The Consequences of Merit Aid: Who Really Benefits?

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ABSTRACT

State governments make a tremendous investment in the financing of higher education. Considering this investment, it is critical that there be a better understanding of exactly how financial aid programs administered at the state level are related to persistence and degree attainment, especially among the groups these programs were created to serve. The purpose of the current research was to examine the relationships between state merit-based aid programs and degree attainment among African-American, Hispanic, and low-income students. Longitudinal data provided by the National Center for Education Statistics were analyzed using an ex post facto research design. The Beginning Postsecondary Students Survey served as the source for the longitudinal data, and these data were analyzed using descriptive statistics and logistic regression. The state financial aid programs of interest were broad merit-based financial aid programs. The findings here are consistent with past research suggesting that state merit-based financial aid is disproportionately awarded to majority, high-income students. Additionally, although there was a very weak relationship between the receipt of state merit-based aid and timely degree attainment among African-Americans, there was no statistically significant relationship among Hispanic and low-income students. The findings from the current research could prove helpful as related to the continued establishment and implementation of state financial aid programs. It is important for legislators to know who the true beneficiaries are of these broad merit-based financial aid programs that are becoming increasingly popular. In addition, it is also important to determine whether or not the receipt of these types of funding is related to timely degree attainment.
THE CONSEQUENCES OF MERIT AID: WHO REALLY BENEFITS?

The Evolution of State Merit Aid Programs: Historical Context

The Higher Education Act of 1965 expanded the role of the federal government in the financing of higher education, and with an overarching goal of providing access, the passage of this act also defined the criteria that would be used in determining eligibility for most financial aid programs. However, more recently, there has been a shift in the financial aid awarding criteria and now academic merit is more often the basis for which financial aid is awarded than financial need (Heller, 2008). Although the federal government continues to make a significant investment in need-based programs, changes at the state level have resulted in significantly more spending on merit-based programs than ever before (Heller, 2008).

The National Association of State Student Grant and Aid Programs (NASSGAP) tracks state expenditures related to post-secondary education. At the state level, in 1998 approximately $2.96 billion was spent on need-based financial aid programs and this figure rose to $6.09 billion in 2009, an increase of 105.4% over the last 10 years (NASSGAP, 2010). During the same time period, $717 million in merit-based financial aid was awarded in 1998, increasing to $2.37 billion in 2009, representing an increase by over 230% in the last 10 years (NASSGAP, 2010). This exponential spending in merit aid has primarily resulted from the creation of merit-based financial aid programs throughout the U.S., which were modeled after the Helping Outstanding Pupils Educationally (HOPE) Program that began in Georgia in 1993 (Heller, 2008). The primary objectives for these merit-based programs include (1) promoting college access and attainment, (2) keeping the “best and the brightest” students enrolled in college in their home
states, and (3) rewarding and encouraging students who work hard or make significant academic achievements (Heller, 2008). Considering that only the first goal is consistent with the guiding principles of the Higher Education Act of 1965, it is no surprise that these awards are disproportionately made to high-income, majority students (Binder et al., 2000; Dynarski, 2002; Farrell, 2004; Heller, 2008). Additionally, these merit-based awards have only widened the educational opportunity and attainment gaps that exist among low-income and high-income as well as majority and minority students (Binder, Ganderton, & Hutchens, 2000; Dynarski, 2002; Farrell, 2004; Heller, 2008). Currently, there are 14 states with broad-based merit financial aid programs. The criteria for receiving these grants and scholarships vary by state, and can include high school grade point average, college grade point average, high school rank, SAT/ACT scores, and scores on standardized statewide testing.

Review of the Literature

Considerable research has been conducted on the relationships between merit-based financial aid programs and the promotion of access, considering this is the overarching goal of most merit-based programs in place today. However, there are significantly fewer studies that focus on the impact merit-based financial aid has on persistence and likelihood of graduation. Although it is important to know if access to post-secondary education has indeed improved as a result of state initiatives aimed at that objective, it is even more important to understand the outcomes of students for whom access is granted.

It is not surprising that there are so few studies focused on the impact of merit-based financial aid programs on persistence and graduation, considering the earliest program, Georgia’s HOPE Scholarship, has only been in existence since 1993. Once an interest in research regarding these programs had begun to surface, the primary focus was on whether or not
these programs promoted access and increased college enrollment. Specifically, researchers have been interested in whether or not the HOPE Scholarship has impacted access to and enrollment within post-secondary institutions within the state of Georgia. More recently, researchers have started to examine the impact of the HOPE Scholarship on retention and graduation rates. Cornwell and Mustard (2006) presented an in-depth overview of the state of higher education in Georgia. Additionally, these researchers discussed the effect the HOPE Scholarship has had on retention and graduation rates in the state. There are 68 public post-secondary institutions within the state of Georgia, 21 are four-year institutions, 13 are degree-granting two-year institutions, and 34 are technical schools. The 21 four-year institutions along with the 13 degree-granting two-year institutions comprise the University System of Georgia (USG). Prior to 1993, first-year retention rates within the USG were between 73.2% -75.8%; however following the establishment of the HOPE Scholarship Program, first-year retention rates within USG rose to 80.4% (Cornwell & Mustard, 2006). First-year retention rates at the state’s flagship institution, The University of Georgia, rose to 90.7% in 2001 (Cornwell & Mustard, 2006). Between the years of 1987-1989 the four-year graduation rate within the USG was approximately 40% and in 1991, the six-year graduation rate was between 62% - 64% (Cornwell & Mustard, 2006). However, when graduation rates were later assessed in the year 2000, the four-year graduation rate had risen to 43.6% and the six-year graduation rate had risen to 73.6% (Cornwell & Mustard, 2006). Since the HOPE Scholarship had a minimum 3.0 grade point average requirement, at that time, to qualify and to maintain the scholarship, Cornwell and Mustard were also interested in whether or not the receipt of the scholarship prompted students to alter their course loads in order to improve the likelihood they would remain eligible. The researchers found that students who received the HOPE Scholarship were less likely to carry a
full course load and were more likely to withdraw from one or more courses than students who did not receive the HOPE Scholarship. Although it is evident that students who receive the HOPE Scholarship do indeed alter their course loads, it is unclear whether or not these adjustments resulted in delays in academic progress or if these classes were made up at a later time (Cornwell & Mustard, 2006). Although the research conducted by Cornwell & Mustard only provides comparison data before and after the implementation of the HOPE Scholarship, it does offer information regarding the influence merit-based financial aid has on persistence and likelihood of graduation.

Henry, Rubenstein, and Bugler (2004) also interested in the impact of merit aid on student performance, conducted research to compare the persistence and graduation rates of those with the HOPE Scholarship, those without the HOPE Scholarship, and those who initially received the HOPE Scholarship but later lost it due to a failure to meet the grade point average requirements. These researchers analyzed longitudinal from the USG and the Georgia Student Finance Commission (GSFC), which is the organization that provides oversight for the HOPE Scholarship (Henry et al., 2004). In an attempt to minimize selection bias, these researchers compared students who minimally met the grade point average requirements to receive the HOPE Scholarship to those students who were just shy of meeting the requirements. Using Ordinary Least Squares Regression models and logistic regression models, Henry et al. analyzed year-to-year persistence, graduation rates, college credits earned, and grade point average. Contrary to the research of Cornwell and Mustard (2006), these researchers found that HOPE scholars earned more credit hours per year than students who did not receive the HOPE scholarship. However, consistent with the research of Cornwell and Mustard, Henry et al. found that HOPE scholars were more likely to persist through four years of college than were non-
recipients and were more than twice as likely to graduate from a two-year college within two years and 72% more likely to graduate from a four-year college within four years than non-recipients. It is important to note that approximately 85% of students who initially received the HOPE Scholarship lost their eligibility after 30 hours and only 3.5% remained HOPE eligible for four consecutive years. The effect of the HOPE Scholarship on persistence and graduation was then eliminated for those students who did not remain HOPE eligible. The findings from the current research offer additional substantiation for the relationship between merit-based financial aid, persistence, and timely graduation. However, this research expands on previous research through the use of more advanced statistical techniques, as well as data that demonstrate the effect of the HOPE Scholarship is only evident among students who retain their scholarship eligibility and that initial receipt of the scholarship has no subsequent effect on persistence.

Although the discussion of state merit aid programs thus far has been limited to Georgia’s HOPE Scholarship, research has also been conducted on New Mexico’s Success Scholarship Program. Binder et al. (2000) sought to examine the enrollment effects before and after the establishment of the state merit aid program in New Mexico. Although the focus of this research was access and enrollment, there are findings related to persistence worthy of discussion. These researchers use a human capital model of investment as their theoretical framework, asserting that students will conduct a cost-benefit analysis when deciding whether or not to enroll in college. Using longitudinal data from the University of New Mexico, primarily analyzing the data through descriptive statistics, these researchers determined that retention rates did not improve as a result of the scholarship program, instead the dropout rate from Fall 1994 to Fall of 1995 increased from 28% prior to the scholarship program to 32% after the program was implemented (Binder et al., 2000). Additionally, students who received the scholarship had
lower course loads than those students who did not receive the scholarship funds. The New
Mexico Success Scholarship has less stringent qualifications for receiving and maintaining the
scholarship as compared to the HOPE Scholarship, so it appears the scholarship attracted lower
ability students, who likely may not have persisted in the first place.

Overall, the research described above offers a glimpse into the impact of merit-based
financial aid on persistence and graduation, but unfortunately research is extremely limited as
related to the examination of merit-based financial aid, persistence, and degree attainment.
However, considering the yearly expenditures by states on merit-based programs it is important
that there is some understanding regarding whether or not these programs improve access and
also how scholarship and grant recipients fare once enrolled. More importantly, a determination
needs to be made regarding how these programs affect African-American, Hispanic, and low-
income students, who have been historically underrepresented in higher education, and are most
in need of financial aid funding to ensure their dreams of pursuing and completing post-
secondary education are a reality.

The Current Problem

The American Institute for Research reports that during the past five years, federal and state
governments have spent approximately $2.9 billion through the provision of financial aid to
students who dropout after the first year (Schneider, 2010). Considering the significant spending
by federal and state governments, it is critical that there be a better understanding of exactly how
these financial aid programs are related to persistence, and likelihood of degree attainment,
especially among the groups these programs were created to serve.

Purpose of the Study
The purpose of the current research was to examine state merit-based financial aid programs to determine the relationship between financial aid and likelihood of degree attainment among under-represented groups. For the purposes of the current research, under-represented groups are defined as African-American, Hispanic, and low-income students. A preponderance of past research has identified these groups as having lower persistence and graduation rates, as compared to White students (Chen & DesJardins, 2008; DesJardins, Ahlburg, & McCall, 2002; Johnson, 2006; Wessel, Bell, McPherson, Costello, & Jones, 2007).

Theoretical Framework

Social Reproduction Theory is offered as a possible explanation for how and why programs that were designed to provide assistance to underrepresented students such as low-income students and minorities, fail to reach these populations. Social Reproduction Theory is described as a manner through which the current social structures in society are perpetuated over time. Bourdieu (1973) discussed this perpetuation as related to economic, social, and cultural capital. Of primary interest in the current research, cultural capital is the mechanism through which educational opportunities and benefits are available to some and not others. Cultural heritage and cultural wealth make up the idea of cultural capital and consist of teachings by families and in schools as well as connections to the dominant members of a society that allow individuals to understand the codes associated with the dominant class (Bourdieu, 1973). Bourdieu (1973) posits that only those individuals who already possess cultural wealth will have the capacity to benefit from cultural heritage. The educational system provides education in such a way that requires familiarity with the dominant culture, so the knowledge and training in schools will only be acquired by those who have the capacity, based on exposure and teachings within the family, to receive it (Bourdieu, 1973). Because those individuals who are most dissimilar from the
dominant class are unable to gain anything from the educational experience, the educational system is in no way beneficial to them and does not provide them with the knowledge needed to advance. Bourdieu (1973) therefore concludes that the educational system represents a mechanism through which existing social structures can be reproduced and the dominant class can control the most esteemed educational opportunities and advancements. Social Reproduction Theory is therefore offered as a potential explanation for how and why financial aid programs appear to be created for the benefit of the under-represented, yet may only benefit those students from higher social classes.

Design & Methodology

The current research involved the investigation of possible relationships between financial aid and degree attainment among African-American, Hispanic and low-income students. Longitudinal data were analyzed retrospectively so the researcher was not to manipulate the variables of interest to study the relationships directly, thus an ex post facto research method was used. Because this design lacks random assignment and the manipulation of variables, no attempt was made to establish a causal relationship. Instead, an effort was made to determine the type of relationship that exists between the variables of interest and to examine the predictive nature of these variables.

The National Center for Education Statistics (NCES) is the principal federal organization charged with collecting, analyzing, and reporting information regarding the system of education in the United States and select nations (U.S. Department of Education, 2009). The survey of interest here, furnished by NCES, is the Beginning Postsecondary Students Longitudinal Study (BPS). This nationally representative survey contains information regarding persistence, attrition, and degree attainment among students enrolled in colleges and universities throughout
the United States. The National Postsecondary Student Aid Study (NPSAS) addresses how students and their families pay for post-secondary education and includes information regarding the type and amount of financial aid received by students. Since the sample of first-year students for the Beginning Postsecondary Students Longitudinal Study (BPS) is extracted from those students who were eligible for the National Postsecondary Student Aid Study (NPSAS), the Beginning Postsecondary Students Longitudinal Study (BPS) also includes extensive information regarding how students finance post-secondary education, with some financial aid data tracked cumulatively throughout the subsequent years of the survey. Data are available for undergraduate and graduate students attending two-year institutions, community colleges, four-year colleges, research universities, and proprietary institutions. The most recent administration of the Beginning Postsecondary Students Longitudinal Study (BPS) began with first-time students who started their post-secondary education during the 2003-2004 academic year. These students were then followed for six years and were surveyed for a second time in 2006 and for the final time in 2009. According to the National Center for Education Statistics (NCES), the most recent administration of the Beginning Postsecondary Students Longitudinal Study (BPS) contains responses from approximately 16,700 students (U.S. Department of Education, National Center for Education Statistics, 2011). Through the analysis of data from the National Center for Education Statistics (NCES) database, great effort was made to obtain samples that are most representative of the population. However, the sample was limited by the data that were available through the NCES databases, which means it is possible that the data set for the survey may not be complete. Specifically, data regarding whether or not a student received state merit grant funds was only available for the 2003 – 2004 year, so it is not possible to know if those students who initially received these grant funds, also received them in subsequent years of the
study. The Beginning Postsecondary Students Survey (BPS) was filtered by institution type and only four-year public, four-year private, and four-year proprietary institutions were included in the analysis.

Approximately 8.8% of White students, 6.8% of African-American students, and 4.1% of Hispanic students received state merit-based financial aid funding. All sample sizes were weighted within the statistical analysis software package provided by the Department of Education, PowerStats, so exact samples sizes are not provided.

Results

Demographic Characteristics of Merit Aid Recipients

Percentage distributions indicate that approximately 94.3% of the sample did not receive any state merit-based funding, while 5.7% of the sample received an amount ranging from $111 - $10,000. Examination of the demographic characteristics of the students awarded merit-based financial aid offered at the state level revealed similarities outlined in previous research. Although only approximately 5.7% of the sample received state merit-based financial aid, these funds were disproportionately awarded to 8.8% of White students as compared to 6.8% of African-American students and 4.1% of Hispanic students. With regard to income, 7.2% of the students classified as high income, which is an annual household income of more than $89,000, received state merit-based financial aid. 8.7% of the middle income students, which is an income range from $31,000 - $89,000 received state merit-based financial aid. Lastly, those students with an annual household income of less than $31,000 were considered low-income and 7.0% of these students received state merit-based financial aid. Past research conducted by Binder et al. (2000), Dynarski (2002), Farrell, (2004), and Heller (2008) has demonstrated that
these merit-based funds are most often awarded to majority, high-income students, and the findings from the current research substantiate this claim.

State Merit Based Financial Aid Programs and Attainment

Since there has not been any research conducted to date that specifically explored the relationship between the receipt of state merit-based financial aid and attainment among African-American, Hispanic, and low-income students, there were no a priori expectations regarding these predictive relationships. However, based on the small proportion of African-American, Hispanic, and low-income students who are awarded these funds, one could conclude that most of the relationships would fail to meet the criteria for statistical significance. However, for African-American students, state merit-based financial aid was a statistically significant predictor of degree attainment within six years. African-American students receiving between $111 - $10,000 in state merit-based financial aid were 87% more likely to complete their Bachelor’s degrees in six years as compared to African-American students who received no state merit-based financial aid. However, it was necessary to compare the model of previously established predictors of persistence and attainment, which included parent’s highest level of education, delayed enrollment into post-secondary education, college grade point average, academic integration, and social integration to the model of these predictors along with state merit-based financial aid. It was then determined that the model including state merit-based financial aid explained no additional variance in degree attainment than the model of previously established predictors alone. In essence, these findings indicate that although state-merit aid is predictive of degree attainment among African-American students, the effect is so small that it is statistically equal to zero. Among Hispanic and low-income students, state merit-based financial
aid was not a statistically significant predictor of attainment within six years. As indicated earlier, this is likely due to the small representation of Hispanic and low-income students receiving these funds.

The demographic characteristics of the students receiving merit-based financial aid offered at the state level confirm the results of previous research indicating the funds are disproportionately awarded to high-income majority students. Although the current research suggests a very small predictive relationship between state merit-based financial aid and attainment for African-American students, there was no statistically significant relationship between state merit-based aid and attainment among Hispanic and low-income students.

Conclusions
The demographic characteristics of students receiving merit-based financial aid offered at the state level confirm the results of previous research indicating the funds are disproportionately awarded to high-income majority students. Although the current research suggests a very weak predictive relationship between state merit-based financial aid and attainment for African-American students, there was no statistically significant relationship between state merit-based aid and attainment among Hispanic and low-income students. The weak predictive relationship for African-Americans as well as the lack of a statistically significant relationship among Hispanic and low-income students may result from the small representation of African-American, Hispanic and low-income students who received state merit-based financial aid. However, even if a determination is made that these funds are indeed predictive of attainment among these students, a shift toward more merit-based financial could still be problematic. As the current trends continue and awarding criteria for merit-based financial aid becomes even more stringent,
those students most in need of financial assistance will continue to be the ones least likely to meet the eligibility criteria for participation in these programs. Consequently, White, high-income students who would have attended college absent any financial assistance, would continue to receive the financial aid that was originally intended for students for whom financing a college education was a financial impossibility.

Implications

Federal and state governments invest billions of dollars each year in the financing of post-secondary education. However, there has been little research conducted that provides information regarding which federal and state financial aid programs result in improved persistence and timely degree attainment. The results of the current research could therefore offer information that could inform policy practice and assist legislators in funding and promoting those programs most likely to aid in ensuring the success of students, especially those who have been historically under-represented among college completers.

Additionally, the current research could also prove helpful for state administrators as more and more states adopt broad merit-based financial aid programs. The results of the current research indicate these funds were awarded to a larger percentage of White, high-income and middle-income students as compared to minority and low-income students. While merit-based financial aid programs are worthwhile and students should be rewarded for their academic achievements, this should not happen at the expense of low-income and minority students. It is possible that a smaller percentage of minority and low-income students receive these funds because it may be difficult for students who have not had the same educational opportunities or academic resources to be academically competitive among those who have had access to better schools, better teachers, and more academic rigor. However, it is not suggested that merit-based
financial aid programs be eliminated, but that there be some consideration for those students are who in desperate need of financial assistance to attend college, but may fail to meet the stringent academic requirements for the merit-based financial aid programs.

References


Farrell, P. (2004). Who are the students receiving merit scholarships. In D. Heller & P. Marin, State Merit Scholarship Programs and Racial Inequality (pp. 47-76), The Civil Rights Project, Harvard University, Cambridge, Massachusetts.


