemployed to feed their family instead of completing their degrees (Finkel, 2016).

Lack of family financial support impacts student degree completion by forcing decisions related to work and debt that compromise students' abilities to be successful in college (Christie et al., 2001). Balancing finances is a challenge for students because they juggle multiple and irregular income streams, which makes it difficult to plan for unexpected expenses (Gerwartz & Thornton, 2018). Low-income students take fewer courses, forgo purchasing textbooks, or make difficult decisions on when, whether, or what to eat to make ends meet while in college (Eckerson Peters et al., 2019). Forty-one percent of students surveyed did not have a savings account and of the students who did, nearly half had balances of less than \$100 (Gerwartz & Thornton, 2018). Sixty-two percent of students surveyed stated that they could not afford a \$500 emergency or unexpected bill (Gerwartz & Thornton, 2018).

Help Seeking Behaviors

Since higher education is experiencing a significant demographic shift with a high influx of low-income and non-traditional students, colleges must look to change and adapt their practices to retain students from marginalized student demographic groups (Martin et al., 2018; Perna, 2015; Smith, 2012; Strauss, 2014). While universities have a wide variety of student support structures, many students do not seek out or take advantage of the resources available (Clegg et al., 2006). Students are reluctant to seek outside help for a variety of reasons, including feelings of failure and loss of face if they ask for help (Clegg et al., 2006). Students also experience shame when they are unable to succeed because it greatly impacts their feelings of self-worth (Clegg et al., 2006). Students have a strong ownership of problems and do not want to blame their problems on extenuating circumstances that impact their ability to be successful in college (Clegg et al., 2006).

University support systems expect students to reach out for help from the appropriate departments when support is needed (Clegg et al., 2006). The current system creates unintentional barriers by assuming that students have the institutional knowledge to know where to ask for help while also relying on the students' willingness to ask for help when a problem occurs (Clegg et al., 2006). Students often do not have institutional knowledge and are unaware that programs exist or what the benefits campus programs provide (Engle & O'Brien, 2007). Students are also unlikely to reach out to ask for help and only reach out after they exhausted all other resources (Soria et al., 2014). This is especially true for low-income, first-generation students who are less likely to use support services than their peers (Engle & Tinto, 2008).

The disadvantages that low-income students face in accessing university resources is rooted in their economic status (Martin, 2015). Low-income students are more likely to enroll at colleges with limited resources and limited support structures (Titus, 2006). Even when universities have support structures in place, self-advocacy is considered a middle-class norm that lower-class students may not have learned or developed (Tichavakunda, 2017; Williams et. al., 2021). Middle- and upper-class students enter college already socialized on how to navigate administrations and how to appeal decisions, instead of just accepting “no” as an answer (Tichavakunda, 2017; Williams et. al., 2021). Lower-class students, in comparison, may take “no” as the final answer and not continue to push or go to different offices after the initial shut down to find the support they need (Tichavakunda, 2017; Williams et. al., 2021).

Students preserve their sense of self-worth and self-esteem by relying on informal support networks instead of university support systems (Clegg et al., 2006). If students do seek help, they are more likely to do so from peer connections than they are from faculty or staff (Clegg et al., 2006). Universities must provide affirming messages to let students know it is okay to ask for financial assistance when they are struggling to make ends meet (Great Lakes, 2016). University staff must be sensitive towards students who feel self-conscious asking for help and provide a supportive environment where students feel comfortable disclosing their financial concerns (Great Lakes, 2016).

Demographic Differences in Help-Seeking Behaviors

There are demographic differences in students’ willingness to ask for additional financial assistance (Geckeler, 2008). The Dreamkeepers emergency grant program, which provides emergency grant funding to students at 41 affiliated 2-year colleges, found that female and

African American students were more likely to receive emergency grant assistance compared to other demographic groups (Geckeler, 2008; Herk, 2016). Women and African American students experience a disproportionate level of need compared to other student populations which could account for this discrepancy (Geckeler, 2008; Herk, 2016). Hispanic students may be less likely to receive emergency funding than other demographic groups due to language barriers and immigration statuses that impact their likelihood of applying for financial assistance (Flores et al., 2007; Olivas, 2009).

Certain student demographics do not request additional funding assistance due to perceived stigmas which could also impact application rates (Geckeler, 2008). Demographic funding gaps are also exacerbated when programs do not widely advertise funding availability since students do not know the program is available unless they ask for help (Geckeler, 2008). Depending on the university's emergency assistance marketing strategies, information about assistance programs does not reach all segments of the student body which causes disproportionate awarding by demographic groups (Geckeler, 2008).

Institutional Aid

Institutional grant aid is the largest source of student grant aid in the United States (Doyle, 2010). Colleges choose how they award institutional grants because the money comes from institutional funds instead of outside sources (Doyle, 2010). Institutional aid impacts student persistence if it is awarded strategically (Olbrecht et al., 2016). Students who received more institutional financial aid have less unmet need and stayed enrolled at higher rates than their peers who did not receive institutional support (Olbrecht et al., 2016). As students' unmet need decreases, so does their likelihood of persisting towards their degree (Olbrecht et al., 2016).

Colleges should consider strategically awarding institutional grant funding to retain students on the brink of leaving (Olbrecht et al., 2016). By focusing institutional aid dollars on students on the margins of attendance, colleges could impact enrollment numbers by directing aid towards students who need it the most to stay enrolled (Doyle, 2008). Institutional grant aid also helps programs decrease operating costs by focusing, streamlining, and simplifying their current awarding processes towards one targeted student group instead of relying on complex and varying awarding requirements (Doyle, 2008).

Program Criteria and Institutional Supports

Institutional grant programs that target students on the margins of attendance struggle on how to establish grant criteria, distribute resources, and collect data to improve their programs (Goldrick-Rab & Cady, 2018). Ideally, institutional grant programs should be well publicized, easy to understand, and have minimal paperwork requirements to most impact students and universities (Goldrick-Rab & Cady, 2018). Obscure, complicated, and heavily administrative programs have institutional costs due to the time and expertise required to implement complex program requirements (Dynarski, 2000).

Institutional grant programs should also ideally be able to provide both financial and non-financial support for students to increase persistence and completion rates (Clotfelter et al., 2018). Non-financial support comes in the form of additional advising and community resources, like food or public assistance programs that help students with ongoing financial concerns (Goldrick-Rab et al., 2017; Kruger et al., 2016). Students who only received financial support without additional non-financial resources did not show increased persistence or academic improvement (Clotfelter et al., 2018; Wright et al., 2017). Similarly, students who only received

non-financial support in the form of community resource referrals minimally improved their persistence rates (Clotfelter et al., 2018; Wright et al., 2017). In comparison, students who received financial resources in addition to non-financial support improved degree progress, academic performance, and degree completion (Clotfelter et al., 2018; Wright et al., 2017).

Community referrals alone are unsuccessful in increasing persistence because students often do not reach out to the outside organizations and the ones that do struggle with transportation issues (Goldrick-Rab et al., 2017; Wright et al., 2017). Students are more likely to use community resources if they are accessible on-campus through campus-community partnerships (Goldrick-Rab et al., 2017; Wright et al., 2017). Colleges should consider offering additional on campus advising and community connections to positively impact student persistence, in addition to offering institutional grants to maximize student success (Goldrick-Rab & Cady, 2018; Wright et al., 2017).

Advising Requirements

Financial counseling is a frequent requirement for institutional aid programs (Gerwirtz & Thornton, 2018). Financial counseling is valuable because it helps to build student relationships, shows the student that people at the university are rooting for their success, and gives students the tools and resources they need to be financially successful in the future (Finkel, 2016). Students are often apprehensive or defensive in financial counseling appointments because they want to show that they are normally self-reliant and that they do not need to rely on outside help to make ends meet (Clegg et al., 2006; Wright et al., 2017). Emergency grant advisors walk a delicate balance of trying to assist students without making students feel stigmatized for being “needy” (Smith, 2017).

Successful financial advising appointments significantly impact persistence rates. Sixty-one percent of students who no showed or cancelled their appointment, or were denied assistance due to lack of documentation, re-enrolled, whereas 83% of students who attended their advising appointments and received institutional grant aid re-enrolled the following term (Wright et al., 2017). Successful advising appointments are an integral part in successfully helping students to navigate their financial emergency and stay enrolled in college (Eichelberger et al., 2017; Wright et al., 2017).

Culturally Responsive Advising Practices

Advisors must work to build trust between students and themselves during financial advising appointments so that the student feels comfortable openly talking about money and any financial behaviors they need to address (Gerwartz & Thornton, 2018). Effective advisors have strong sociocultural understandings of the students they are meeting with to best provide the resources the students need to succeed (McDonough, 2006). Students of colors' persistence rates are particularly impacted when attempts are made to assist and connect with students both inside and outside of the classroom (Lang, 2002).

Cultural misunderstandings sometimes arise between students and administrators during the awarding and advising process (Eichelberger et al., 2017; McNairy, 1996; Tichavakunda, 2017). The majority of financial aid administrators are white and middle class, which means they may make incorrect assumptions of how students of color and low-income students interact with their financial aid awards (Eichelberger et al., 2017; McNairy, 1996). Students of color often have family obligations that place them in a no-win situation when it comes to financial aid awards and excess funds (Eichelberger et al., 2017; McDonough, 2006). Students of color can be

viewed as selfish by their families if they pay their financial aid overages towards their own educational and living expenses instead of financially assisting their families (McDonough, 2006; McNairy, 1996). This places students of color in a precarious economic position where they do not have enough funding to meet their needs (McDonough, 2006; McNairy, 1996). Financial aid administrators are often unaware of these situations, and when they are aware they do not understand how to address these additional economic barriers in awarding or advising appointments (Eichelberger et al., 2017).

Emergency grant recipients are more likely to take out a larger amount of financial aid compared to non-grant recipients, which supports that their financial need is greater than what is included in their cost of attendance (Geckeler, 2008). More than 60% of grant administrators referred aid recipients to additional support services to try to address these ongoing funding gaps and economic concerns (Kruger et al., 2016). Administrators reported that the most beneficial support services include financial literacy counseling and food assistance programs (Kruger et al., 2016).

Institutional Grants Marketing and Outreach

Proactive outreach is an important advising tool for increasing student persistence (McCafferty, 2017). Institutional aid programs are not well known or well-advertised, so students are often unaware they are an available resource (Eckerson Peters et al., 2019). This is further compounded because the students most in need of financial counseling are often the least likely to ask for help, and if they do, they are unlikely to know what questions to ask to receive the resources they need (Oliverrez & Tierney, 2005).

Universities use different strategies to market grant opportunities to students (Fain, 2016). Some universities track down recipients, whereas others wait for students to come to them with requests for assistance (Fain, 2016). Universities who do not use active marketing rely on word of mouth between students as a successful and inexpensive way to market and expand their programs (Gerwartz & Thornton, 2018). However, word of mouth is a limited marketing strategy and certain subpopulations of students never hear about the program if they are not well connected to other students or faculty/staff (Eckerson Peters et al., 2019). Part-time, low-income, and commuting students are less likely to hear about on-campus opportunities because they spend less time on campus and have less in-person connections to hear about on-campus opportunities (Eckerson Peters et al., 2019). The majority of students surveyed were unaware if their university had an emergency grant program, likely because they did not hear about it from their classmates or friends (Eckerson Peters et al., 2019).

Universities using active marketing campaigns rely on cross-departmental partnerships to help effectively market the program to more students (Gerwartz & Thornton, 2018). For commuting and part-time students, the classroom is often the only venue where they interact with other students and faculty (Kuh et al., 2008). Institutional grant programs should look to expand their marketing to class announcements and faculty referrals to reach the most possible students who need additional financial assistance (Goldrick-Rab & Cady, 2018). Universities can also increase marketing efforts by doing proactive outreach to at-risk student populations through calling campaigns or targeted printed materials (Goldrick-Rab & Cady, 2018). To prevent unintentional barriers, colleges should widely advertise financial assistance programs and

conduct special outreach to student demographic groups that are less likely to reach out for help (Geckeler, 2008).

Forty-nine percent of public institutions surveyed stated that they do not use proactive outreach to market their institutional aid programs because eligible students would far outweigh the existing resources available (Kruger et al., 2016). Whereas, institutions that use predictive analytics were able to identify students who had unmet need and were on track to graduation to narrow down the candidate pool (Kruger et al., 2016). Predictive analytics could dramatically increase students' persistence rates and institutional return on investment by proactively identifying candidates instead of relying on marketing and word of mouth which misses segments of the student population that most benefit from the additional financial support (Kruger et al., 2016).

Emergency Grant Programs

Emergency grant programs are an increasingly popular type of institutional aid program that is designed to help low-income students cover a one-time big expense that would normally cause them to drop out of school (Great Lakes, 2016). The majority of emergency aid research is focused on small foundation programs, third-party funded programs, or programs run by a small group of higher education institutions (Kruger et al., 2016). Research studies on emergency aid programs' effectiveness are rising as emergency aid programs expand across the United States (Clotfelter et al., 2018; Goldrick-Rab & Cady, 2018; Great Lakes, 2015; Herk, 2016; Herschbein, 2018; McCafferty, 2017; Scholarship America, 2015). Universities are refining and expanding what emergency aid programs they offer as more is learned about emergency aid

program effectiveness to increase students' graduation and persistence rates (Kruger et al., 2016).

There are currently over 100 emergency grant programs in the United States, and many of the programs have varied eligibility requirements and awarding criteria (Herschbein, 2018). Successful emergency grant programs have common tenets that lend towards their successful application (Martinez, 2016). Successful programs tend to be well staffed with advisors and support staff who provide timely communications, clear bookkeeping, and fast processing times (Martinez, 2016). Successful programs also center their practices on in-person one-on-one meetings with students to determine their individual needs and to build a connection and trusting relationship between the student and the program advisor (Martinez, 2016).

Emergency aid programs are a joint venture between multiple departments across the university (Kruger et al., 2016). Student affairs and financial aid are frequently in close partnership with managing and delivering emergency funds to students (Kruger et al., 2016). More than 40% of the colleges surveyed placed emergency grant management solely within their financial aid departments (Kruger et al., 2016). Emergency loan and grant programs are an administrative burden because financial aid administrators must individually review students' aid packages to verify that their funding fits within the student's cost of attendance to avoid any possible federal compliance issues (Kruger et al., 2016).

Program Models

Emergency aid programs are not uniform across institutions (Anderson & Steele, 2016). Instead, there are a variety of models that institutions use when dispersing emergency funds to students (Anderson & Steele, 2016). Institutions using the skin in the game model award

completion loans to students who are close to graduation (Anderson & Steele, 2016). Institutions then only forgive the completion loan if the student graduates within a predetermined time, whereas if the student drops out or extends their time to graduation, the student is obligated to repay the loan to the institution (Anderson & Steele, 2016).

In comparison, institutions using the cost-splitting model require students to come up with half of their unmet need to stay enrolled, and then match the student with an institutional grant to cover the remainder of the deficit (Anderson & Steele, 2016). Finally, the two-pronged model is where institutions provide both emergency grants to first-year students and completion grants to continuing students or returning students to address financial emergencies throughout their college careers (Anderson & Steele, 2016). The two-pronged model is the most popular model, with two-thirds of the institutions surveyed using it (Anderson & Steele, 2016).

Emergency grant programs also vary by grant selection criteria. Some programs have GPA requirements or credit completion requirements to be eligible for the program (Anderson & Steele, 2016). Some programs also require students to first exhaust all other resources, such as financial aid, to stretch the internal grant budget to support as many students as possible (Anderson & Steele, 2016). Other common grant requirements are financial literacy training, grant contracts, academic work plans to graduation, service hours to the institution, and donor engagement (Anderson & Steele, 2016).

Program Examples

Many colleges experienced persistence gains through their small-dollar emergency grant programs. For example, Great Lakes awarded 1.5 million dollars to establish one-time emergency grants for low-income students in the Wisconsin community college system (Great

Lakes, 2016). Almost 2,700 low-income students received an emergency grant, with an average grant award of \$500 per student (Great Lakes, 2016). The Wisconsin community college system noted persistence gains, with 73% of emergency grant recipients persisting, compared to 59% of the general student body (Great Lakes, 2016). Due to the success of the initial pilot program, Great Lakes extended the program to 32 four-year colleges and universities across six states (Great Lakes, 2017).

In 2014, Dreamkeepers partnered with 41 affiliated two-year schools to award 1,545 students emergency grants averaging \$445 (Herk, 2016). The funds went towards living expenses such as housing, vehicle costs, utilities, and food that prevented students from staying enrolled in school (Herk, 2016). The Dreamkeepers program experienced success with 95% of the grant recipients completing the term they were currently enrolled in and 88% of the students enrolling in the subsequent term (Ronkvist, 2019). The 88% subsequent term persistence rate positively reflects that the program was able to provide resources to address the short-term financial emergencies that caused students to leave college (Ronkvist, 2019).

Great Lakes and Dreamkeepers are just two of many organizations running successful emergency grant programs across the nation. The State University of New York (SUNY) also reported positive results from their emergency grant pilot. Out of 100 students who took advantage of the SUNY Emergency Grant, 87% continued their studies (Bump, 2017). Georgia State University also experienced student persistence success with their Panther Retention Grant program. Georgia State's program is one of the largest and most established university micro-grant programs in the nation (Fain, 2016). The Panther Retention Grant Program awards students up to \$2,000 if they are on track to graduation but have an unmet need and outstanding university

balance (Fain, 2016). Georgia State University has reported a 200% return on investment from their retention grant program due to significant retention gains (Fain, 2016).

Seminole State College of Florida's program, Destination Graduation, uses United Way's 2-1-1 helpline to connect students to over 2,000 community resources and emergency grants (Wright et al., 2017). The benefits include housing, food pantries, public benefits, and health care services (Wright et al., 2017). To be eligible for the program, students are required to document their emergency and demonstrate their ability to cover their other expenses as a way for the college to increase persistence rates (Wright et al., 2017). Destination Graduation successfully increased their student persistence numbers. Students who received the emergency aid were 22% more likely to persist over the general student population and 36% more likely to persist over students who experienced a crisis but who did not receive emergency assistance (Wright et al., 2017).

Amarillo College also has extensive programs to help low-income students stay enrolled. Amarillo's ACE Scholarship is awarded to past due accounts to remove registration barriers. This scholarship program is unique because students are not required to prove their low-income status, which removes the application burden from students (Goldrick-Rab & Cady, 2018). Amarillo College also offers a separate emergency grant program to cover emergency expenses outside of the student's university bill (Goldrick-Rab & Cady, 2018). If a student is approved for the additional emergency grant, the funds are then paid directly to the students' outstanding expenses (landlord, auto repair shop, etc.) (Goldrick-Rab & Cady, 2018). Amarillo College also offers students a resource center with a food pantry, vouchers for testing, computers, and calculators. Finally, Amarillo College created an Adult Students Program that offers childcare,

transportation, textbooks, and tuition assistance resources for returning adult students who need financial and community assistance to stay enrolled (Goldrick-Rab & Cady, 2018).

Research Site Program Overview

In 2017, my research site received \$420,000 from Great Lakes Corporation to pilot an emergency grant program. The program awards up to \$1,000 for low-income students who were facing an unexpected financial emergency that prevented them from continuing their educational careers. The funds cannot be used for direct educational expenses like tuition or fees, but instead is used towards living expenses, medical bills, car repair bills, childcare, etc. If awarded, students' emergency grant funds are paid directly towards the unexpected bill that prevented them from continuing their educational careers.

Program Eligibility

Eligible students must be degree seeking undergraduate students enrolled in at least one credit and show financial need by having an Expected Family Contribution (EFC) of 7,000 or less as determined by their FAFSA applications. In 2017, between 34% and 39% of undergraduate students at the university had an EFC of 7,000 or less, and it was estimated that approximately 4,000 students would potentially be eligible for the program.

After the external grant ended in 2019, the emergency grant program transitioned to institutional and donor funds. The university then expanded program eligibility to include graduate students, Minnesota Dream Act students, and students with an EFC of 8,000 or less to assist more categories of students facing financial emergencies. The university continued funding the emergency grant program and expanded eligibility criteria as an actionable step of meeting

their strategic goals of improving student support services to promote timely graduation, increase campus diversity, and promote a campus culture of wellness.

Emergency Grant Administration

The emergency grant program is housed out of the Scholarships Office and the Director of Scholarships manages the program. The Scholarships Office is also staffed by a graduate assistant who works 20 hours a week to help administer the emergency grant program. The program operates by having a student reach out to an emergency grant advisor via the email list on the institution's website. The emergency grant advisor and the student then meet one-on-one to discuss the emergency at hand and to collaboratively complete the emergency grant application.

Emergency grant advisors are volunteer faculty and staff across the university. All university employees who work directly with students are eligible to be grant advisors once they complete a 2-hour in-person training given by the Director of Scholarships. The emergency grant advisor's role is to assist students with completing the emergency grant application, submitting supporting documentation of the unpaid bill(s), and to provide additional coaching and resources to students to help prevent future financial emergencies from occurring.

Once a student's grant application is completed, it is then reviewed by three committee members from across the university and approved based on the committees' decision. If the grant application is approved, the funds are paid within 48 business hours directly towards the student's emergency (rent bill, electric bill, car repair, etc.). If the grant application is denied, the student receives notification of the denial and the reason for why they were denied. After the grant application is reviewed and the student has received the emergency funds, the grant advisor

meets again with the student one week later to go over additional community resources and to help the student plan ahead to hopefully prevent future financial emergencies from occurring.

Program Goals and Benefits

An intended outcome of the emergency grant program is to forge relationships with students facing financial emergencies to increase their likelihood of staying at the university and persisting towards their degree. The emergency grant advisor is the primary individual who creates these relationships since their role is to meet with the student facing an emergency, so they feel seen and heard. The advisor helps to create an on-campus connection with the student, so the student has someone to turn to if a future emergency arises. Through the emergency grant program, the student creates a connection on campus with their advisor who helps them work through future budgeting concerns and to help them find community resources to proactively address any other financial gaps that stand in the way of their academic success at the university.

The emergency grant program advisor also provides resources for students to learn good financial habits so that when they enter their professional careers later, they go from living paycheck to paycheck to being financially successful. Oftentimes the meeting with the emergency grant advisor is the first time the student has created a budget, and while emergency grant advisors are not dedicated financial advisors, they give the student the basic budgeting tools they need to be successful both in and outside of college (Goldrick-Rab & Cady, 2018).

University Return on Investment

The emergency grant program has the potential to impact student persistence since an average of 20% of students who left the university in the last 5 years had an unpaid balance hold

at some point in their academic careers. In 2015 alone, there was a \$200 to \$1200 funding gap between enrolled and non-enrolled students within the 0-7000 emergency grant EFC range. In fall 2015, 25% of the 398 students who dropped out had an unpaid balance hold on their account at some point during the term.

While this program is a sizable investment in university funds, it also has the potential for a return on that investment. The average amount of tuition and fees for a full-time undergraduate student for the 2020-2021 school year is \$8,455.40. The university would have a full return on investment if 29 students persisted from this program for an additional year. The university's goal is to fund approximately 216 students over 2 years, which means that the program would only need a 13.43% success rate to regain the university's investment, assuming that the grant recipients would have dropped out of college if they did not receive the funding. However, it is difficult to calculate an accurate return on investment for the program because there are a certain percentage of the students retained who would have stayed at the university regardless of whether or not they received the emergency grant funding.

Conceptual Framework

Sanford's Theory of Challenge and Support (1967) states that students succeed in college based on how well universities provide support and educate students on how to address future emergencies (Patton et al., 2016). College students must receive sufficient support to address any challenges they face in their higher education careers for optimal personal growth (Sanford, 1967). Students inevitably face academic, social, or personal challenges in college because it is impossible to prepare for everything, but students from marginalized identity groups, such as lower-socioeconomic status students and students of color, are more

likely to face challenges due to these identity characteristics (Ong et al., 2006). If a student does not receive the support they need to grow, they end up in a state of retreat which hinders their ability to succeed in higher education (Sanford, 1967).

Sanford's Theory of Challenge and Support is divided into three areas that determine student success: college readiness, challenges faced, and support received (Sanford, 1967). The first developmental condition, college readiness, is whether students have the maturity and positive environmental conditions necessary to be successful in college (Sanford, 1967). Students' college readiness impacts how many challenges students face in college because the students who are the most prepared for college are less likely to face unexpected challenges compared to their less prepared peers (Sanford, 1967). The second developmental condition, challenges faced, occurs when a situation arises that students are not prepared to handle (Sanford, 1967). The situation becomes a challenge when students have not developed the coping skills necessary to address the situation (Sanford, 1967).

The third developmental condition, support received, refers to college environmental conditions that help students overcome the challenges they face (Sanford, 1967). Support is integral to student success in college because support is correlated positively with increased grade point averages and greater academic achievement (Ong et al., 2006). Support also includes mentoring and involvement from faculty and staff, as well as family support (Sanford, 1967). Universities should work towards providing the optimal level of support to help students learn how to overcome the challenges that inevitably occur (Sanford, 1967). Colleges should be cautious not to provide excessive amounts of support since excessive support limits the development of students as they learn how to overcome challenges (Sanford, 1967).

My research centers primarily on the third tier of Sanford's Theory of Challenge and Support by focusing on whether the emergency grant program helps to support students as measured through university persistence rates and student degree completion. Students in a state of retreat due to financial crisis are unlikely to reach out and ask for help, and as a result are unlikely to get connected to resources on campus (Sanford, 1967). Sanford's Theory of Challenge and Support provides a framework to determine whether the Emergency Grant program bridges the gap between students in crisis and the resources available to them by measuring whether the program successfully retains students after receiving an emergency grant as measured by short term and long-term persistence rates for emergency grant recipients. Sanford's Theory of Challenge and Support frames whether the emergency grant program provides adequate institutional support for students to help them overcome current and future financial emergencies. If the third area of Sanford's Theory of Challenge and Support is met through the emergency grant program, students use the institutional supports to overcome the challenges they face and continue in college to earn their degrees.

I also use the first and second areas of Sanford's Theory of Challenge and Support in my research to frame whether additional challenges to success, such as household income level or racial minority status, further impacts students' ability to be successful after receiving the emergency grant. My research is centered on low-income students and students of color because they are two populations who are statistically less prepared for college when compared to other populations of students due to socioeconomic status and racial disparities (Oliverez & Tierney, 2005). I use Sanford's Theory of Challenge and Support to frame whether the university's additional financial and advising support is enough to increase persistence for

low-income students and/or students of color, or if the support received is not enough to overcome the challenges faced (Sanford, 1967).

Conclusion

The need for student aid programs is higher than ever due to the increased number of low-income students and students of color attending college, which creates an increased demand for student aid programs and financial assistance (Duranczyk et al., 2004; Wilkinson, 2005). Emergency aid programs are becoming more frequent as college administrators are noticing that students are dropping out of college due to unintended financial emergencies that make it unlikely that they are able to continue their degree programs without additional financial assistance (Kruger et al., 2016). Universities are refining and expanding what emergency aid programs they offer as more is learned about emergency aid program effectiveness to increase students' graduation and persistence rates (Kruger et al., 2016).

The majority of emergency aid research is focused on small foundation programs, third-party funded programs, or programs run by a small group of higher education institutions (Kruger et al., 2016). While research studies on emergency aid programs' effectiveness are rising as emergency aid programs expand across the United States, research on emergency aid programs is still a relatively new field due to the significant expansion of emergency aid programs since 2012 (Kruger et al., 2016). There is still considerable research to be done on varying programs' effectiveness at increasing persistence and graduation rates, especially at the four-year college level.

By studying emergency grant recipients' persistence and graduation rates at a public four-year institution, I contribute to the current literature by addressing what student populations are

most impacted by the additional aid dollars. Through the lens of Sanford's Theory of Challenge and Support, I examine whether the current emergency grant program provides resources to help students address their current and future financial emergencies. I also use Sanford's theory to frame whether students overcome the challenges faced to successfully stay in college and earn their degree. My research adds to the current emergency grant literature to help refine and expand emergency grant best practices for increasing student success as measured through persistence and graduation rates.

Chapter 3: Methods

The purpose of this study was to determine whether an emergency grant program at a 4-year public institution is correlated with increased student persistence, and if students' socioeconomic status and race are correlated with their likelihood to persist after receiving the emergency grant. I define persistence as students who continue to attend the university the following term(s) after receiving the emergency grant or students who graduate from their program of study after receiving the emergency grant. To measure correlation, I conducted a correlational quantitative analysis on students' demographic information, socioeconomic status, and persistence rates from their student records and emergency grant applications. This chapter describes the methods used to conduct this study, including the setting and environment, population, methodology, data analysis, and limitations.

Setting and Environment

My research location is a mid-sized public university that serves more than 14,000 graduate and undergraduate students, including over 2,300 students of color (16.4%). The university has a high percentage of students experiencing financial need, with 50% of full-time undergraduate students receiving some form of need-based financial aid to help fund their education. One of the university's strategic goals is to increase diversity and promote a campus culture of wellness, including financial wellness, for all students on campus. One of the ways the university plans to implement their strategic plan is to expand student support services to promote student persistence and timely graduation.

In 2017, my research site received \$420,000 from Great Lakes Corporation to create an emergency grant program. Eligible students apply for up to \$1,000 in grant funding to cover

an unexpected financial emergency that might hinder their ability to continue their educational careers and degree completion. The \$1,000 award is applied directly towards students' unpaid bills, including rent, car repairs, medical bills, childcare, etc. Tuition and fees were not eligible expenses as these are considered planned or expected bills and not unexpected financial emergencies.

To be eligible for the grant, students must be degree-seeking undergraduates, enrolled in at least one credit, and have an Expected Family Contribution (EFC) of 7,000 or less. In 2019, when the external grant funding ended, the university's emergency grant program transitioned to institutional and donor funds. The university then expanded their emergency grant program eligibility criteria to include graduate students, Minnesota Dream Act students, and students with an EFC of 8,000 or less.

Population and Sample

In 2017, between 34% and 39% of the 12,500-student undergraduate population at the university had an EFC of 7,000 or less, which meant that approximately 4,000 students attending the university were eligible for the program. As of May 2021, 451 students received funding, out of 550 total grant applications who fit my research's demographic variables. An intended outcome of the emergency grant program is to increase persistence rates for students of color who have an increased likelihood of leaving the university due to financial concerns.

On average across student demographics, my research location has a 50% six-year graduation rate and a 34% transfer rate. When this statistic is broken down demographically, white students graduated slightly above average at 53% with a 33% transfer rate, whereas African American students had a 28% graduation rate with 52% transfer rate, Hispanic students

had a 43% graduation rate with a 36% transfer rate, Asian students had a 36% graduation rate, with a 39% transfer rate and students listing two or more races had a 40% graduation rate and a 45% transfer rate. Indigenous students did not have graduation or transfer rates listed to protect student data privacy due to limited sample size.

On average, 20% of students who dropped out in the last five years had an unpaid balance hold on their account during their time at the university. In fall 2015, 25% of the 398 students who dropped out had an unpaid balance hold during the term. For students with a 0-7000 EFC, there was only a \$200 to \$1200 funding gap between students who stayed enrolled compared to those who did not continue onto the next term.

Methodology

The majority of emergency aid research is focused on small foundation programs, third-party funded programs, or programs run by a small group of higher education institutions (Kruger et al., 2016). While research studies on emergency aid programs' effectiveness are rising as emergency aid programs expand across the United States, research on emergency aid programs is still a relatively new field due to the significant expansion of emergency aid programs since 2012 (Kruger et al., 2016). There is still considerable research to be done on varying programs' effectiveness at increasing persistence and graduation rates, especially at the four-year college level (Kruger et al., 2016). My correlational quantitative research project provides initial and exploratory data on whether certain student populations have higher persistence rates after receiving emergency grant funding.

Research Questions

R₁: How does socioeconomic status relate to persistence at the university after students receive the emergency grant?

R₂: How does race relate to persistence at the university after students receive the emergency grant?

Research Design

Correlational quantitative studies measure the relationship between two or more variables to determine if associations exist between the variables (Curtis et al., 2016). While correlational studies do not determine causation, they do provide valuable information on what variables are statistically associated with one another to warrant further review (Curtis et al., 2016). This correlational quantitative study measures the relationship between the dependent and independent variables to determine if correlations exist between students' socioeconomic status and race and their likelihood of persisting after receiving the emergency grant. My independent variables are Pell grant eligibility, race, sex, age, first-generation status, and credits earned and my dependent variable is persistence. My data was obtained from university electronic student records and students' emergency grant applications. I recorded whether students were approved or denied the emergency grant, and if they persisted, graduated, transferred, or left the university after receiving or not receiving the emergency grant.

My data was imported into IBM SPSS Statistics Version 27.0 (SPSS 27) for statistical analysis. The data was coded and properly organized before analysis to ensure data accuracy. Data points and normality of the data were analyzed using descriptive statistics including sample size, frequencies, relative frequencies, and percentages (Muijs, 2016). I

performed Pearson's Chi-Square test and logistic regressions on the data elements to test whether students of color or Pell grant eligible students had significant differences in term-to-term persistence after receiving the emergency grant (Muijs, 2016).

Chi-Square. Test. Pearson's Chi-Square test determines the relationship between two categorical variables to ascertain whether the distribution of cases in the categorical variables follows the known or hypothesized distribution (Muijs, 2016). Pearson's Chi-Square assesses the goodness of fit, homogeneity, and independence of the data (Muijs, 2016). Goodness of fit establishes whether the frequency of the observed events is consistent with the expected events for each cell; homogeneity compares the number of two or more groups using the same categorical variable; and independence of the data is whether the variables are independent from one another (Muijs, 2016).

Pearson's Chi-Square test determines associations between the dependent and independent variables, but does not establish causation (Muijs, 2016). To test my first hypothesis, I used Pearson's Chi-Square test to determine if there is a relationship between students' Pell grant eligibility and their likelihood of persisting at the university after receiving the emergency grant. To test my second hypothesis, I used Pearson's Chi-Square test to determine if there is a relationship between students' racial categories and their persistence rates after receiving the emergency grant.

Logistic Regression. Logistic regressions are a statistical technique used to analyze a categorical dependent variable on categorical independent variables to determine the probability of an outcome occurring (Muijs, 2016). To test my first hypothesis, I used a logistic regression to predict the probability of Pell grant eligible students persisting at the university after receiving the emergency grant. To test my second hypothesis, I used a logistic regression to predict the probability of students from different racial backgrounds persisting at the university after receiving the emergency grant. I also accounted for the variables “Sex”, “First Generation”, “Age”, and “Credits Earned” in my logistic regressions to see the probability of these categories of students persisting after receiving the emergency grant.

Instrument

No instrument was created for this study as I used a pre-existing data set for my analysis.

Variables

In this section I outline the dependent and independent variables for each research question. The independent variables I used in my study are “Pell Grant” and “Race”. To determine persistence, I used persistence as my dependent variable. I analyzed students’ persistence based on whether students attended classes the term(s) after receiving the emergency grant or if they left the university without receiving their degree. I also recorded students’ graduation rates (if applicable).

I also accounted for the common persistence indicators “Age”, “Credits Earned”, “First Generation”, and “Sex” in my logistic regression to determine which portion of the variance is due to students’ Pell grant eligibility, racial identity, or other variables (Britt et al., 2017, Lotkowski et al., 2004, Millea et al., 2018). I coded age into two categories (ages 18-23 and ages

24 years old and above) to compare traditional college aged students with older or returning students. I used 24 years of age as the dividing point based on the FAFSA's determination of automatic independent status based on age (Federal Student Aid, n.d.-d). I coded credits earned into common grade level categories as listed on the FAFSA application (first-year, sophomore, junior, and senior) (Federal Student Aid, n.d.-c). I coded first generation into two categories (Yes and No) as determined by if either parent or guardian has earned a 4-year college degree (NASPA, 2020). I also coded sex into two categories (male and female) based on the two categories listed on the FAFSA and the student records system (Federal Student Aid, n.d.-a).

R₁: How does socioeconomic status relate to persistence at the university after students receive the emergency grant?

I measured students' socioeconomic status based on their Pell grant eligibility. Pell grant eligibility is determined based the EFC number listed on students' FAFSA applications (NASFAA, 2020). The EFC number is calculated from over 100 data points on the FAFSA application including parent and student income levels, assets, family size, and number in college (NASFAA, 2020). The EFC number is meant to provide a holistic look at a family's ability to cover the cost of college and is used to calculate students' federal aid eligibility, including the federal Pell grant (NASFAA, 2020). For each award year I coded whether students were or were not eligible for the Pell grant based on yearly federal aid awarding criteria. The Pell grant EFC range was 0-5328 for the 2017-2018 year, 0-5498 for the 2018-2019 year, and 0-5711 for the 2019-2020 and 2020-2021 award years (Federal Student Aid, 2016; Federal Student Aid, 2018; Federal Student Aid, 2019a; Federal Student Aid, 2020).

My dependent variable “Persistence” was re-coded to reflect if students continued at the university and/or received their degree or if the student dropped out or transferred to another university. I also accounted for common persistence indicators in my analysis “Sex”, “First Generation”, “Age”, and “Credits Earned” The variables and codes I used in my analysis for R_1 are included in the table below.

Table 1

Variables and Codes Used in Analysis for R_1

Independent Variables	Coding
Sex	0 = Male 1 = Female
First Generation	0 = No 1 = Yes
Age	0 = Ages 18-23 1 = Ages 24 years old and above
Credits Earned	0 = First-Year 0-29 credits 1 = Sophomore 30-59 credits 2 = Junior 60-89 credits 3 = Senior 90-120+ credits
Pell Grant	0 = Non-Pell Grant Eligible 1 = Pell Grant Eligible
Persistence	0 = Enrolled or Graduated 1 = Dropped Out or Transferred

R₂: How does race relate to persistence and being academically successful at the university after students receive the emergency grant?

The category “Students of Color” includes all students that listed a category on their admissions application other than “white”. My independent variable “Race” was recoded based on the racial categories listed in the student records system. The racial categories are “Asian”, “Black or African”, “Hispanic of any race”, “Two or more Races”, “white”, and “American Indian/Alaskan Native” for logistic regressions. I also coded race as “Students of Color” and “white” for Chi-Square analysis, where the category “Students of Color” included all students who were not listed as white.

My dependent variable “Persistence” was re-coded to reflect if students continued at the university and/or received their degree or if the student dropped out or transferred to another university. I also accounted for common persistence indicators in my analysis “Sex”, “First Generation”, “Age”, and “Credits Earned”. The variables and codes I used in my analysis for R₂ are included in the table below.

Table 2*Variables and Codes Used in Analysis for R₂*

Independent Variables	Coding
Sex	0 = Male 1 = Female
First Generation	0 = No 1 = Yes
Age	0 = Ages 18-23 1 = Ages 24 years old and above
Credits Earned	0 = First-Year 0-29 credits 1 = Sophomore 30-59 credits 2 = Junior 60-89 credits 3 = Senior 90-120+ credits
Race	0 = White 1 = Asian 2 = Black or African 3 = Hispanic of any Race 4 = Two or more Races 5 = Native American/Alaskan Native
Race2	0 = Students of Color 1 = White
Persistence	0 = Enrolled or Graduated 1 = Dropped Out or Transferred

Data Analysis

I ran descriptive statistics on all variables used to determine their frequencies, distributions, and outliers to help illustrate my data sample and answer my research questions (Muijs, 2016). I removed any missing variables to remove any potential outliers in my analysis. Figures 1-6 below confirm that the missing variables have been removed and that there are enough cases per variable category for analysis. Once I confirmed that my variables were independent and all outliers were removed, I ran Pearson's Chi-Square test and logistic regressions to determine whether relationships occurred between student's race and socioeconomic status and their likelihood of persisting at the university (Muijs, 2016).

Model for Pearson's Chi-Square

The Chi-Square test uses a contingency, or cross-tabulation table, to classify the data with the formula $\chi^2 = \sum (O_i - E_i)^2 / E_i$ where O is the observed frequencies of type i, E is the expected frequencies of type i, and χ^2 is the cumulative test statistic (Kent State University, 2021). The categories of the independent and dependent variables are listed in columns and rows respectively, with each cell reflecting the total number of cases for each combination listed (Muijs, 2016).

I first used SPSS to run a Chi-Square statistic (χ^2) and calculate the degrees of freedom (df) (Muijs, 2016). SPSS calculated the degrees of freedom by subtracting the number of observed categories from the number of expected categories (Muijs, 2016). I then observed the p values that resulted in the test to see if the test statistic exceeded the critical value of χ^2 or if no clear conclusions could be reached by the test (Muijs, 2016).

Assumptions for Pearson's Chi-Square. The first assumption of the Chi-Square test is that the data comes from a random sampling of the population and that the sample is large enough for analysis (Muijs, 2016). The second assumption is that the data is comprised of two or more independent groups and that the variables are independent of one another with no overlapping cases (Muijs, 2016). Finally, the third is that there is a high enough frequency of all data points so that there are at least five cases listed in each cell (Muijs, 2016).

Table 3

Students' Persistence by Pell Eligibility Cross Tabulation (n = 451)

Pell Eligible	Persisted	
	Yes	No
Yes	326	91
No	26	8

Table 4

Students' Persistence by Racial Categories Cross Tabulation (n = 451)

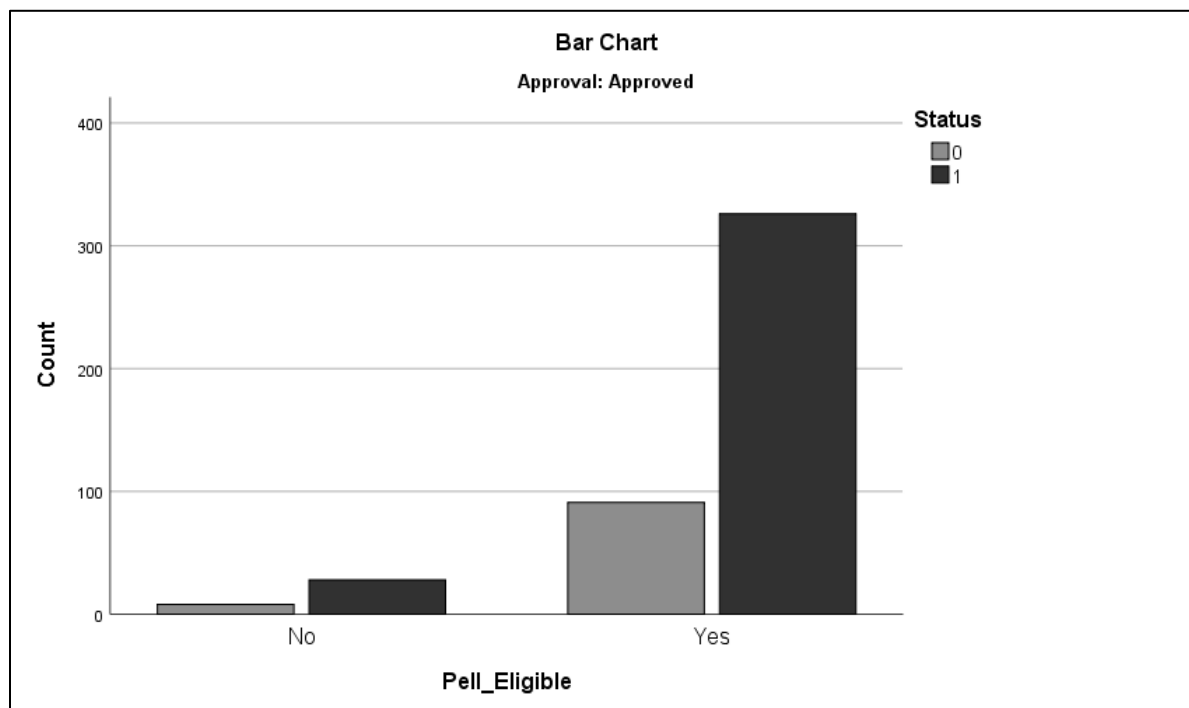
Race	Persisted	
	Yes	No
Students of Color	214	73
White	138	26

Table 3 and Table 4 confirm that the categories are independent and that there are no overlapping cases. Both tables also confirm that the sample is large enough for analysis, and that the minimum number of cases per square (> 5) have been met.

Model for Logistic Regression

Logistic regressions predict the probability of an outcome occurring through the formula: $\pi/(1-\pi) = \exp(\beta_0 + \beta_1 X_1 + \dots + \beta_k X_k)$, where $\pi/(1-\pi)$ is the probability of the event occurring, β_0 is the constant, β_1 through β_8 are the estimated regression coefficients (Stoltzfus, 2011). An odds ratio of 1 is the baseline for comparison and indicates if there is no association between the dependent and independent variables (Stoltzfus, 2011). If the odds ratio is greater than 1, then the probability of an outcome occurring is higher than chance and values farther from 1 represent stronger degrees of association (Stoltzfus, 2011). I used a nominal logistic regression in my analysis because my dependent variable has two categories with no natural ordering of the categories (Stoltzfus, 2011).

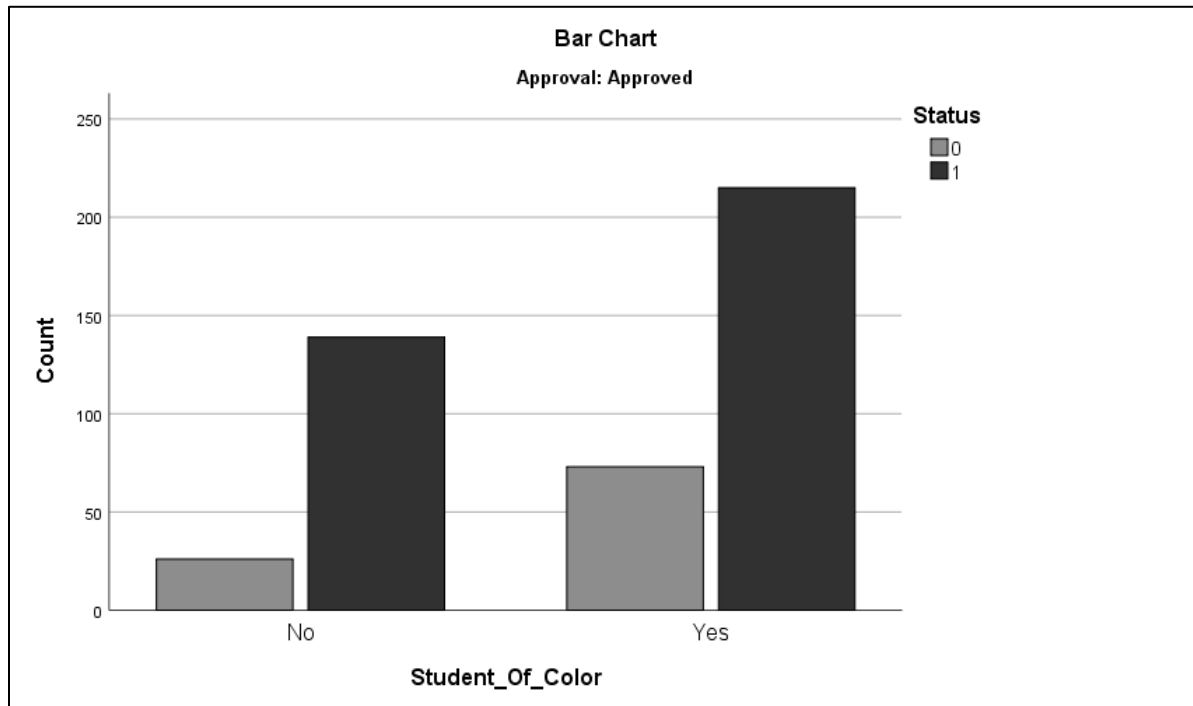
Assumptions for Logistic Regression. I confirmed my sample size ($n = 451$) was larger than the minimum recommended for logistic regressions of $n = 100 + 50i$ where i represents the number of independent variables in the final model (Bujang et al., 2018). My independent variables were tested for assumptions including the independence of errors, absence of multicollinearity, and lack of strongly influential outliers (Muijs, 2016). I examined the case processing summary, the Pearson's Chi-Square Goodness of Fit test, the cross tabulations, and the descriptive statistics including the frequencies, distributions, and outliers to determine if the assumptions were violated (Muijs, 2016). I ran the Hosmer-Meleshow goodness-of fit statistic to determine if the model was a good fit to the observed data (Muijs, 2016). I also used the Wald test to confirm that the coefficients were not equal to zero and that each predictor of the model results in a statistically significant improvement of the model (Muijs, 2016).

Figure 1*Persistence Rates by Pell Eligibility*

Note: 0 = Non-Pell Grant Eligible, 1 = Pell Grant Eligible

*Persistence is coded 0 = Enrolled or graduated, 1 = Dropped out or transferred

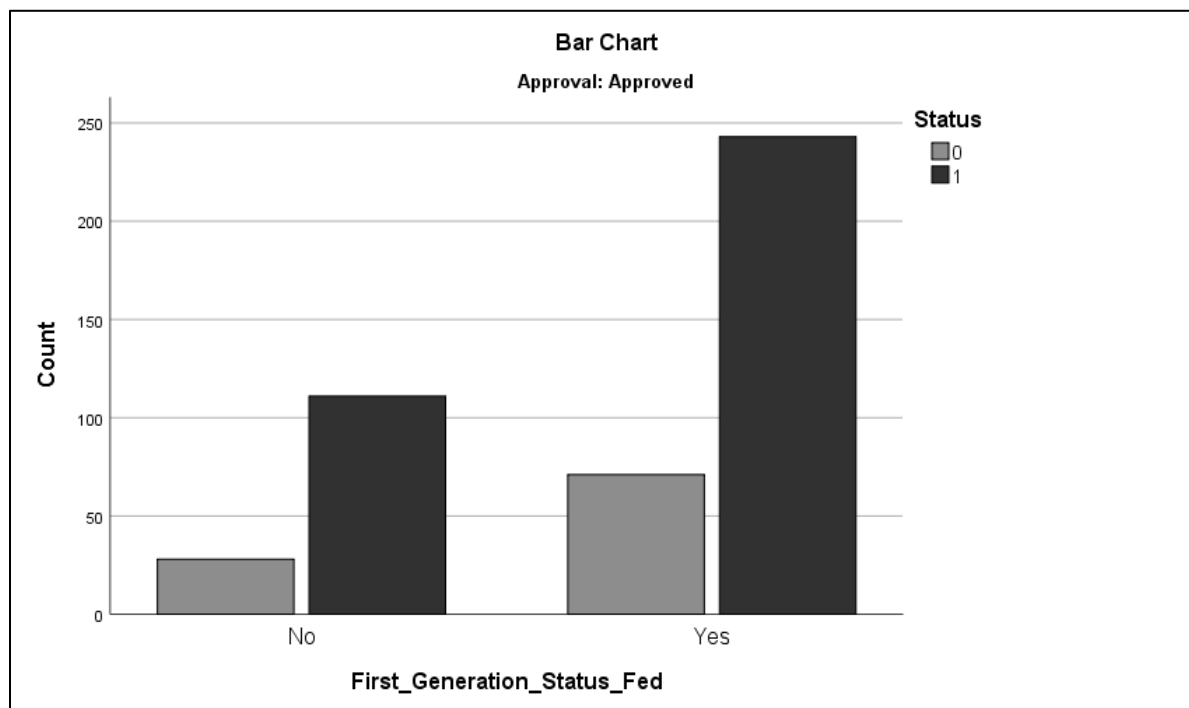
Out of 451 total students in the sample, 34 students were not eligible for the Pell Grant. Of the 34 non-Pell eligible students, 26 persisted and 8 did not persist. For Pell Grant eligible students, 326 persisted and 91 students did not persist. The sample is limited due to the small number of non-Pell eligible students, but the persistence rates between both categories of students appear similar based on the bar chart.

Figure 2*Persistence Rates by Race*

Note. 0 = Students of Color and 1 = White *Students of color comprised of all racial categories other than white students.

*Persistence is coded 0 = Enrolled or graduated, 1 = Dropped out or transferred

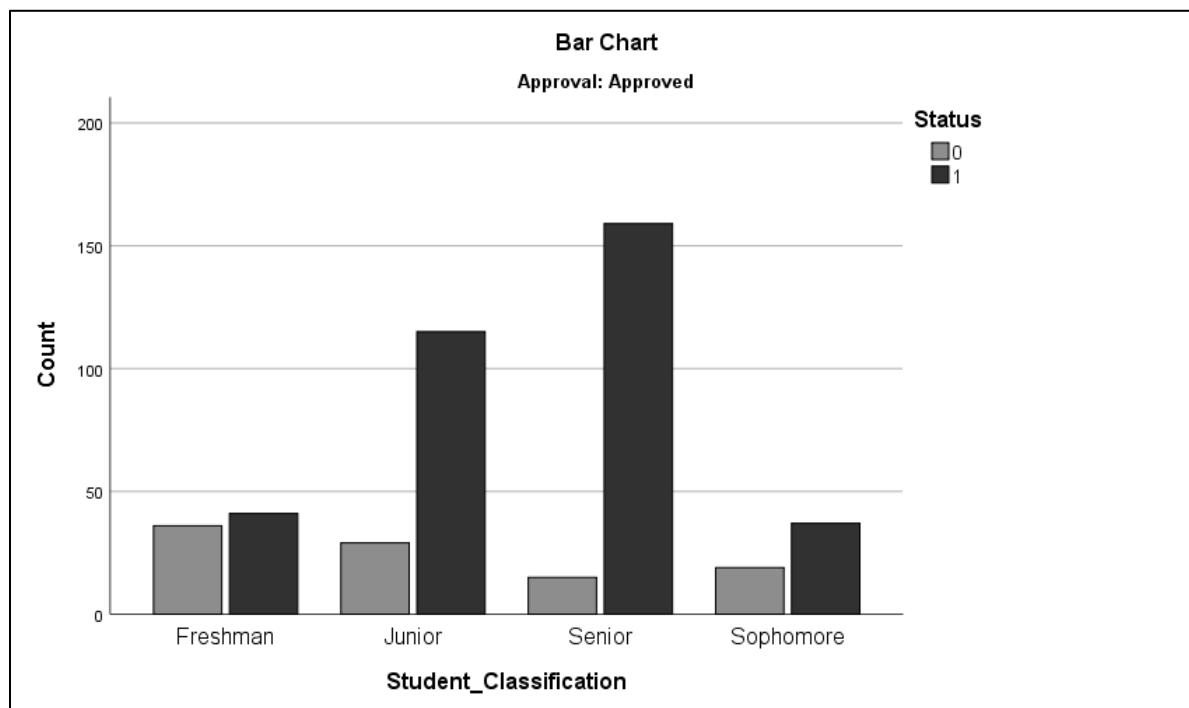
Out of 451 total students, 287 are students of color and 164 are white. For students of color, 214 persisted and 73 did not persist. For white students, 138 persisted and 26 students did not persist. Based on the bar chart, white students appear to have a higher persistence rate compared to students of color.

Figure 3*First Generation Persistence Rates*

Note. 0 = No, 1 = Yes

*Persistence is coded 0 = Enrolled or graduated, 1 = Dropped out or transferred

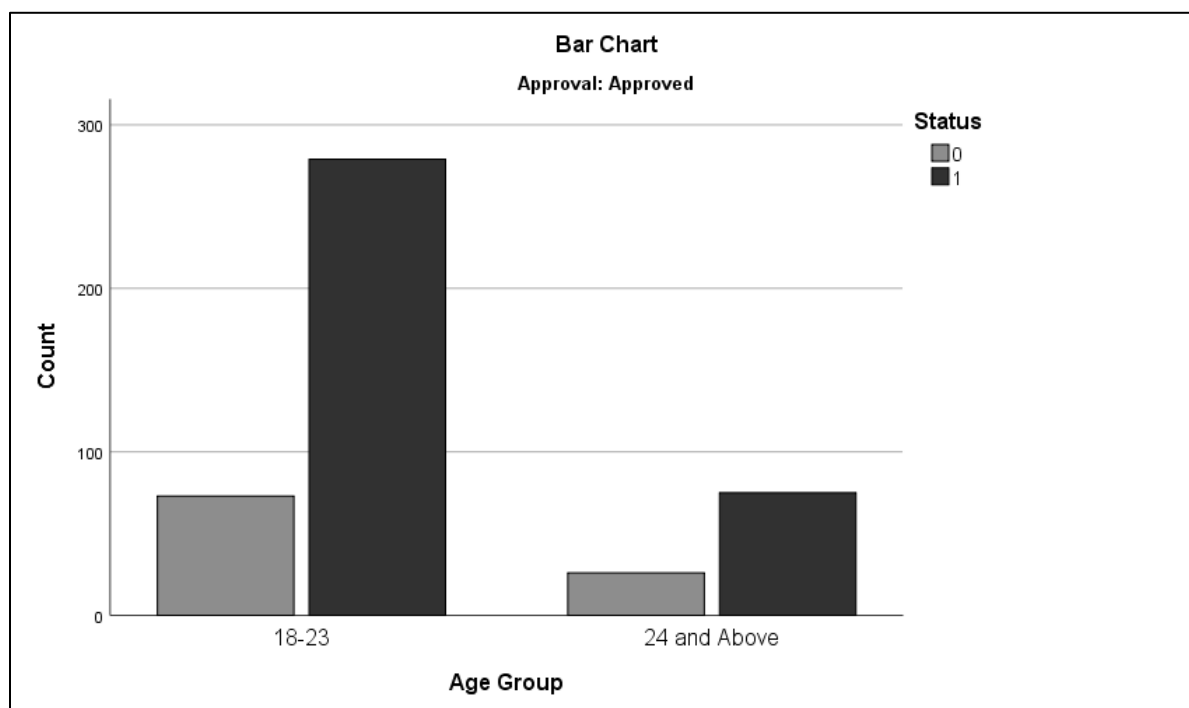
Out of 451 total students in the sample. 139 students are not first-generation and 312 are first generation. One hundred and eleven non-first-generation students persisted and 28 did not persist. In comparison, 241 first generation students persisted and 71 did not persist. There was a high population of first-generation students in my sample, and the persistence rates between the two categories of students appear similar based on the bar chart.

Figure 4*Persistence Rates by Grade Level*

Note. 0 = First-Year 0-29 credits, 1 = Sophomore 30-59 credits, 2 = Junior 60-89 credits, 3 = Senior 90-120+ credits

*Persistence is coded 0 = Enrolled or graduated, 1 = Dropped out or transferred

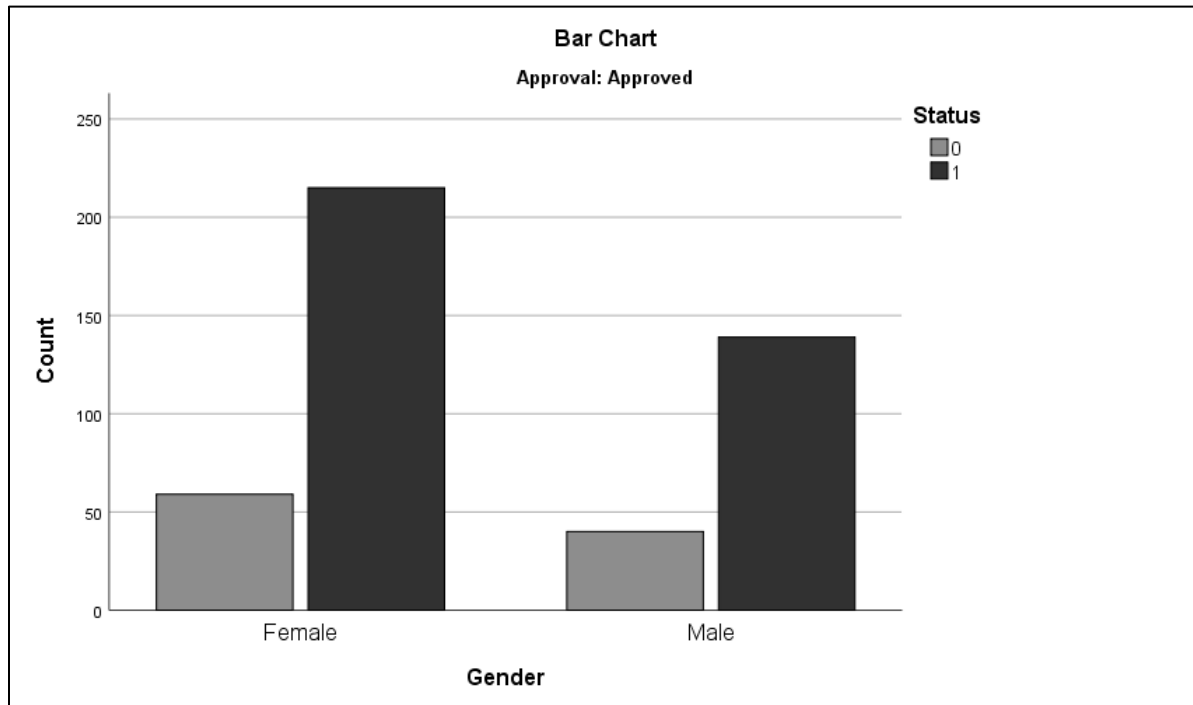
Out of 451 total students in the sample, there were 77 first-year students, 56 sophomore students, 144 junior students, and 174 senior students. Thirty-six first-year students were denied the emergency grant and 41 students were approved. Nineteen sophomore students were denied the emergency grant and 37 students were approved. Twenty-nine junior students were denied the emergency grant and 115 students were approved. Fifteen senior students were denied the emergency grant and 159 students were approved. Senior and junior students appear to persist at significantly higher rates after receiving the emergency grant than first-year students.

Figure 5*Persistence Rates by Age*

Note. 0 = Ages 18-23, 1 = Ages 24 years old and above.

*Persistence is coded 0 = Enrolled or graduated, 1 = Dropped out or transferred

Out of 451 total students in the sample, 352 students were 18-23 years old and 99 were 24 years old and above. Within the 18-23-year-old age range, 279 students persisted and 73 students did not persist. For students 24 years and above, 73 students persisted and 26 students did not persist. Based on the bar chart, there appears to be significantly higher persistence rates for 18-23-year-old students after receiving the emergency grant compared to students 24 years old and above.

Figure 6*Persistence Rates by Sex*

Note. 0 = Male, 1 = Female

*Persistence is coded 0 = Enrolled or graduated, 1 = Dropped out or transferred

Out of 451 total students in the sample, 273 students are female and 178 are male. For female students, 214 persisted and 59 did not persist. For male students, 326 persisted and 91 did not persist. Based on the bar chart, there appear to be similar persistence rates between the categories of students.

Limitations

My research has multiple limitations due to the methodology and data used. While my data provides potential correlations for future research, my results are limited because I am unable to determine causation (Punch & Oancea, 2014). The pre-existing data used in this study was originally intended for admissions and aid eligibility which means that my data sample may

be incomplete because the data sample may not be representative of the general student population (Muijs, 2016).

The data are also limited due to students' reporting errors on their applications which impacts the accuracy of my statistical analyses (Punch & Oancea, 2014). Since the data set comes from one moment in time, it does not reflect the changes that students experience from year to year which does not reflect their accurate gender identities or socioeconomic status (Punch & Oancea, 2014). Some demographic categories of students may not be included in the sample and others may be over- or under-represented due to the nature of the data sample which may influence my conclusions (Punch & Oancea, 2014).

My research is also limited to the pre-determined categories listed in the pre-existing data set (Punch & Oancea, 2014). The limited categories available for racial and sexual/gender identity does not reflect the wide diversity of students' ethnicities or sexual/gender identities (Fonseca, 2017; McNairy, 1996). For example, my data set lists "Asian" as one category without recognizing the broad diversity and differences between individuals who are of Asian descent but who come from a broad diversity of cultural and geographic backgrounds which may influence their persistence in college (Lee & Ramakrishnan, 2020). My data set is also limited to the categories "male" and "female" which do not encapsulate trans* or nonbinary students (Fonseca, 2017).

Another limitation is that students' Pell grant eligibility does not accurately reflect their ability to pay for college (Delisle, 2017). Pell grant eligibility is not a direct substitute for socioeconomic status because not all low-income students complete the FAFSA due to a variety of factors including cultural differences, lack of family support, or ineligibility due to citizenship

status (Delisle, 2017). My categorization of the variable “Pell grant” into two categories also eliminates the differences that students experience within those categories since a student with a \$0 Expected Family Contribution (EFC) may experience college differently than a student with a \$5,000 EFC even though both are eligible for the Pell grant and fall within the same reporting category for this study.

Delimitations

My research was conducted at one mid-sized public university on one emergency grant program; therefore, my research has limited generalizability to other emergency grant programs and other universities due to the limited scope and nature of my study. My research sample is also limited to the students who either sought out or were directly referred to the emergency grant program which means that my sample does not include students who may benefit from the program but who never learned that the program existed. My research is limited to citizens and eligible non-citizens who were able to submit the Free Application for Financial Aid (FAFSA) and does not include individuals who did not submit the FAFSA or to international students or non-citizens who were not eligible to apply.

Biases

I am using secondary data; therefore, it is important to consider how and why my data was collected to reduce potential biases (Muijs, 2016). My data sample may not represent the overall student population since some students may not have heard of the grant opportunity and other students may have decided that the grant application process was too burdensome and decided not to apply (Šimundić, 2013). Some populations of students may be over or under represented in the data sample because of their institutional knowledge and university

connections due to the emergency grant program using word of mouth as their primary marketing strategy (Šimundić, 2013). The grant application reviewers may also have internal biases in their reviewing and awarding that I am unable to control for in my data which also impacts the demographics of my data set. While the grant application is reviewed by three university employees to try to reduce individual biases, collective and systematic biases are still a concern.

The influence of personal bias in my study is limited because I am using a predetermined data set from already completed emergency grant applications. However, my interpretation of the results and my study design are influenced by unintended personal biases. While it is impossible to eliminate biases in data and analysis; by increasing transparency and outlining the potential limitations of my study I hope to decrease the biases present (Šimundić, 2013).

Validity and Reliability

The multiple statistical analyses I conducted on my data increase the validity for my study, including descriptive statistics, Pearson's Chi-Square test, and logistic regressions. By using multiple statistical tests, I did not to rely on just one statistical conclusion to base my results. My extensive and detailed methods section helped ensure the reliability and replicability of my study if other researchers would like to conduct similar studies at other universities to compare results.

Researcher Positionality

I currently work as the Assistant Director of Financial Aid at a mid-sized public university in the Midwest. I have previously served as an Emergency Grant advisor and have assisted with COVID-19 emergency grant awarding. I lead the advising Policies and Procedures

committee in the Financial Aid Office and am in a position to influence policy and practice in aid awarding.

I hold a significant amount of privilege as a white, able-bodied, cis-gendered, third generation college-educated female and have benefitted from these privileges due to ongoing policies, practices, and biases rooted in white supremacy. My study is focused on an aid awarding system that benefits white students over students of color due to structural and systematic inequalities. While I try to address the systematic issues inherent in the awarding of institutional aid, I recognize that there may be inequalities or perspectives that I have missed in my research. I invite ongoing feedback and critiques so that I can grow as a better researcher, employee, and a person.

Human Subject Approval Institutional Review Board (IRB)

I obtained permissions to conduct this study from the St. Cloud State University Institutional Review Board and the Minnesota State University, Mankato Institutional Review Board. I followed all policies and procedures as outlined by the IRB to protect my human subjects. I stored all data securely within Minnesota State University, Mankato's password protected OneDrive system and I removed students' identifying information and replaced the data with individual identification numbers to protect students' identities. All data will be destroyed upon completion of my study and publication of my dissertation.

Conclusion

As emergency grant programs continue to grow and mature, more data-driven evidence is needed to understand their direct impact on persistence rates and overall student success (Anderson & Steele, 2016). My correlational quantitative research on students who applied for

the emergency grant program analyzed whether correlations exist between students' persistence and their receipt of emergency grant funds at a four-year public institution. I ran descriptive statistics, Pearson's Chi-Square, and logistic regressions on the data to determine if there was a statistically significant difference in persistence rates between different student populations.

Chapter 4: Results

This chapter describes the results from my correlational quantitative analysis based on my two research questions. My analysis was conducted on emergency grant applicants from fall 2017 to spring 2021 at a mid-sized, public university. I analyzed existing institutional data from students' emergency grant applications and the student records system, including students' demographic information, socioeconomic status, and persistence rates after receiving or not receiving the emergency grant to explore the following research questions:

R₁: How does socioeconomic status relate to persistence at the university after students receive the emergency grant?

R₂: How does race relate to persistence at the university after students receive the emergency grant?

My data was imported into IBM SPSS Statistics Version 27.0 (SPSS 27) for statistical analysis. I analyzed my data using descriptive statistics including sample size, frequencies, relative frequencies, and percentages. I also analyzed the normality of the data through running descriptive statistics and removing any missing variables in my statistical analyses (Muijs, 2016). I split the data into students who received the emergency grant and students who did not receive the emergency grant and ran descriptive statistics on each category (Table 2 and Table 3). I ran Pearson's Chi-Square tests and logistic regressions on students who received the emergency grant to determine the relationship or effects of the independent variables, (1) socioeconomic status and (2) race on the dependent variable, persistence. I used a logistic regression to test whether students' sex, age, grade level, or first-generation status influenced students' term-to-term persistence after receiving the emergency grant to determine if my

independent variable is correlated with my categorical dependent variables (Muijs, 2016). In this chapter, I list my demographic data and the results of my statistical analyses. I also present my results and provide conclusions based on the data set and analysis.

Descriptive Statistics

My data came from 550 emergency grant applications from August 2017 to May 2021. The demographic information included in the tables below are race, sex, age, first-generation status, and credits earned. The demographic variables are listed for the entire population (Table 5), students who received the emergency grant (Table 6).

Table 5

Demographic Variables for Entire Population

Demographics		N	%
Race	Asian	53	9.6
	American Indian or Alaskan Native	4	.7
	Black or African	175	31.8
	Hispanic of any Race	66	12.0
	Two or More Races	40	7.3
	White	204	37.1
	Missing	8	1.5
Race2	Students of Color	338	61.5
	White	206	37.5
	Missing	6	1.1
Pell Grant Eligibility	Yes	462	15.5
	No	85	84.0
	Missing	3	0.5

Table 5 (continued)

Demographics		N	%
First-Generation	Yes	355	64.5
	No	178	32.4
	Missing	17	3.1
Sex	Female	324	58.9
	Male	224	40.7
	Missing	2	.2
Age	18-23 Years	433	78.7
	24 Years +	117	21.3
Credits Earned	First-Year	86	15.6
	Sophomore	69	12.5
	Junior	180	32.7
	Senior	215	39.1
Persistence Status	Dropped Out	79	14.4
	Enrolled	220	40.0
	Graduated	211	38.4
	Transferred Out	40	7.3
Persisted	Yes	431	78.4
	No	119	21.6

Note. $N = 550$.

Across the entire student population, my research location has a 50% six-year graduation rate and a 34% transfer rate. When looking at my study's subpopulation, currently 38.4% of emergency grant applicants have graduated from the university ($n = 211$) with another 40.0% continuing towards their degree ($n = 220$). Only 7.3% of emergency grant students have

transferred ($n = 40$) and 14.4% have stopped attending college entirely ($n = 79$). This means that 78.4% of emergency grant applicants persisted after receiving the emergency grant. While not enough time has passed to fully analyze the 6-year graduation rate for emergency grant recipients, the initial persistence rates are promising that emergency grant applicants will either meet or exceed the graduation rates for the general student population.

Table 6*Approved Emergency Grant Applications Demographic Variables*

Demographics		Approved	Approved %	Persisted	Persisted %
Race	Asian	44	9.8	40	90.9
	American Indian or Alaskan Native	1	.01	1	100
	Black or African	151	33.5	101	66.9
	Hispanic of any Race	56	12.4	46	82.1
	Two or More Races	35	7.8	26	74.3
	White	164	36.4	138	84.1
Race2	Students of Color	287	63.6	214	74.6
	White	164	36.4	138	84.1
Pell Grant	Yes	417	92.5	326	78.2
	No	34	7.5	26	76.5
First-Generation	Yes	312	69.2	241	77.2
	No	139	30.8	111	79.9
Sex	Female	273	60.5	214	78.4
	Male	178	39.5	138	77.5
Age	18-23 Years	352	78.0	279	79.3
	24 Years +	99	22.0	73	73.7
Credits Earned	First-Year	77	17.1	41	53.2
	Sophomore	56	12.4	37	66.1
	Junior	144	31.9	115	79.9
	Senior	174	38.6	159	91.4

Note. N = 451 approved emergency grant applications.

My study included 451 students who received the emergency grant out of the 550 total emergency grant applicants (82.0% of total applicants). The demographic variables for approved

emergency grant students are listed above. When reviewing the variable “Race”, Asian students (n = 44) had the highest persistence likelihood at 90.9%, whereas Black or African students (n = 151) had the lowest persistence rate at 66.9%. In between these two demographics, Hispanic students of any race (n = 56) persisted at a 82.1% rate, students from two or more races (n = 35) persisted at a 74.3% rate, and white students (n = 164) persisted at a 84.1% rate. When all students of color (n = 287) were combined into one category, white students (n = 164) persisted at a 84.1% rate compared to students of color who persisted at a 74.6% rate.

The variables “Pell grant”, “first-generation”, and “sex” all had similar persistence percentages between the variables (Table 4). Students aged 18-23 (n = 352) persisted at a 79.3% rate compared to older students (n = 99) who persisted at a 73.7% rate. Students’ persistence rates also increased as they earned more credits at the university. First-year students (n = 77) persisted a 53.2% rate, compared to sophomore students (n = 56) at a 66.1% rate, junior students (n = 144) at a 79.9% rate, and senior students (n = 174) at a 91.4% rate.

Research Results

I examined the data from the descriptive statistics, Pearson’s Chi-Square tests, and logistic regressions to answer my two research questions. The results of my statistical analyses are listed below.

Research Question 1 (R₁): How does socioeconomic status relate to persistence at the university after students receive the emergency grant?

A Chi-Square test of independence was performed to examine the relation between students’ socioeconomic status and their likelihood of persisting after receiving the emergency grant. Based on the Chi-Square test, I found that the relationship between these variables was not

significant, $\chi^2(1) = .053, p < .956$ and that non-Pell eligible students were not more likely to persist after receiving the emergency grant compared to Pell eligible students. Pell eligible students persisted at a 78.2% rate compared to 76.5% of non-Pell eligible students after receiving the emergency grant.

I then performed a logistic regression to predict if students' socioeconomic status impacted their persistence rates after receiving or not receiving the emergency grant. I also performed the Hosmer-Meleshow goodness-of-fit statistic and the Wald statistic to test the null hypothesis that $b = 0$. The Hosmer-Meleshow test confirmed the model was a good fit to the observed data ($\chi^2 = 7.638, p = .366, df = 7$). The Wald test confirmed that the coefficients were not equal to zero and that each predictor of the model resulted in a statistically significant improvement of the model. The results of the logistic regression are in Table 7.

Table 7

Logistic Regression Model Predicting Pell Grant Emergency Grant Persistence (n = 450)

Predictor	B	SE	Wald	B	P	95% CI
Pell Grant Eligible	.107	.466	.053	1.113	.818	(.447, 2.772)
First-Generation	.100	.273	.135	1.105	.714	(.647, 1.887)
Female	.028	.252	.013	1.029	.911	(.628, 1.685)
24 years or Older	-1.083	.315	11.807	.339	.001	(.183, .628)
First Year					.000	
Sophomore	-.574	.371	2.393	.563	.122	(.272, 1.166)
Junior	-2.656	.394	45.383	.070	.000	(.032, .152)
Senior	-1.458	.323	20.362	.233	.000	(.124, .438)
R^2					19.7%	

Note. $N = 450$ approved emergency grant applications.

A test of the full model against a constant only model was statistically significant, and the predictors are reliably distinguished between the variables ($\chi^2 = 61.813, p < .000, df = 7$).

Students' persistence rates were statistically significant in the logistic regression model, and the Nagelkerke R-Squared model explained 19.7% of the variance in persistence. Based on the findings, Pell-eligible students were statistically not more likely to persist than non-Pell eligible students after receiving the emergency grant ($p = .818$). The answer to Research Question 1 is that Pell grant eligibility does not significantly predict students' persistence rates after receiving the emergency grant.

Research Question 2 (R₂): How does race relate to persistence at the university after students receive the emergency grant?

A Chi-Square test of independence was performed to determine the relationship between students' race and their likelihood of persisting after receiving the emergency grant. Based on the Chi-Square test, I found a significant relationship between the variables, $\chi^2(1) = 5.593$, $p = .018$ and that white students were more likely to persist after receiving the emergency grant in comparison to students of color. Eighty-four percent of white students persisted after receiving the emergency grant compared to 74.6% of students of color.

I then performed a logistic regression to predict the categorical outcome variable from my categorical predictor variables. I used the Hosmer-Meleshow goodness-of-fit statistic and the Wald statistics to test the null hypothesis that $b = 0$. The Hosmer-Meleshow test confirmed that the model was a good fit to the observed data ($\chi^2 = 4.363$, $p = .823$, $df = 8$). The Wald test confirmed that no coefficient was equal to zero and that each predictor of the model resulted in a statistically significant improvement of the model. The results of the logistic regression are listed in Table 8.

Table 8

Logistic Regression Model Predicting Race Emergency Grant Persistence (n = 450)

Predictor	B	SE	Wald	B	P	95% CI
Asian	-.521	.592	.774	.594	.379	(.186, 1.897)
Black or African	.837	.303	7.606	2.309	.006	(1.274, 4.186)
Hispanic	.052	.438	.014	1.053	.906	(.446, 2.485)
Two or more Race	.321	.481	.446	1.379	.504	(.537, 3.539)
White			11.860		.018	
Pell Grant Eligible	-.075	.477	.025	.927	.874	(.364, 2.362)
First-Generation	.090	.279	.104	1.094	.748	(.633, 1.890)
Female	.123	.259	.255	1.131	.635	(.681, 1.877)
24 years or Older	-1.163	.323	12.944	.313	.000	(.166, .589)
First Year			43.969		.000	
Sophomore	-.615	.380	2.619	.541	.106	(.257, 1.139)
Junior	-2.542	.401	40.130	.079	.000	(.036, .173)
Senior	-1.457	.331	19.389	.233	.000	(.122, .446)
<i>R</i> ²					23.3%	

Note. N = 450 approved emergency grant applications.

The logistic regression model predicted that students' persistence rates were statistically significant, and the Nagelkerke R-Squared model explained 23.3% of the variance in persistence. A test of the full model against the constant only model was statistically significant, indicating that the predictors were reliably distinguished between different variables ($\chi^2 = 74.097$, $p < .000$, $df = 10$). The model indicated that white ($p = .018$) and Black or African students ($p = .006$) had significant persistence differences after receiving the emergency grant, with Black or African students 230.9% less likely to persist after receiving the emergency grant than white students based on the odds ratio and controlling for other predictors in the model. The model indicated that there are no significant persistence differences for Hispanic students ($p = .906$), students with two or more races ($p = .504$), or Asian students ($p = .379$). The answer to Research

Question 2 is that the racial categories white or Black or African significantly predict students' persistence rates after receiving the emergency grant.

Additional Logistic Regression Variables

Based on the logistic regression, I found that students had statistically significant persistence rates depending on grade level. Junior ($p < .000$) and Senior ($p < .000$) students showed statistically significant persistence differences after receiving the emergency grant. Junior and Senior students persist at 7.9% and 23.3% higher rates respectively compared to first year students based on the odds ratio and controlling for other predictors in the model (Table 7). Students' age also had a statistically significant impact on persistence after receiving the emergency grant ($p < .000$). Students who were 24 years or older were 31.3% less likely to persist compared to students 18-23 years old based on the odds ratio and when controlling for other predictors in the model. In comparison, the variables Sex ($p = .635$), and First-Generation status ($p = .748$) were not statistically significant variables in predicting students' persistence rates after receiving the emergency grant.

Conclusion

In this chapter, I listed the demographic data, analyses, and results for each research question. Based on the findings from my research, Pell grant eligibility does not significantly predict students' persistence rates after receiving the emergency grant. I also found that race impacts persistence after receiving the emergency grant and that Black or African and white showed statistically significant persistence differences after receiving the emergency grant compared to other racial categories of students. There were no significant persistence differences between Hispanic students of any race, students with two or more races, and Asian students.

Finally, I found that credits earned and age have a statistically significant difference in students' likelihood of persisting after receiving the emergency grant. A discussion of my study results is listed in Chapter 5 where I tie my study results to the literature and theoretical framework. I also further list the limitations of my study, the implications for my research, and the opportunities for future research.

Chapter 5: Discussion

In Chapter 1, I provided the background of my study, problem statement, significance, overview of my methodology, research questions, objectives and outcomes, limitations, delimitations, assumptions, and key terms. In Chapter 2, I provided my literature review, including discussing current financial aid programs, students' college experiences based on race and socioeconomic status, and information on existing emergency aid programs. I also gave an overview of my research site and outlined the three areas of my theoretical framework: Sanford's Theory of Challenge and Support. In Chapter 3 I listed my study methods, including the setting and environment, population, methodology, data analysis plan, assumptions, and limitations. In Chapter 4, I discussed the results of my study, including looking at my demographic variables, Chi-Square analyses, and logistic regressions of my data set. I examined if there were persistence differences after students received the emergency grant based on socioeconomic status and race. In Chapter 5, I discuss the results found in Chapter 4 and discuss my results in relation to the existing literature and theory as well as the opportunities for future research and policy and practice recommendations.

Results

The purpose of this study was to determine whether the emergency grant program at a four-year public institution was correlated with increased student persistence, and if students' socioeconomic status and race were correlated with their likelihood of persisting after receiving the emergency grant. My quantitative correlational study measured the relationship between the dependent and independent variables to determine if correlations existed between students' socioeconomic status and race and their likelihood of persisting after receiving or not receiving

the emergency grant. My study added to the current literature on emergency grants by determining whether the emergency grant program successfully increased persistence rates for grant recipients at my four-year public research location.

I studied the 451 students who received the emergency grant out of the 550 total emergency grant applicants (82% of total applicants). I found that Pell grant eligibility did not significantly predict students' persistence rates after receiving the emergency grant ($p = .818$). I also found that race was correlated with student persistence after receiving the emergency grant, with African American ($p = .006$) and white students ($p = .018$) having statistically significant persistence differences after receiving the emergency grant. There were no significant persistence differences between Hispanic students ($p = .906$), students with two or more races ($p = .504$), or Asian students ($p = .379$). When reviewing the additional variables in my logistic regression, the variables credits earned and age had statistically significant differences in students' likelihood of persisting after receiving the emergency grant. Gender and first-generation status were not statistically significant predictors of students persisting after receiving the emergency grant. In the following sections, I discuss the results in relation to the literature.

Research Question 1 (R₁): How does socioeconomic status relate to persistence at the university after students receive the emergency grant?

In response to my first research question, my logistic regression analysis and Chi-Square test did not find statistically significant differences in Pell-grant and non-Pell grant eligible students persistence rates after receiving the emergency grant. Pell eligible students persisted at a 78.2% rate compared to 76.5% of non-Pell eligible students after receiving the emergency grant. This finding supports that all emergency grant applicants had a large financial need regardless of

Pell grant eligibility since all students in the study had a high financial need with an EFC of 8,000 or less.

Financial Need. In 2017, between 34% and 39% of undergraduate students at the university had an EFC of 7,000 or less, with 50% of full-time undergraduate students receiving some form of need-based financial aid to help fund their education. This high percentage of financial need in the student population supports that students, both within and outside of Pell grant range, need financial assistance to attend college. All students eligible for the emergency grant are already considered high need students because the emergency grant's EFC eligibility range is limited from \$0 to \$8000. Students are also required to document their unexpected expenses when applying for the emergency grant, which further supports that all applicants have a high financial need, regardless of Pell grant status. It is logical that the difference between a \$0 and an \$8,000 EFC was not significant in the results because all eligible students have low EFC numbers and documented unexpected expenses. Pell grant eligibility has also been critiqued for being used as a direct substitute for socioeconomic status because it does not necessarily reflect students' ability to pay for college, which may also explain the lack of persistence differences between Pell grant and non-Pell grant eligible students (Delisle, 2017).

Family Support. Students with a \$0 to \$8,000 EFC have limited family support as measured by their FAFSA application (NASFAA, 2020). Lack of family financial support impacts student degree completion by forcing decisions related to work and debt that compromise students' abilities to be successful in college (Christie et al., 2001). Low-income students often cannot rely on family support and struggle to balance classes, family obligations, and the number of hours they work to make ends meet (Johnson et al., 2009; Soria et al., 2013).

Students who work during college also struggle to balance finances due to multiple and irregular income streams, which makes it difficult to plan for unexpected expenses (Gerwirtz & Thornton, 2018).

Students outside of Pell grant range struggle to make ends meet while in college, and often do not have savings to fall back on when a financial emergency arises (Broton & Goldrick-Rab, 2017; Martinez et al., 2016; Smith, 2017). The percentage of students who struggle to cover expenses while in college are significantly higher than just Pell grant eligible students since 38% of students report they borrowed money from family or friends to help cover bills and more than half of college students face some form of food insecurity (Broton & Goldrick-Rab, 2017; Martinez et al., 2016; Smith, 2017). The high percentages of low-income college students who struggle with covering living expenses, transportation, childcare, etc. may explain why there are no persistence differences between Pell and non-Pell eligible students because all emergency grant eligible students are already high need students and who expressed an acute need for additional funding assistance.

Research Question 2 (R₂): How does race relate to persistence at the university after students receive the emergency grant?

In response to my second research question, students of color and white students had significant persistence differences after receiving the emergency grant. When broken down further demographically, white and African American students had statistically significant persistence rate differences, whereas Asian students, Hispanic students, and students from two or more races did not have statically significant persistence rates. My research results reflect national demographic trends that white students persist at higher rates than other student demographics (NSC, 2019; Shapiro et al., 2017). My results also corroborate prior research

findings that African American students are disproportionately impacted by financial hardships in college compared to their peers, which influences their college graduation rates (Macartney, 2013).

Black Students' Financial Hardships. I found that Black or African students persisted at lower rates than other racial groups after receiving the emergency grant. Black or African students' low persistence rates reflect national persistence patterns since Black students have the lowest six-year completion rate of any racial demographic group (NCES 2020b; Shapiro et al., 2017). Black or African students' low persistence rates after receiving the emergency grant also matched my research location's lower African American student persistence rate since African American students have a 28% six-year graduation rate in comparison to white students who have a 53% six-year graduation rate.

Black students' lower academic and socioeconomic resources are cited as the two biggest reasons for similar achievement gaps nationally, accounting for 68% of the discrepancy between graduation rates (Ciocca Eller & DiPrete, 2018). Black students are disproportionately impacted by financial hardships in college compared to their peers, which influences their college graduation rates (Macartney, 2013). In 2019, the median income for Black families was only 60% that of white families and the percentage of Black young adults living in poverty was almost double that of white or Asian youth (IHEP, 2010; Ma et al., 2020). Black students have a greater overall need for financial aid to attend college because Black families have lower family wealth and incomes compared to white families (Goldrick-Rab et al., 2014).

Low socioeconomic status is a significant indicator of Black student college persistence because low-parental income means that Black students do not have family financial support to

stay in college when an unexpected financial emergency arises (Titus, 2006). Black students' low family financial support is also why Black students are statistically more likely to apply for emergency grant assistance while in college compared to other demographic groups (Geckeler, 2008; Herk, 2016). While Black student apply for emergency funding at higher rates, their low persistence rates after receiving emergency funding indicates that the \$1,000 in emergency aid is not enough to offset the disproportionately high financial need Black or African students experience while in college.

Hispanic Students. Hispanic students did not have significantly different persistence rates compared to white students after receiving the emergency grant. This finding is surprising because Hispanic students both national and locally have statistically lower persistence rates compared to white students. Nationally, Hispanic students have a 10% lower 6-year graduation rate compared to their white peers (54% compared to 64%) (NCES, 2020b). Locally, at my research location, Hispanic students also have significantly lower graduation rates compared to their white peers (53% compared to 42%).

Hispanic students nationally persist at significantly lower rates than their white peers for a variety of factors including systematic disparities such as underfunded K-12 school systems, poverty, and negative campus climates (Field, 2018). Hispanic students are also statistically more likely to live near poverty compared to their white peers, with Hispanic families making 63% the median income of white families (IHEP, 2010; Ma et al., 2020). Hispanic students are thus less likely to have family income or resources to fall back on when a financial emergency arises compared to their white peers which creates and supports persistence disparities (Titus, 2006). This supports the existing literature that financial aid plays a key role in students of

colors' reduced graduation rates due to their high financial aid unmet need totals, compared to their white peers (Dulabaum, 2016; Kim, 2004; Long & Riley, 2007).

Students from Two or More Races. Students from two or more races did not have statistically significant persistence differences compared to white students. My research results match national data because students from two or more races have a 60% six-year graduation rate compared to 64% of white students (NCES, 2020b). However, at my research location, students from two or more races have a significantly lower six-year graduation rate (39%) compared to their white peers (53%). Based on local graduation rates, I would have expected to see statistically significant reduced persistence rates from students from two or more races compared to white students.

Additional Variables

I found statistically significant persistence differences depending on grade level and age. Juniors, seniors, and students aged 18-23 were more likely to persist compared to first-year students and students aged 24 and older. Students' sex and first-generation status were not statistically significant in predicting students' persistence rates after receiving the emergency grant.

Age Matters. I found that traditional aged college students (18-23) persisted at higher rates after receiving the emergency grant compared to non-traditional students (24+ years old). The results of my study match national statistics because students aged 20 or younger persist at a 76.9% rate; students 21-24 persist at a 57.6% rate; and students 25 or older persist at a 53.3% rate (Nietzel, 2019). Non-traditional students also have significantly lower graduation rates compared to traditional students, with 20% of students aged 24-29 years and 16% of students

aged 30 years or above graduating within six years compared to a 62% of students across demographics (NCES, 2011; NCES 2020a).

Non-traditional student persistence is important for institutions to consider because 40% of undergraduate students in the United States are defined as non-traditional (CLASP, 2015). Although national college demographics are changing, colleges are still catering primarily to the needs of traditional aged students with only 58% of colleges and universities surveyed offering non-traditional student support services (Hittepole, 2019). Non-traditional students report experiencing limited institutional flexibility and do not see colleges as meeting their unique needs (Goncalves & Trunk, 2014). Both of these items impact non-traditional students' ability to stay enrolled and earn their degrees and may account for the significantly lower persistence rates of older students in my logistic regressions (Goncalves & Trunk, 2014).

Seniors Stick it Out. I found that emergency grant recipients are significantly more likely to persist in college the closer they are to completing their degrees, with juniors and seniors being more likely to persist than first year students after receiving emergency grant funding. My research results reflect national data since 30% of undergraduate students who leave college do so their first year with another 14% of first-year students transferring to another institution before their sophomore year (Hanson, 2021; NCES, 2020b; Nietzel, 2019). Across all demographics, students who have earned 24 or more credits are significantly more likely to complete their degree than students who earned under 24 credits (Lin et al., 2020).

There are many reasons that students may not persist at an institution, including academic issues, financial concerns, and institutional fit (Nietzel, 2019). A significant portion of studies only focus on students dropping out during the first year, so it is important to look at student

persistence rates across all class levels since barriers to persistence vary during a students' time in college (Ishanti & DesJardins, 2003). The amount and timing of financial aid has significant impacts on student persistence, with the most impact occurring during the third year of college (Ishanti & DesJardins, 2003). The emergency grant program as a type of financial assistance may have been a factor in helping junior and senior level students persist towards their degrees. However, completion of academic milestones has also been tied to long term college success so these students may have persisted with or without emergency grant funding (Lin et al., 2020).

Limitations

My research has multiple limitations due to the methodology and data used. While my data provided potential correlations for future research, my results were limited because I was unable to determine causation (Punch & Oancea, 2014). It is unclear whether the emergency grant program impacted student persistence, or whether emergency grant recipients would have persisted without additional emergency funding.

Data Set Limitations

The pre-existing data used in my study was originally intended for admissions and aid eligibility which means that my data sample may be incomplete because it may not be representative of the student population (Muijs, 2016). The data are also limited due to students' application reporting errors or missing variables which impacted the accuracy of my statistical analyses (Punch & Oancea, 2014). My data set does not reflect the changes that students experience from year to year, such as socioeconomic status and income changes because the data set only came from one moment in time (Punch & Oancea, 2014).

My research has limited generalizability to other emergency grant programs and other universities since my research was conducted at one mid-sized public university on one emergency grant program. Due to the limited scope and nature of my study, my results may not apply to other types or sizes of universities or emergency grant programs with different student body compositions or different emergency grant administrative practices. My study population also only included students who either sought out or were directly referred to the emergency grant program which means that my sample did not include students who may benefit from the program but who never learned that the program existed.

Measuring Socioeconomic Status

My results regarding persistence and socioeconomic status were limited since the majority of approved emergency grant applicants were Pell grant eligible ($n = 417$). Only 34 emergency grant recipients were not Pell grant eligible, which is a limited sample size that reduces the generalizability of my results. Categorizing students into two categories (Pell Grant eligible and non-Pell grant eligible) also reduces the nuances within those categories because a student with a \$0 EFC may have a significantly different likelihood of persisting compared to a \$5,000 EFC student even though both categories of students are Pell grant eligible.

Socioeconomic status may also have a greater impact on persistence if the EFC range for the emergency grant was expanded to include more students outside of Pell grant eligibility range.

Pell grant eligibility also does not accurately reflect students' ability to pay for college (Delisle, 2017). Pell grant eligibility is not a direct substitute for socioeconomic status because not all low-income students complete the FAFSA due to a variety of factors including cultural differences, lack of family support, or ineligibility due to citizenship status (Delisle, 2017). The

FAFSA is also based on tax information from two years prior which may not accurately reflect students' and families' current financial situations (NASFAA, 2020).

Racial Categories

My research is limited to the pre-determined categories listed in the pre-existing data set. The limited categories available for racial identities do not reflect the wide diversity of the student population (Fonseca, 2017; McNairy, 1996). For example, listing students from two or more races as one demographic category limits my analysis and understanding of the diverse experiences of students depending on what racial or cultural backgrounds from which they come.

My data set did not have enough Native American or Alaskan Native students to include in my logistic regression which meant I was unable to analyze how emergency grant funding impacted indigenous student persistence rates. My data set limitations are similar to national trends because many quantitative projects do not have enough indigenous participants in their data sets to include indigenous students in research (Lopez, 2020). Targeting emergency grant outreach to Native American or Alaskan Native students is one way to increase participation rates so future research studies can include indigenous students in their analysis.

Sex Categories

Similar to race, I was limited on how I characterized student's sex for my research. I use the term sex instead of gender for my research because my data set only had the options "male" and "female" which do not account for non-binary or trans* students' experiences. I hope that college applications continue to expand their demographic categories so that students can list their accurate gender identities and so that researchers can further understand trans* and non-binary students' college experiences.

Implications for Future Research

This study contributes to the scholarly canon by providing data-driven evidence on how an emergency grant program at a four-year public institution impacted students' persistence. My research addressed an existing gap in the literature because there is still considerable research to be done on varying programs' effectiveness at increasing persistence and graduation rates, especially at the four-year college level (Anderson & Steele, 2016; Kruger et al., 2016). My study adds to the literature by providing data on program effectiveness based on student demographic categories as there are only a limited number of prior studies evaluating emergency aid program impacts (Herk, 2016).

Future Studies on Socioeconomic Status

My results on socioeconomic status are limited due to the small sample size of non-Pell eligible students. I recommend that future studies expand the emergency grant eligibility criteria to include students with less financial need to determine if statistically significant persistence differences exist between Pell grant eligible and non-Pell eligible students. By looking at expanded EFC ranges, researchers can obtain data on whether socioeconomic status is statistically significant once students with less documented financial need are included in the study. If students with less financial need persist at significantly lower rates than students with high financial need, it would support either continuing to keep the EFC range low to provide financial support to the students who are financially struggling the most or keeping the expanded EFC range to help the most students possible to increase overall university persistence rates.

Future Studies on Race

An intended outcome of the emergency grant program is to increase persistence rates for students of color who have an increased likelihood of leaving the university due to financial concerns. Black or African students persisted at significantly lower rates than their white counterparts so it is important that researchers continue to study whether additional support structures, such as a higher emergency grant award totals or additional community and academic supports, decrease the persistence gap. Future researchers should look into what factors most influenced Hispanic students' high persistence rates to see if these factors can be replicated or adapted to increase Black or African students' persistence rates. Ideally, researchers should conduct control trials where some students receive funding under the current grant program while others receive funding in conjunction with additional support structures to see if statistically significant persistence differences occur. Based on the results of the study, the university can then adjust and fine-tune their grant program by adding additional supports to best serve the needs of their diverse student population.

I found that Hispanic students did not have statistically significant persistence differences compared to white students, which is significant since national and local data trends show that Hispanic students persist at significantly lower rates than their white counterparts (NCES, 2020b). I recommend that future studies focus on Hispanic student populations to see if emergency grant funding makes a significant difference in Hispanic students' persistence rates or if there are other factors that helped these students persist in college. Further quantitative and qualitative research, including interviews and surveys would provide additional information and

context for why more Hispanic students stayed enrolled after receiving the emergency grant than were expected based on national and local persistence trends.

Additional Variables

My research matches national data trends that students persist at higher rates the further they are in their college careers (Hanson, 2021; NCES, 2020b; Nietzel, 2019). Juniors' and seniors' higher persistence rates are logical because the further a student gets in their program and the more time and resources they invest in their degree, the more likely they are to continue to graduation. Based on these findings, I recommend that the university conduct further targeted persistence efforts based on grade level. The current emergency grant program does not seem to be enough to keep first-year students enrolled, so other persistence efforts should continue to be explored and researched through additional surveys and interviews with first-year students who left the university to help determine what prevented them from persisting. I also recommend that the university continue to fund the emergency grant program for upper-level students to promote their high persistence and graduation rates at the university.

I also found that older students (24 years and older) persist at significantly lower rates than traditional aged students (18-23 years old). This matches national trends that traditional aged students are more likely to persist and complete their degrees than their older student counterparts (Nietzel, 2019). With national college student demographics shifting and an increasing number of college students being classified as non-traditional, it is important for colleges to learn how to support their older student populations to increase overall college persistence rates (Hittepole, 2019). Future surveys and interviews should ask older students what prevented them from persisting and if additional support services would help them stay enrolled.

Additional Variables to Account for in Future Research

I did not account for GPA in my logistic regression, which may account for significant persistence differences in emergency grant recipients. Students with lower exam participation rates and students who failed early exams are statistically less likely to persist in their college careers (Baars & Arnold, 2015). GPA also has a statistically significant relationship with first-year persistence rates, which may account for the significant persistence differences between first-year students and junior and senior students because first-year students with low GPA rates are statistically less likely to persist to their later years of college (Ishanti & DesJardins, 2003). I recommend future researchers conduct linear regressions to look at the relationship between GPA and persistence rates for students who received emergency grant aid.

There are countless other independent variables that I did not include in my logistic regression that may increase the R value of the model. Other potential independent variables to consider include parental education, student employment, living in the Residence Halls, social engagement on campus, being involved in learning communities, etc. The additional variables that I list are not all encompassing, but a jumping off point for future research and opportunities to learn more about what helps emergency grant recipients persist in college.

Research Design

My research was done at one mid-sized public university, consequently, while my results can be extrapolated to other mid-sized public institutions with similar student demographics, they are not generalizable to other types of institutions, such as community colleges or private, for-profit colleges. More quantitative emergency grant research studies should be done at other types of institutions to determine if there are differences in the results depending on the

emergency grant program and the institution type. Specifically, more research should be done at colleges and universities with higher Native American/Alaskan Native populations so that indigenous students can be included in logistic regression analyses.

Future qualitative research would help bridge any gaps in my current study, especially regarding students' experiences taking part in the emergency grant program (Punch & Oancea, 2014). Potential qualitative questions for students who participated in the emergency grant program are:

- 1) What financial emergency prevented you from completing your degree?
- 2) What dollar amount do you feel would make a significant difference in your ability to stay enrolled?
- 3) How did you hear about the emergency grant program?
- 4) Did you encounter any barriers applying for the emergency grant?
- 5) What aspects of the emergency grant program (emergency funding assistance/counseling/additional campus resources) were the most beneficial to you and why?
- 6) Did you utilize the additional community or campus resources offered? If not, why?
- 7) If you did not stay enrolled after receiving the emergency grant, what prevented you from staying enrolled?
- 8) Are there additional services or resources that would have helped you stay enrolled?

Additional qualitative research would provide insights on the students' experience with the emergency grant program, the aspects of the program they felt were most beneficial, and the

additional barriers they experienced that prevented them from completing their degree, even after receiving emergency grant funding.

Implications for Theory

The emergency grant program was created to increase student success and persistence at the university. I used Sanford's Theory of Challenge and Support (1967) to determine whether the emergency grant program bridged the gap between students in crisis and the resources available to them. Sanford's theory framed how students' backgrounds and unique challenges impacted their persistence in college. I also used Sanford's Theory of Challenge and Support (1967) to frame whether the emergency grant program provided adequate institutional support for students to help them overcome current and future financial emergencies. I outline how the three developmental conditions in Sanford's theory were reflected in my research results below.

College Readiness

The first area, college readiness, is whether students have the maturity and positive environmental conditions necessary to be successful in college (Sanford, 1967). My research centered on low-income students and students of color since students' financial and racial demographic backgrounds impact their persistence in college and these two populations of students are statistically less prepared for college compared to other populations of students due to socioeconomic status and racial disparities (Oliverrez & Tierney, 2005). White students' high persistence rates and Black or African students' low persistence rates supports the first developmental condition in Sanford's theory that college readiness impacts college persistence rates. Black or African students often come to college with fewer academic or socioeconomic

resources than their white student counterparts which means that Black or African students start college without the college readiness factors to help them succeed when an unexpected emergency arises (Ciocca et al., 2018; IHEP, 2010; Ma et al., 2020).

Challenges Faced

The second developmental condition, challenges faced, occurs when a situation arises where students have not developed the coping skills necessary to address the situation (Sanford, 1967). Every student who applied for the emergency grant is experiencing a different challenge based on their background and college readiness factors that impact them differently due to their unique life experiences and circumstances. The university designed the emergency grant program to recognize students' unique challenges by allowing students to explain what challenge occurred and how the funding could benefit them.

Students from marginalized identity groups, such as lower-socioeconomic status students and students of color, are more likely to face challenges due to their identity characteristics (Ong et al., 2006). Black or African students face significantly higher challenges while in college, because Black or African students are disproportionately impacted by financial hardships in college compared to their peers, which influences their college persistence rates (Macartney et al., 2013). Black students have a greater overall need for financial aid to attend college due to their lower family wealth and income levels compared to white families, which means that their financial challenges are significantly larger than their peers (Goldrick-Rab et al., 2014). My research supports the second tier of Sandford's Theory of Challenge and Support (1967) because Black or African students' college readiness factors and challenges faced worked in conjunction

together to significantly impact their college persistence rates compared to their more privileged peers.

Support Received

The third developmental condition, support received, refers to environmental conditions that help students overcome the challenges they face in college (Sanford, 1967). Based on Sanford's third developmental condition, universities should work towards providing the optimal level of support to help students learn how to overcome the challenges that inevitably occur (Sanford, 1967). The additional community support structures offered during the emergency grant application process helped account for the high persistence rates for both students who received and did not receive the emergency grant funding (78.4% and 80.3%, respectively). The financial support received and the community support structures work in conjunction with one another to help overcome the challenges faced and address the college readiness factors that impact student success.

The emergency grant program appeared to positively impact white students since they experienced high persistence rates after receiving the funds. However, it is unclear if these additional structural supports helped students persist who would have otherwise left the university without receiving the funds or if the students would have persisted without the funds regardless. White students may not have needed the additional support structures to stay enrolled and graduate because they already experience high graduation rates at my research location.

For students who did not persist, the support received was not enough to prevent a state of retreat or allow students to succeed in higher education (Sanford, 1967). Based on

Sandford's theory, it is important to look at what student demographic groups left the university after receiving the emergency grant to see what other supports the university could provide to increase future enrollment. Since African American students persisted at a lower rate than other categories of students, additional financial advising, outreach, and community support structures should be created help support students overcome the financial challenges they face.

Implications for Policy and Practice

The emergency grant program is a university investment meant to help students stay enrolled when a financial emergency occurs. Students who applied for the grant have significant persistence rates with 78.4% or 431 of the 550 total applicants staying enrolled or graduating. While it is unclear how many students the university retained because of the grant and how many would have stayed enrolled or graduated regardless, the emergency grant program is one way that the university can show they care about student success, while also potentially creating a return on investment through continued student enrollment. Below I outline several recommendations, based on my results, for additional support structures and changes to the emergency grant program to further increase student persistence rates.

Marketing and Outreach

My first recommendation is to increase the marketing budget for the emergency grant program because proactive outreach is an important advising tool to increase student persistence (McCafferty, 2017). After the initial marketing push when the grant was first created, the university now primarily uses word of mouth to advertise the grant program, which is a limited marketing strategy since certain subpopulations of students never hear about the program if they are not well connected to other students or faculty/staff. While students from privileged

backgrounds know how to navigate the university system to gain additional resources, students from marginalized backgrounds do not have access to the same opportunities as their more privileged peers and often struggle to navigate the university system to gain access to additional resources and opportunities (Patton et al., 2016; St. John et al., 2011; Tichavakunda, 2017; Williams et. al., 2021).

Students from privileged backgrounds have the social capital to know when, how, and who to ask for help which allows them to access resources (Patton et al., 2016; Schandavel, 2019). In comparison, students from marginalized backgrounds often do not have the social capital or social networks to know about the grant program unless it is directly advertised to them. This is further compounded because the students most in need of financial counseling are often the least likely to ask for help, and if they do, they are unlikely to know what questions to ask to receive the resources they need (Oliverez & Tierney, 2005). Part-time, low-income, and commuting students are especially unlikely to hear about on-campus opportunities because they spend less time on campus and have less in-person connections to hear about on-campus opportunities (Eckerson Peters et al., 2019).

One way to increase emergency grant marketing is to provide more promotional materials through cross-departmental partnerships. Further cross-departmental partnerships, especially with academic departments, is one way to market the program to more students, since the classroom is often the only venue that part-time and commuting students interact with other students and faculty (Gerwirth & Thornton, 2018; Kuh et al., 2008). The emergency grant program should request in-class announcements to occur every semester to reach the most possible students who need additional financial assistance (Goldrick-Rab & Cady, 2018).

Another way to increase marketing is to conduct calling campaigns and create targeted print materials as a way to proactively reach out to at-risk student populations (Goldrick-Rab & Cady, 2018). The university's Institutional Analytics and Strategic Effectiveness office can provide predictive analytics to proactively identify students most in need of additional support to do additional personalized outreach to instead of relying on word or mouth (Kruger et al., 2016). While these suggestions would require additional financial and time investments from the university, the investment has the potential to pay off over time as more students stay enrolled and graduate from the university due to the additional support and outreach provided.

Additional Advising and Off-Campus Connections

My second recommendation is to increase the extent and amount of emergency grant advising. Students in a state of retreat due to a financial crisis are unlikely to reach out and ask for help, and as a result are unlikely to get connected to resources on- or off-campus (Sanford, 1967). While the emergency grant program connects students with on-campus advisors and community resources, sometimes the initial connection is not enough. Low-income students may not have the self-advocacy in place to initiate contacts with the community resources they need, especially if the resource is off campus (Tichavakunda, 2017; Williams et. al., 2021).

I recommend training emergency grant advisors on how to access and complete community resource applications, such as SNAP or housing assistance, to help students correctly fill out and submit their applications. I also recommend that advisors proactively help students with transportation plans, such as accessing bus schedules, routes, and times, to connect students with the exact busses they need to get to these locations. The university could even provide

transportation vouchers if bussing routes are not convenient. In addition to advisors being trained in public assistance applications, I would also recommend adding a second and potentially third advising appointment or outreach after the initial appointment to make sure the student was able to use the transportation system to get to the location and to see if the student needed any additional application assistance. Proactively connecting students to community resources would help address more chronic financial inequalities that a one-time grant is able to resolve.

To increase emergency grant advisor efficacy, I also recommend supplemental training sessions for emergency grant advisors on the marginalized student experience. Additional trainings should focus on the equity and opportunity gaps that low-income students and students of color experience on college campuses so that emergency grant advisors can understand the ongoing economic and social struggles that marginalized students face when attending college. The trainings should provide information on how to connect students with long term community resources instead of just relying on the band-aid solution of a one-time grant that may not address the ongoing economic concerns that marginalized student populations face (Lawton, 2018).

Conclusion

My study provided correlational data on student persistence rates after receiving an emergency grant. My research supported national data that first-year students, students aged 24 years or older, and Black or African students persisted at lower rates than their counterparts. These findings confirm that while emergency grant funding is one way for universities to financially support students in crisis, more support structures are needed to keep students enrolled.

Institutions should look at focusing their institutional aid dollars on students at the margins of attendance by directing aid towards students who need it the most to stay enrolled (Doyle, 2008). Institutions can do this is through targeted marketing towards student populations that need the support most through predictive analytics and targeted outreach initiatives. The university can also use targeted marketing to reach more students on the margins of attendance and provide them with additional resources they need to achieve in college.

Institutions should also look at expanding emergency grant advising practices to meet the needs of our diverse student population. By expanding the role of the emergency grant advisor through additional trainings and resources, advisors are better equipped to help the student follow through with getting the additional resources they need. The university should consider adding additional in-person support meetings and follow up calls to students to guide them towards on-campus connections and community resources.

While my research contributes to the rising literature on emergency grant programs, more research is needed on how grant funding impacts persistence rates (Anderson & Steele, 2016; Martinez, 2016). My research did not account for students' academic success or other variables that may impact students' persistence rates. Why students do or do not persist in college is multifaceted and complex and more research needs to be done on how different persistence initiatives, student demographic variables, and students' academic success impact students' likelihood of persisting to graduation.

The emergency grant program is one way the university shows it cares about its students through directly providing resources to students in a state of emergency. Continuing to fund the emergency grant program is a tangible way the university invests directly in student success. The

emergency grant program is thus one way the university can put its money where its mouth is to help students persist at the university and achieve their degrees.

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Appendix A: SCSU Institutional Review Board Approval

From: SCSU-RSP GA - Shei Sze Bong rspgrad@stcloudstate.edu
Sent: Thursday, April 22, 2021 10:12 AM
To: Sherlock, Rachel M rachel.sherlock@go.stcloudstate.edu
Cc: Jones, Jennifer B jbjones@stcloudstate.edu
Subject: IRB Decision

Hello Rachel,

IRB understands that your project titled "A Quantitative Analysis of Emergency Grant Persistence Rates" does not actively involve interaction or intervention with participants. Based on the current data sharing agreement with the facility, it is understood that the PI will only receive de-identified data regarding age, race, ethnicity, EFC number, student enrollment status, emergency grant status, and credits earned from the facility. If the PI requires information regarding other demographic variables, then the PI will need to submit the revised data sharing agreement from the facility to IRB.

Please feel free to reach out to me if you have any questions.

Good luck on your research!

Regards,
Shei Sze

Shei Sze Bong
Graduate Assistant
Office of Research and Sponsored Programs
Administrative Services 101
St. Cloud State University
Phone: (320) 308-4932
<https://www.stcloudstate.edu/rsp>

Appendix B: MNSU Institutional Review Board Approval

Minnesota State University, Mankato
Application for Use of Students, Staff or Faculty in Research or Scholarly Activity

ADD YOUR INPUT AND LEAVE EVERYTHING ELSE ON THIS FORM AS IT IS

University procedure requires external researchers who wish to obtain access to participants who are employees or students at MSU, Mankato to submit this application to be reviewed by the Interim Associate Vice President for Research and Dean of Extended Campus for approval. In completing the application, be aware that the persons reviewing it may be unfamiliar with the field of study involved. Present the request in non-technical terms. Data collection may not begin until approval is received from the Interim Associate Vice-President. Include your IRB's approval document with this application and email it to Teresa.Wallace@mnsu.edu with a copy to Julie.Joerg@mnsu.edu

1. Project Title: A Quantitative Analysis of Emergency Grant Persistence Rates

2. Key Personnel:

a. Principal Investigator (PI) Name: Dr. Jennifer Jones
Organization: St. Cloud State University
Address: B241 Education Building, 840 4th Ave S., St. Cloud, MN 56301
Phone Number: 320-308-3953 **Email:** jbjones@stcloudstate.edu

Student Investigator: Rachel Sherlock
Email: Rachel.sherlock@go.stcloudstate.edu

3. Procedures

a. Where will the research be conducted?

Minnesota State University, Mankato

b. Describe how participants will be recruited, including how researchers will first contact potential participants (including how their contact information will be obtained, if applicable), script and/or recruitment materials.

Access to data from students' electronic records and emergency grant applications to obtain age, first-generation status, student race/ethnicity, student gender, Expected Family Contribution Number (EFC), student enrollment (whether the student is still enrolled, graduated, or left the university before receiving their degree), whether the student was approved or denied the emergency grant and how much the student received in the emergency grant, and credits earned.

- c. What exactly will participants be asked to do? Include participants in any control condition, a description of research procedures, data collection tools, time commitment, and anything else that might be pertinent.**

The request is for disaggregated data so there are no participants involved.

Rachel Sherlock will receive the data via the secure system file transfer tool (<https://securefileshare.minnstate.edu/>) from Jerry Oman after IRB and institutional approval. The data for this research will be de-identified and anonymized before Rachel Sherlock receives it. The data will be protected by only being accessed from Minnesota State, Mankato's VPN and stored in Rachel's private university "M" Drive folder. The data will be deleted from the private "M" drive folder after the completion of her doctoral degree.

- d. Please provide a detailed rationale why this study requires access to the specific population at Minnesota State University, Mankato.**

Rachel Sherlock's quantitative study will measure the relationship between the dependent and independent variables to determine if correlations exist between students' socioeconomic status and race and their likelihood of persisting after receiving or not receiving Minnesota State University, Mankato's emergency grant. The purpose of this study is to determine whether the emergency grant program at a four-year public institution is correlated with increased student persistence, and if students' socioeconomic status and race are correlated with their likelihood for persistence after receiving the emergency grant. Rachel's study will add to the current literature on emergency grants to determine whether the emergency grant program successfully increased persistence rates for grant recipients at my four-year public research location. Rachel is particularly interested in studying Minnesota State University, Mankato's Emergency Grant program because she is a Minnesota State University, Mankato employee who works with the emergency grant program and would like to provide data to influence future emergency grant practices.

- e. What are the potential benefits of this research for Minnesota State University?** Minnesota State University, Mankato would benefit from Rachel Sherlock's research because they would receive data on the efficacy of their emergency grant program for marginalized populations that could be used to change current practices and improve future emergency grant recipients' retention rates.

Approved by AVP of Research



Date 4-22-2021

This approval is valid for one year at which time, you must apply for re-approval.

Not Approved by AVP of Research _____ Date _____

AVP's Reason for Withholding Approval: