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DOES THE HELP GRANT HELP?
IMPACT OF THE HELP GRANT ON COLLEGE-GOING IN MISSISSIPPI

A dissertation
presented in partial fulfillment of requirements
for the degree of Doctor of Education
in the Department of Higher Education
at The University of Mississippi

by

JENNIFER D. ROGERS

August 2022

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ABSTRACT

Mississippi appropriates millions of dollars each year to the Higher Education Legislative Plan for Needy Students (HELP) Grant to help college-ready, low-income students pay for college, but little is known about the effectiveness of the program. This dissertation in practice examines the impact of the HELP Grant by comparing the college-going performance of HELP Grant recipients to the college-going performance of similar students who did not receive the HELP Grant. The study finds HELP Grant recipients complete significantly more hours and earn significantly higher GPAs than non-recipients after the first term, first year, and second year of college. With the HELP Grant, minority students and the lowest income students complete nearly as many hours and earn nearly the same GPA as their majority and higher income peers. Nevertheless, the merit eligibility criteria act as an eligibility barrier for many students, so too few students receive and benefit from the HELP Grant. These data will be shared with policymakers to inform the Mississippi budget process and the development of general legislation.

DEDICATION

This dissertation is dedicated to all the students of Mississippi who have ever dreamed the American Dream. Unfortunately, too many of these students have been marginalized by their race or poverty and find the dream out of reach, because they cannot afford to go to college. As a white woman from a privileged upbringing, I do not and never will understand fully the obstacles many students face as they strive to realize their dreams of going to college. But I *see* the struggle, and this dissertation is part of my effort to at least minimize the obstacle of affordability. I love my native state and want what is best for it, but Mississippi will only ever be as strong and productive as her greatest resource, her people. And what phenomenal people they are! I hope I am successful in sharing the results of this study. I hope Mississippi's policymakers listen and engage in a thoughtful and data-driven redesign of Mississippi's student financial aid programs that will help more Mississippi students afford college and ultimately achieve their dreams.

ACKNOWLEDGEMENTS

So many have helped me on this journey in big and small ways, but my first acknowledgment must go to God. Faith has become somewhat unfashionable in academic circles in recent years, but I still believe. I believe God has a plan for my life, and His plan is good and meaningful. I believe this doctoral journey was somehow part of His plan. Thank you, God, for giving me everything I needed to finish the program and this dissertation. I am hopeful for what comes next.

Thank you to my family. Chris Rogers, you were hesitant to support me at first, but you eventually went all in, and I could not have done it without you. You are the best husband, father, and friend a girl could ever hope for. I love you. Ellen and Gunner Rogers, I hope your mom has proven you can do anything you set out to do, no matter how old you are or how busy your life is. Thank you for understanding when I needed quiet to read or write, when the house was less than tidy, and when dinner was Hamburger Helper. I love you both dearly. Gloria Harvey, where do I start? Thank you for reading to me as a little girl, for sacrificing to send me to the best schools, for letting me leave home at 16 to go to MSMS, for paying for college so I did not have the burden of long work hours and loans, for showing me by example it is possible to go to graduate school as a parent with a full-time job, for encouraging me not to give up on my desire to earn my doctorate, for helping us with the kids so much, and just for loving me so fiercely. I love you, Momma.

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Thank you to my professors and advisors. Dr. Phillis George, you have challenged me to be a better scholar and practitioner. I will always remember and employ your analytic guides. Dr. George McClellan, your Education and Society course was quite possibly the most impactful course of my educational career. Thank you for teaching me to use a critical lens to see beyond the water spiders. Dr. David Rock, I do not know how you juggle all your responsibilities and still make time for very needy graduate students, but I appreciate all your time and attention, nonetheless. Dr. Neal Hutchens and Dr. Amy Wells Dolan, thank you for giving me your time and advice on my dissertation committee.

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CHAPTER I: PROBLEM OVERVIEW

Problem of Practice

The good life. The American Dream. Freedom. Life, liberty, and the pursuit of happiness. You can be whoever you want to be. You can do anything you want to do. All it takes is hard work. The sky is the limit. These are the promises made to children growing up in America. They are promises made through the retelling of the American story from the Pilgrims who sailed across the world in search of religious freedom, to Henry Ford who rose from poverty through entrepreneurship and hard work, to Jackie Robinson who broke the color barrier in professional sports, and to Margaret Sanger who championed a new era of personal freedom for women. The list of Americans is long for whom the promise was fulfilled, but the list is longer of ones for whom the promise was broken. That list includes the indigenous people who were stripped of their land and massacred, the Africans sold and enslaved to white landowners, the freedmen whose only choice was to sharecrop, the foster children swallowed by a system they did not choose, the single parents struggling to raise children alone, the rural Americans with no farms to work, and the inner-city youth fighting pressures of hunger and violence. For too many Americans, the American Dream forever remains just that, a dream.

There are so many steps a just society can and should take to help more people fulfill the promise of a good life. In America, the provision of education, particularly higher education, is widely heralded as the most important step. Mississippi Governor William Winter is commonly known for saying, “The road out of poverty runs by the schoolhouse door.” Numerous articles, books, and reports have been published about the benefits of higher education (Hermannsson et

al., 2017; Ma et al., 2019; McMahon, 2009; Perna, 2005). The College Board typically publishes an annual report on the personal and social benefits derived from higher education (Ma et al., 2019).

Despite a well-documented and publicly shared belief in the importance of higher education, states have struggled to provide universal access to higher education, in part because higher education is an expensive undertaking. The Urban Institute (2017) explored the many elements that contribute to the cost of educating students, which include faculty salaries and benefits, student support services, administrative and operational overhead, and infrastructure maintenance. These costs vary by institutional type and by student population. For example, community colleges with large populations of under-prepared and nontraditional students may require a greater investment in student support services, such as advising, whereas residential four-year universities may require a greater investment in facilities maintenance.

States take varied approaches to financing the cost, using appropriations, tuition, and financial aid as levers. States generally appropriate most of their higher education funding directly to institutions, but they vary in the amount set aside for financial aid to students (Baum, 2017). Some states, like Mississippi, appropriate most higher education funds directly to institutions, which allows institutions to keep tuition relatively low; other states, like South Carolina, appropriate less to institutions, but fund state grant programs more generously, thus helping students pay higher tuition prices (Baum, 2017). Many states, however, adhere to neither a high tuition, high aid or low tuition, low aid model (Baum, 2017).

Regardless of a state's approach to higher education finance, nationally, state funding for higher education has decreased while enrollment has increased, resulting in dramatic fluctuations in per student funding. During the Great Recession (2008-2009), states looked for areas to cut

state expenditures, and nearly every state in the nation cut funding for higher education. After adjusting for inflation, 45 states spent less per student in 2018 than in 2008, with an average per-student decrease of 16%. In Mississippi, per-student funding fell by more than 30% (Mitchell et al., 2018). When public institutions received less funding from the state, they looked to other sources to make up the difference, and the most readily available source was tuition. By increasing tuition or allowing institutions to do so, states effectively shifted the cost burden from the state to the student (Baum, 2017; Mitchell et al., 2018).

Given the generally accepted belief in the importance of higher education and its burgeoning cost, both the federal and state governments have implemented policies and created programs to make college more affordable and therefore more accessible. Federal and state financial aid policies and programs have traditionally included need-based grants and merit scholarships, loans, and work study. Less frequently discussed approaches include tax incentives, income-share agreements, and work study, and more recent policy solutions include free college and loan forgiveness. Moving forward, this paper will focus exclusively on grants and scholarships, also known as gift aid.

Gift aid is a form of financial assistance that does not have to be repaid. Gift aid includes need-based grants and merit and performance scholarships. Eligibility for need-based grants is based on family income and the need for financial assistance in paying for college. Eligibility for merit and performance scholarships is based on a student's academic, athletic, artistic, or other abilities. Gift aid may come from the federal or state government, the institution, or a private benefactor. Perhaps the most recognized need-based grant program is the federal Pell Grant program. In 2018-19, the program awarded up to \$6,095 per year to qualifying students (Federal Student Aid, n.d.-a). In 2019, Federal Student Aid awarded a total of \$29.9 billion in

Pell Grants to 8.2 million students (Federal Student Aid, 2019). The Federal Supplemental Education Opportunity Grant is also available from the federal government for the neediest students. Many states also offer need-based grants that can be used along with the Pell grant to offset costs. California alone awards nearly \$2 billion in need-based grants each year (National Association of State Student Grant and Aid Programs [NASSGAP], 2018).

In addition to requiring meritorious academic, athletic, or performance abilities, merit aid programs are usually only available to recent high school graduates and often require full-time enrollment. The federal government does not offer a merit-based grant. Merit aid comes from states, institutions, or private sources. According to NASSGAP (2018), the largest and longest-running state merit aid programs are concentrated in the South. Examples of these programs include Georgia HOPE, Florida Bright Futures, Louisiana TOPS, and the Tennessee Education Lottery Scholarship.

Like the federal government and the states mentioned above, the State of Mississippi offers grants to offset the cost of college and promote college-going. Mississippi lawmakers created three grant programs in the mid-1990s, the Higher Education Legislative Plan for Needy Students (HELP) Grant, the Mississippi Eminent Scholars Grant (MESG), and the Mississippi Resident Tuition Assistance Grant (MTAG). The statutory purpose of the programs is to “make manifest the belief that the continued growth and development of Mississippi requires that all Mississippi youth be assured ample opportunity for the fullest development of their abilities and to recognize that this opportunity will not fully materialize unless the State of Mississippi moves to encourage and financially assist our young people in their efforts” (Post-Secondary Education Financial Assistance Law of 1975).

All three grant programs are available only to Mississippi residents who enroll full-time in a public or not-for-profit institution in Mississippi in a program of study leading to a first certificate, first associate degree, or first bachelor's degree (Mississippi Office of Student Financial Aid, n.d.-a). The definition of full-time enrollment changed from 12 credit hours per term to 15 credit hours per term effective with the 2016-2017 aid year. After meeting initial eligibility criteria, to maintain eligibility, students are expected to maintain continuous, full-time enrollment and a cumulative grade point average (GPA) equal to the GPA required for initial eligibility. Students can receive the HELP Grant, MESHG, or MTAG for up to 8 terms (Mississippi Office of Student Financial Aid, n.d.-a). Before the 2017-2018 aid year, students could receive aid through two grants at the same time if they met the eligibility requirements for both. This process, known as "stacking," was eliminated by the 2017 Legislature. Since then, students who demonstrate eligibility for more than one program receive aid through the program that awards the largest amount (Mississippi Office of Student Financial Aid, n.d.-a).

The HELP Grant is initially available to students who graduated high school within two years of making application, have a high school GPA of 2.5 on a 4.0 scale, score a minimum of 20 on the National ACT (or equivalent SAT), complete a specific high school curriculum, meet income limitations, and demonstrate need by completing the Free Application for Federal Student Aid (FAFSA) and qualifying for a full or partial federal Pell Grant. Qualifying students are eligible for up to full tuition each year if they attend a public institution or an amount equivalent to the tuition of the nearest geographically located public university if they attend a private institution. MESHG is initially available to students who graduated high school within three years of making application, have a high school GPA of 3.5 on a 4.0 scale, and score a minimum of 29 on the National ACT (or equivalent SAT). Students are eligible for up to \$2,500

per year. MTAG is initially available to students who either have a high school GPA of 2.5 on a 4.0 scale and score a minimum of 15 on the National ACT (or equivalent SAT) or who have a college GPA of 2.5 on a 4.0 scale after earning 12 or more college credits and who are not eligible for a full federal Pell grant as determined by the FAFSA. College freshmen and sophomores are eligible for up to \$500 per year, and college juniors and seniors are eligible for up to \$1,000 per year (Mississippi Office of Student Financial Aid, n.d.-a).

The Mississippi Legislature annually appropriates about \$45 million for student financial aid, with the bulk of the investment—more than \$40 million—supporting the three undergraduate grant programs (Mississippi Office of Student Financial Aid, 2019). However, as postsecondary enrollment has increased in the state, funding for the three grants and other state aid programs has not increased accordingly. From 2002 through 2018, the annual appropriation for student financial aid increased 0.2% when adjusted for inflation. During this same time, the number of MESHG recipients increased by 79%, and the number of HELP Grant recipients increased by an exponential 2,138%. The number of MTAG recipients decreased by 32% due to policy changes enacted over the years to contain cost (Mississippi Office of Student Financial Aid, n.d.-b).

The State of Mississippi recognizes the value of higher education by making a substantial investment to support higher education. The challenge, though, for any government is to make funding choices when there are many needs that warrant attention and financial support. In 2019, Mississippi had the highest poverty rate of any state, with an estimated 19.7% of the state's population living in poverty (U.S. Census Bureau, 2019). At just over \$43,500 per year, Mississippi median household income is the second lowest in the nation, and at 5.1%, Mississippi's unemployment rate is the fourth highest in the nation (U.S. Census Bureau, 2019).

In 2019, a Wallet Hub report ranked Mississippi as the least educated state in the union (McCann, 2019). Mississippians suffer poor health outcomes, such as high rates of obesity and high rates of heart disease, that earned the ranking of least-healthy state (United Health Foundation, 2019). Even the transportation infrastructure in the state ranks among the weakest in the nation (U.S. News and World Report, 2019).

Given these struggles and the many competing demands for state funds, it is imperative that decisionmakers have data to inform wise choices for investing the state's limited resources. Mississippi adopted performance-based budgeting guidelines to more wisely allocate scarce resources by using outcomes data to prioritize funding (MacKellar, 2016). Nevertheless, the state has collected little outcomes data with which to effectively evaluate the state financial aid programs and their impact. Therefore, I have chosen to evaluate the HELP Grant, the costliest of the state's financial aid programs, to determine the program's impact on college-going in Mississippi. The outcomes data gleaned can inform policy and budget decisions related to student financial aid.

Positionality

The problem of understanding the impact of state financial aid programs on college-going in Mississippi is relevant to me personally and professionally. This section describes the ways in which my personal and professional experiences have shaped my views of this problem of practice. The findings of this study will also impact my future professional goals and plans.

Personal Experience

I am a native of Mississippi and have lived in the state my entire life, except for the four years I spent in Sewanee, Tennessee for undergraduate school. In fact, I live on the family land my maternal grandparents purchased in 1957. In the tradition of his rural family, my grandfather

bought the land to raise cattle, work he did when he was not barbering six days a week. My grandfather was one of five boys and my grandmother was one of thirteen children, but my grandparents limited their family to just three girls. Although my grandfather completed his formal schooling after the seventh grade and my grandmother graduated high school, my grandparents financially supported their three girls in earning college degrees. My mother surpassed her parents' expectations to earn first a bachelor's degree in education and then a master's degree in business. Like my mother's parents, neither of my father's parents went to college. My paternal grandfather was a carpenter, and my maternal grandmother was a homemaker. Nevertheless, my grandparents financially supported my father as he earned his bachelor's degree and became a Certified Public Accountant.

My parents were both raised in working-class families, but their education enabled them to command higher salaries that moved them from the lower-middle income tier into the middle- and eventually upper-middle income tiers. Because of their own success and economic mobility, my parents valued education. They instilled in me a strong appreciation for education and even encouraged me to leave home at 16 to attend a selective public high school during my junior and senior years. They established the expectation that I, too, would go to college. I never questioned whether I would go to college, only where I would go. I benefited from their income, which enabled me to attend a private liberal arts college without the need for excessive work or loans, but I gained an appreciation for this advantage only after I started working in higher education.

Professional Experience

My immersion into the world of higher education administration began with my first job after college. As an eager liberal arts graduate, I took an entry-level position at Phi Theta Kappa,

the international honor society for community college students. During my five-year tenure at Phi Theta Kappa, I visited community colleges in 23 states. Initially, I was shocked by the contrasts between the two-year college experiences and my own private college experience, from the student demographics to the academic programming. That work experience gave me my first look at the financial obstacles that students overcome to put themselves through school. For the first time, I recognized my own advantage and the powerful role my family's financial situation played in my own educational success.

I left Phi Theta Kappa to accept a position with the Mississippi Institutions of Higher Learning, the state agency that governs the state's eight public universities. I oversaw the development and public launch of the state's first college access website where students could gather information about going to college in Mississippi. Through the planning and development of the website, I conducted focus groups with high school students and parents, school counselors, college admissions counselors, and financial aid administrators. I learned that going to college is a complex process that many students do not have the resources to navigate successfully. I again recognized my advantage in having college-educated parents and attending an academically elite high school with excellent counselors who reinforced my parents' college-going expectations, ensured I was academically prepared, and advised the college choice and admissions processes. I also received my first introduction to the complexities of financial aid.

I now serve as the Director of Student Financial Aid for the State of Mississippi, where I am responsible for administering the state's student financial aid programs. I oversee the daily administration of all undergraduate and graduate grant and loan programs funded by state appropriations. I also advocate for appropriations and policies during the annual legislative session and throughout the year. Perhaps the most fulfilling aspect of my position is the outreach

work I do with high school counselors, students, and families to promote the state's student financial aid programs.

In my current role, I have actively engaged with state aid administrators in other states through membership in NASSGAP. Through NASSGAP I first learned that Mississippi's preference for merit-based aid over need-based aid is not the norm nationally, although it is a preference shared by some other southern states. I also learned about the very large and generous need-based aid programs administered in other states, such as Texas, California, and Washington. Intrigued by what I learned about state aid in other states, I started looking more closely at Mississippi's programs, specifically at *how* the programs are designed and *who* the programs benefit.

As noted above, Mississippi administers three undergraduate grant programs, the HELP Grant, MESG, and MTAG. MESG and MTAG were both created in 1995, and the HELP Grant was created two years later in 1997 (Post-Secondary Education Financial Assistance Law of 1975). With its high ACT score and GPA eligibility requirements, MESG is considered a merit-based aid program. MTAG is considered a residency grant, because the program has less stringent academic requirements that make it accessible to many residents. MTAG, unlike any other state grant program in the nation (Education Commission of the States, n.d.), excludes students who are also eligible for a full federal Pell grant (Mississippi Office of Student Financial Aid, n.d.-a.). Because the HELP Grant requires students to meet both academic and financial requirements, the HELP Grant is considered a need-merit hybrid program with characteristics of both need-based aid and merit-based aid. Table 1 shows the number of recipients and amounts awarded through the HELP Grant, MESG, and MTAG over time.

Table 1*History of State Aid Recipients and Awards, 2010 – 2019*

Aid Year	HELP		MTAG		MESG	
	Awards	Amount	Awards	Amount	Awards	Amount
2009-10	289	\$ 1,265,238	23,227	\$ 13,950,739	1,990	\$ 4,712,408
2010-11	316	\$ 1,528,257	23,297	\$ 13,979,693	2,019	\$ 4,810,293
2011-12	652	\$ 3,153,418	22,490	\$ 13,660,150	2,156	\$ 5,132,949
2012-13	918	\$ 4,852,533	23,481	\$ 13,880,728	2,189	\$ 5,212,308
2013-14	1,381	\$ 7,443,326	23,871	\$ 14,051,117	2,261	\$ 5,388,245
2014-15	1,840	\$ 10,184,010	24,329	\$ 14,377,542	2,409	\$ 5,789,228
2015-16	2,661	\$ 15,117,951	24,537	\$ 14,587,524	2,519	\$ 6,061,836
2016-17	2,912	\$ 16,762,793	22,629	\$ 12,897,356	2,726	\$ 6,390,868
2017-18	3,357	\$ 19,664,346	18,244	\$ 9,988,284	2,908	\$ 6,435,647
2018-19	3,959	\$ 23,921,182	18,872	\$ 10,477,118	3,065	\$ 6,882,878

The Mississippi aid recipient demographic data are not surprising when one considers the program eligibility rules and the correlations between race, socioeconomic status, and academic performance. Students who qualify for a full federal Pell grant are not eligible to receive MTAG, which means MTAG recipients are going to be more affluent than HELP Grant recipients, because the HELP Grant requires students to be at least partially Pell grant eligible. In Mississippi, race and income are related, as evidenced by the fact that median household income for White families is \$54,244 per year, which is almost double that of Black families at \$29,690 per year (U.S. Census Bureau, 2018). Students who meet the academic criteria for MESG are eligible regardless of income, but just as race and income are related, so are race, income and ACT scores. The 2019 ACT *Condition of College and Career Readiness* report indicated that first-generation, minority, and low-income students are significantly less likely to

meet the ACT benchmark scores needed to demonstrate college and career readiness. Although the recipient demographics are not surprising, they are concerning.

When I first took the financial aid director position in 2009, the state awarded about \$1.3 million in HELP Grants to 289 students statewide, about \$14 million in MTAG to 23,227 students, and about \$4.7 million in MESG to 1,990 students (Mississippi Office of Student Financial Aid, 2010). These numbers reveal the state invested far less in need-based aid than in residency or merit-based aid. Inspired by what I saw happening in other states and concerned with the recipient demographics in Mississippi, I started looking for ways to grow the need-based HELP Grant. Over several years, the Mississippi Office of Student Financial Aid (SFA) staff were successful in tripling the size of the HELP Grant through grass roots marketing and counselor education. Then in 2013 and 2014, SFA, in partnership with high school counselors and college access service providers, successfully lobbied state legislators to simplify the HELP Grant application process and align the required core high school curriculum with the existing college preparatory curriculum recognized by the public universities (Post-Secondary Education Financial Assistance Law of 1975). Table 1 shows the history of state grant recipients and awards by program from 2010 through 2019. The numbers reveal rapid growth of the HELP Grant over that time.

Table 2*Selected Demographics of State-Supported Student Financial Aid Award Recipients*

Demographic	All	HELP	MTAG	MESG
Age				
16-24	24,482	3,882	17,797	3,050
25-34	721	31	652	7
35-44	163	0	163	0
> 45	101	0	101	0
Race				
African American	5,050	1,587	3,374	99
Alaskan Native/American Indian	72	11	56	5
Asian/Pacific Islander	491	134	254	101
Caucasian	18,222	1,817	13,911	2,682
Hispanic	355	101	219	40
Unknown	1277	263	899	130
Income				
< \$0	108	49	47	12
\$0	1159	644	403	96
\$1-30,000	3,489	2,092	1,247	145
\$30,001-48,000	3,759	1,071	2,580	134
\$48,001-75,000	4,183	52	3,788	385
\$75,001-110,000	4,607	2	4,099	559
\$110,001-250,000	5,186	3	4,288	969
\$250,000-999,999	621	0	440	197
> \$1,000,000	25	0	17	8
No FAFSA	2,330	0	1,804	552

Based on the personal and professional experiences described above, I bring to this study a deep affection for Mississippi and a desire to improve the state. To improve the state, I believe the state must identify ways to improve the lives of Mississippians. As discussed above, raising educational attainment rates is one way to accomplish this goal. While I see higher education as private good, I also view higher education as a public good (Labaree, 1997). Despite the extensive evidence cited in the introduction of this paper that demonstrates higher education to be a public good, the public policies authorizing student financial aid in Mississippi have resulted in programs that fail to serve large segments of the college-going “public,” because the policies value merit over need. I bring to this study a belief that finite state resources are better invested in need-based aid than merit-based aid. Titus (2006a) identified a positive correlation between a state’s college completion rates and the percentage of state appropriations designated for higher education as well as per student investment in state need grants. The author argued states can increase college completion rates by increasing the percentage of overall higher education funding designated for financial aid, specifically need-based grants.

I intend to use the data regarding the impact of the HELP Grant on college-going in Mississippi to inform state legislators about the program. My hope is that policymakers will use the information to make data-driven decisions to improve state aid program design and to increase program budgets for effective programs. I also intend for this to be just the first study, as other impact studies are needed to better understand MTAG and MESG and how state aid generally impacts retention, academic performance, and in-state residency and employment after graduation.

Contextualization

In the following section, I will contextualize the need to understand the impact of state aid on college-going in Mississippi within a conceptual framework. Through an exploration of related literature, I will demonstrate how the research problem has been addressed by other researchers and how the study will contribute to the larger understanding of the impact of student financial aid. I will also discuss how the study aligns with the principles of social justice, equity and ethics promoted by the Carnegie Project on the Educational Doctorate (CPED).

Conceptual Framework

Three basic concepts provide the framework for this study of the impact of state aid programs on college-going in Mississippi. The study is grounded by the notion that higher education is both a public and a private good as described by Labaree's (1997) theory on the competing political goals of education. On that foundation sits the reality of social stratification. Despite the societal and individual benefits of higher education, African American and economically disadvantaged students are less likely to go to college and less likely to finish. To counter this reality, institutions and governments have created policies and programs, such as financial aid, to minimize the financial barriers to college access and completion. These concepts are considered through the critical theory that some policies, processes, and systems disparately impact some populations. An extensive body of literature related to state and federal financial aid programs provide the context for understanding the potential impact and shortcomings of state aid programs (Castleman & Terry-Long, 2016; Dynarski, 2000; Dynarski, 2003; Heller & Marin, 2002; Ness & Tucker, 2008; Scott-Clayton, 2011; Sjoquist & Winters, 2015). Data on other state programs also offers opportunity for comparison, evaluation, and recommendations related to state aid programs.

Higher Education as a Public and Private Good

In the introduction, I noted that individuals benefit from higher education. The belief in the power of education to promote social mobility has merit. Census data show that a child born into a family in the lowest income quintile has a 45% chance of remaining in the lowest income quintile and only a 5% chance of moving up the income ladder into the top quintile. However, if that same child earns a college degree, the child has only a 16% chance of remaining in the lowest income quintile and a 19% chance of moving into the top income quintile (Greenstone et al., 2013). Individuals with more education on average earn more, have higher employment rates, are less likely to need public assistance, and enjoy lower health care costs as a result of healthier lifestyles (Ma et al., 2019). In addition to earning higher wages and paying higher taxes, people with a postsecondary credential are more community and civic-minded, are healthier, are less likely to depend on social services, and start and attract more businesses than their less educated peers (Ma et al., 2019).

As illustrated above, individuals benefit from higher education, making it what Labaree described a “private good designed to prepare individuals for successful social competition for the more desirable market roles” (1997, p.42). In addition to social mobility, Labaree (1997) pointed out two other competing goals of education, democratic equality and social efficiency. The goal of democratic equality holds that education is necessary for developing Americans who are civic-minded and capable of participating fully in American democracy, and the goal of social efficiency maintains that education is a practical necessity to provide workers and promote economic growth (Labaree, 1997). The goal of social efficiency has been the rally cry to bolster support for higher educational attainment levels in recent years. A Georgetown University study asserted that a postsecondary credential would be required for 65% of all job openings by 2020

and that the number of qualified workers would fall short by five million (Carnevale et al., 2013). States responded to this data and calls from the Lumina Foundation to increase educational attainment rates by setting statewide educational attainment goals. When the writing of this dissertation commenced, Mississippi was one of only seven states that did not have a publicly stated degree attainment goal (Lumina Foundation, 2020). When one considers the benefits to individuals and society, it is not surprising that a 2014 Gallup survey found that 96% of adults think education beyond high school is somewhat or very important.

Socio-economic and Racial Stratification

Students still value a college degree, and so they seek ways to finance the increasing costs. The college finance system features gift aid, student work, and loans. Gift aid is the most desirable form of financial aid because it does not exist as an exchange (payment for work), and it does not have to be repaid (like loans). Students often work long hours or multiple jobs, but as Huelsman (2018) demonstrated, even students who work often cannot work enough to cover the costs. Many students rely on loans. Nationally, 65% of 2019 graduates left college with student loan debt that averaged \$28,650 (The Institute for College Access and Success [TICAS], 2018). In Mississippi, about 415,000 residents have \$15.2 billion in student loan debt, which equates to about \$36,600 per borrower (Federal Reserve Bank of New York, n.d.).

Unfortunately, the existing college finance system impacts students differently, depending on the student's race or socio-economic background. Low-income and minority students are disadvantaged. In every state, families making under \$30,000 per year are expected to pay more than half their annual income as the net price for one year at a public four-year college, and minority students account for one-half to two-thirds of all families making under \$30,000 (TICAS, 2017). More low-income and minority students respond by taking out loans

and in higher amounts than their better resourced and majority classmates. Of graduating students from families earning less than \$40,000 per year, 84% graduated with debt averaging \$31,200, and 85% of African American bachelor's degree recipients graduated with an average \$34,000 in debt (TICAS, 2019). This inequitable cost burden contributes to gaps in college completion. The Pell Institute reported that 58% of wealthy children receive college degrees by 24, while only 11% of poor children receive degrees (Cahalan et al., 2018).

The shift of costs from the state to the student discussed earlier in this paper and the growing reliance on loans have given rise to what is commonly referred to as the student debt crisis or the affordability crisis. Of all students with debt, approximately 17% default sometime within 12 years of separation from school (TICAS, 2018). Of low-income students earning less than \$40,000 with debt, 28% default, a rate that is five times the default rate for more advantaged students, and 38% of African American borrowers default, compared to 12% of white students (TICAS, 2018). Despite the frequent stories of crippling six-figure student loan debt, most students carry much less debt. Also, students with low debt levels are the most likely to default. Nevertheless, the term "crisis" is frequently used to describe the current student debt situation, not only because of the record levels of student debt, but also the unknown ramifications of student debt. Reports indicated that student loan debt is keeping borrowers from fully engaging in the economy by buying homes and starting new businesses and from making other life decisions like getting married and starting families (Norris, 2014).

Critical Theory

Critical theory is a social theory that grew out of the theories of Karl Marx and was further developed by the Frankfurt School of German sociologists, most notably Max Horkheimer and Jürgen Habermas (Lincoln & Guba, 2000). Unlike other social theories that

seek primarily to inform one's understanding of society, critical theory challenges intellectuals to question socially accepted norms, particularly those related to power and marginalization (Lincoln & Guba, 2000). Glesne (2016) asserted that critical theorists study not just beliefs but also "the associated structures, mechanisms, and processes that help to keep [distorting ideologies] in place" (p. 11).

Student loans were designed to extend college access to more students and create a path for upward social mobility, but student debt has become a barrier to wealth creation and financial stability for many low-income and minority students. Instead of promoting social mobility, student debt is perpetuating racial and socio-economic stratification in the United States. My study of the impact of state aid on college-going will take a critical approach in examining the programs to consider who is excluded from college affordability and challenge the system of exclusion.

Merriam (2002) described critical research as asking questions about "whose interests are being served by the way the educational system is organized, who really has access to particular programs...and what are the outcomes of the way in which education is structured" (p. 10). In Mississippi, the state government created the HELP Grant, MESHG, and MTAG to extend affordable access to higher education to all Mississippians (Post-Secondary Education Financial Assistance Law of 1975). MTAG, the state's primary residency grant is not available to students who qualify for a full federal Pell grant (Mississippi Office of Student Financial Aid, n.d.-a). MESHG is only available to students with a minimum 29 ACT score (Mississippi Office of Student Financial Aid, n.d.-a), even though students with high ACT scores are less likely to have financial need (ACT, 2019). The HELP Grant is only available to students with a minimum 20 ACT and to traditional age students who are able to enroll full-time (Mississippi Office of

Student Financial Aid, n.d.-a). In this study, I will view the HELP Grant through a critical lens and question whether state financial aid policy as a “structure,” “mechanism,” or “process” (Glesne, 2016, p. 11) perpetuates racial and socioeconomic stratification in much the same way as student loans.

Literature Regarding the Impact of Financial Aid

Federal and state governments and institutions have implemented policies and created programs to make college more affordable and accessible. In the 2018-19 aid year, the federal government awarded \$41.4 billion in federal grants, states awarded \$12.6 billion in state grants, and institutions awarded \$64.7 billion in institutional grants and scholarships (College Board, 2019). Federal and state financial aid programs have traditionally included gift aid, which is a form of financial assistance that does not have to be repaid. Gift aid includes need-based grants and merit and performance scholarships. Researchers have produced an extensive body of literature in their efforts to evaluate this tremendous investment in student grants and the impact of various aid-related policies. The research conducted on these programs provides a basis for drawing conclusions about similar programs, such as those in Mississippi. In the following pages, I will review the literature related to need- and merit-based aid, and how such aid programs have been shown to impact college-going.

Need-based Aid

Need-based aid is a type of gift aid for which eligibility is based on family income and/or the need for financial assistance in paying for college. As noted above, the Pell Grant program is a large need-based aid program administered by the federal government. Many states also offer need-based grants that can be used along with the Pell grant to offset costs, like the Washington Need Grant or the California Cal Grants. Mississippi does not support a true need-based grant

program that considers only financial need but does offer the HELP Grant, which considers both need and academic merit (Mississippi Office of Student Financial Aid, n.d.-a). Institutions also offer some need-based financial aid, but many institutional need-based grant programs also carry academic eligibility and enrollment intensity requirements. Examples of such programs in Mississippi are the Ole Miss Opportunity Grant and the Mississippi State Promise Program, which both require a 3.0 high school grade point average.

Impact on Enrollment. Researchers have found a positive relationship between need-based aid and college enrollment. Dynarski (2003) revealed the strong effect aid eligibility and award amounts can have on college enrollment, retention, and completion. Using data from the National Longitudinal Survey of Youth, Dynarski employed a difference-in-differences (DID) approach to study the impact of the 1982 elimination of the Social Security Student Benefit Program (SSSB) on college enrollment and degree completion. The author compared outcomes for students who were high school seniors from 1979 to 1981 before the need-based program was eliminated to outcomes for students who were high school seniors in 1982 and 1983 just after the program was eliminated. The study revealed the elimination of SSSB reduced by more than a third a student's probability of attending college by age 23. When generalized to understand the incentive effect of grant aid, the study suggests the probability of attending college increases by 24.3 percentage points and the probability of completing at least one year of school increases by 16.1 percentage points for students who are eligible for aid. The study also found the probability of college attendance increases by 3.6 percentage points for each \$1,000 offer of grant aid.

Kane (2003) determined that California Cal Grants caused college enrollment to rise by 1.2 percentage points for each \$1,000 in Cal Grant aid available. A more recent analysis by

Castleman and Terry-Long (2016) found that Florida's need-based Student Access Grant raised student enrollment at Florida universities by 3.2 percentage points for each \$1,300 invested.

Impact Beyond Enrollment. The impact of grant aid goes beyond enrollment. Scott-Clayton (2011) took a two-pronged quasi-experimental approach to study the impact of the West Virginia PROMISE Scholarship program, a need-merit hybrid financial aid program, on student outcomes such as college GPA, enrollment intensity, degree completion, and time-to-degree. The dual strategies included a regression-discontinuity analysis of outcomes for students with ACT test scores surrounding the eligibility threshold of 21 and an interrupted time series comparison of the outcomes of the two cohorts before program implementation (2000 and 2001) to the two cohorts following program implementation (2002 and 2003). The study revealed the receipt of PROMISE increases a student's likelihood to complete 30 credit hours or more for each of the first three years of college, the likelihood of completing 120 credits in four years, and the likelihood of a student having a 3.0 GPA after four years. Perhaps most importantly, the program increased four-year and five-year bachelor's degree completion rates.

Castleman and Terry-Long (2016) analyzed the need-based Florida Student Access Grant (FSAG), for its impact on student retention and graduation rates. The authors used a regression discontinuity design to estimate the impact of aid for students around the income thresholds established by the grant. Results revealed that FSAG raised improved retention by 4.3 percentage points and increased six-year completion rates by 4.6 percentage points, or 22%. Because FSAG recipients could stack the award with Pell Grants, the authors surmised that increasing the award amount for need-based grants would further improve results.

Wardrip et al. (2018) conducted a mixed-methods analysis of the first year of the Bridging the Gap program, a last-dollar tuition and fees scholarship for low- and middle-income

students at the Camden Campus of Rutgers, the State University of New Jersey, to determine the program's effects on attendance and first-year student performance. The quantitative study was conducted using difference-in-differences analyses of outcomes for recipients and similar non-recipients. A series of 22 interviews were conducted for the qualitative portion of the study. The researchers discovered the program increased enrollment at the institution overall and specifically for low-income and African-American students. The program indicated no impact on enrollment for middle-income, first-generation, and Asian students. After the first year, the program appeared to have little effect on the academic performance (GPA and credits earned) of low-income students but does appear to improve performance for middle-income recipients. In the interviews, recipients reported other benefits, including less financial stress, less student debt, and the need for less work.

A recent working paper from economists Colas et al. (2018) at the Federal Reserve Bank of Minneapolis explored the long-term economic impact of various financial aid policies to identify the policy with the greatest return on investment. The economists developed a series of increasingly complex and dynamic economic models to test different financial aid policies. The models considered the initial investment cost as well as the long-term returns generated by college-educated taxpayers countered by the higher costs of subsidies for less-educated citizens. For every model, need-based financial aid netted the greatest long-term return. The researchers determined the financial aid policy for maximum efficiency is an investment of 70% more aid for students in the lowest 10th of income than for students in the highest 10th of income. They also concluded that any financial aid investment in students below the 45th percentile in income will pay for itself.

Merit Aid

Merit aid is another type of gift aid. Eligibility for merit and performance scholarships is based on a student's academic, athletic, artistic, or other abilities. In addition to requiring meritorious academic, athletic, or performance abilities, merit aid programs are usually only available to recent high school graduates and often require full-time enrollment. Merit aid comes from states, institutions, or private sources. According to NASSGAP (2018), the largest and longest-running state merit aid programs are concentrated in the South. Examples of these programs include Georgia HOPE, Florida Bright Futures, Louisiana TOPS, the Tennessee Education Lottery Scholarship, and MESG.

Impact on Enrollment. Like need-based aid, merit aid has proven effective for increasing enrollment. However, researchers have drawn attention to inequalities in the positive impact of state merit grant aid. Dynarski (2000) reviewed Georgia's HOPE Scholarship and published one of the earliest studies on the stratifying effects of merit-based aid. She used difference-in-differences estimation to compare college-going rates for Georgia students to the college-going rates of a control group of students from other Southeastern states at the time surrounding the introduction of HOPE. Dynarski found the program increased college enrollment of 18-19-year-olds by 7-8 percentage points. Further analysis revealed the increases were concentrated among White middle- and high-income students. The college enrollment of low-income and Black students did not increase at all, resulting in larger gaps in college enrollment among White and Black students and among high-income and low-income students.

In 2001, Harvard University hosted a symposium, called "State Merit Aid Programs: College Access and Equity," during which seven papers were presented to address various aspects of state merit aid and college access. The authors of the papers overwhelmingly agreed

that state merit grant aid is not equally distributed based on race and socioeconomics (Heller & Marin, 2002). In one of the papers introduced at the Harvard symposium, Heller and Rasmussen (2002) examined Florida's Bright Futures program and the Michigan Merit program, which were two of the largest state merit programs at the time. The researchers found that both programs disproportionately represented high-income students. They concluded that such programs hamper a state's ability to raise college attendance rates, because attendance rates are lowest among low-income students (Heller & Rasmussen, 2002).

Ness and Tucker (2008) used stratified random sampling and regression analyses to analyze survey data to determine the impact of the Tennessee Education Lottery Scholarship (TELS) on college access and completion for under-represented students. TELS is a merit-based aid program with relatively low eligibility requirements (a 3.0 GPA or a 19 on the ACT), making it one of the most broadly awarded state merit grant programs in the nation. The survey data was collected through an opinions and perceptions survey administered to 65,000 high school seniors in Tennessee. The researchers learned that minority and low-income students are more likely to perceive the availability of and eligibility for merit grants as important in their college-going and college choice decisions. The authors recognize that large merit grant programs are often inefficient as demonstrated in other studies. Therefore, they conclude that states should target merit aid by designing programs with accessible eligibility requirements and income caps to positively impact the outcomes of underrepresented groups. The type of program the authors recommend is similar to the Mississippi HELP Grant.

Cohodes and Goodman (2014) conducted a recent study of Massachusetts' Adams Scholarship to determine the impact of aid on both college choice and completion, and they discovered merit aid can have a negative impact on college choice. The Adams Scholarship is a

merit-based financial aid program designed to incent high achieving Massachusetts high school graduates to enroll at public in-state colleges. The authors employed a regression discontinuity design to compare students on either side of the eligibility threshold. While the scholarship did prove to slightly increase college enrollment at public institutions by 1.7%, it also decreased net graduation rates. A deeper exploration of the data reveals that Adams scholarship recipients at the margins of eligibility chose to attend lower-quality colleges with lower graduation rates than they would have otherwise attended, thus resulting in lower overall completion rates.

Impact Beyond Enrollment. Researchers have found mixed results regarding the impact of merit aid on factors like completion, outmigration, and employment after college. Sjoquist and Winters (2015) used census data from 25 states with merit-based state grants to explore the causal effects of merit aid on enrollment and completion. The authors used a difference-in-differences methodology to compare data for intent-to-treat and control groups. They found that merit aid has no statistically significant effect on college completion in the states when viewed as one sample, or when examined individually, despite differences in the program requirements from one state to another. The authors did suggest the impact of aid may be increased if targeted to low-income students.

Supporters of merit aid programs value such programs as a tool to prevent brain drain by incenting high-achieving high school students to remain in state for college and careers. Orsuwan and Heck (2009) used longitudinal data to conduct a quasi-experimental study using an interrupted time-series design to assess the impact of state merit grants on student migration. The authors discovered states that implemented merit grant programs experience less outmigration over time than states that did not implement such programs. However, the authors pointed out the trends differ for states based on institutional capacity and college price. States,

like Mississippi, with higher institutional capacity and lower prices see less impact. The authors also recognized that other factors, such as per capita income and overall higher education finance policy influence student migration trends.

Hawley and Rork (2013) analyzed data from the Integrated Postsecondary Education Data System using a first-difference model to examine student migration patterns in 21 states that implemented state supported merit grant programs between 1990 and 2005. In keeping with other studies on state merit grant programs, the results showed the programs did increase rates of in-state enrollment. However, like the Sjoquist and Winters (2015) study, the increases in enrollment did not translate into increases in the number of graduates. The researchers conducted a second analysis using census microdata from the American Community Survey to determine whether states with merit grant programs retained the students who did graduate. States with merit grants did experience an increase in the percentage of young college graduates who remained in state; however, this gain was offset by outmigration of older college graduates, whom the authors believed to be parents who remained in state initially to meet their children's residency eligibility requirements. The net result was that states did not experience an overall increase in the percentage of college educated workers after creating state-supported merit grant programs. The authors concluded that broadly accessible merit grant programs likely yield a low rate of return.

Sjoquist and Winters (2014) used a treatment and control design to examine the impact of state merit grants on long-term retention of graduates in the state workforce. They examined American Community Survey microdata for states with and without merit grant programs. The authors found that states with merit grant programs experienced a 2.8 percentage point increase in the rate of in-state retention of college graduates. The authors further analyzed the data for

states with merit grant programs and found great variation among the states. In Mississippi, the increase was less than 1 percentage point. The authors examined the state-specific coefficients and concluded that factors beyond the availability of merit aid, such as a desirable quality of life, impact in-state retention.

Carnegie Project on the Educational Doctorate

The Doctor of Education program in Higher Education at the University of Mississippi is affiliated with the Carnegie Project on the Educational Doctorate (CPED). CPED-affiliated programs require scholar-practitioners to center research around problems of practice that advance equity (fairness), social justice (fair distribution of power, wealth, privilege, etc.), and ethics (values or moral principles) (Carnegie Project on the Educational Doctorate [CPED], 2017). By seeking to understand the impact of the state HELP Grant on college-going in Mississippi, this study aligns with the CPED principles of social justice, equity, and ethics (CPED, 2017).

Equity

Equity is easily confused with equality. Whereas equality involves treating all people in the same way, regardless of circumstance, equity involves treating people differently depending on their needs and circumstances to ensure they end up in a place of equality or at least equal opportunity. The difference is exemplified through the debate over need-based versus merit-based aid as a means of access to higher education. Merit-based student financial aid promotes equality, because all students who meet certain criteria of merit (competitive GPA, high ACT score, hours of volunteer service, etc.) receive the financial aid, regardless of whether they *need* the financial assistance in order to gain access. Need-based student financial aid promotes equity in college access, because only students who demonstrate financial need receive the aid.

Although need-based aid is not equally available to all students, it helps students with financial need achieve the equal opportunity of higher education by making college affordable. This study seeks to understand the impact of the HELP Grant on the promotion of equity in college access among Mississippians.

Social Justice

Like equity, social justice is a concept concerned with fairness. Whereas the promotion of equity involves the provision of supports that create equality, the promotion of social justice involves eliminating the barriers that create and perpetuate inequality. To achieve social justice in higher education, society must ensure that all students have equal access to equal quality postsecondary education, regardless of the student's race or financial circumstance.

Affordability, or lack of affordability, is a barrier to college access for many students. As indicated throughout this paper, the cost of college is unaffordable for many students. Governments and institutions seek to address issues of accessibility and affordability by subsidizing higher education in public institutions and by offering student financial aid. In Mississippi, the goal of public funding for higher education stated in the state's five-year strategic plan is to "make available an accessible, quality public higher education at an affordable cost that prepares Mississippians to become productive, financially self-sufficient members of society while meeting the human resource needs of Mississippi and its employers" (Legislative Budget Office, 2014, p. 12). Mississippi provides state appropriations to public institutions and offers MTAG, MESG and the HELP Grant directly to students to offset the cost of tuition.

In Mississippi, MESG is awarded to students with high ACT scores as the primary eligibility requirement. As shown above, ACT scores are highly correlated with income, so aid

programs with high ACT score requirements disproportionately benefit higher income students. The evidence is abundant that more affluent students benefit from better K-12 schools, and they have the financial resources to take ACT-prep courses, hire tutors, and take the test multiple times to achieve a higher score. The MTAG program excludes full-Pell eligible students, which disproportionately impacts African American students due to the socio-economic stratification of the races in Mississippi. This study will evaluate the Mississippi HELP Grant as a vehicle of social justice by questioning whether the program eliminates or strengthens systems of inequality, segregation, and marginalization.

Ethics

In addition to upholding the principles of equity and social justice, scholars in CPED programs should also consider the role of ethics in their work and research. Ethics are people's guiding moral principles. They are the system of values people rely upon to make right and good decisions. As the Director of Student Financial Aid for the state of Mississippi, I have an ethical responsibility to be a good steward of the state's resources. This fiduciary responsibility includes making legislators aware of ineffective programs. As an educated citizen of humanity, I also have an ethical responsibility to confront and challenge systems, policies, or programs that disparately impact students because of race or socioeconomic status. This study on the impact of the HELP Grant on college-going in Mississippi will provide data I need to fulfill my ethical responsibilities.

Methodology

This dissertation in practice seeks to determine the impact of the HELP Grant on college-going in Mississippi. Postpositivism, or positivism as Lincoln and Guba (1985) called it, is the research paradigm through which I have approached this study. A postpositive epistemology

maintains there are phenomena in the world that we can measure and about which we can make inferences and generalizations; we can identify correlations and make predictions even if we are unable to determine an absolute truth about such phenomena (Phillips & Burbules, 2000).

Research Questions

The Higher Education Legislative Plan for Needy Students (HELP) Grant purports to promote access to college by making college more affordable. The following research questions guide my inquiry into the impact of the HELP Grant on college-going in Mississippi:

1. Does the HELP Grant impact initial and continued college-going in Mississippi?
2. If so, how does the HELP Grant impact initial and continued college-going?
3. Does the impact of the HELP Grant on initial and continued college-going vary by race and income?
4. If so, how does the impact vary based on a person's race or income?

Choosing Quantitative Methods

A study of the impact of the HELP Grant on college-going in Mississippi could be approached qualitatively or quantitatively. A qualitative study would allow a researcher to explore the impact of specific programs on individuals or groups of individuals who received aid (Creswell, 2002; Glesne, 2016). If taking a qualitative approach, I would want to explore with first-year college students their perceptions of financial aid and the role that aid offers played in their college-going decisions. However, because the purpose of this impact study is to provide data for policymakers to use in budget and policy decisions that will ultimately impact thousands of Mississippi students, quantitative analysis will allow me to hypothesize about the “causes that influence outcomes” (Creswell, 2002, p. 7). Quantitative analysis is also better suited for

research founded on a postpositive theoretical perspective of knowledge creation (Creswell, 2002; Glesne, 2016).

Data Sources and Collection

To address the impact of the HELP Grant on college-going in Mississippi, I will obtain a data file from the Mississippi Office of Student Financial Aid (SFA). The file will contain deidentified student unit records for all Mississippi graduating high school students for the years 2009 through 2019. The unit records will include indicators of the following demographic identifiers: race, gender, date-of-birth, high school, year of high school graduation, county of residence, and income if available from completion of the FAFSA. The records will include indicators of the following academic identifiers: cumulative high school grade point average and highest composite score from a national administration of the ACT. The records will indicate the financial aid program offered, the financial aid award received, and an indicator of enrollment at a two-year college, four-year college, private university, or non-enrollment. The data listed above are obtained by SFA from the following sources:

- High school grade files, containing demographic information, GPA, standardized test score(s), and an indicator of completion of the HELP Grant curriculum for all graduating high school seniors
- ACT files including the composite and sub-scores for each national administration of the ACT for all Mississippi high school students and all Mississippi residents
- Institutional Student Identification Records (ISIRs) generated when Mississippi resident students complete the FAFSA

- College and university enrollment files, containing demographic information, student classification, and hours of enrollment for all Mississippi residents enrolled in the institution
- Mississippi Aid Applications

Statistical Analysis

Within the tradition of quantitative methods, there are several research designs and numerous techniques. I plan to conduct a quasi-experimental study in which I test whether the HELP Grant impacts college-going behavior. Using the SFA data file, I will identify students by enrollment status, race, Pell-eligibility, income, high school academic performance (GPA and composite ACT score), and HELP Grant eligibility status. As utilized by Kane (2003), I will use a statistical approach known as Regression Discontinuity Design to determine whether there are any statistically significant differences in enrollment between students who just meet the HELP Grant eligibility cutoffs and those who just miss the cutoffs.

The statistical tests will allow me to compare the college-going behavior of HELP Grant eligible students with the college-going behavior of similar students who do not receive the HELP Grant. The test will allow me to draw conclusions about the impact of the aid on college-going behavior. I will also consider whether the impact varies for students by race and income. The null hypothesis is the HELP Grant has no impact on college-going for students of any race or income. The alternate hypothesis is the HELP Grant has an impact on college-going and the impact varies for students by race and income.

Summary

This manuscript is the first of three manuscripts that will ultimately comprise a dissertation in practice. In this manuscript, I have introduced the need for impact data about the

Mississippi HELP Grant as a pressing problem of practice. I have discussed my life and work experiences that created the position from which I approach the problem. I have contextualized the problem through a conceptual framework, a review of relevant literature, and discussion of the problem through the lens of the CPED principles of equity, social justice, and ethics. Lastly, I have presented the methodology I intend to employ to address the problem of practice. In the second manuscript, I will present a more detailed description of the data, the statistical tests employed, any limitations or challenges related to the data or the tests, and the results of the statistical analyses in response to the research questions posed. In the third and final manuscript, I will discuss my findings, the practical implications, and any recommendations that may emerge.

CHAPTER II: DATA ANALYSIS

Summary of the Problem

Higher education is well-documented as a path to both personal success and public betterment. Yet, states have thus far failed to provide universal access to higher education in part due to the high cost of higher education. Thus, the cost burden of higher education has shifted over time from the government to students and their families (Baum, 2017; Mitchell et al., 2018). Nevertheless, both the federal and state governments have implemented policies and created programs to make college more affordable and therefore more accessible. Such programs include student grants like the federal Pell grant and the Mississippi Higher Education Legislative Plan for Needy Students (HELP) Grant.

The HELP Grant is a hybrid grant program awarded based on students' financial need as well as their college readiness as demonstrated by meeting certain academic criteria. The Mississippi Legislature annually appropriates about \$24 million of its \$45 million annual investment in student financial aid for support of the HELP Grant (Mississippi Office of Student Financial Aid, 2019). This substantial investment underscores the state's perception of the value of higher education. Despite recognizing the importance of providing affordable higher education to its citizens, the state faces many competing needs and demands for its limited resources. Little outcomes data about the HELP Grant has been collected with which to effectively evaluate the state financial aid program and its impact. This study aims to provide outcomes data for informing public policy.

Positionality

I am a native of Mississippi and the product of an upper-middle income family that values education. My parents instilled in me a strong appreciation for education and established an expectation that I would go to college. Because of our economic situation, I attended elite primary and secondary schools and was able to attend a private, liberal-arts college without taking out loans or working long hours. My first full-time job at Phi Theta Kappa, the international honor society for community college students, was where I first discovered that not all college students share my “traditional” four-year college experience and that many students face tremendous financial obstacles to put themselves through school. For the first time, I recognized my own privilege and the powerful role my family’s financial situation played in my own educational success.

I left Phi Theta Kappa to accept a position with the Mississippi Institutions of Higher Learning (IHL), the public university system in Mississippi, where I oversaw the development and public launch of the state’s first college access website. I learned through that project that going to college is a complex process, and I again recognized my privilege in having college-educated parents and attending an academically elite high school with excellent counselors. I now serve as the Director of Student Financial Aid for the State of Mississippi, where I am responsible for administering the state’s student financial aid programs.

When I first took the financial aid director position in 2009, the state awarded only \$1.3 million in HELP Grants to 289 students statewide. I immediately started looking for ways to grow the state’s only need-based program. In just three years, the HELP Grant tripled in size due to grass roots marketing, counselor education, and political advocacy. Expansion efforts continued, and by 2019, the state awarded nearly \$24 million in HELP Grants to 4,000 students.

Based on these personal and professional experiences, I bring to this study a deep affection for Mississippi and a desire to improve the state by providing higher educational opportunities to more Mississippians.

Contextualization

My study is grounded by the notion that higher education is both a public and a private good as described in David Labaree's 1997 theory on the competing political goals of education. Individuals benefit from higher education through social mobility, making higher education what Labaree described a "private good." The goal of democratic equality holds that education is also necessary for developing citizens who are civic-minded and capable of participating fully in a democracy. The goal of social efficiency maintains that education is a practical necessity to provide workers and promote economic growth. Because higher education is considered a private and public good, people will find ways to pay for it, despite the high cost.

Unfortunately, the existing college finance system impacts students differently, depending on the student's race or socio-economic background. Low-income and minority students are disadvantaged and respond by taking out loans and in higher amounts than their better resourced and majority classmates. This inequitable cost burden contributes in turn to gaps in college completion. Critical theory challenges intellectuals to question socially accepted norms, particularly those related to power and marginalization. Instead of promoting social mobility, student loans and the resulting debt is perpetuating racial and socio-economic stratification in the United States. In this study, I will view the HELP Grant through a critical lens and question whether state financial aid policy perpetuates racial and socioeconomic stratification in much the same way as student loans.

Cementing the conceptual framework of this study is an extensive body of literature produced by researchers to evaluate the annual \$120 billion investment in federal, state, and institutional student financial (Castleman & Terry-Long, 2016; Dynarski, 2000; Dynarski, 2003; Heller & Marin, 2002; Ness & Tucker, 2008; Scott-Clayton, 2011; Sjoquist & Winters, 2015). The literature overwhelmingly agrees that financial aid has a positive impact on enrollment and beyond. I intend to use the data regarding the impact of the HELP Grant on college-going in Mississippi to inform state legislators about the program. My hope is that policymakers will use the information to make data-driven decisions to improve state aid program design and to increase program budgets for effective programs.

Research Questions and Methods

The HELP Grant purports to make a college education more accessible by making college more affordable. Does, and if so, how does the HELP Grant impact initial and continued college-going in Mississippi? Does, and if so, how does the impact of the HELP Grant on initial and continued college-going vary by race and income? To address these general questions, I sought answers to a series of specific research questions:

1. Is there a significant difference in the number of credit hours earned a) after the first fall term, b) after the first year, and c) after the second year for those students potentially eligible to receive the HELP Grant (but did not receive the HELP Grant) and those students who did receive the HELP Grant? To answer this question, I will conduct a series of independent t-tests. The null hypothesis is there is no difference in the mean number of credit hours earned ($H_0: \mu_1 = \mu_2$). The alternate hypothesis is the mean numbers of credit hours are not equal ($H_a: \mu_1 \neq \mu_2$). I further hypothesize that HELP Grant recipients complete more credit hours than non-recipients.

2. Is there a significant difference in the cumulative GPA earned a) after the first fall term, b) after the first year, and c) after the second year for those students potentially eligible to receive the HELP Grant (but did not receive the HELP Grant) and those students who did receive the HELP Grant? To answer this question, I will conduct a series of independent t-tests. The null hypothesis is there is no difference in the mean cumulative GPAs ($H_0: \mu_1 = \mu_2$). The alternate hypothesis is the mean cumulative GPAs are not equal ($H_a: \mu_1 \neq \mu_2$). I further hypothesize that HELP Grant recipients earn higher GPAs than non-recipients.

3. Is there a significant difference in the number of credit hours earned a) after the first fall term, b) after the first year, and c) after the second year for students based on whether they received the HELP Grant and their ethnicity? To answer this question, I will conduct a series of three two-way analysis of variance (ANOVA) tests. The first null hypothesis is there is no difference in the mean number of credit hours earned for HELP Grant recipients and non-recipients ($H_{01}: \mu_1 = \mu_2$). The second null hypothesis is there is no difference in the mean number of credit hours earned for students of each ethnicity – African American, Alaskan Native/American Indian, Asian/Pacific Islander, Caucasian, Hispanic, or Unknown ($H_{02}: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6$). The third null hypothesis is there is no interaction between receiving the HELP Grant and ethnicity ($H_{03}: \text{all } (\mu_{jk} - \mu_j - \mu_k + \mu) = 0$). I further hypothesize that Caucasian students, the ethnic majority, will earn more credit hours than ethnic minority students but that HELP Grant receipt will minimize the completion gap between majority and minority students.

4. Is there a significant difference in the mean cumulative GPA a) after the first fall term, b) after the first year, and c) after the second year for students based on whether they received the HELP Grant and their ethnicity? To answer this question, I will conduct a series of three two-way ANOVAs. The first null hypothesis is there is no difference in the mean cumulative GPA for HELP Grant recipients and non-recipients ($H_{01}: \mu_1 = \mu_2$). The second null hypothesis is there is no difference in the mean cumulative GPA for students of each ethnicity – African American, Alaskan Native/American Indian, Asian/Pacific Islander, Caucasian, Hispanic, or Unknown ($H_{02}: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6$). The third null hypothesis is there is no interaction between receiving the HELP Grant and ethnicity ($H_{03}: \text{all } (\mu_{jk} - \mu_j - \mu_k + \mu) = 0$). I further hypothesize that Caucasian students, the ethnic majority, will earn higher GPAs than ethnic minority students but that HELP Grant receipt will minimize the academic performance gap between majority and minority students.
5. Is there a significant difference in the number of credit hours earned a) after the first fall term, b) after the first year, and c) after the second year for students based on whether they received the HELP Grant and their income? To answer this question, I will conduct a series of three two-way ANOVAs. The first null hypothesis is there is no difference in the mean number of credit hours earned for HELP Grant recipients and non-recipients ($H_{01}: \mu_1 = \mu_2$). The second null hypothesis is there is no difference in the mean number of credit hours earned for students of each income level – Low Pell Expected Family Contribution (EFC), Middle Pell EFC, and High Pell EFC ($H_{02}: \mu_1 = \mu_2 = \mu_3$). The third null hypothesis is there is no interaction between receiving the HELP Grant and income ($H_{03}: \text{all } (\mu_{jk} - \mu_j - \mu_k + \mu) = 0$). I

further hypothesize that High Pell EFC students will earn more credit hours than Middle and Low Pell EFC students but that HELP Grant receipt will minimize the completion gap between higher and lower income students.

6. Is there a significant difference in the mean cumulative GPA a) after the first fall term, b) after the first year, and c) after the second year for students based on whether they received the HELP Grant and their income? To answer this question, I will conduct a series of three two-way ANOVAs. The first null hypothesis is there is no difference in the mean cumulative GPA for HELP Grant recipients and non-recipients ($H_{01}: \mu_1 = \mu_2$). The second null hypothesis is there is no difference in the mean cumulative GPA for students of each income level – Low Pell EFC, Middle Pell EFC, and High Pell EFC ($H_{02}: \mu_1 = \mu_2 = \mu_3$). The third null hypothesis is there is no interaction between receiving the HELP Grant and income ($H_{03}: \text{all } (\mu_{jk} - \mu_j - \mu_k + \mu) = 0$). I further hypothesize that High Pell EFC students will earn higher GPAs than Middle and Low Pell EFC students but that HELP Grant receipt will minimize the academic performance gap between higher and lower income students.

Definitions of Terms

The following terms will be used throughout the study.

- Award – An award is a disbursement of financial aid to a student.
- College Preparatory Curriculum – The College Preparatory Curriculum is a series of high school courses required by the public universities in Mississippi for admission (My Way Mississippi, n.d.).
- Composite ACT Score – The ACT consists of four subtests in English, mathematics, science, and reading. Students receive a score of 1-36 on each of the four subtests. A

composite ACT score is the average of the four subtest scores earned during a single administration of the test (ACT, n.d.).

- Continuous Enrollment – For the purpose of receiving state aid in Mississippi, continuous enrollment is required. Continuous enrollment is defined as enrollment in each successive fall and spring semester or fall, winter, and spring trimester, year over year (Mississippi Office of Student Financial Aid, n.d.-a).
- Credit Hour – A credit hour is a unit of measurement used to indicate the amount of time a student spends on instruction or learning. A typical college course is valued at three credit hours. In Mississippi, a typical associates degree includes about 60 credit hours of coursework and a typical bachelor’s degree includes about 120 credit hours of coursework.
- Cumulative Grade Point Average (GPA) – The cumulative GPA is the average of the final grades a student has earned on all courses taken over the course of the student’s enrollment. The cumulative GPA is calculated by the institution according to the institution’s grade policy and may or may not include grades from transfer courses (Mississippi Office of Student Financial Aid, n.d.-a).
- Earned Credit Hour – An earned credit hour is a credit hour for a course in which the student earns a passing grade.
- Enrolled Credit Hour – An enrolled credit hour is a credit hour for a course in which a student enrolls but may or may not complete with a passing grade.
- Expected Family Contribution (EFC) – The Expected Family Contribution (EFC) is a number used to determine a student’s eligibility for financial aid. The number is

- derived by the federal government from information a student provides on the Free Application for Federal Student Aid (FAFSA) form (Federal Student Aid, n.d.-b).
- Low Pell EFC – For the purposes of this study, a Low Pell EFC is an EFC of 0-1500. Students with a Low Pell EFC qualify for the maximum or near-maximum amount of the federal Pell grant and are considered the lowest income students.
 - Middle Pell EFC – For the purposes of this study, a Middle Pell EFC is an EFC of 1501-3500. Students with a Middle Pell EFC qualify for a partial Pell grant. The students have considerable financial need.
 - High Pell EFC – For the purposes of this study, a High Pell EFC is an EFC of 3501-6500. Students with a High Pell EFC qualify for a partial Pell grant. The students have financial need.
 - First-time College Student – A first-time college student is any student who has fewer than 12 hours of postsecondary academic credit. Postsecondary academic credit earned prior to or during the summer immediately after receiving a high school diploma or earned while dually enrolled in secondary and postsecondary educational institutions, or while enrolled in the early admission program of a postsecondary institution is not considered when determining if a student is a first-time college student. Postsecondary academic credit granted by an institution for Advanced Placement (AP) or International Baccalaureate (IB) courses completed in high school is not considered when determining if a student is a first-time college student (Mississippi Office of Student Financial Aid, n.d.-a).
 - Free Application for Federal Student Aid (FAFSA) – The FAFSA is the federal form used by students to apply for federal grants, loans, work study or other federal

- financial assistance. The information provided on the FAFSA is used by the federal government to produce an EFC, which is used to determine a student's financial need.
- Full-time Enrollment – For the purpose of receiving state aid in Mississippi, full-time enrollment is defined as 15 credit hours per term for traditional fall and spring semesters or 9 credit hours per term for fall, winter, and spring trimesters (Mississippi Office of Student Financial Aid, n.d.-a).
 - HELP Grant – The Mississippi HELP Grant is available to Mississippi residents who enroll full-time in a public or not-for-profit institution in Mississippi in a program of study leading to a first certificate, first associate degree, or first bachelor's degree and meet all eligibility criteria, which include a minimum 20 composite ACT score, a minimum 2.5 high school GPA, completion of a specific high school curriculum, and demonstration of financial need. The grant awards up to an amount equal to tuition and required fees (Mississippi Office of Student Financial Aid, n.d.-a).
 - HELP Grant Core Curriculum – The HELP Grant Core Curriculum is the selection of specific high school courses a student must complete to be eligible for the HELP Grant.
 - High School Grade File – The high school grade file is a set of data provided by a Mississippi high school to SFA on an annual basis to help SFA determine student eligibility for state grants. The files include demographic and academic records for graduating high school seniors.
 - Mississippi Aid Application (MAAPP) – The Mississippi Aid Application (MAAPP) is the form used by students to apply for financial aid made available by the State of Mississippi.

- Mississippi Office of Student Financial Aid (SFA) – SFA is the state agency that administers the state’s student financial aid programs.

Data Presentation

In the following section, I will provide a detailed description of the data. I will describe the data elements, how the data were obtained, how the data were stored, and how the data may be obtained for additional research. I will discuss the data limitations, the ethical treatment of the data, data interpretation challenges, and data deficits.

Description of Data

During the spring of 2021, I obtained a data file from the SFA. The database administrator within SFA queried the office’s homegrown Oracle database to produce a file that contained deidentified student unit records for all Mississippi students with a high school graduation year between 2009 and 2019. The original file included 364,575 student records. The unit records included indicators of the following demographic identifiers: ethnicity, gender, date-of-birth, high school, year of high school graduation, county of residence, and income and EFC if available from completion of the FAFSA. The records included indicators of the following academic identifiers: cumulative high school GPA, highest composite score from a national administration of the ACT, credit hours enrolled by term of college enrollment, credit hours earned by term of college enrollment, and cumulative college GPA by term of college enrollment. The records indicated the financial aid program received, the amount received, and the name of the institution where the student was enrolled and awarded by term.

Original Data Sources

While the file was obtained directly from SFA, the data contained in the file and stored in the SFA database were originally obtained by SFA from the following sources:

- High school grade files containing demographic information, GPA, standardized test score(s), and an indicator of completion of the HELP Grant Core Curriculum for all graduating high school seniors
- ACT files including the composite scores for each national administration of the ACT for all Mississippi high school students and all Mississippi residents
- Institutional Student Identification Records (ISIRs) generated when Mississippi resident students complete the FAFSA
- College and university enrollment files, containing demographic information, student classification, and hours of enrollment for all Mississippi residents enrolled in the institution
- College and university grade files, containing demographic information, student classification, earned hours, and term and cumulative grades for all Mississippi residents enrolled in the institution
- Mississippi Aid Application

Data Storage and Accessibility

The unit records included in the data file did not include any personal identifying information, such as Social Security Numbers, mailing addresses, or email addresses.

Nevertheless, the original data file and all associated files used in analysis are saved in a folder on a secure network. The data file could be shared with other scholars or practitioners upon request to the Mississippi Office of Student Financial Aid through email at sfa@mississippi.edu or telephone at 601-432-6997 <mailto:sfa@mississippi.edu>.

Data Limitations and Deficits

There are some limitations to the data that are important to note. I have obtained a data file that purports to include a unit record representing all Mississippi high school graduates from 2009 through 2019. However, the high school data are obtained primarily from high school grade files and student applications. Each spring, high school counselors or data officers at both public and private high schools across the state are supposed to submit a high school grade file to SFA. Most high schools comply, but some do not. The state also has homeschooled students who graduate each year. Homeschooled students do not have a counselor or data officer to submit information on their behalf, in which case their data may be missing. Therefore, it is not only possible but likely that not every high school graduate is represented in the file. Despite the likelihood that some high school graduates are not included in the data file, the file constitutes a nearly universal sample.

While some graduates may be missing from the file, some students may be included in the file although they did not graduate. High school grade files are submitted by high school counselors and data officers in early spring of their students' senior year. A handful of students for whom data are submitted as projected graduates fail to complete the final year and graduate. Such students, therefore, are represented as graduates in the file but did not actually graduate. SFA does not have any way to determine how often this occurs. Other students do not graduate and later complete a diploma equivalency, in which case their date of high school graduation becomes the date the student completes the diploma equivalency.

Income information is not available for all students included in the data file, because the income information is gleaned from the student's FAFSA record, and not all students complete a FAFSA. Some high school graduates do not complete the federal aid application because they

are not aware of it. Others do not complete it because they do not plan to attend college. Nevertheless, in recent years over 70% of Mississippi high school graduates have completed a FAFSA (Form Your Future, n.d.).

Race/ethnicity information is unknown for some students. Both the FAFSA and the MAAPP ask students to report their race and/or ethnicity. However, the question is optional on both forms, and some students choose not to identify themselves. Race/ethnicity information may also be missing because the student did not complete either the federal or state aid application.

If a student leaves the state to attend college, that student's postsecondary enrollment status is not represented in the data file. SFA does not collect data from the National Student Clearinghouse or any other national source of student enrollment and completion data to track the college pathways of students that leave the state. However, data indicate 80.5% of Mississippi high school graduates transition directly from high school to postsecondary education (National Information Center for Higher Education Policymaking and Analysis, n.d.), and 93% of those students enroll at postsecondary institutions located in Mississippi (Roman Higher Ed, 2020).

Ethical Use of Data

There are limited ethical concerns regarding the collection and use of data for this study. The unit records included in the data file do not include any personal identifying information, such as Social Security Numbers, mailing addresses, or email addresses. Due to the number of records collected across multiple aid years, there is no way to identify an individual in the data. The study also involved no direct interaction with human subjects, so there was no risk of abuse or manipulation of the students represented by the data. In compliance with the process created

by the University of Mississippi, I submitted a protocol application to the university's Institutional Review Board to conduct research with human participants. My protocol was approved as Exempt under federal regulations.

Because I am both the researcher and the director of the department from which the data was retrieved, there could be the appearance of impropriety. To allay any concerns about data manipulation, I saved both the original and edited data files in a folder called HELP Dissertation Data on the SFA network drive, which is a secure location but is also accessible by all staff of SFA. Other researchers may request the files to replicate my analysis or conduct additional analysis.

Analysis and Results

In the following section, I will present the results of my study. I will first present findings from the descriptive analysis of the data. I will then describe the statistical tests employed and present my findings from the statistical analysis of the data, addressing each of the research questions individually.

Descriptive Statistics

As indicated above, the original data file included 364,575 student records. To better understand the real impact of the HELP Grant, I edited the file to include only those students who might potentially be eligible for the HELP Grant due to their socioeconomic status and their high school academic profile. To receive the HELP Grant, a student must demonstrate financial need by completing the FAFSA and having an adjusted gross income that falls below a certain threshold. Because the income threshold varies for students depending on the number of children in the household, I chose to look only at the Expected Family Contribution (EFC). For the aid years included in this study, SFA used \$6,500 as the maximum EFC a student could have

to meet the financial need threshold. Therefore, I included only students who had completed a FAFSA with an EFC of \$6,500 or less. I also included students with a minimum 2.45 high school GPA and a minimum 20 composite score on the ACT. Ultimately, 46,635 students, or 12.8% of the students from the original data file, met the profile of being potentially HELP Grant eligible.

Readers may question why less than 13% of the population of high school graduates over 11 years would be eligible for a need-based grant in arguably the poorest state in the union. The statistic results primarily from the hybrid nature of the HELP Grant, which is based on both need and merit. To qualify, students must score a minimum 20 on the ACT and earn a 2.5 high school GPA. As discussed previously, ACT scores are negatively correlated with income. Considering Mississippi's median income is one of the lowest in the nation, it is not surprising the average ACT score for the 2019 graduating high school class in Mississippi was 18.4, which is below both the national average and the minimum 20 required for the HELP Grant. Therefore, over half of Mississippi's high school graduates are automatically ineligible for the Grant due to failure to meet the ACT and/or GPA requirement (ACT, 2019).

As shown in Table 2 below, among the students deemed potentially HELP Grant eligible, nearly 30% identified as African American and 52% identified as Caucasian. Race/ethnicity was unknown for nearly 14% of the identified population and a combined 4% identified as Alaskan Native/American Indian, Asian/Pacific Islander, or Hispanic. Based on the socioeconomic stratification in Mississippi, one might expect more African American students to potentially qualify for the HELP Grant. However, the average ACT score for African Americans in Mississippi is 16.1, even lower than the state average (ACT, 2019). This helps explain why fewer African Americans can be counted among the students potentially eligible for the HELP

Grant despite meeting the income qualifications. The ACT score requirement is an eligibility barrier that disparately impacts minority students and students with the lowest incomes.

Of the 46,635 potentially eligible students, only 8,404 students, or about 18%, received the HELP Grant during the first fall term after high school graduation. Among the students who received the HELP Grant, nearly 42% identified as African American, 47% as Caucasian, 6% as other, and 5% as unknown. There are many possible explanations for such a low participation rate. Prior to 2013, the required HELP Grant Core Curriculum was not aligned with the state's high school graduation requirements or with the university system's admission curriculum, known as the College Preparatory Curriculum (CPC). Prior to 2014, the application process required applicants to provide two years of residency and income documentation, which made the application burdensome. Additionally, the application deadline for the HELP Grant is March 31, nearly six months earlier than the application deadline for the state's other two grant programs. Therefore, many potentially eligible students likely miss the application deadline each year. Others may never even apply. College access organizations have lamented the irony that low-income students who stand to benefit the most from FAFSA completion also experience the lowest rates of FAFSA completion (National College Attainment Network, 2019). The same may be happening in Mississippi with the Mississippi Aid Application.

Table 2 below also shows a breakdown by race of the institutions where potentially HELP Grant eligible students enroll and earn credit hours. Of all potentially HELP Grant-eligible students, nearly 78% earned college credit during the first fall term after high school graduation. Among students who did not receive the HELP Grant, about 73% earned college credit during the first fall term, while 97% of student who did receive the HELP Grant earned college credit. These data suggest the HELP Grant may be a motivating factor to move students beyond interest

or enrollment to credit hour completion. The data also indicate the HELP Grant may play a role in institutional choice. While about 26% of potentially HELP Grant-eligible students who do not receive the HELP Grant earn hours at public four-year institutions, more than 53% of HELP Grant recipients earn hours at public four-year institutions. Because the HELP Grant covers the full cost of tuition and required fees at all in-state public institutions, one can assume that HELP Grant recipients can afford to attend more expensive institutions.

Table 3*Potentially HELP Grant Eligible Students by Ethnicity and Institution Type*

Students	AA	AN/AI	A/PI	C	H	U	Total
All potentially HELP Grant eligible students							
<i>N</i>	13,844	157	912	24,430	965	6,327	46,635
%	29.7	0.3	2.0	52.4	2.1	13.6	100
<i>n</i> earned	10,979	104	666	19,924	743	3,770	36,186
% earned	79.3	66.2	73.0	81.6	77.0	59.6	77.6
<i>n</i> 4-yr public	6,890	38	373	5,695	288	956	14,240
% 4-yr public	49.8	24.2	40.9	23.3	29.8	15.1	30.5
<i>n</i> 2-yr public	3,355	56	263	13,272	420	2,683	20,049
% 2-yr public	24.2	35.7	28.8	54.3	43.5	42.4	43.0
<i>n</i> private	734	10	30	957	35	131	1,897
% private	5.3	6.4	3.3	3.9	3.6	2.1	4.1
Did not receive HELP							
<i>N</i>	10,320	129	695	20,433	733	5,921	38,231
%	27.0	0.3	1.8	53.4	1.9	15.5	100
<i>n</i> earned	7,541	76	455	16,045	517	3,397	28,031
% earned	73.1	58.9	65.5	78.5	70.5	57.4	73.3
<i>n</i> 4-yr public	4,505	28	233	4,036	174	774	9,750
% 4-yr public	43.7	21.7	33.5	19.8	23.7	13.1	25.5
<i>n</i> 2-yr public	2,510	40	199	11,291	315	2,504	16,859
% 2-yr public	24.3	31.0	28.6	55.3	43.0	42.3	44.1
<i>n</i> private	526	8	23	718	28	119	1,422
% private	5.1	6.2	3.3	3.5	3.8	2.0	3.7
Received HELP Fall 1							
<i>N</i>	3,524	28	217	3,997	232	406	8,404
%	41.9	0.3	2.6	47.6	2.8	4.8	100
<i>n</i> earned	3,438	28	211	3,879	226	373	8,155
% earned	97.6	100.0	97.2	97.0	97.4	91.9	97.0
<i>n</i> 4-yr public	2,385	10	140	1,659	114	182	4,490
% 4-yr public	67.7	35.7	64.5	41.5	49.1	44.8	53.4
<i>n</i> 2-yr public	845	16	64	1,981	105	179	3,190
% 2-yr public	24.0	57.1	29.5	49.6	45.3	44.1	38.0
<i>n</i> private	208	2	7	239	7	12	475
% private	5.9	7.1	3.2	6.0	3.0	3.0	5.7

Note. AA = African American; AN/AI = Alaska Native/American Indian; A/PI = Asian/Pacific Islander; C = Caucasian; H = Hispanic.

Research Question 1

To address the first research question regarding whether there is a significant difference in the number of credit hours earned a) after the first fall term, b) after the first year, and c) after the second year for those students potentially eligible to receive the HELP Grant (but did not receive the HELP Grant) and those students who did receive the HELP Grant, I conducted a series of independent t-tests. Descriptive statistics are presented in Table 4. As hypothesized, a statistically significant difference in the number of hours earned was evident between HELP Grant recipients and non-recipients for all terms examined. A moderately high to high effect size was noted for all terms examined, indicative of a moderately high to high degree of practical significance.

The HELP Grant appears to have a positive impact on credit-hour completion. Students who receive the HELP Grant during their first fall term earn nearly four more credit hours on average after the first term, nearly eight more credit hours after the first year, and nearly 12 more credit hours after the second year than similar students who do not receive the HELP Grant. Students who continue to receive the HELP Grant through their second spring term earn nearly 21 credit hours more by their second year of college than similar students who do not receive the HELP Grant at all. Such students are a full semester and a half ahead of their peers by the end of the second year. While continuous receipt of the HELP Grant has the greatest impact on credit hour completion, receiving the HELP Grant during any term during the first two years is related to improved credit hour completion. Students who receive the HELP Grant during any term during the first two years earn more than 13 credit hours more after two years than similar students who do not receive the HELP Grant.

Table 4*Mean Credit Hours Earned by Term for HELP Grant Recipients and Non-Recipients*

Term	Did not receive HELP			Received HELP			<i>t</i> (46,633)	<i>p</i>	Cohen's <i>d</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>			
Hours earned after the first fall term									
Fall 1	38,231	10.56	7.06	8,404	14.51	4.01	-49.55	.000	0.69
Hours earned after the first year									
Fall 1	38,231	20.27	13.55	8,404	28.04	8.28	-50.57	.000	0.69
Spring 1	39,905	20.21	13.43	6,730	30.30	5.73	-60.68	.000	0.98
Hours earned after the second year									
Fall 1	38,231	37.78	24.61	8,404	49.13	17.79	-40.07	.000	0.53
Spring 1	39,905	37.46	24.48	6,730	53.83	13.59	-53.51	.000	0.83
Fall 2	40,672	37.29	24.25	5,963	57.06	11.18	-61.98	.000	1.05
Spring 2	41,294	37.43	24.14	5,341	58.32	10.37	-62.52	.000	1.12
Any	36,330	36.91	24.72	10,305	50.10	17.36	-50.75	.000	0.62

Note. The term represents the term during which the HELP Grant was disbursed. Fall 1 is the first fall term after the student graduated high school. Spring 1 is the first spring term after the student graduated high school. Fall 2 is the second fall term after the student graduated high school. Spring 2 is the second fall term after the student graduated high school.

Research Question 2

I conducted another series of independent t-tests to address the second research question regarding whether there is a significant difference in the cumulative GPA earned a) after the first fall term, b) after the first year, and c) after the second year for those students potentially eligible to receive the HELP Grant (but did not receive the HELP Grant) and those students who did receive the HELP Grant. Descriptive statistics are presented in Table 5. As hypothesized, there is a statistically significant difference in the mean cumulative GPA earned by HELP Grant

recipients and similar students who do not receive the HELP Grant. The effect size varied for the terms examined.

HELP Grant recipients earn a higher GPA on average after the first semester, after the first year, and after the second year than similar students who do not receive the HELP Grant. The mean cumulative GPA of students who receive the HELP Grant during their first fall term is 0.78 higher than the mean cumulative GPA of similar non-recipients after the first semester and 0.76 higher after the first year. The effect is less pronounced, only 0.16 higher, after the second year for students who received the HELP Grant during their first fall term. However, students who continue to receive the HELP Grant in subsequent terms after the first fall earn higher mean cumulative GPAs than similar students who do not receive the HELP Grant. The mean cumulative GPA after the first year for students who received the HELP Grant in the first spring is 1.08 higher than students who do not receive the HELP Grant. The mean cumulative GPA after the second year for students who continue to receive the HELP Grant in their second spring term is also 1.08 higher than students who do not receive the HELP Grant. Students who receive the HELP Grant during any term within the first two years earn 0.38 higher mean cumulative GPAs than similar students who do not receive the HELP Grant.

Table 5*Mean Cumulative GPAs Earned by Term of HELP Recipients and Non-Recipients*

Term	Did not receive HELP			Received HELP			<i>t</i> (46,633)	<i>p</i>	Cohen's <i>d</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>			
Cumulative GPA earned after the first fall term									
Fall 1	38,231	2.16	1.48	8,404	2.94	0.92	-46.61	.000	0.63
Cumulative GPA earned after the first year									
Fall 1	38,231	2.07	1.49	8,404	2.83	1.02	-44.82	.000	0.59
Spring 1	39,905	2.05	1.48	6,730	3.13	0.71	-58.54	.000	0.93
Cumulative GPA earned after the second year									
Fall 1	38,231	1.79	1.57	8,404	1.97	1.75	-9.34	.000	0.11
Spring 1	39,905	1.76	1.61	6,730	2.22	1.51	-22.02	.000	0.29
Fall 2	40,672	1.71	1.57	5,963	2.63	1.64	-42.34	.000	0.57
Spring 2	41,294	1.70	1.61	5,341	2.78	1.25	-47.02	.000	0.75
Any	36,330	1.74	1.57	10,305	2.12	1.69	-20.64	.000	0.23

Note. The term represents the term during which the HELP Grant was disbursed. Fall 1 is the first fall term after the student graduated high school. Spring 1 is the first spring term after the student graduated high school. Fall 2 is the second fall term after the student graduated high school. Spring 2 is the second fall term after the student graduated high school.

Research Question 3

I conducted a series of three between-subjects two-way ANOVAs to determine whether HELP Grant receipt and ethnicity have a significant effect on the number of credit hours earned by students a) after the first fall term, b) after the first year, and c) after the second year. The two-way ANOVAs also test the moderating role of ethnicity in the relationship between HELP Grant receipt and credit hours earned. I hypothesized that HELP Grant recipients would earn more hours than non-recipients and that students who identify as Caucasian, the ethnic majority, would earn more credit hours than students who identify as ethnic minorities. Finally, I

hypothesized that the difference in credit hours completed between students of varying ethnicities would be minimized by receipt of the HELP Grant. The independent t-tests already conducted in response to the first research question revealed there is a significant difference in the mean credit hours earned for HELP Grant recipients and non-recipients after the first fall term, first year, and second year. As hypothesized, the mean credit hours for HELP Grant recipients are higher than the mean credit hours earned for non-recipients. The mean credit hours earned for HELP Grant recipients and non-recipients after the first term, the first year, and the second year are presented in Table 4.

As hypothesized, simple main effects analysis revealed ethnicity (African American, Alaskan Native/American Indian, Asian/Pacific Islander, Caucasian, Hispanic, and Unknown) to have a statistically significant effect on credit hour completion after the first fall term, $F(5, 46,623) = 52.07, p = .000$, the first year, $F(5, 46,623) = 23.90, p = .000$, and the second year, $F(5, 46,623) = 16.25, p = .000$. The between-subjects effects are presented in Table 6. The descriptive statistics for ethnicity are presented in Table 7, and the mean differences in credit hours earned by students of different ethnicities are presented in the supplemental materials in Appendix A, Tables A1, A2, and A3.

After the first term, the mean credit hours earned by African American students is significantly higher than the mean credit hours earned by Alaskan Native/American Indian students and students of unknown ethnicity but is significantly lower than the mean credit hours earned by Caucasian students. There is no significant difference between the mean credit hours earned by African American students and Asian/Pacific Islander or Hispanic students. The mean credit hours earned by Caucasian students is significantly higher than the mean credit hours earned by every other ethnic group except Hispanic students. The mean credit hours earned by

Asian/Pacific Islander students is significantly greater than the mean credit hours earned by Alaskan Native/American Indian students and students of unknown ethnicity. The mean credit hours earned by Hispanic students is greater than the mean credit hours earned by Alaskan Native/American Indian students and students of unknown ethnicity. The results after the first year wholly mirror the results after the first fall term. The results after the second year mostly mirror the results after the first fall term and first year, except that the mean hours earned by Caucasian students is significantly higher than the credit hours earned by Hispanic students but not by Asian/Pacific Islander students.

As hypothesized, the two-way ANOVAs revealed there was statistically significant interaction between the effects of ethnicity and the receipt of the HELP Grant on credit hours earned after the first fall term, $F(5, 46,623) = 17.76, p = .000$, the first year, $F(5, 46,623) = 20.02, p = .000$, and the second year, $F(5,46,623) = 14.29, p = .000$. Simple effects plots, shown in Figures 1, 2, and 3 reveal the observed interaction of the effects after the first term, first year, and second year, respectively. HELP Grant recipients earn more credit hours than non-recipients, regardless of ethnicity for each observation period. For each period, Caucasian students, regardless of HELP Grant receipt, earn more hours than African American students, Alaskan Native/American Indian students, and students of unknown ethnicity. When receiving the HELP Grant, however, Asian/Pacific Islander and Hispanic students earn more hours than Caucasian students.

Receiving the HELP Grant also has a greater impact on students of every ethnicity other than Caucasian, as demonstrated by the slope of the lines depicting mean hours earned by those who received the HELP Grant compared to those who did not. The HELP Grant serves as an equalizer between Caucasian students and students of other ethnicities, especially Alaskan

Native/American Indian students and students of unknown ethnicity. Without the HELP Grant, Caucasian students earn two to seven credits more than students of other ethnicities after the first year and three to 16 credits more after the second year. With the HELP Grant, students of all ethnicities earn total credit hours varying by less than two by the end of the first year and by less than five by the end of the second year.

Table 6

Between-Subjects Effects of HELP Receipt and Ethnicity on Mean Credit Hours

Source of variation	SS	df	MS	F	p
After first term					
HELP receipt	14,439.89	1	14,439.86	341.60	.000
Ethnicity	11,005.26	5	2,201.05	52.07	.000
Interaction	3,752.79	5	750.56	17.76	.000
Error	1,970,818.26	46,623	42.271		
Total	2,145,684.02	46,634			
After first year					
HELP receipt	66,279.18	1	66,279.180	431.48	.000
Ethnicity	18,354.87	5	3,670.98	23.90	.000
Interaction	15,374.27	5	3,074.85	20.02	.000
Error	7,161,671.61	46,623	153.61		
Total	8,007,943.38	46,634			
After second year					
HELP receipt	137,999.77	1	137,999.77	274.20	.000
Ethnicity	40,901.72	5	8,180.34	16.25	.000
Interaction	35,950.21	5	7,190.04	14.29	.000
Error	23464520.36	46623	503.28		
Total	100642706.1	46,635			

Table 7*Mean Credit Hours of HELP Recipients and Non-recipients of Different Ethnicities*

Ethnicity	Did not receive HELP			Received HELP			Total		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>
After first term									
AA	10.24	6.93	10,320	14.38	3.84	3,524	11.29	6.55	13,844
AN/AI	8.12	7.45	129	14.00	3.76	28	9.17	7.29	157
A/PI	9.88	7.54	695	15.33	3.46	217	11.18	7.18	912
C	11.56	6.74	20,433	14.66	3.98	3,997	12.07	6.47	24,430
H	10.29	7.30	733	15.36	3.88	232	11.51	6.99	965
U	7.84	7.44	5,921	13.26	5.57	406	8.19	7.45	6,327
After first year									
AA	19.82	13.06	11,027	30.04	5.56	2,817	21.90	12.61	13,844
AN/AI	15.94	13.81	136	28.81	6.23	21	17.66	13.76	157
A/PI	19.44	14.25	716	30.76	6.40	196	21.88	13.78	912
C	22.05	12.98	21,185	30.46	5.71	3,245	23.17	12.59	24,430
H	19.89	13.80	773	30.71	7.06	192	22.04	13.46	965
U	14.71	13.92	6,068	30.54	5.92	259	15.36	14.03	6,327
After second year									
AA	37.53	22.93	11,461	58.23	9.57	2,383	41.09	22.63	13,844
AN/AI	29.55	23.40	148	55.00	12.76	9	31.01	23.66	157
A/PI	37.65	25.75	735	59.42	10.74	177	41.87	25.12	912
C	40.85	23.49	21,916	58.31	10.98	2,514	42.64	23.14	24,430
H	36.91	24.26	843	59.61	11.55	122	39.78	24.25	965
U	25.38	24.47	6,191	57.63	10.46	136	26.07	24.70	6,327

Note. AA = African American; AN/AI = Alaska Native/American Indian; A/PI = Asian/Pacific Islander; C = Caucasian; H = Hispanic.

Figure 1

Means of Credit Hours after the First Term by Ethnicity with and without HELP

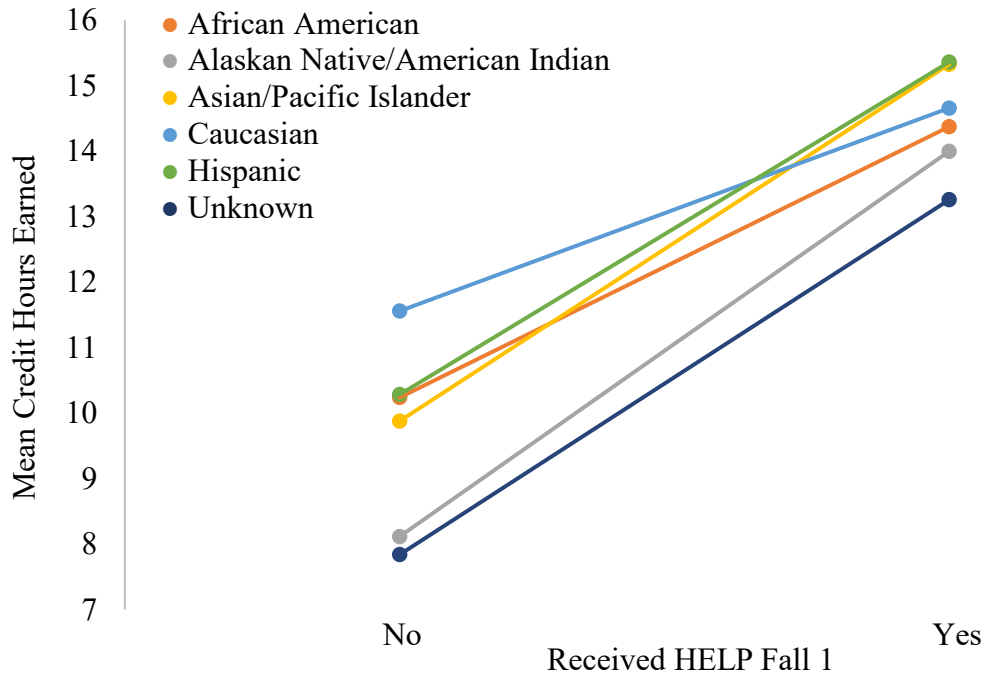


Figure 2

Means of Credit Hours after the First Year by Ethnicity with and without HELP

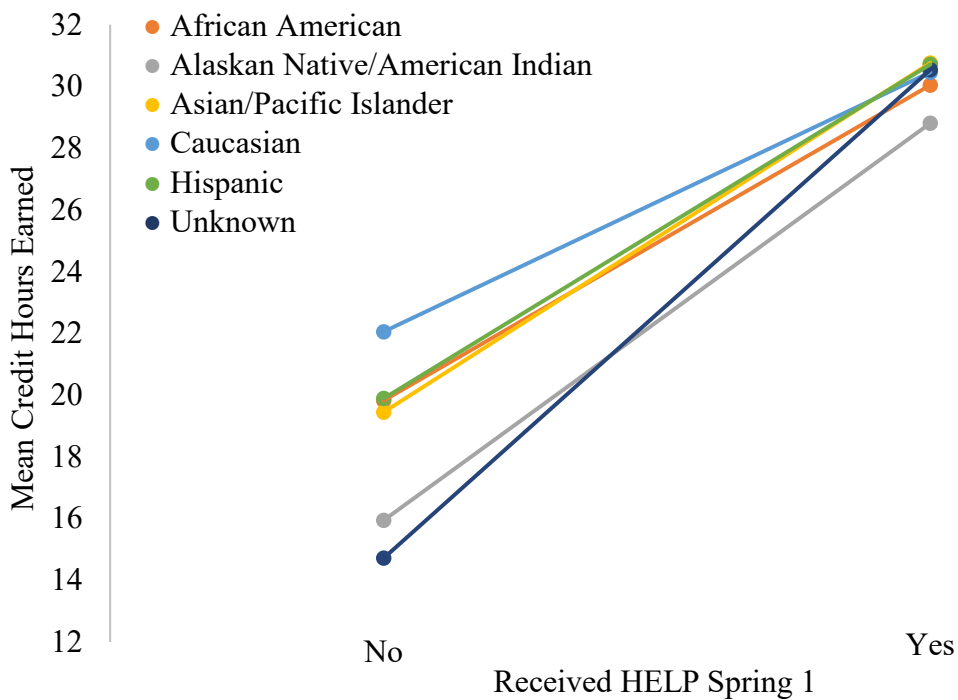
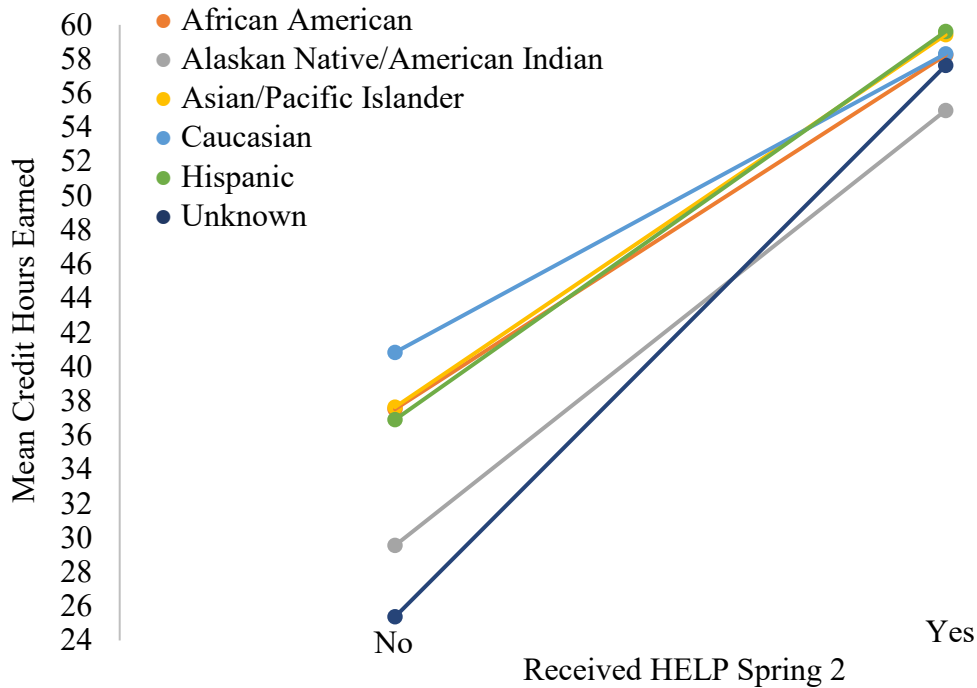


Figure 3

Means of Credit Hours after the Second Year by Ethnicity with and without HELP



Research Question 4

To address the fourth research question, I conducted another series of three between-subjects two-way ANOVAs to determine whether HELP Grant receipt and ethnicity have a significant effect on the mean cumulative GPA earned by students a) after the first fall term, b) after the first year, and c) after the second year. The two-way ANOVAs also test the moderating role of ethnicity in the relationship between HELP Grant receipt and cumulative GPA. I hypothesized that HELP Grant recipients would earn higher GPAs than non-recipients and that students who identify as Caucasian would earn higher GPAs than students who identify as ethnic minorities. Finally, I hypothesized that the difference in GPAs between students of varying ethnicities would be minimized by receipt of the HELP Grant. The independent t-tests

conducted in response to the second research question revealed there is a significant difference in the mean cumulative GPAs earned by HELP Grant recipients and non-recipients after the first fall term, first year, and second year. As hypothesized, the mean cumulative GPAs for HELP Grant recipients are higher than those for non-recipients. The mean cumulative GPAs earned by HELP Grant recipients and non-recipients after the first term, the first year, and the second year are presented in Table 5.

As hypothesized, simple main effects analysis revealed ethnicity to have a statistically significant effect on cumulative GPA after the first fall term, $F(5, 46,623) = 78.23, p = .000$, the first year, $F(5, 46,623) = 34.19, p = .000$, and the second year, $F(5,46,623) = 21.22, p = .000$. The between-subjects effects are presented in Table 8. The descriptive statistics for ethnicity are presented in Table 9, and the mean differences in GPAs earned by students of different ethnicities are presented in the supplemental materials in Appendix A, Tables A4, A5, and A6. After the first fall term, the mean cumulative GPA for African American students is significantly higher than the mean cumulative GPA earned by Alaskan Native/American Indian students and students of unknown ethnicity but is significantly lower than the mean cumulative GPA earned by Caucasian students. There is no significant difference between the mean cumulative GPA earned by African American students and Asian/Pacific Islander or Hispanic students. The mean cumulative GPA earned by Caucasian students is significantly higher than the mean cumulative GPA earned by every other ethnic group. The mean cumulative GPA earned by Asian/Pacific Islander students is significantly greater than the mean cumulative GPA earned by Alaskan Native/American Indian students and students of unknown ethnicity. The mean cumulative GPA earned by Hispanic students is greater than the mean cumulative GPA earned by Alaskan

Native/American Indian students and students of unknown ethnicity. The results after the first and second years differ only slightly from the results after the first fall term.

As hypothesized, the two-way ANOVAs revealed there was statistically significant interaction between the effects of ethnicity and the receipt of the HELP Grant on cumulative GPA earned after the first fall term, $F(5, 46,623) = 19.58, p = .000$, the first year, $F(5, 46,623) = 17.51, p = .000$, and the second year, $F(5, 46,623) = 4.26, p = .001$. Simple effects plots, shown in Figures 4, 5, and 6 reveal the observed interaction of the effects after the first term, first year, and second year, respectively. For every observation period, HELP Grant recipients earn higher cumulative GPAs than non-recipients, regardless of ethnicity. Also for every observation period, Caucasian students, regardless of HELP Grant receipt, have higher cumulative GPAs than African American students, Alaskan Native/American Indian students, and students of unknown ethnicity. When receiving the HELP Grant, however, Asian/Pacific Islander students earn higher cumulative GPAs than Caucasian students. Receiving the HELP Grant also has a greater impact on students of every ethnicity other than Caucasian, as demonstrated by the slope of the lines depicting mean cumulative GPA earned by those who received the HELP Grant compared to those who did not. The HELP Grant serves as an equalizer between Caucasian students and students of other ethnicities, especially Alaskan Native/American Indian students and students of unknown ethnicity.

Table 8*Between-Subjects Effects of HELP Receipt and Ethnicity on Mean Cumulative GPA*

Source of variation	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
After first term					
HELP receipt	535.62	1	535.62	287.14	.000
Ethnicity	729.68	5	145.94	78.23	.000
Interaction	182.62	5	36.52	19.58	.000
Error	86,968.98	46,623	1.87		
Total	94,848.39	46,634			
After first year					
HELP receipt	743.74	1	743.74	394.07	.000
Ethnicity	322.60	5	64.52	34.19	.000
Interaction	165.23	5	33.05	17.51	.000
Error	87,993.11	46,623	1.89		
Total	97,887.93	46,634	97,887.93		
After second year					
HELP receipt	302.20	1	302.20	126.91	.000
Ethnicity	252.63	5	50.53	21.22	.000
Interaction	50.72	5	10.14	4.26	.001
Error	111,018.95	46,623	2.38		
Total	120,504.98	46,634			

Table 9*Mean Cumulative GPAs of HELP Recipients and Non-recipients of Different Ethnicities*

Ethnicity	Did not receive HELP			Received HELP			Total		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>
After first term									
AA	2.04	1.44	10,320	2.89	0.90	3,524	2.26	1.37	13,844
AN/AI	1.64	1.51	129	2.56	0.94	28	1.81	1.47	157
A/PI	2.08	1.63	695	3.26	0.84	217	2.36	1.56	912
C	2.40	1.43	20,433	2.99	0.90	3,997	2.49	1.37	24,430
H	2.11	1.53	733	3.12	0.85	232	2.35	1.46	965
U	1.55	1.50	5,921	2.59	1.15	406	1.62	1.50	6,327
After first year									
AA	1.96	1.41	11,027	3.07	0.71	2,817	2.19	1.37	13,844
AN/AI	1.60	1.48	136	2.89	0.65	21	1.77	1.47	157
A/PI	2.07	1.59	716	3.33	0.80	196	2.34	1.55	912
C	2.27	1.46	21,185	3.17	0.70	3,245	2.39	1.42	24,430
H	2.02	1.52	773	3.16	0.74	192	2.25	1.47	965
U	1.47	1.49	6,068	3.11	0.75	259	1.53	1.51	6,327
After second year									
AA	1.71	1.62	11,461	2.75	1.20	2,383	1.89	1.60	13,844
AN/AI	1.38	1.53	148	2.35	1.36	9	1.43	1.53	157
A/PI	1.85	1.63	735	2.89	1.34	177	2.05	1.63	912
C	1.90	1.59	21,916	2.82	1.27	2,514	1.99	1.58	24,430
H	1.57	1.60	843	2.68	1.35	122	1.71	1.61	965
U	0.99	1.44	6,191	2.48	1.50	136	1.03	1.46	6,327

Note. AA = African American; AN/AI = Alaska Native/American Indian; A/PI = Asian/Pacific Islander; C = Caucasian; H = Hispanic.

Figure 4

Means of Cumulative GPAs Earned after the First Term by Ethnicity with and without HELP

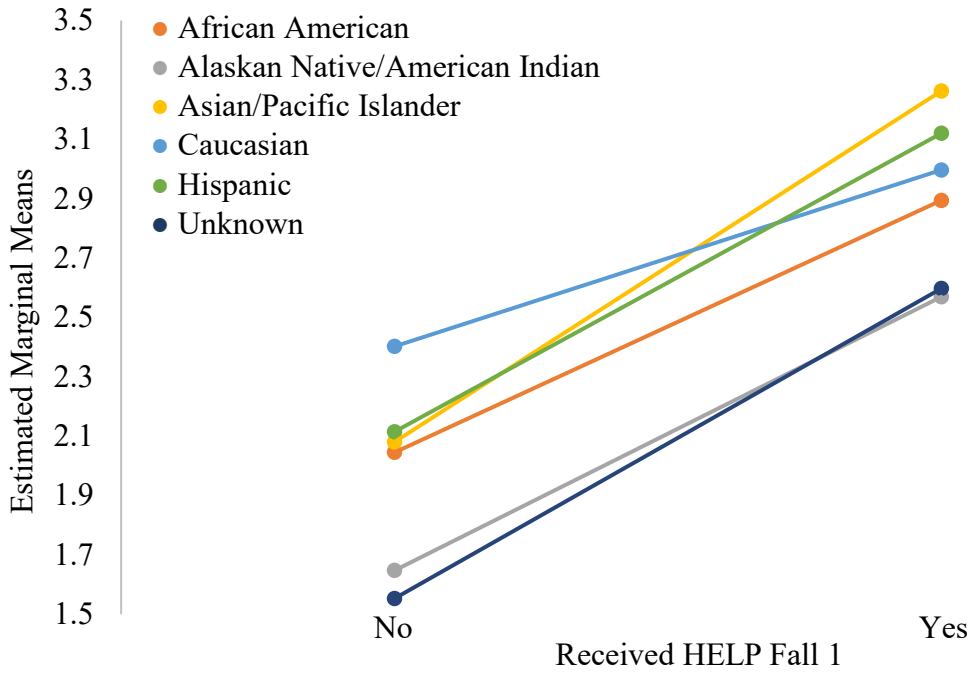


Figure 5

Means of Cumulative GPAs Earned after the First Year by Ethnicity with and without HELP

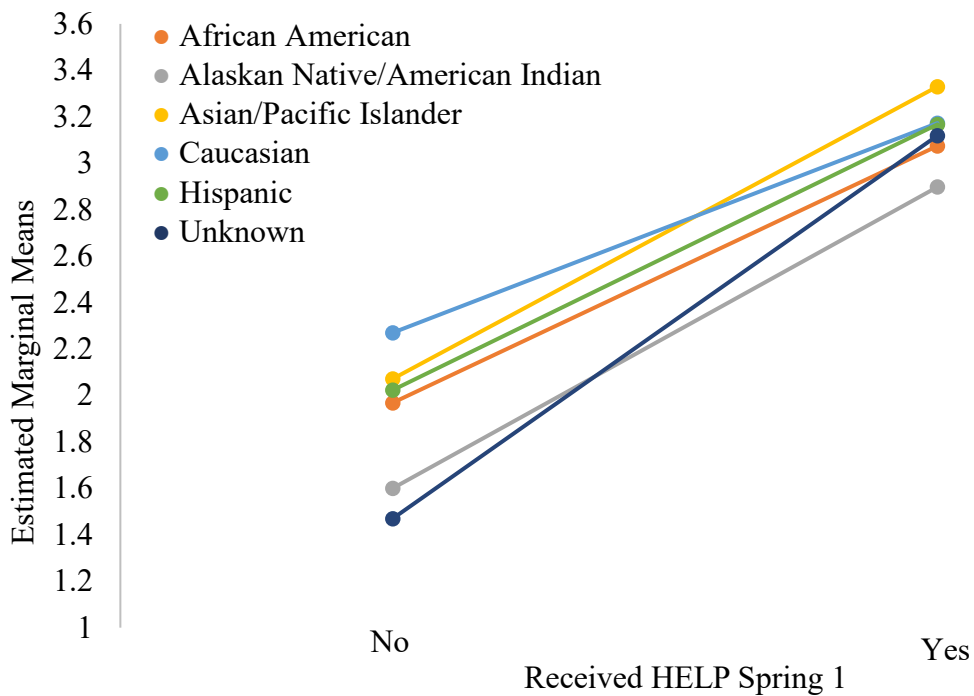
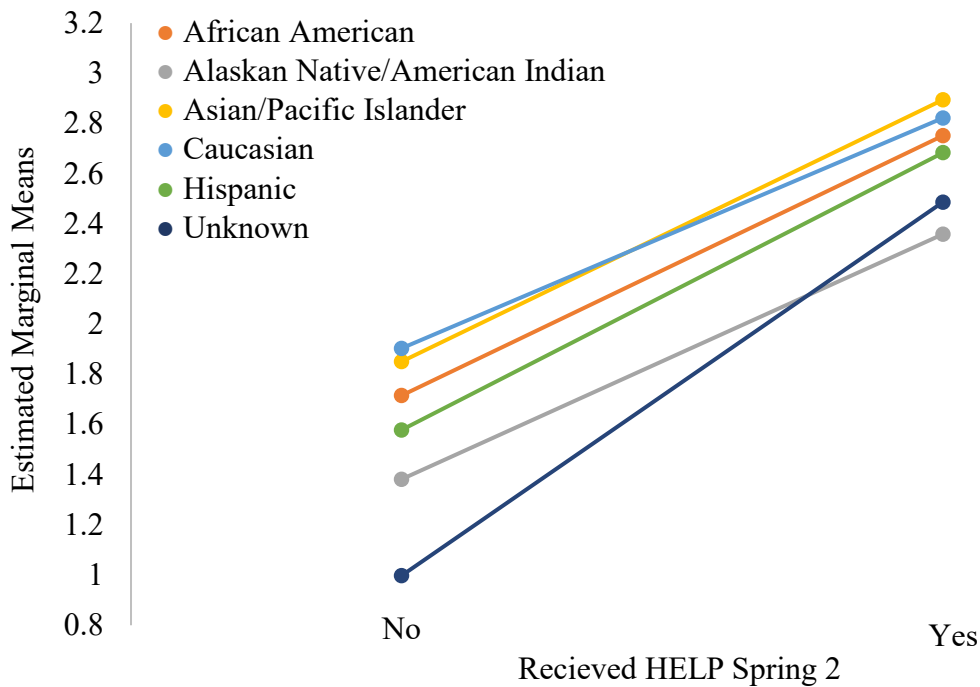


Figure 6

Means of Cumulative GPAs Earned after the Second Year by Ethnicity with and without HELP



Research Question 5

I conducted another series of three two-way ANOVAs to address the fifth research question to determine whether HELP Grant receipt and income have a significant effect on the mean credit hours earned by students a) after the first fall term, b) after the first year, and c) after the second year. The two-way ANOVAs also test the moderating role of income in the relationship between HELP Grant receipt and credit earn completion. I hypothesized that HELP Grant recipients would earn more credit hours than non-recipients and that students from higher income families would earn more credit hours than students from lower income families. Finally, I hypothesized that the difference in credit hours between higher and lower income students would be minimized by receipt of the HELP Grant. The independent t-tests conducted in response to the first research question revealed that HELP Grant recipients complete

significantly more credit hours than non-recipients after the first term, first year, and second year. The mean credit hours earned by HELP Grant recipients and non-recipients are presented in Table 4.

As hypothesized, simple main effects analyses revealed income (Low Pell EFC, Middle Pell EFC, High Pell EFC) to have a statistically significant effect on credit hour completion after the first fall term, $F(2, 46,629) = 40.64, p = .000$, the first year, $F(2, 46,629) = 28.72, p = .000$, and the second year, $F(2, 46,629) = 32.78, p = .000$. The between-subjects effects are presented in Table 10. The descriptive statistics for income are presented in Table 11, and the main differences in mean credit hours completed by students of different incomes are presented in the supplemental materials in Appendix A, Tables A7, A8, and A9. After the first fall term, the first year, and the second year, the mean hours completed by High Pell and Middle Pell students are significantly greater than the mean hours completed by Low Pell students. There is no significant difference in the mean hours completed by High Pell and Middle Pell students.

As hypothesized, there was also statistically significant interaction between the effects of income and HELP Grant receipt on credit hours earned after the first fall term, $F(2, 46,629) = 30.56, p = .000$, the first year, $F(2, 46,629) = 37.76, p = .000$, and the second year, $F(2, 46,629) = 18.96, p = .000$. Simple effects plots, shown in Figures 7, 8, and 9 reveal the observed interaction of the effects after the first term, first year, and second year, respectively. HELP Grant recipients earn more credit hours than non-recipients, regardless of income, for every period. Also for every period, without the HELP Grant, High Pell students complete more hours than Middle Pell students who in turn complete more hours than Low Pell students. After the first term, when receiving the HELP Grant, Low Pell students complete almost as many hours as Middle Pell students. By the end of the second year, for students receiving the HELP Grant, the

differences in credit hour completion between Low Pell students and their higher income peers is minimized or erased. Receiving the HELP Grant has the greatest impact on Low Pell students, as demonstrated by the slope of the lines depicting mean hours completed by those who received the HELP Grant compared to those who did not.

Table 10

Between-Subjects Effects of HELP Receipt and Income on Mean Credit Hours

Source of variation	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
After first term					
HELP receipt	12,920.45	1	12,920.45	301.70	.000
Income	3,480.60	2	1,740.30	40.64	.000
Interaction	2,617.33	2	1,308.66	30.56	.000
Error	1,996,923.08	46,629	42.83		
Total	2,145,684.02	46,634			
After first year					
HELP receipt	70,841.25	1	70,841.25	455.32	.000
Income	8,936.53	2	4,468.26	28.72	.000
Interaction	11,750.24	2	5,875.12	37.76	.000
Error	7,254,866.03	46,629	155.59		
Total	8,007,943.34	46,634			
After second year					
HELP receipt	320,130.63	1	320,130.63	618.63	.000
Income	33,929.28	2	16,964.64	32.78	.000
Interaction	19,619.39	2	9,809.69	18.96	.000
Error	24,129,556.99	46,629	517.48		
Total	26,693,322.51	46,634			

Table 11*Mean Credit Hours of HELP Recipients and Non-recipients of Different Incomes*

Income	Did not receive HELP			Received HELP			Total		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>
After first term									
High Pell	12.09	6.58	7,637	14.99	3.91	145	12.14	6.55	7,782
Low Pell	9.76	7.18	23,896	14.49	4.02	7,428	10.88	6.87	31,324
Middle Pell	11.67	6.70	6,698	14.55	4.00	831	11.99	6.52	7,529
After first year									
High Pell	23.26	12.83	7,654	30.38	5.38	128	23.38	12.78	7,782
Low Pell	18.68	13.50	25,418	30.33	5.67	5,906	20.87	13.22	31,324
Middle Pell	22.50	12.93	6,833	29.98	6.21	696	23.19	12.65	7,529
After second year									
High Pell	42.85	23.73	7,657	58.55	12.74	125	43.10	23.68	7,782
Low Pell	34.89	23.97	26,724	58.19	10.32	4,600	38.31	23.95	31,324
Middle Pell	41.26	23.73	6,913	59.26	10.17	616	42.73	23.45	7,529

Figure 7

Means of Credit Hours after the First Term by Income with and without HELP

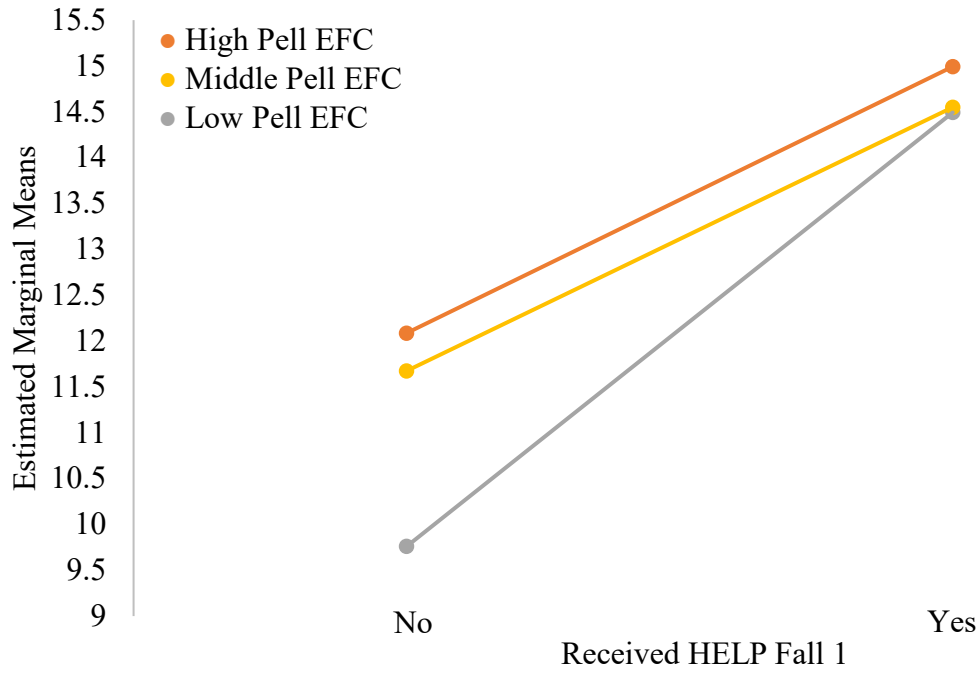


Figure 8

Means of Credit Hours after the First Year by Income with and without HELP

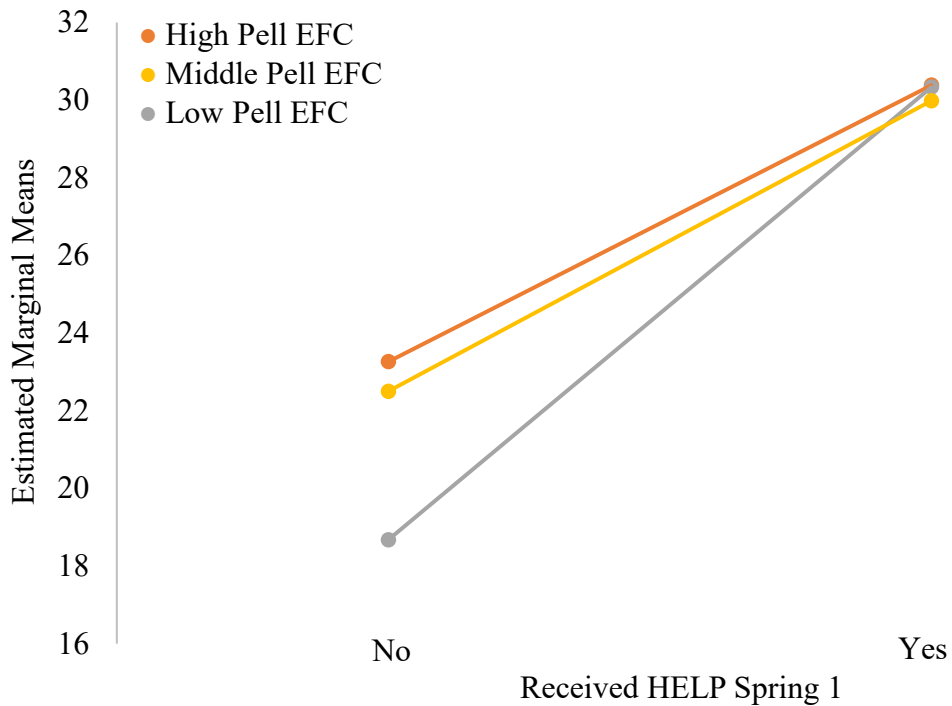
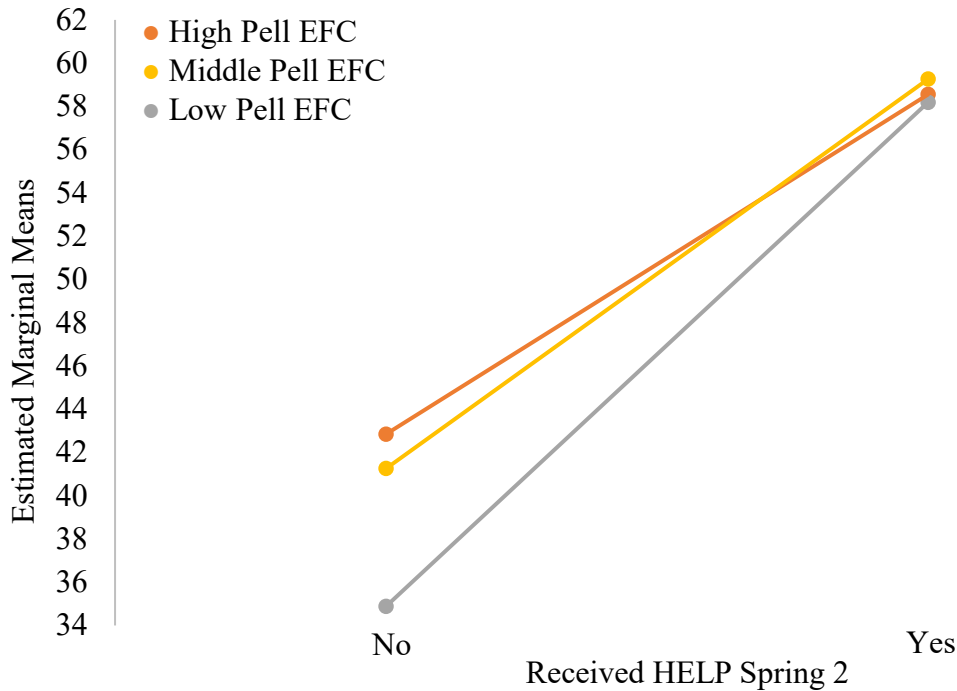


Figure 9

Means of Credit Hours after the Second Year by Income with and without HELP



Research Question 6

I conducted a final series of three between-subjects two-way ANOVAs to address the sixth research question to determine whether HELP Grant receipt and income have a significant effect on the mean cumulative GPAs earned by students a) after the first fall term, b) after the first year, and c) after the second year. The two-way ANOVAs also test the moderating role of income in the relationship between HELP Grant receipt and cumulative GPA. I hypothesized that HELP Grant recipients would earn higher GPAs than non-recipients and that students from higher income families would earn higher GPAs than students from lower income families. Finally, I hypothesized that the difference in cumulative GPAs earned by higher and lower income students would be minimized by receipt of the HELP Grant. The independent t-tests conducted for the second research question revealed that HELP Grant recipients earn

significantly higher GPAs than non-recipients after the first term. The mean cumulative GPAs earned by HELP Grant recipients and non-recipients are presented in Table 5.

As hypothesized, simple main effects analysis revealed income (Low Pell, Middle Pell, and High Pell) to have a statistically significant effect on a student's cumulative GPA earned after the first fall term, $F(2, 46,629) = 43.94, p = .000$, the first year, $F(2, 46,629) = 27.24, p = .000$, and the second year $F(2, 46,629) = 22.99, p = .000$. The between-subjects effects are presented in Table 12. The descriptive statistics for income are presented in Table 13, and the main differences in mean cumulative GPAs earned by students of different incomes are presented in the supplemental materials in Appendix A, Tables A10, A11, and A12. After the first fall term, the first year, and the second year, the mean cumulative GPAs earned by High Pell and Middle Pell students are significantly higher than the mean cumulative GPA earned by Low Pell students. There is no significant difference in the mean cumulative GPA earned by High Pell and Middle Pell students.

Also as hypothesized, there is interaction between the effects of income and HELP Grant receipt on cumulative GPA after the first fall term, $F(2, 46,629) = 35.83, p = .000$, the first year, $F(2, 46,629) = 37.24, p = .000$, and the second year, $F(2, 46,629) = 10.00, p = .000$. Simple effects plots, shown in Figures 10, 11, and 12, reveal the observed interaction for each period. HELP Grant recipients earn a higher cumulative GPA than non-recipients, regardless of income. After the first term and the first year, High Pell students earn a higher cumulative GPA than Middle Pell and Low Pell students, regardless of HELP Grant receipt. After the first term and first year, when receiving the HELP Grant, Low Pell students earn the same or higher mean cumulative GPA as Middle Pell students. However, after the second year, when receiving the HELP Grant, Middle Pell and Low Pell students earn a higher cumulative GPA than High Pell

students. Receiving the HELP Grant has the greatest impact on Low Pell students, as demonstrated by the slope of the lines depicting mean cumulative GPA earned by those who received the HELP Grant compared to those who did not.

Table 12

Between-Subjects Effects of HELP Receipt and Income on Mean Cumulative GPA

Source of variation	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
After first term					
HELP receipt	494.97	1	494.97	260.47	.000
Income	167.00	2	83.50	43.94	.000
Interaction	136.18	2	68.09	35.83	.000
Error	88,609.97	46,629	1.90		
Total	94,848.39	46,634			
After first year					
HELP receipt	816.50	1	816.50	426.89	.000
Income	104.19	2	52.09	27.24	.000
Interaction	142.46	2	71.23	37.24	.000
Error	89,186.04	46,629	1.91		
Total	97,887.93	46,634			
After second year					
HELP receipt	815.28	1	815.28	334.62	.000
Income	112.05	2	56.02	22.99	.000
Interaction	48.70	2	24.35	10.00	.000
Error	113,608.39	46,629	2.44		
Total	120,504.98	46,634			

Table 13*Mean Cumulative GPAs Earned by HELP Recipients and Non-recipients of Different Incomes*

Income	Did not receive HELP			Received HELP			Total		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>N</i>
After first term									
High Pell	2.49	1.39	7,637	3.06	0.89	145	2.50	1.39	7,782
Low Pell	1.98	1.49	23,896	2.94	0.91	7,428	2.21	1.44	31,324
Middle Pell	2.41	1.42	6,698	2.94	0.93	831	2.47	1.39	7,529
After first year									
High Pell	2.39	1.44	7,654	3.17	0.68	128	2.40	1.43	7,782
Low Pell	1.88	1.48	25,418	3.13	0.71	5,906	2.12	1.45	31,324
Middle Pell	2.30	1.45	6,833	3.08	0.77	696	2.37	1.42	7,529
After second year									
High Pell	2.00	1.59	7,657	2.69	1.34	125	2.01	1.59	7,782
Low Pell	1.57	1.60	26,724	2.76	1.26	4,600	1.74	1.61	31,324
Middle Pell	1.89	1.58	6,913	2.89	1.19	616	1.98	1.57	7,529

Figure 10

Means of Cumulative GPAs Earned after the First Term by Income with and without HELP

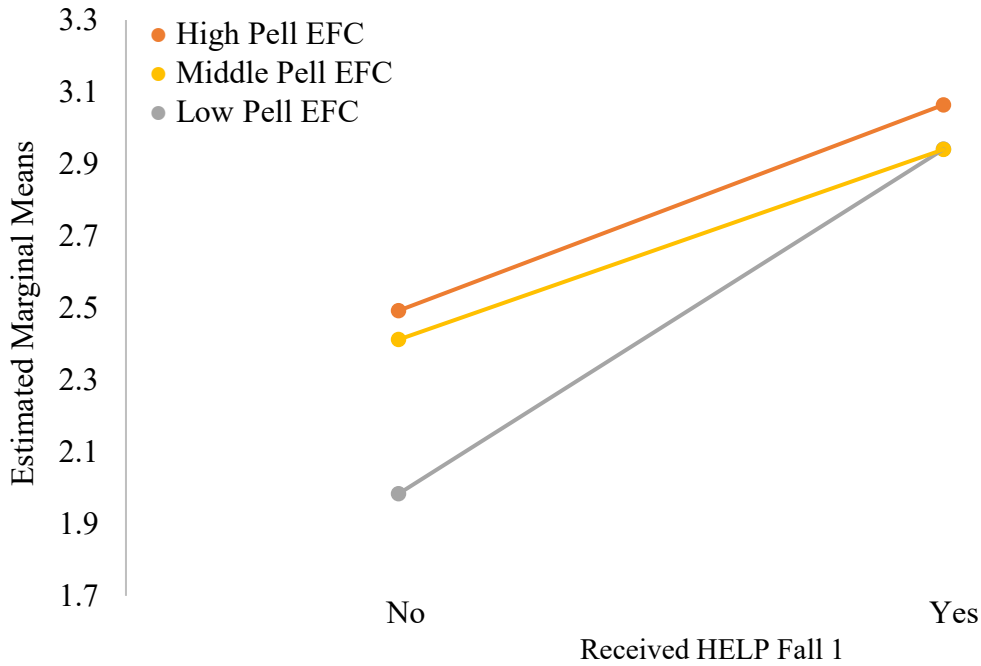


Figure 11

Means of Cumulative GPAs Earned after the First Year by Income with and without HELP

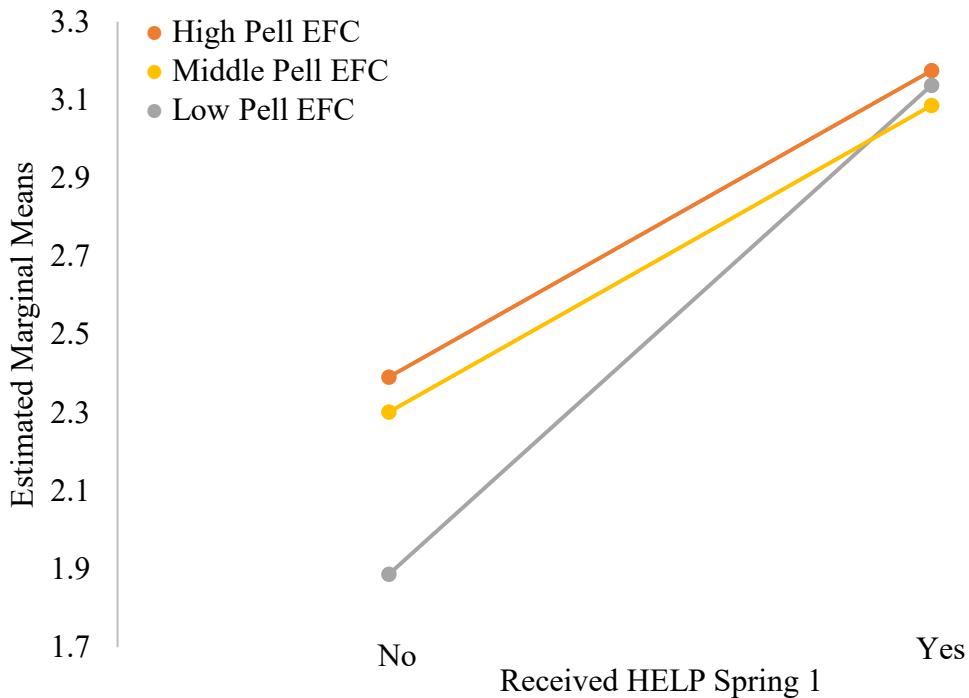
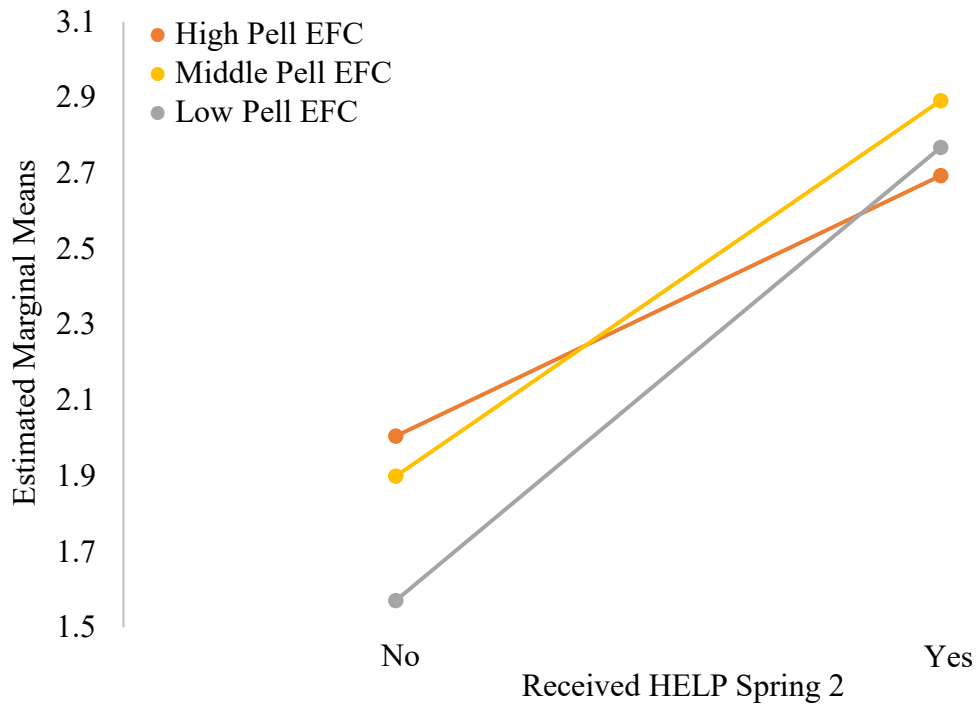


Figure 12

Means of Cumulative GPAs Earned after the Second Year by Income with and without HELP



Conclusions

In response to the original question driving this inquiry, “Does the HELP Grant Help?” the answer is yes. The Mississippi HELP Grant positively impacts college-going in Mississippi. HELP Grant recipients earn significantly more credit hours and significantly higher GPAs after the first fall term, the first year, and the second year than similar students who do not receive the HELP Grant. These findings are in keeping with the findings from studies on other state financial aid programs discussed in Chapter 1.

The HELP Grant also has a greater impact on credit hour completion and cumulative GPA for minority students and the lowest income students than on Caucasian students and students with less financial need. Whereas without the HELP Grant, minority students and Low Pell EFC students earn fewer credit hours than Caucasian students and students with less

financial need, with the HELP Grant, minority students and Low Pell EFC students earn almost the same, and in some cases more, credit hours. Likewise, without the HELP Grant, minority students and Low Pell EFC students earn lower cumulative GPAs than Caucasian students and students with less financial need, but with the HELP Grant, minority students and Low Pell EFC students earn almost the same, and in some cases higher, cumulative GPAs. The HELP Grant does not perpetuate racial and socioeconomic stratification in the same way that student loans do. Instead, in most cases, the HELP Grant serves as an equalizer to level the performance gap between Caucasian and ethnic minority students and between the lowest income students and those with less financial need.

Unfortunately, too few students qualify for the HELP Grant and even fewer actually receive it. The ACT score requirement for HELP Grant eligibility is the greatest impediment to broader participation that has a disparate negative impact on minority students and the lowest income students. Other HELP grant requirements, such as the early application deadline and the continuous, full-time enrollment requirement, are also concerning as barriers to broader participation. I will offer recommendations for addressing these concerns in the final chapter.

This is the second of three chapters that will ultimately comprise a dissertation in practice. In this chapter, I have restated the need for impact data about the Mississippi HELP Grant as a problem of practice. I presented six research questions to explore the impact of the HELP Grant on credit hour completion and GPA for all students and for students of various races/ethnicities and various levels of financial need. I defined terminology and described the data in detail. I presented my findings that the HELP Grant has a positive impact on credit hour completion and cumulative GPA for all recipients but especially for minority students and students with the most financial need. In the third and final chapter, I will examine the findings

in relation to the conceptual framework. I will view the results through a critical lens and compare the results to findings from other states. I will also make a series of recommendations for both action and additional research.

CHAPTER III: DISCUSSION AND RECOMMENDATIONS

Summary of the Problem and Study Design

As is the case in most every state, Mississippi's state resources are limited while the state's needs are vast. Therefore, the state legislature must make difficult choices about how best to spend the state's limited resources. Each year, the Mississippi legislature appropriates money to fund programs to help Mississippi students pay for college. The bulk of appropriations flow to three undergraduate grant programs, the Mississippi Higher Education Legislative Plan for Needy Students (HELP) Grant, the Mississippi Eminent Scholars Grant (MESG), and the Mississippi Tuition Assistance Grant (MTAG). In recent years, the cost of these programs, particularly the HELP Grant, has increased. Appropriations have not increased at the same rate. In recent years, the Legislature has appropriated additional funds mid-year to prevent the Mississippi Office of Student Financial Aid (SFA) from being forced to prorate awards for eligible students.

In October 2018, shortly after I started my doctoral journey, a group of state legislators established a State Aid Study Committee to conduct a comprehensive review of the state's student financial aid programs. The goal of the committee was to identify changes to the programs that would make the cost of the programs more sustainable while ensuring the programs continued to meet the needs of the state and students. During the meetings, committee members realized that minor adjustments to the programs would not yield the desired results. Rather, a wholesale redesign would be needed, and such radical change would require time, political capital, and additional data.

Despite the state's sizable investment in the state aid programs over about 25 years, very little is known about the effectiveness of the programs or the outcomes of the students who benefit from the programs. I recognized the need to fill this knowledge gap. I initially hoped to evaluate all three state financial aid programs and their impact on college-going in Mississippi. However, the effort to evaluate three distinct programs proved to be unwieldy for a single dissertation, so I narrowed my focus to the HELP Grant. This dissertation in practice explores the impact of the HELP Grant on college-going in Mississippi. I intend to use what I have learned to advise state policymakers and inform the state aid redesign discussion.

This is the third of three manuscripts that will ultimately be compiled into a single dissertation in practice. In the first manuscript, I presented information about the creation of federal and state student financial aid programs to offset the ever-rising cost of higher education to students. I provided specific details about the undergraduate grants in Mississippi including the HELP Grant, and I explained how my personal and professional experiences have positioned me to approach this topic. I built a conceptual framework using David Labaree's 1997 theory on the competing political goals of education, critical theory, and the literature on state aid programs to serve as a blueprint to guide my analysis of the HELP Grant.

When I started this exploration, I most wanted to know whether the HELP Grant impacts initial and continued college-going, and if so, how. I also wanted to know whether the impact differs for students of different races/ethnicities and for students from different socioeconomic situations. I wanted to be able to argue with surety that some percentage of Mississippi students with a composite score of 19 on the ACT (and therefore not eligible for the HELP Grant) go to college, stay in college, and complete college. I expected this rate would be low. I then wanted to run a regression test using discontinuity design to show that some different percentage of

Mississippi students with a composite score of 20 on the ACT (and therefore eligible for the HELP Grant) go to college, stay in college, and complete college. I expected this rate would be significantly higher, thus demonstrating the positive impact of the HELP Grant. I also expected to see a greater impact for minority students and students from the lowest socioeconomic sector.

I obtained a data file that contained student unit records for nearly all Mississippi high school graduates for the years 2009 through 2019. For each student record, the file included demographic identifiers as well as both high school and postsecondary academic identifiers. Once I started examining the data and thinking about limitations, I realized I did not have access to the data I would need to compare rates of initial college-going or completion. I also realized that the take-up rate of the HELP Grant over the years was too low and inconsistent to allow me to attribute any differences I found between the performance of students with an ACT score of 19 and those with a 20 solely to the HELP Grant.

I changed course to focus my analysis on the aspects of college-going I could confidently measure—earned credit hours and cumulative GPA. I conducted multiple independent t-tests and two-way ANOVAs to compare the college-going performance of students who received the HELP Grant and similar students who appear eligible for but did not receive the HELP Grant. The second manuscript included the presentation of data that answered the following research questions:

1. Is there a significant difference in the number of credit hours earned a) after the first fall term, b) after the first year, and c) after the second year for those students potentially eligible to receive the HELP Grant (but did not receive it) and those students who did receive the HELP Grant?

2. Is there a significant difference in the cumulative GPA earned a) after the first fall term, b) after the first year, and c) after the second year for those students potentially eligible to receive the HELP Grant (but did not receive it) and those students who did receive the HELP Grant?
3. Is there a significant difference in the number of credit hours earned a) after the first fall term, b) after the first year, and c) after the second year for students based on whether they received the HELP Grant and their race?
4. Is there a significant difference in the mean cumulative GPA a) after the first fall term, b) after the first year, and c) after the second year for students based on whether they received the HELP Grant and their race?
5. Is there a significant difference in the number of credit hours earned a) after the first fall term, b) after the first year, and c) after the second year for students based on whether they received the HELP Grant and their income?
6. Is there a significant difference in the mean cumulative GPA a) after the first fall term, b) after the first year, and c) after the second year for students based on whether they received the HELP Grant and their income?

In this final manuscript, I will summarize my findings and their significance to the problem of practice. I will provide context for the findings by presenting the data in relation to the conceptual framework. I will present recommendations for next steps in the effort to redesign Mississippi state aid in a way that will promote ethics, equity, and social justice, and I will address recommendations for additional research and data collection. I will conclude with a personal reflection on this study and my doctoral journey.

Interpretation of Results

The Mississippi HELP Grant positively impacts the enrollment intensity and academic performance of college-going students in Mississippi. HELP Grant recipients earn significantly more credit hours and significantly higher GPAs after the first fall term, the first year, and the second year than similar students who do not receive the HELP Grant. The HELP Grant also has a greater impact on credit hour completion and cumulative GPA for minority students and the lowest income students than on Caucasian students and students with less financial need.

Whereas without the HELP Grant, minority students and Low Pell EFC students earn fewer credit hours than Caucasian students and students with less financial need, with the HELP Grant, minority students and Low Pell EFC students earn almost the same, and in some cases more, credit hours. Likewise, without the HELP Grant, minority students and Low Pell EFC students earn lower cumulative GPAs than Caucasian students and students with less financial need, but with the HELP Grant, minority students and Low Pell EFC students earn almost the same, and in some cases higher, cumulative GPAs. Nevertheless, the broader impact of these positive results is muted by the inaccessibility of the HELP Grant caused by merit-based eligibility requirements.

Very little outcomes data exists for Mississippi's undergraduate grant programs, even though such data is crucial to inform state policy. Without outcomes data, how can policymakers know if state programs are working as intended? As described above, to solve budget problems, Mississippi lawmakers were ready to make changes to the state aid programs without fully understanding the impact the programs make in their current form. As a result of this study, policymakers will now know that the HELP Grant has a positive impact on the enrollment intensity and academic performance of recipients. Policymakers will also be confronted with data that demonstrates the discriminatory nature of merit-based eligibility

requirements. As discussions of state aid redesign continue, policymakers should consider not only the significant positive outcomes of the program but also the narrow reach of a program that automatically excludes over half of the state's high school graduates.

David Labaree's Competing Goals of Education (1997)

As discussed in Manuscript 1, students value higher education as a path of upward social mobility. The federal and state governments have historically valued higher education as a means of nurturing the development of civic-minded Americans to achieve democratic equality and as a means of achieving social efficiency through the development of the American workforce. The results of this study demonstrate the HELP Grant assists the state in achieving all the competing goals of education.

HELP Grant recipients complete more credit hours. Students who complete more hours are more likely to complete a degree (Belcheir, 2000; Jones, 2015; O'Toole et al., 2003; Shapiro et al., 2016). Students with a degree are more likely to secure gainful employment and achieve social mobility (Carnevale & Rose, 2004; Carnevale & Strohl, 2010; Haskins et al., 2009; Hoxby, 2015; Roksa et al., 2007; Torche, 2011). Although the quality and quantity of learning in higher education has been debated in recent years (Arum & Roksa, 2011), for the purposes of this argument, I assume that students learn over the course of their enrollment in higher education. Learning in turn broadens perspectives and develops citizens who are more prepared to participate in all functions of civil society. If GPA is any measure of learning, which is debatable, HELP Grant recipients learn more than similar students who do not receive the HELP Grant.

In October 2020, Mississippi's Education Achievement Council (EAC) formally adopted Mississippi's postsecondary education attainment goal—Ascent to 55%. The goal is to increase

the number of working-age Mississippians who hold a credential of value to 55% by 2030 and to 60% by 2035 (Ascent to 55%, n.d.). When setting this goal, the EAC acknowledged the goal will not be met unless the state can award more degrees or credentials to students from populations that have traditionally experienced low postsecondary completion rates (EAC, 2020). These populations include working adults, minorities, and the socioeconomically disadvantaged. My study demonstrates that minority students and students with the lowest incomes complete as many credit hours, if not more credit hours, than their majority and higher income peers when awarded the HELP Grant, thereby increasing their chances of completing a degree and becoming part of the state's educated workforce.

Critical Theory

Critical theory is a social theory that challenges researchers to question socially accepted norms related to power and marginalization (Lincoln & Guba, 2000) and to question “whose interests are being served by the way the educational system is organized, who really has access to particular programs...and what are the outcomes of the way in which education is structured” (Merriam, 2002, p. 10). From this study, I discovered the HELP Grant does not perpetuate racial and socioeconomic stratification in the same way that student loans do, as I discussed in Manuscript 1. Instead, in most cases, the HELP Grant serves as an equalizer to level the performance gap between Caucasian and minority students and between the lowest income students and those with less financial need. Nevertheless, some of the program's requirements, especially the ACT score requirement, exclude many students from eligibility, and low-income and minority students are disparately impacted.

My original conceptual framework utilizes critical theory, but some tenets of critical race theory (CRT), a sub-discipline of critical theory, have influenced my understanding of the

study's results and my thinking about what to do with the results. Lea Anne Bell described CRT as a way to challenge popular narratives through counter storytelling (2019). One broadly understood mainstream narrative is that of the American Dream. As I described in the introduction to Chapter 1, one of the most widely held American beliefs is that anyone can achieve anything through hard work and perseverance. It is this American Dream narrative that supports the preponderance of merit-based financial aid programs and the inclusion of merit criteria in the design of need-based aid programs. Because Americans know this mainstream narrative by heart, it is easy for many to agree that students who have proven their hard work in high school by scoring high ACT scores *deserve* grant money for college. They *earned* it.

But the mainstream narrative is not always true, and by retelling it, we uphold the status quo. White and affluent students continue to access and succeed in college at higher rates, and minority and low-income students continue to struggle. To disrupt the status quo, we must change the narrative. The data tells a counter-narrative that hard work alone does not always equal success. Minority students score lower on the ACT on average than majority students (ACT, 2019; Jencks & Phillips, 2011), not because they do not work as hard, but because of circumstantial factors beyond their control. Perhaps they are less prepared academically because they attended sub-par schools (Musu-Gillette et al., 2017; Frankenberg et al., 2019), or perhaps they miss cultural clues imbedded in standardized tests that are biased in design (Banks, 2012; Baumgartner & Johnson-Bailey, 2010; Ford & Helms, 2012). Minority and low-income students are also more likely to miss an early deadline date, not because they are lazy or do not have the drive to apply, but because such students do not even know about the program, much less the deadline. Again, this is because such students are more likely to attend high schools with less resources and student support services than their majority peers (McDonough, 2005; Perna et al.,

2008). Finally, minority and low-income students are more likely to work and work more hours than majority and higher income students (Carnevale & Smith, 2018), thus making it more difficult for them to maintain continuous, full-time enrollment in a postsecondary program.

To qualify for the HELP Grant, students must have a composite ACT score of 20, be within two years of high school graduation, and be able to enroll full-time (Mississippi Office of Student Financial Aid, n.d.-a). The HELP Grant also has an application deadline of March 31, which is nearly six months earlier than the September 15 deadline for MTAG and MESHG (Mississippi Office of Student Financial Aid, n.d.-a). Despite the positive outcomes of the program, too many students are excluded. When viewed through a critical lens, at best the HELP Grant eligibility requirements support the mainstream narrative of “hard work equals success.” At worst, the merit requirements of the HELP grant are a form of structural racism that perpetuates the status quo by excluding many minority and low-income students. Because of the HELP Grant’s positive impact on credit hour completion and the state’s goal to increase degree completion, the Legislature should adjust the program rules to support greater participation among the state’s minority and low-income students. Eliminating the ACT score requirement would accomplish this.

Another tenet of CRT is interest convergence. Proponents of CRT have argued that change, or disruption of the status quo, does not happen due to moral imperatives like social justice and equity, but rather due to a convergence of interests (Bell, 1980). As Bell discussed, the U.S. Congress did not pass the Civil Rights Act of 1964 because America realized it should do better by Black people and other marginalized groups. Congress passed the law, because the world was entering the Cold War and America did not want to project an image that was anything less than democratic. Interests converged around national security and the democratic

ideal. After years of conservative politicians ignoring pleas to change the Mississippi flag, they finally came together in the summer of 2020 after realizing the current flag was hurting the state's public image and affecting business and sports-related tourism. Interests converged around economics and public perception. So, where do the interests of low-income and minority students converge with the interests of white, conservative politicians? I believe the answer is social and economic efficiency. Need-based financial aid creates social efficiency by helping more minority and low-income students become part of a skilled and educated workforce that attracts new businesses and spurs entrepreneurship. Need-based financial aid creates economic efficiency by yielding a positive return on investment. I will discuss this idea of social and economic efficiency in greater detail later in my recommendations.

Literature

The results of the study bolster the literature that demonstrates the positive impacts of need-based financial aid on college-going (Anderson et al., 2020; Castleman & Terry-Long, 2016; Chen & St. John, 2011; Scott-Clayton, 2011; Titus, 2006b; Titus, 2009). Recipients of the HELP Grant completed significantly more hours than similar students who did not receive the HELP Grant. Similar results were found in studies of the West Virginia PROMISE Scholarship program (Scott-Clayton, 2011) and the Florida Student Access Grant (Castleman & Terry-Long, 2016). Another study of the need-based aid programs in many states concluded that every 10% increase in need-based aid per undergraduate enrollment results in a 3% increase in the number of bachelor's degrees conferred (Titus, 2009). Other studies have demonstrated the positive effect of state need-based aid on persistence, degree completion, and/or time-to-degree (Anderson et al., 2020; Chen & St. John, 2011; Titus, 2006b;). Similar results have been found in association with federal Pell grants (Bettinger, 2004) and institutional need-based aid as well

(DesJardins & McCall, 2010). A recent meta-analysis of 43 studies concluded that persistence and degree completion increase by 1.5 to 2 percentage points with each additional \$1,000 in grant aid (Nguyen et al., 2019).

Recipients of the HELP Grant also earned significantly higher cumulative GPAs than similar students who did not receive the HELP Grant. This finding aligns with findings from Scott-Clayton's (2011) study of the West Virginia PROMISE program, which revealed the receipt of PROMISE increases the likelihood of a student having a 3.0 GPA after four years. In a study of GPAs at three public universities, Stater (2009) also found that financial aid is associated with improved student academic performance. As with this study of the HELP Grant, a randomized experiment conducted on the impact of the need-based Wisconsin Scholars Grant found recipients remain enrolled at higher rates, earn more credits, earn higher grades, and graduate on time at higher rates than similar nonrecipients (Goldrick-Rab et al., 2016). Finally, HELP Grant recipients who are also minority students or the lowest income students experienced a greater impact from the HELP Grant in terms of credit hour completion and cumulative GPA than HELP Grant recipients who are also majority or have less financial need. Alon (2011) found that the lowest income students benefit more from need-based aid than their less needy peers as demonstrated by gains in persistence. In a study of the New Jersey Tuition Aid Grant (TAG) program, researchers found the lowest-income recipients experienced the largest gains in degree completion and in on-time completion (Anderson & Zaber, 2021). The researchers recommend policymakers increase grant aid to this group if possible and protect this group from cuts to grant aid.

Recommendations

As the Director of Student Financial Aid, I am an employee of the State of Mississippi, charged with implementing the policies and programs laid out by Mississippi lawmakers in the Mississippi state code. Therefore, I do not have the authority to enact policy or program changes based on the data revealed in this study. I am, however, in a position to make recommendations and advise policymakers. Based on the results of the statistical analysis I conducted on HELP Grant recipients and similar non-recipients, I am prepared to make a series of recommendations related to state financial aid policy. The HELP Grant does not exist in a vacuum, but rather acts as one of three primary grant programs. All discussion to date about the need to reform or redesign state aid has involved all three programs. Therefore, some of my recommendations apply to all three programs.

Recommendation One: Establish Program Goals

Before advancing any legislation to redesign state aid, the Legislature should first and foremost establish and document the goals for state financial aid. Currently, the only codified goal for state aid is to extend affordable access to higher education to all Mississippians (Post-Secondary Education Financial Assistance Law, 1975). The goal was established in 1975 and has not been revisited since. While the stated goal of Mississippi's financial aid programs may be affordability for all students, the actual creation and design of programs suggest the state has other priorities, such as rewarding meritorious academic achievement. Rewarding merit is a goal evidenced by the creation of MESG in 1995 and the existence of ACT and GPA eligibility requirements for all three undergraduate grant programs (Higher Education Legislative Plan for Needy Students Grant, 1997/2014; Mississippi Eminent Scholars Grant, 1995/2014; Mississippi Tuition Assistance Grant, 1995/2014). Nevertheless, this goal is not stated in law and in some

ways conflicts with the goal that is stated in law. After all, the HELP Grant only extends affordability to students with a composite score of 20 who graduated from high school within the last two years, apply early, and enroll in college full-time. As I argued in the earlier discussion of critical theory, the HELP Grant does not extend affordable access to higher education for *all* Mississippians. Rather, the merit criteria for HELP Grant-eligibility *exclude* many low-income and minority students. Although not discussed at length in this dissertation, the other two grant programs exclude many students as well. MTAG is not available to students who are eligible for a maximum federal Pell grant, and MESG is only available to students who score at least a 29 on the ACT and earn a minimum high school GPA of 3.5. All three programs require students to take and complete at least 15 hours every semester or 9 hours every trimester.

The lack of plainly stated program goals makes it difficult to anticipate outcomes and evaluate the effectiveness of programs. The Legislature should set goals for state financial aid, and the goals should drive program design. I will stop short of recommending specific goals, but I do recommend the state aid goals directly support achievement of the state's educational attainment goal, Ascent to 55%. If aligned with the attainment goal, state aid goals will necessarily focus on historically underserved populations that are not already going to college and earning degrees. In Mississippi, these populations include minority, low-income, and non-traditional students. A carefully designed state aid program targeting these populations would promote equity in degree attainment and social justice through the upward economic mobility of marginalized students.

Recommendation Two: Involve Stakeholders

My second recommendation is to utilize available data and involve all stakeholders to redesign state aid. In my role as Director of Student Financial Aid, I also serve as the Executive

Director of the Mississippi Postsecondary Education Financial Assistance Board (PSB), which is the nine-member board appointed to administer the state aid programs and oversee the budget (Postsecondary Education Financial Assistance Board [PSB], n.d.). After the State Aid Study Committee failed to take action to redesign state aid in 2018 (Mississippi Office of Student Financial Aid, n.d.-c), the PSB initiated its own strategic planning process. The PSB met as a committee of the whole over two years to discuss possible avenues of redesign (PSB, n.d.). Despite my title as Executive Director, I do not direct or oversee the PSB, but rather serve in a support capacity. For the strategic planning meetings, I provided data on programs in other states and evidence from literature about the impact of need-based and merit-based grant aid programs in other states. I also encouraged the Board to set goals for what state aid programs should accomplish. Ultimately, the PSB appointed an Advisory Committee of eight college and university financial aid directors from the public universities, private colleges, and two-year colleges in the state. The Advisory Committee was charged with developing a single grant program to replace MTAG, MESHG, and HELP (PSB, 2021a). The Board instructed the committee the new program should include elements of need- and merit-based aid, award more students than are currently served by MTAG, MESHG, and HELP, and stay within the current year's appropriated budget.

In October 2021, the Advisory Committee proposed a program they called the Mississippi One Grant (PSB, 2021b). The program would award aid based on a matrix of need and merit. Need would be determined by a student's EFC, and merit would be determined by a student's ACT score. Students with the lowest EFC and highest ACT score would receive the most money. No student scoring below an 18 ACT would qualify, regardless of need, and no

student with an EFC over 100,000 would qualify, regardless of ACT score. The PSB voted unanimously to adopt the proposal and recommend it to the Legislature.

The public response to the proposal was swift and negative. Within days, a local news outlet released an article calling attention to the fact that the proposal would decrease the average award for Black students and increase the average award for white students. The program would also drastically reduce the average grant amount currently received by HELP Grant recipients (Minta, 2021a). More articles followed (Jira, 2021; Minta, 2021b; Smallwood, 2021), and students initiated a Change.org petition and a Twitter campaign to #HelpSaveHELP (Change.org, 2021). The local college access organization, the Woodward-Hines Education Foundation (WHEF) that runs a program called Get2College, also spoke against the proposal on behalf of the low-income students they assist.

I describe these recent events to provide background and context for my second recommendation. I recommend a convening of all key stakeholders to inform the development of a student financial aid program that aligns with Mississippi's postsecondary attainment goal, Ascent to 55%. The stakeholder group should include representatives from the Mississippi Institutions of Higher Learning, the Mississippi Community College Board, the Mississippi Economic Council (Mississippi's Chamber of Commerce), the Public Education Forum, Accelerate Mississippi (State Workforce Investment agency), the Mississippi Office of Student Financial Aid, key elected officials, and students. Involving all stakeholders will result in a more equitable redesign effort.

WHEF has offered to support the convening financially, organize it, and invite the key stakeholders. The Lumina Foundation, in concert with HCM Strategists, has offered to facilitate the convening and provide content experts if needed. The convening should host multiple

working meetings over a course of several months to allow time to fully educate all stakeholders. The impact data produced in this study will be shared with the convening along with other pertinent data to support a data-driven redesign effort. The convening should also engage regional and/or national experts with knowledge and experience with state financial aid programs to inform the meetings and provide non-biased, data-based opinions about various financial aid mechanisms. The convening should aim to design a new state aid program or programs to be recommended to the Legislature in a subsequent session. The convening should also identify a legislative champion to sponsor the resulting legislation.

Recommendation Three: Focus on Interest Convergence around Economic Efficiency

My third recommendation is to frame arguments for change using the lens of economic efficiency. As I discussed earlier, Mississippi Legislators established the State Aid Redesign Study Committee to find ways to alter the state aid programs to control the budget. Because there is concern about the cost of the programs but not necessarily about the effectiveness of the programs or the impact of the programs on marginalized students, any proposals for a new need-based program or program redesign should focus on economic efficiency as the point of interest convergence.

A study on the long-term impacts of California's need-based Cal-Grant program concluded the grant more than pays for itself. Recipients earn degrees at higher rates, earn higher wages, and pay more taxes. Recipients are also more likely to pursue graduate school, which ultimately results in even higher wages and taxes (Bettinger et al., 2019). Denning et al. (2019) found that first-time students in Texas who received the maximum federal Pell grant graduated at higher rates, earned more in wages long-term, and paid more taxes than students receiving less grant aid. The authors asserted the grant more than paid for itself in economic and

societal benefits. Scott-Clayton and Zafar (2019) examined the credit bureau reports of West Virginia PROMISE recipients ten years after receipt of the grant. The researchers found grant recipients were more likely to be homeowners and to live in higher income neighborhoods than non-recipients. As with the Cal-grant recipients, PROMISE recipients were also more likely to have graduate degrees. The PROMISE findings are particularly applicable to this study of the HELP Grant, because although the PROMISE program is a merit-based aid program, it is broadly available to students with a 21 ACT score which is similar to the 20 ACT required by the HELP Grant, and it awards an amount equal to tuition and fees, which is also similar to the HELP Grant. These outcomes from other state grant programs should be shared with the convening to demonstrate how the state's continued and perhaps expanded investment in need-based aid can yield positive long-term economic returns for the state.

Recommendation Four: Guidelines for Program Redesign

If it is to be data-driven, a redesign of the Mississippi HELP Grant or the creation of a new need-based aid program should do the following:

- a. Preserve the HELP Grant's significant purchasing power, especially for the students with the least financial resources. Currently the maximum HELP Grant award amount is equal to tuition and required fees at public institutions or an amount equal to the average public university tuition and fees at private institutions. The literature shows that lower income students are more sensitive to the amount of aid they receive (Alon, 2011; Anderson & Zaber, 2021). This dissertation also showed the HELP Grant was most impactful in terms of credit hour completion and GPA for students in the lowest income segment.

- b. Maintain rigorous enrollment requirements and GPA requirements for continuing students. Studies of other state grant programs have demonstrated positive results for programs that incorporate academic and enrollment intensity requirements for maintaining aid (Dynarski & Scott-Clayton, 2013; Scott-Clayton, 2011; Yanagiura & Johnson, 2017). All three Mississippi undergraduate grant programs, including the HELP Grant, currently require students to maintain continuous, full-time enrollment of 15 credit hours during the regular academic year, which does not include summer. This requirement is likely a large part of the reason HELP Grant recipients complete on average 21 more credit hours by the end of the second year than similar students who do not receive the HELP Grant. Nevertheless, as I discussed above, full-time enrollment requirements can exclude some students and disproportionately affect low-income and minority students. One suggestion for making need-based aid more equitably accessible would be to provide awards for part-time enrollment while encouraging full-time (30-credit hours per year) enrollment with a performance bonus. An example of this type of performance scholarship is Indiana's need-based Frank O'Bannon Grant (Indiana Commission for Higher Education, n.d.).
- c. Allow the grant to be used across all terms, not just the regular academic year. Studies show that students who earn at least 30 credit hours each year are more likely to complete and complete in less time (Adelman, 1999; Binder et al., 2015; Lee, 2018; Mayer et al., 2015; O'Toole et al., 2003; Postsecondary Analytics, 2013). Yet, data indicates low-income students and nontraditional students, many of whom are also minority students, have trouble balancing full course loads and full work schedules (Ardissone et al., 2021; Choitz & Reimherr, 2013; Paulsen & St. John,

- 2002). By allowing grant aid to be used year-round, low-income students who need to work more hours could spread their credit hours over the full calendar year, including summer, and still complete at least 30 hours. Students can already use Pell grants during the summer (Federal Student Aid, n.d.-c), so low-income students would have access to additional funds to make enrollment more affordable.
- d. Remove the ACT score requirement for eligibility. A required ACT score is not only unnecessary for the program to be effective, but it is also discriminatory against low-income and minority students. Research shows that low-income and minority students score lower on average than their higher-income and majority peers (ACT, 2019). Research also shows that standardized tests are often biased (Kruse, 2016; Nettles, 2019), and standardized tests are not the best predictor of college readiness (Allensworth & Clark, 2020). For these reasons, many schools are becoming test optional, meaning they no longer require an ACT or SAT score for admission (Carnevale, 2020). Moreover, a recent study of recipients of the Susan Thompson Buffett Foundation grants to Nebraska high school graduates found that the students who benefitted the most from the awards were students with below average ACT scores and grades (Angrist et al., 2021).
- e. Set a later deadline for grant applications. Currently, the HELP Grant application is due March 31 each year, but the MTAG and MESH applications are not due until September 15 each year. Like the ACT requirement, the earlier HELP Grant deadline is also discriminatory to low-income and minority students who are more likely to attend high schools with fewer resources, which include school counseling services

(Haskins et al., 2009). Therefore, such students may never hear about available financial aid until after the early deadline has passed.

Recommendation Five: Collect Additional Data and Conduct Deeper Research

Additional data should be collected. Some limited outcomes data exist on MTAG and MESG (Allin, 2015a; Allin, 2015b; Lifetracks, 2018). This study provides outcomes data on the HELP Grant. Additional data are needed to fully evaluate all three programs. Future research on the HELP Grant is needed to determine its impact on initial enrollment of low-income students and on graduation rates/on-time graduation rates. National Student Clearinghouse data is needed to fully understand the enrollment patterns of Mississippi students. Without Clearinghouse data, it is difficult to track students as they transition from high school to college. We do not know how many high school students do not graduate from high school, how many go to college out of state, or how many directly enter the military or workforce. We only know about the recent graduates who enroll directly in a Mississippi college or university. We also need Clearinghouse data to better calculate college transfer and graduation rates. Without this data, researchers are unable to fully determine four-year and six-year graduation rates of HELP Grant recipients and non-recipients.

Additional data are needed to measure affordability. As the state agency that distributes state-supported student financial aid, SFA receives Institutional Student Information Records (ISIRs) from the federal government for every Mississippi resident who completes a FAFSA. The ISIR contains all the information obtained from the FAFSA, including each student's adjusted gross income and EFC. The ISIR is not an award offer or award statement, but rather a record of the student's financial situation and indicator of the federal assistance for which the student may qualify. SFA also maintains its own records of which students receive state aid.

SFA does not have access to any data about institutional and private aid. Without a legislative requirement, institutions will not share student record level financial aid award package data with the state. Any legislative mandate should require SFA to aggregate the data and report on it in such a way as to protect the enrollment and recruiting strategies of individual institutions. Having such data would allow the state to develop an affordability model to determine which students have outstanding financial need and the size of the need. An example of an affordability model is the College Affordability Estimator developed by researchers at the University of Washington (College Affordability Estimator, 2022).

Personal Reflections

I began this doctoral journey as the Director of Student Financial Aid for the State of Mississippi, and I end my journey in the same position. While many of the students in my program cohort pursued their degree to advance their career, I do not have any aspirations to leave my current position. I enjoy my work and believe there is more I need to do in this position. Rather, I traveled this path to become the best practitioner I can be and to learn better how to conduct and consume research to inform my practice. I have also laid the foundation for a future position in higher education consulting and research when I retire from the state. Though my position has not changed, I better understand my position, both its power and its limitations. I have also grown and changed in many ways.

Through the doctoral journey and coinciding journey to redesign state aid, I have developed a deeper understanding of the power and limitations of my position. In the past, I naively believed my position gave me the power of expertise and influence. I thought if I provided a well-reasoned recommendation driven by data, I would be heard and acknowledged as the expert by virtue of my position. I even developed my problem of practice around the

notion to learn about the HELP Grant and then use that information to inform policy. While that is still the end goal, I now know I must take a more nuanced approach. Before, I was not taking a 360-degree view of the problem that considered the perspectives of all stakeholders, as recommended by one of my professors (George, 2018). The stakeholders are not just the everyday Mississippi students who may potentially receive state aid. They are also the university presidents, whose institutions use financial aid strategically as an enrollment management tool to build classes of students who bring millions of dollars of revenue to the school. They are the business leaders, looking for skilled and educated workers to staff and grow their businesses. Perhaps most importantly in the state policy context, they are the conservative policymakers who hold all state elected positions and a supermajority in the Mississippi House of Representatives and Senate. By considering the perspectives of all stakeholders, I see the limitations of my own positional influence. This realization led to recommendations three and four above to convene all stakeholders to jointly develop a plan and to identify areas of interest convergence, such as social and economic efficiency.

My personal outlook and approach to problems has also changed since I began working on my doctorate. I have become more critical of the status quo and the policies and procedures that have “always been that way.” I heard a story once about a woman who would cut off the butt of the ham before she put it in her roasting pan for baking. Her husband questioned her, and she told him that is how her mother and grandmother taught her to do it. At Christmas one year, her husband noticed his mother-in-law bake the ham without cutting off the butt, so he questioned her about it. She replied, “Oh, Mom just did it that way because her pan wasn’t big enough for the whole ham.” The point is that just because we have always done things a certain way does not mean that way is the best way. This lesson can certainly apply at the state level to

the basic design of state aid programs. This lesson can also be applied on a more local level. While the Postsecondary Board and by extension the state aid office cannot change the laws that govern the programs, the Board upon recommendation by SFA can change some policies and rules. The early March 31 HELP Grant deadline is not established in code. Years ago, the deadline was established upon recommendation by SFA to give SFA plenty of time to collect and review all the required residency and financial supporting documents. Many of those documents are no longer required, and the once manual application review process is now automated. Nevertheless, the early deadline still exists, even though the early deadline is an access barrier to many potentially eligible students. I cannot control the Postsecondary Board, but I will be working to change this policy and others to disrupt the status quo and promote more equitable access to state aid programs whenever possible.

I have also learned to question the full impact of policies and processes. One professor in the program challenged us to be criticalists and look past the water spiders on the surface of the pond to see what is going on underwater (McClellan, 2019). It was that introduction to critical theory that led me to include critical theory as an element of my conceptual framework. However, when I drafted Manuscript 1 nearly two years ago, the public fight over the teaching of CRT had not yet reached Mississippi. Now anti-CRT legislation has passed in several states, and as of the writing of this final chapter, both the Mississippi Senate and House of Representatives have passed anti-CRT legislation.

The purpose of my dissertation is to collect outcomes data to inform public policy. While writing this final chapter, I have worried that anti-CRT policymakers might write off the study because I used critical theory in my conceptual framework. I ultimately decided to retain the conceptual framework as written. Critical theory is not about pointing fingers, placing blame, or

shaming others for being racist, sexist, or classist. Instead, critical theory is about questioning the impact of systems, policies, and processes, recognizing that some systems, policies, and processes may have a disparate impact on some people due to their race, gender, sexuality, or socioeconomic situation, and looking for ways to minimize the disparate impact. As I learned from this study, the HELP Grant minimizes performance disparities between students of different races and different socio-economic levels. If I viewed the results without a critical lens, I might only see the tremendous gains of the recipients and tout the program's impact and success. However, when I view the results with a critical lens, I also see the tremendous loss of potential. How many more low-income and minority students could have attended college and graduated if they too had received the HELP Grant? The HELP Grant itself may not perpetuate socio-economic and racial disparities, but the merit eligibility requirements do exclude many students who are disproportionately low-income and minority. Because of this, critical theory remains a choice framework for examining the impact of the HELP Grant in Mississippi. Yes, the HELP Grant helps, but it only helps those who qualify by meeting the above-average eligibility requirements. As a state, we can and must do more.

Conclusion

Mississippi spends nearly \$50 million each year on student financial aid, but inadequate outcomes data exist on the grant programs to help policymakers understand whether the programs are effective and efficient. The study takes a critical approach to examine the impact of the Mississippi HELP Grant on college-going in Mississippi. The study shows HELP Grant recipients complete significantly more credit hours and earn significantly higher grades than similar students who do not receive the HELP Grant. The grant also serves to narrow and in some cases erase the performance gaps that exist between majority and minority students and

between students in different socioeconomic situations. The results also suggest the HELP Grant could be an effective program to help the state achieve greater social and economic efficiency if expanded. Unfortunately, merit-based eligibility requirements mean too few students have the opportunity to benefit from the HELP Grant.

The study is timely as discussions of redesigning state financial aid are ongoing in the state. As policymakers grapple with redesign, I recommend they start by establishing goals for student financial aid that are aligned with the state's educational attainment goal Ascent to 55%. To support the state's redesign efforts, I recommend convening all stakeholders to use the data from this study and other studies to develop a state aid program or programs to achieve the established goals. Effective programs will be more equitable and help the state achieve greater social and economic efficiency by ensuring more Mississippians earn postsecondary credentials of value, participate in the workforce, and contribute to the state's economy. Opportunities exist for researchers to collect more outcomes data on the state grant programs and to explore the concept of economic efficiency to determine the state's return on investment from student financial aid.

This is the third of three manuscripts that will ultimately comprise a dissertation in practice. It also represents the conclusion of my doctoral journey. Through the program coursework and this study, I have grown as a practitioner. I have realized the importance of considering the perspectives of all stakeholders and been humbled by the limitations of my own positional influence. I have recognized an ethical responsibility to be critical of the systems, policies, and processes that impede social justice and equity. I have learned to question the popular narratives that perpetuate racial and socioeconomic disparities and identify ways to disrupt the status quo when needed.

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APPENDICES

Appendix A

Tables Detailing Mean Differences

Table A1

Mean Differences in Credit Hours Earned by Different Ethnicities after the First Term

(I) Ethnicity	(J) Ethnicity	(I-J) Mean Difference	<i>p</i>
African American	Alaskan Native/Native American	2.126*	0.001
	Asian/Pacific Islander	0.116	0.995
	Caucasian	-.775*	0.000
	Hispanic	-0.214	0.921
	Unknown	3.104*	0.000
Alaskan Native/Native American	African American	-2.126*	0.001
	Asian/Pacific Islander	-2.010*	0.005
	Caucasian	-2.901*	0.000
	Hispanic	-2.340*	0.000
	Unknown	0.978	0.425
Asian/Pacific Islander	African American	-0.116	0.995
	Alaskan Native/Native American	2.010*	0.005
	Caucasian	-.891*	0.001
	Hispanic	-0.330	0.882
	Unknown	2.988*	0.000
Caucasian	African American	.775*	0.000
	Alaskan Native/Native American	2.901*	0.000
	Asian/Pacific Islander	.891*	0.001
	Hispanic	0.561	0.091
	Unknown	3.879*	0.000
Hispanic	African American	0.214	0.921
	Alaskan Native/Native American	2.340*	0.000
	Asian/Pacific Islander	0.330	0.882
	Caucasian	-0.561	0.091
	Unknown	3.318*	0.000
Unknown	African American	-3.104*	0.000
	Alaskan Native/Native American	-0.978	0.425
	Asian/Pacific Islander	-2.988*	0.000
	Caucasian	-3.879*	0.000
	Hispanic	-3.318*	0.000

Note: * $p < .05$

Table A2*Mean Credit Hours Earned by Students of Different Ethnicities after the First Year*

(I) Ethnicity	(J) Ethnicity	(I-J) Mean Difference	<i>p</i>
African American	Alaskan Native/Native American	4.239*	0.000
	Asian/Pacific Islander	0.026	1.000
	Caucasian	-1.267*	0.000
	Hispanic	-0.140	0.999
	Unknown	6.539*	0.000
Alaskan Native/Native American	African American	-4.239*	0.000
	Asian/Pacific Islander	-4.214*	0.001
	Caucasian	-5.507*	0.000
	Hispanic	-4.380*	0.001
	Unknown	2.300	0.195
Asian/Pacific Islander	African American	-0.026	1.000
	Alaskan Native/Native American	4.214*	0.001
	Caucasian	-1.293*	0.024
	Hispanic	-0.166	1.000
	Unknown	6.514*	0.000
Caucasian	African American	1.267*	0.000
	Alaskan Native/Native American	5.507*	0.000
	Asian/Pacific Islander	1.293*	0.024
	Hispanic	1.127	0.062
	Unknown	7.807*	0.000
Hispanic	African American	0.140	0.999
	Alaskan Native/Native American	4.380*	0.001
	Asian/Pacific Islander	0.166	1.000
	Caucasian	-1.127	0.062
	Unknown	6.679*	0.000
Unknown	African American	-6.539*	0.000
	Alaskan Native/Native American	-2.300	0.195
	Asian/Pacific Islander	-6.514*	0.000
	Caucasian	-7.807*	0.000
	Hispanic	-6.679*	0.000

Note: **p* < .05

Table A3*Mean Credit Hours Earned by Students of Different Ethnicities after the Second Year*

(I) Ethnicity	(J) Ethnicity	(I-J) Mean Difference	<i>p</i>
African American	Alaskan Native/Native American	10.077*	0.000
	Asian/Pacific Islander	-0.783	0.911
	Caucasian	-1.554*	0.000
	Hispanic	1.308	0.498
	Unknown	15.015*	0.000
Alaskan Native/Native American	African American	-10.077*	0.000
	Asian/Pacific Islander	-10.860*	0.000
	Caucasian	-11.631*	0.000
	Hispanic	-8.769*	0.000
	Unknown	4.938	0.071
Asian/Pacific Islander	African American	0.783	0.911
	Alaskan Native/Native American	10.860*	0.000
	Caucasian	-0.771	0.912
	Hispanic	2.091	0.332
	Unknown	15.798*	0.000
Caucasian	African American	1.554*	0.000
	Alaskan Native/Native American	11.631*	0.000
	Asian/Pacific Islander	0.771	0.912
	Hispanic	2.862*	0.001
	Unknown	16.569*	0.000
Hispanic	African American	-1.308	0.498
	Alaskan Native/Native American	8.769*	0.000
	Asian/Pacific Islander	-2.091	0.332
	Caucasian	-2.862*	0.001
	Unknown	13.707*	0.000
Unknown	African American	-15.015*	0.000
	Alaskan Native/Native American	-4.938	0.071
	Asian/Pacific Islander	-15.798*	0.000
	Caucasian	-16.569*	0.000
	Hispanic	-13.707*	0.000

Note: **p* < .05

Table A4*Mean Cumulative GPA Earned by Students of Different Ethnicities after the First Fall Term*

(I) Ethnicity	(J) Ethnicity	(I-J) Mean Difference	<i>p</i>
African American	Alaskan Native/Native American	.4493*	0.001
	Asian/Pacific Islander	-0.1006	0.260
	Caucasian	-.2382*	0.000
	Hispanic	-0.0953	0.289
	Unknown	.6410*	0.000
Alaskan Native/Native American	African American	-.4493*	0.001
	Asian/Pacific Islander	-.5499*	0.000
	Caucasian	-.6876*	0.000
	Hispanic	-.5447*	0.000
	Unknown	0.1917	0.507
Asian/Pacific Islander	African American	0.1006	0.260
	Alaskan Native/Native American	.5499*	0.000
	Caucasian	-.1377*	0.033
	Hispanic	0.0052	1.000
	Unknown	.7416*	0.000
Caucasian	African American	.2382*	0.000
	Alaskan Native/Native American	.6876*	0.000
	Asian/Pacific Islander	.1377*	0.033
	Hispanic	.1429*	0.018
	Unknown	.8793*	0.000
Hispanic	African American	0.0953	0.289
	Alaskan Native/Native American	.5447*	0.000
	Asian/Pacific Islander	-0.0052	1.000
	Caucasian	-.1429*	0.018
	Unknown	.7364*	0.000
Unknown	African American	-.6410*	0.000
	Alaskan Native/Native American	-0.1917	0.507
	Asian/Pacific Islander	-.7416*	0.000
	Caucasian	-.8793*	0.000
	Hispanic	-.7364*	0.000

Note: **p* < .05

Table A5*Mean Cumulative GPA Earned by Students of Different Ethnicities after the First Year*

(I) Ethnicity	(J) Ethnicity	(I-J) Mean Difference	<i>p</i>
African American	Alaskan Native/Native American	.4197*	0.002
	Asian/Pacific Islander	-.1485*	0.020
	Caucasian	-.1966*	0.000
	Hispanic	-0.0573	0.811
	Unknown	.6562*	0.000
Alaskan Native/Native American	African American	-.4197*	0.002
	Asian/Pacific Islander	-.5683*	0.000
	Caucasian	-.6163*	0.000
	Hispanic	-.4770*	0.001
	Unknown	0.2365	0.272
Asian/Pacific Islander	African American	.1485*	0.020
	Alaskan Native/Native American	.5683*	0.000
	Caucasian	-0.0481	0.905
	Hispanic	0.0913	0.703
	Unknown	.8047*	0.000
Caucasian	African American	.1966*	0.000
	Alaskan Native/Native American	.6163*	0.000
	Asian/Pacific Islander	0.0481	0.905
	Hispanic	.1393*	0.025
	Unknown	.8528*	0.000
Hispanic	African American	0.0573	0.811
	Alaskan Native/Native American	.4770*	0.001
	Asian/Pacific Islander	-0.0913	0.703
	Caucasian	-.1393*	0.025
	Unknown	.7134*	0.000
Unknown	African American	-.6562*	0.000
	Alaskan Native/Native American	-0.2365	0.272
	Asian/Pacific Islander	-.8047*	0.000
	Caucasian	-.8528*	0.000
	Hispanic	-.7134*	0.000

Note: **p* < .05

Table A6*Mean Cumulative GPA Earned by Students of Different Ethnicities after the Second Year*

(I) Ethnicity	(J) Ethnicity	(I-J) Mean Difference	<i>p</i>
African American	Alaskan Native/Native American	.4560*	0.003
	Asian/Pacific Islander	-.1595*	0.030
	Caucasian	-.1043*	0.000
	Hispanic	.1758*	0.008
	Unknown	.8641*	0.000
Alaskan Native/Native American	African American	-.4560*	0.003
	Asian/Pacific Islander	-.6155*	0.000
	Caucasian	-.5604*	0.000
	Hispanic	-0.2802	0.282
	Unknown	.4081*	0.014
Asian/Pacific Islander	African American	.1595*	0.030
	Alaskan Native/Native American	.6155*	0.000
	Caucasian	0.0551	0.897
	Hispanic	.3353*	0.000
	Unknown	1.0236*	0.000
Caucasian	African American	.1043*	0.000
	Alaskan Native/Native American	.5604*	0.000
	Asian/Pacific Islander	-0.0551	0.897
	Hispanic	.2802*	0.000
	Unknown	.9684*	0.000
Hispanic	African American	-.1758*	0.008
	Alaskan Native/Native American	0.2802	0.282
	Asian/Pacific Islander	-.3353*	0.000
	Caucasian	-.2802*	0.000
	Unknown	.6883*	0.000
Unknown	African American	-.8641*	0.000
	Alaskan Native/Native American	-.4081*	0.014
	Asian/Pacific Islander	-1.0236*	0.000
	Caucasian	-.9684*	0.000
	Hispanic	-.6883*	0.000

Note: **p* < .05

Table A7*Mean Credit Hours Earned by Students of Different Incomes after the First Fall Term*

(I) Income	(J) Income	(I-J) Mean Difference	<i>p</i>
High	Low	1.259*	0.000
	Middle	0.149	0.334
Low	High	-1.259*	0.000
	Middle	-1.109*	0.000
Middle	High	-0.149	0.334
	Low	1.109*	0.000

Note: * $p < .05$ **Table A8***Mean Credit Hours Earned by Students of Different Incomes after the First Year*

(I) Income	(J) Income	(I-J) Mean Difference	<i>p</i>
High	Low	2.504*	0.000
	Middle	0.186	0.626
Low	High	-2.504*	0.000
	Middle	-2.319*	0.000
Middle	High	-0.186	0.626
	Low	2.319*	0.000

Note: * $p < .05$

Table A9*Mean Credit Hours Earned by Students of Different Incomes after the Second Year*

(I) Income	(J) Income	(I-J) Mean Difference	<i>p</i>
High	Low	4.792*	0.000
	Middle	0.371	0.572
Low	High	-4.792*	0.000
	Middle	-4.422*	0.000
Middle	High	-0.371	0.572
	Low	4.422*	0.000

Note: * $p < .05$ **Table A10***Mean Cumulative GPA Earned by Students of Different Incomes after the First Semester*

(I) Income	(J) Income	(I-J) Mean Difference	<i>p</i>
High	Low	.2925*	0.000
	Middle	0.0327	0.306
Low	High	-.2925*	0.000
	Middle	-.2598*	0.000
Middle	High	-0.0327	0.306
	Low	.2598*	0.000

Note: * $p < .05$

Table A11*Mean Cumulative GPA Earned by Students of Different Incomes after the First Year*

(I) Income	(J) Income	(I-J) Mean Difference	<i>p</i>
High	Low	.2815*	0.000
	Middle	.0301	0.369
Low	High	-.2815*	0.000
	Middle	-.2514*	0.000
Middle	High	-.0301	0.369
	Low	.2514*	0.000

Note: * $p < .05$ **Table A12***Mean Cumulative GPA Earned by Students of Different Incomes after the Second Year*

(I) Income	(J) Income	(I-J) Mean Difference	<i>p</i>
High	Low	.2697*	0.000
	Middle	.0358	0.332
Low	High	-.2697*	0.000
	Middle	-.2339*	0.000
Middle	High	-.0358	0.332
	Low	.2339*	0.000

Note: * $p < .05$

Appendix B

University of Mississippi Institutional Review Board Application



APPLICATION FOR EXEMPTION

Purpose: Many studies qualify for an abbreviated review, according to the federal regulations and university policy.

- Part I of this form screens for a brief review.
- Part II of this form completes the abbreviated IRB application.
- Part III of this form gives instructions for obtaining the required assurances.
- The IRB makes the final determination on whether you must fill out a full application.

Always download the most recent version of this form: <http://www.research.olemiss.edu/irb/protocol/forms>.

Prepare and send application form as a Word document. E-mail the completed form and attachments (and forwarded email assurance if PI is a student) to irb@olemiss.edu.

Note: Some class project studies may qualify for a classroom waiver of IRB Application. Instructors: see form [here](#).

PART I – Screening

1. Do any of the following apply to your study?

Research Methods:

- Clinical Treatment study Yes No
- Exercise Yes No
- X-rays Yes No
- Collection of blood, urine, other bodily fluids, or tissues Yes No
- Use of blood, urine, other bodily fluids, or tissues with identifiers Yes No
- Use of drugs, biological products, or medical devices Yes No
- Use of drugs, biological products, or medical devices Yes No
- Use of data collected in the European Economic Area (EEA)* Yes No

Targeted Subjects:

- Prisoners Yes No

Elements of Deception:

- The study uses surreptitious videotaping Yes No
- The study gives subjects deceptive feedback, whether positive or negative Yes No
- The study uses a research confederate (i.e., an actor playing the part of subject). Yes No

If you checked Yes to any of the above, STOP HERE and fill out the [FULL IRB APPLICATION FORM](#).

***Anonymous or Confidential?** Anonymous means (1) the recorded data cannot associate a subject with his/her data, and (2) the data cannot identify a subject. *Examples:* surveys with no names but with demographic data that can identify a subject (e.g., the only African-American in a class) are not anonymous.

***Sensitive Information?** Sensitive information includes but is not limited to (1) information that risks damage to a subject's reputation; (2) information that involves criminal or civil liability; (3) information that can affect a subject's employability; and (4) information involving a person's financial standing. *Examples:* Surveys that ask about porn use, illegal drug or alcohol use, religion, use of alcohol while driving, AIDS, cancer, etc. contain sensitive information.

***European Economic Area -** Collection of data in the European Economic Area (the 28 states of the European Union and Iceland, Liechtenstein, Norway, and Switzerland). Special considerations apply -if data are not 100% anonymous. See [GDRP Guidance](#) for more information

If using Qualtrics for anonymous surveys, [see guidance here](#).

2. **The ONLY involvement of human subjects will be in the following categories (check all that apply)**

PLEASE READ CAREFULLY: MUCH CHANGED WITH NEW REGULATIONS, JANUARY 2019

- 1) **Educational Research**: Research conducted in established or commonly accepted educational settings, involving normal educational practices. Research is not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
- 2) **Surveys, Interviews, Educational Tests (cognitive, diagnostic, aptitude, achievement), Observation of Public Behavior (including video or auditory recording). AT LEAST ONE OF THE FOLLOWING MUST BE CHECKED**
- (i) Information recorded by the investigator cannot readily identify the subject (either directly or indirectly)
 - (ii) Disclosure of subjects' responses outside the research could NOT reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, educational advancement, employability, or reputation
 - (iii) Information recorded by the investigator includes identifiers and the investigator specifies strong security measures to protect the data (e.g., encryption for electronic data; multiple locks for paper data). Minors are NOT permitted under this sub-category
- 3) **Benign Behavioral Interventions (BBI)**: Research involving interventions in conjunction with collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording, if the subject prospectively agrees to the intervention and information collection.
- BBI is limited to communication or interpersonal contact; cognitive, intellectual, educational, or behavioral tasks; manipulation of the physical, sensory, social or emotional environment
 - Intervention Requirements:
 - brief duration (maximum intervention = 3 hours within one day; data collection may extend more hours & over days)
 - painless/harmless (transient performance task-related stress, anxiety, or boredom are acceptable)
 - not physically invasive (no activity tracker, blood pressure, pulse, etc.)
 - unlikely to have a significant adverse lasting impact on subjects
 - unlikely that subjects will find interventions offensive or embarrassing
 - no deception / omission of information, such as study purpose, unless subject prospectively agrees

AT LEAST ONE OF THE FOLLOWING MUST BE CHECKED

- (A) Recorded information cannot readily identify the subject (either directly or indirectly)
- (B) Any disclosure of subjects' responses outside the research could NOT reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation
- (C) Information is recorded with identifiers and the investigator specifies strong security measures to protect the data (e.g., encryption for electronic data; multiple locks for paper data)

- 4) **Biospecimen Secondary Research:** Secondary Research for which consent is not required: use of identifiable information or identifiable biospecimens that have been or will be collected for some other 'primary' or 'initial' activity, if ONE of the following is met: (i) biospecimens or information is publicly available; (ii) information recorded by the investigator cannot readily, directly or indirectly identify the subject, and the investigator does not contact the subject or re-identify the subject; (iii) collection and analysis involving investigator's use of identifiable health information when use is regulated by HIPAA; or (iv) research information collected by or on behalf of the federal government using government-generated or -collected information obtained for non-research activities.
- 5) **Research and Demonstration Projects on Federal Programs:** The study is conducted pursuant to specific federal statutory authority and examines certain federal programs that deliver a public benefit [call IRB for details if you think your study may fit].
- 6) **Food Tasting/Evaluation:** Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

PART II — Abbreviated Application

3. **Project Title:** Does the HELP Grant Help? A Quantitative Study of the Impact of the HELP Grant on College-Going in Mississippi

4. **Principal Investigator:** Dr. Ms. Mr. Jennifer D. Rogers

Department: Higher Education

Department Chair's email (for cc of approval):
nhhutche@olemiss.edu

Work Phone: 601-432-6791

Home or Mobile Phone: 601-750-6762

E-Mail Address: jdroger2@go.olemiss.edu

If Principal Investigator is a student:

Graduate student:

- Dissertation Master's thesis
 Other graduate project

Undergraduate student:

- Senior thesis: SMBHC
 Croft Institute Other undergraduate project

Research Advisor: DR. PHILLIS GEORGE (required for student researchers)

Department: HIGHER EDUCATION

Work Phone: 662.915.3411

E-Mail Address: PLGEORGE@OLMISS.EDU

Home or Cell Phone: 608.556.1939

5. **Funding Source:**

- Is this project funded? Yes ⇒
 No

If Yes, is the funding:

- Internal:** **Source:**
External: **Pending/Agency:**
 Awarded/Agency:

PI(s) on external funding:

6. List ALL personnel involved with this research who will have contact with human subjects or with their identifiable data. All personnel listed here must complete [CITI training OR the Alternative to CITI \(ATC\) training](#) before this application will be processed*.

NAME	POSITION/TITLE	ROLE ON PROJECT	Training completed:	
			CITI	or ATC
PI Jennifer D. Rogers	Graduate Student	Principal Investigator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Advisor DR. PHILLIS GEORGE	Faculty/Staff	Dissertation Committee Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dr. David Rock	Faculty/Staff	Dissertation Committee Member/Statistical Support	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

If space is needed to list additional project personnel, submit [Appendix A](#).

*See [Exempt Human Research Policy](#) for training exceptions

Research Methodology/Procedures

7. Check all procedures below that apply to your study:

<input checked="" type="checkbox"/> Pre-existing data or biological samples ⇒	<p>- Source of data: Mississippi Office of Student Financial Aid</p> <p>- Do data/samples have identifiers? <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No</p> <p>- Describe how data will be secured (e.g., encryption for electronic data; multiple locks for paper data). Encryption for electronic data</p> <p>*Minors are NOT permitted under this sub-category</p>
<input type="checkbox"/> Observation	
<input type="checkbox"/> Oral history	
<input type="checkbox"/> Interview ⇒ ⇒ ⇒	<p>Attach interview questions.</p>
<input type="checkbox"/> Focus group ⇒ ⇒ ⇒	<p>Attach topic and questions.</p>
<input type="checkbox"/> Questionnaire or survey ⇒ ⇒ ⇒	<p>Attach questionnaire or survey. If online, describe platform (e.g., Qualtrics):</p>
<input type="checkbox"/> Audio recording or videotaping ⇒ ⇒	<p>Use and attach a release form if you plan to disseminate quoted comments or taped content. (This covers you and UM legally – Not for IRB purposes)</p>
<input type="checkbox"/> The study has misleading or deceptive: ⇒ (1) study descriptions; (2) procedure explanations; and/or (3) survey instructions/rationales.	<p>In the abstract, provide complete details and a rationale for employing misleading/deception information. Include Appendix D in your attachments.</p>

8. Consent Procedures:

- | | | | | |
|---|---|---|---|--|
| <input type="checkbox"/> Oral | ⇒ | ⇒ | ⇒ | Attach script. |
| <input type="checkbox"/> Information Sheet/Cover Letter | ⇒ | ⇒ | | Attach. (No subject signatures required, see example here : Go to Examples and Templates, then 'Sample Information Sheet') |
| <input checked="" type="checkbox"/> Not applicable, Explain: Consent not required for secondary research use of unidentifiable data | | | | |

9. Project Summary

Briefly summarize your project using non-technical, jargon-free language that can be understood by non-scientists.

See <http://www.research.olemiss.edu/irb-forms> for abstract examples.

Give a brief statement of the research question supporting the reasons for, and importance of, the research: Mississippi's Higher Education Legislative Plan for Needy Students (HELP) grant purports to promote access to college by making college more affordable for low-income students who meet certain academic requirements. The state spends more than \$27 million on the program annually, but lawmakers have little outcomes data with which to gauge the effectiveness of the program. To inform lawmakers of the program's outcomes for general legislation and budgeting purposes, I will study the impact of the HELP grant on college-going in Mississippi. Specifically, I will question whether and how the HELP grant impacts initial and continuing college enrollment, and I will question whether and how the impact, if any, varies by race and income.

Describe the ages and characteristics of your proposed subjects and how you will recruit them (attach recruitment script or materials to the application): I will be using de-identified student records, obtained from the Mississippi Office of Student Financial Aid. All personal identifiers, such as name, Social Security Number, and address will have been stripped from the records before I receive the data files. Most students with records in the file will be between the ages of 17 and 24. The students included in the file will include the universe of Mississippi high school graduates from 2009-2019.

For studies using only adult subjects, state how you will ensure they are 18+:

- First question on survey/interview
 Other:
 Not applicable

Briefly describe the research design AND carefully explain how your study will meet each of the requirements of the category criteria you checked on Page 2: I plan to conduct a quasi-experimental study in which I test whether the HELP grant impacts college-going behavior. The Mississippi Office of Student Financial Aid (SFA) collects extensive student record level data from several sources for the primary purpose of making awards to students through the state's financial aid programs. I will obtain student record level data that has been de-identified for the purpose of conducting secondary research. Using the SFA data file, I will identify students by enrollment status, race, Pell-eligibility, income, high school academic performance (GPA and composite ACT score), and HELP eligibility status. I will use a statistical approach known as Regression Discontinuity Design to determine whether there are any statistically significant differences in enrollment between students who just meet the HELP eligibility cutoffs and those who just miss the cutoffs. The data I receive, analyze, and produce cannot readily, directly or indirectly identify the subject, and I will not contact the subject or re-identify the subject in any way.

Give a *detailed* description of the procedure(s) subjects will undergo (from their perspective): Subjects will undergo no procedures.

10. Appendix Checklist:

- A. Additional Personnel not listed on first page of application?
 No Yes – complete [Appendix A](#)
- B. Will the research be conducted in schools or child care facilities?
 No Yes – complete [Appendix B](#)
- C. Does your research involve deception or omission of elements of consent?
 No Yes – complete [Appendix D](#)
- D. Will your research be conducted outside of the United States?
 No Yes – complete [Appendix E](#)
- E. Will your research involve [protected health information \(PHI\)](#)?
 No Yes – complete [Appendix F](#) if applicable

11. Attachments Checklist:

Did you submit:

- a. survey or questionnaires?
 Yes Not Applicable
- b. interview questions?
 Yes Not Applicable
- c. focus group topics?
 Yes Not Applicable
- d. recruitment email, announcement, or script?
 Yes Not Applicable: No subject contact
- e. informed consent information letter or script?
 Yes Not Applicable: No subject contact
- f. permissions for locations outside the University?*
- Yes Not Applicable

*if giving a survey, whether on or off campus, please ensure the person giving permission (e.g., the teacher of a class) has an explicit opportunity to see the survey before they give their permission for its distribution

- 12. If using class points as incentives, are there alternative assignments available for earning points that involve comparable time and effort?**
 Yes Not Applicable

13. If using an anonymous survey through Qualtrics and giving incentives in a separate survey, have you read and conducted the testing of the surveys according to the [procedures here?](#)

Yes Not Applicable

PART III: ASSURANCES

Conflict Of Interest And Fiscal Responsibility

Do you or any person responsible for the design, conduct, or reporting of this study have an economic interest in, or act as an officer or a director of any outside entity whose financial interests may reasonably appear to be affected by this research?

YES ⇒ ⇒ If Yes, please describe any potential conflict of interest.
 NO

Do you or any person responsible for this study have existing financial holdings or relationships with the sponsor of this study?

YES ⇒ ⇒ If Yes, please describe any potential conflict of interest.
 NO
 N/A

Principal Investigator Assurance

PRINCIPAL INVESTIGATOR'S ASSURANCE

I certify that the information provided in the application is complete and correct. As Principal Investigator, I have the ultimate responsibility for the protection of the rights and welfare of the human participants, conduct of the research, and the ethical performance of the project. I will comply with all UM policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of participants in human research, including, but not limited to the following:

- Informed consent will be obtained from the participants, if applicable and appropriate;
- Any proposed modifications to the research protocol that may affect its designation as an exempt (brief) protocol application will be reported to the IRB for approval prior to being implemented.
- Adverse events and/or unanticipated problems will be reported to the IRB as required.

I certify that I, and all key personnel, have completed the required initial and/or refresher CITI or CITI Alternative courses in the ethical principles and regulatory requirements for the protection of human research participants.

Jennifer Rogers

Typed signature/name of Principal Investigator

12/7/2020

Date

RESEARCH ADVISOR'S* ASSURANCE (REQUIRED FOR STUDENT PROJECTS)

Email your Advisor with the following:

1. Email subject line: "IRB Advisor Approval Request from (your name)"
2. Your IRB submission materials as attachments
3. Copy and paste the statements below into the body of the email
4. Forward the reply email from your Advisor to irb@olemiss.edu along with your IRB submission materials attached.

***The research advisor must be a UM faculty member. The faculty member is considered the responsible party for the ethical performance and regulatory compliance of the research project.**

Please review my attached protocol submission. Your reply email to me will constitute your acknowledgement of the assurances below.

**Thank you,
[type your name here]**

As the Research Advisor, I certify that the student investigator is knowledgeable about the regulations and policies governing research with human participants and has sufficient training and experience to conduct this particular research in accordance with the approved protocol.

I agree to meet with the investigator on a regular basis to monitor research progress.

Should problems arise during the course of research, I agree to be available, personally, to supervise the investigator in solving them.

I will ensure that the investigator will promptly report incidents (including adverse events and unanticipated problems) to the IRB.

If I will be unavailable, for example, on sabbatical leave or vacation, I will arrange for an alternate faculty member to assume responsibility during my absence, and I will advise the IRB by email of such arrangements.

I have completed the required CITI course(s) in the ethical principles and regulatory requirements for the protection of human research participants.

RESUMÉ

EDUCATION

Doctor of Education, Higher Education – University of Mississippi (Oxford, MS) – 2022
Phi Kappa Phi

Master of Business Administration – Millsaps College (Jackson, MS) – 2008
Summa cum Laude, Beta Gamma Sigma

Bachelor of Arts, English and Spanish – University of the South (Sewanee, TN) – 2001
Magna cum Laude, Phi Beta Kappa, Sigma Delta Pi

CAREER HISTORY

Mississippi Institutions of Higher Learning (IHL) – Jackson, MS (*September 2006 to present*)

Director of Student Financial Aid (*July 2009 to present*)

- Administer 25 state aid programs and disburse \$50 million annually to more than 25,000 students attending public and private colleges and universities
- Provide leadership to the Mississippi Office of Student Financial Aid staff (seven full-time staff)
- Serve as Executive Director of the Mississippi Postsecondary Education Financial Assistance Board, which oversees the state aid programs
- Serve as the state aid liaison to the Mississippi Legislature
- Oversee compliance with federal and state laws/regulations
- Oversee maintenance and security of the financial aid database and award system that includes modules on applicant tracking, notifications, awarding, loan service, and loan repayment
- Develop and manage the annual program and operational budgets
- Manage and update the Mississippi Aid Application (MAAPP), the online application/dashboard
- Develop student-oriented policies and procedures and ensure clear communication of all
- Manage contracts with third-party vendors to service forgivable loan accounts
- Train high school counselors and conduct outreach to students and parents

Interim Director of Media Relations, Communications, and Marketing (*April 2009 to June 2009*)

- Provide leadership for the Office of Media Relations, Communications, and Marketing staff and direct all initiatives of the department
- Provide oversight and budget authority for the College Access Challenge Grant program

Communications and Marketing Associate (*September 2006 to April 2009*)

- Oversee all aspects of development of the state's first college access website www.riseupms.com
- Oversee the development and implementation of a public awareness campaign (including television, radio, and print elements) for www.riseupms.com (now www.mywayms.org)
- Identify and work with external funding partners to obtain grants for outreach activities
- Ensure responsible expenditure of grant funds
- Facilitate Mississippi's College Access Challenge Grant Program (\$1.4 million budget)
- Write speeches and talking points for the Mississippi Commissioner of Higher Education, assistant commissioners, and members of the IHL Board of Trustees
- Develop, write, and distribute a weekly HTML newsletter to 24,000 university stakeholders
- Serve as media liaison in the absence of the director of media relations

Phi Theta Kappa International Honor Society – Jackson, MS (*August 2001 to August 2006*)

Director of Honors Programs (*November 2004 to August 2006*)

- Provide leadership and vision for the Honors Programs Department and direct all honors initiatives for the Society
- Supervise the Honors Programs Department staff
- Conceptualize, write, and produce, in conjunction with a two-year college faculty committee, a biennial Honors Study Topic Program Guide, a 32-page full-color handbook for the implementation of the Society's premier program
- Promote the Honors Study Topic as the basis for a two-year college honors course
- Identify quality presenters for conferences and conventions
- Serve as the primary liaison between Phi Theta Kappa and the National Collegiate Honors Council (NCHC)
- Write articles for various Society publications

PROFESSIONAL INVOLVEMENT

National Association of State Student Grant and Aid Programs (NASSGAP) – *Past-President (2020-21), President (2019-20), President-Elect (2018-19), Membership Committee Chair (2014-15 to 2017-18), Member-at-Large/Conference Chair (2012-13 to 2013-14), Member (2010-11 to present)*

Mississippi Association of Student Financial Aid Administrators (MASFAA) – *Federal and State Legislative Liaison (2014-15 to 2020-21), Director (2011-12 to 2013-14), and Conference Co-Chair (2010-11), Member (2009-10 to present)*

Southern Association of Student Financial Aid Administrators (SASFAA) – *Legislative Liaison to Mississippi (2017-18), Member (2010-11 to present)*

Mississippi Counseling Association (MCA) – *Conference Presenter (2010-11 to present), Member (2009-10 to present)*

National Association of Student Financial Aid Administrators (NASFAA) – *Member (2010-11 to present)*

HONORS

Leadership Mississippi – *Class of 2012*

Southern Women Leadership Summit – *Class of 2008* (160 participants from 14 Southern states nominated and invited by the Stennis Center for Public Service)

COMMUNITY INVOLVEMENT

Phi Theta Kappa – *Scholarship competition judge (bi-annually in fall and spring)*

Get2College FAFSA Days – *Financial aid expert (monthly October to March)*

His Heart – *Homework/reading coach (weekly August to May)*

University of the South Associated Alumni – *Career mentor (annually as needed)*