

The Impact of Financial Aid on Postsecondary Persistence: A Review of the Literature

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This article identifies the conundrum that exists between removing financial access barriers to college and the student recipients' inability to sustain reenrollment. After reviewing the findings of 7 research studies related to the impact of financial aid on persistence, the article concludes with a discussion of possible intervention strategies to employ in conjunction with financial aid packages.

Rising tuition and fee costs are increasing the number of students who depend on financial aid as a method of gaining access to higher education (National Center for Educational Statistics, 2004). Financial assistance programs that historically provided low-income students full or nearly full college expense subsidies are now simply a component of an education-financing scheme heavily laden with debt. Several states have appropriated funding for full tuition and fee programs for students meeting certain financial criteria, and these initiatives have assisted in reducing financial access barriers for needy students from low socioeconomic backgrounds. Nevertheless, a promise of no tuition and fee charges does not guarantee persistence to degree completion.

For example, at a public research institution in Texas, recipients of the Toward Excellence, Access, & Success (TEXAS) Grant Program, a need-based financial aid program that ensures gift aid for 100% of tuition and fees charges, have stopped out or dropped out at an average rate of 25% per cohort class since the program inception in 1999. This is problematic on two fronts. First, these needy students are also the audience most likely to rely on student loans as a resource for reducing unmet financial need. By stopping or dropping out, these students are more likely not to attain a bachelor's degree. The resulting lower earning power of these students increases the likelihood they will default on their student loan debt.

Second, the State of Texas invests \$4,000 to \$5,000 a year on each student in the program. For those who exit prior to degree attainment, this is at best a poor investment of the public's dollars, if not amoral from one observer's perspective, in that "access without preparation is not opportunity" (Vincent Tinto, personal communication, March 2003).

Prior Research

Past research findings have characterized the role that financial aid plays in persistence and degree attainment as both positive and negative (Pascarella & Terenzini, 1991). In a 1987 meta-analysis of 46 studies on the impact of financial aid on persistence and degree completion, Murdock (as cited in Pascarella &

Terenzini) found statistically significant albeit low position effects for both four-year and community college students who received financial assistance. However, when reducing his analysis only to studies that controlled for academic ability, the difference in persistence and graduation rates between recipients and nonrecipients was not statistically significant. This finding reinforces the call for additional research on the effects of financial assistance in retaining college students.

The present article presets a synthesis of recent studies conducted to determine what effect financial aid packages have on postsecondary persistence, and discusses strategies for possible interventions in conjunction with aid programs.

Literature Review

Dowd and Coury (2006) used data on community college students extracted from the National Postsecondary Student Aid Study (1989–1990) and the Beginning Postsecondary Student Second Follow-Up Surveys (1999–1994) to measure persistence levels from Year 1 to Year 2 and eventual certification or associate's degree attainment. The authors employed logistic regression to obtain prediction coefficients for various independent variables, including gender, ethnicity, enrollment patterns, and types of financial aid received. Their study provided evidence that for community college students, student loans, independently and in conjunction with need-based grants and work-study, had a negative impact on persistence and certification or degree completion. Their findings also suggested that minorities and students with academic preparation deficiencies were averse to student borrowing. According to Dowd and Coury, for community college students, personal and/or family financial status and academic performance are strong predictors of persistence and certificate or degree attainment.

Herzog's (2005) study also used logistic regression based on the independent variables of financial aid, high school preparation, multi-institution enrollment, and first-year academic performance to predict freshman persistence patterns at a 4-year public research institution. His study identified middle-income students as the population most likely to rely on student loans, and found that academic preparedness and performance subsumed the receipt of financial aid as a predictor of reenrollment. Herzog additionally noted that high-performing students were more likely to transfer out regardless of an institution's financial aid package. This phenomenon suggests either that competitor institutions are courting these students through more lucrative aid packages or, more likely, that college cost is not a variable in the students' selection process.

St. John, Paulsen, and Carter (2005) used data from the 1987 National Postsecondary Student Aid Study (NPSAS) to analyze the college choice and persistence patterns of African American students, as compared to White students. Their "financial nexus" model, incorporating 16 predictor variables,

permitted evaluation of criterion variables from a holistic vantage point. Their findings suggest that African American students place a higher value on financial aid offers than their White counterparts, regardless of the amount or type of assistance. Further, the receipt of financial aid was positively associated with persistence for this group. However, the authors noted that a large portion of the African American students in the NPSAS 1987 dataset came from high-income, high-education families. This point provides a confounding variable and a plausible argument that higher incomes and parental education levels are better predictors of college attendance.

In a longitudinal study, Fenske, Porter, and DuBrock (2000) evaluated the impact of financial aid on persistence and graduation rates of women, underrepresented, and needy students majoring in science, engineering, or mathematics (SEM). Their research tracked the progress and completion rates of 4 cohort classes between 1989 and 1992 at a public research institution. Although all SEM students persisted at higher rates than non-SEM majors, underrepresented SEM students receiving need-based aid demonstrated an average attrition rate of 30.7% from year one to year two. The study also considered persistence in relation to type of financial aid (gift, loan, and/or work-study). SEM majors receiving only gift aid demonstrated higher rates of reenrollment than those receiving only loans, only work-study, or combination aid packages. The researchers' findings also contributed to the body of evidence that student borrowing has a negative impact on persistence for all students.

Morris, Wu, and Finnegan (2005) included financial aid as one of nine independent variables in developing a predictive classification rule for retention in online enrollments. Their research suggests that the availability of financial aid information has a positive impact on the ability to predict persistence in Web-based instruction. However, they cautioned that a propensity toward locus of control is also a strong predictor of continued enrollment in conjunction with financial aid information. This correlation suggests the presence within the study sample of an underlying self-efficacy and ability to identify need resources on the part of students preferring online instruction.

Hossler (2000) presented a nonempirical narrative on the history of financial aid and its role in enrollment management. Noting that the original purpose of financial aid was to remove access barriers for students from low- and middle-income backgrounds, he discussed how it now serves as an advantage in recruiting academically high performing and/or demographically desirable students. Hossler also noted that although attractive financial aid packages may get students in the door of the academy, it pales when compared to academic performance and campus integration in explaining the variance in student reenrollment patterns.

Glenn (2007) reported on a study conducted at a Canadian university to determine the effects of aid in conjunction with academic support on retention from one year to the next. Using an experimental design, he randomly assigned a sample of 650 first-year students to one of three groups: (a) students receiving a large scholarship in Year 2 if they met designated academic performance outcomes; (b) students receiving extensive academic support and tutoring services; and (c) students who were offered both. A remaining group of first-year students who received none of the three offers served as a control group against confounding variables. The findings showed that although the financial incentive alone served as a better motivator for persistence than academic support alone, students receiving both offers persisted at the highest rate. The fact that the financial intervention in this study was merit-based and not need-based in nature suggests that money simply served as a catalyst for students already possessing the skills necessary to perform in college. However, the study does not contribute to the argument that academic performance plays a key role in student persistence patterns.

Discussion

These studies suggest that evaluation and possible reform is in order for American postsecondary access and retention policies. In the light of the existing research, it is unwise and inefficient to assume that the removal of financial access barriers is sufficient opportunity for low socioeconomic status and/or first-generation students. Although bridge programs with secondary schools and community colleges might be perceived as the most optimal remediation, there are other avenues that 4-year colleges can pursue to improve the retention of at-risk students.

First, developing intentional mentoring programs would address efficacy and social capital deficiencies. The State of Texas has recently initiated such a program by allowing institutions to award state need-based work-study dollars to third- and fourth-year students who agree to serve as mentors to freshman and sophomore students (Texas Higher Education Coordinating Board, 2007).

Programs of this type have tremendous opportunity for success in that they allow recipients to “earn” their self-help aid in a student-friendly environment. Mentors and those they mentor can arrange times that are convenient to their individual class schedules or spend quality time in study sessions. Such a program provides direct evidence of student successes to those who might enter the institution full of doubt and anxiety. Further, mentoring by fellow students can overcome age differences that may negate the benefits of mentoring by faculty and/or staff.

Second, higher education must increase the resources dedicated to academic support. Currently, Texas mandates that set percentages of state and board designated tuition be designated for need-based financial aid. Institutions should follow this

model in increasing their aid resources and fostering programs dedicated to tutoring and academic support.

The referenced literature supports academic success as a key contributor to persistence. Simply funneling dollars to aid programs, therefore, only goes halfway in addressing precollege deficits in low socioeconomic, first-generation students. In fact, admission, TRIO, and financial aid offices should collaborate to identify need-based aid recipients who also would benefit from academic support services. Institutions should consider policies that mandate enrollment in academic support in return for institutionally funded financial aid. To enhance the abilities and college experience of academically superior students, some institutions mandate enrollment in advanced courses. At one Texas public university, National Merit Scholars are required to not only enroll for honors classes, but also officially join the honors college. This is intended to place these advanced students in an environment that attends to the holistic cultivation of their academic talents. Certainly, disadvantaged, at-risk students deserve the same attention to the precollege inabilities.

Choy's 2001 study (as cited by Pascarella, Pierson, Wolniak, & Terenzini, 2004) suggested that first-generation, at-risk students represent 34% of all entering freshman students. Providing sufficient financial aid in order to classify them as "entering freshmen" does little to ensure the necessary resources—including support services—are available to assist them in persisting and eventually being classified as "graduates."

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