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Persistence and Attainment of Beginning Students with Pell Grants

Executive Summary

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Executive Summary

The Pell Grant program is the largest federal need-based grant program available to postsecondary education students. In 1998–99, the federal government spent \$7.2 billion on Pell Grants for more than 3.8 million students (U.S. Department of Education 1999). Students can use a Pell Grant at almost all 2- and 4-year public and private not-for-profit institutions, as well as several thousand private for-profit institutions. Pell Grant program eligibility is based primarily on the student’s and/or parents’ income for the previous year, with awards made primarily to low-income students. Among undergraduates who enrolled in postsecondary education for the first time in 1995–96, 87 percent of Pell Grant recipients were either dependent students whose parents’ incomes were under \$45,000 (59 percent) or independent students with incomes under \$25,000 (28 percent). Other factors are also taken into account in awarding Pell Grants, such as student and parent assets and other family members who are concurrently enrolled in college.

This report provides a description of Pell Grant recipients who were first-time beginning postsecondary students in 1995–96. Using data from the 1996 Beginning Postsecondary Students Longitudinal Study, “First Follow-up” (BPS:96/98), the report examines the academic and enrollment characteristics of beginning students who received a Pell Grant and their rates of persistence 3 years after first starting postsecondary education. These students are compared with beginning students who did not receive a Pell Grant. Because Pell Grant recipients are predominantly low-income students, high-income students were excluded

from the analysis when comparing students’ educational background and postsecondary outcomes. For these analyses Pell Grant recipients were only compared to low- and middle-income nonrecipients. However, all students were included when analyzing the distribution of different types of financial aid and the types of institutions that students attended with respect to whether or not they received a Pell Grant.

In 1995–96, 29 percent of all beginning students and 32 percent of full-time beginning students received a Pell Grant. Beginning postsecondary students receiving Pell Grants differed from other first-time students in the types of institutions attended and receipt of other types of financial aid. When examining low- and middle-income students only, Pell Grant recipients differed from nonrecipients in their level of high school academic preparation and the number of factors that put them at risk for not achieving their educational objectives.

Institution Type, Pell Grant Award Amounts, and Other Financial Aid

Taking into account all students who enrolled in postsecondary education for the first time in 1995–96, Pell Grant recipients differed from nonrecipients in where they enrolled. In particular, they were more likely than nonrecipients to attend private for-profit less-than-4-year institutions, which provide primarily short-term occupational training. Pell Grant recipients were less likely than nonrecipients to attend public 4-year, public 2-year, and private not-for-profit 4-year institutions

Table A.—Percentage distribution of all 1995–96 beginning postsecondary students according to first institution type, by receipt of Pell Grant and attendance status

Receipt of Pell Grant	Public 4-year	Private not-for-profit 4-year	Public 2-year	Private for-profit less-than- 4-year	Other*
Total					
Total	25.9	14.7	45.7	10.6	3.1
Pell recipient	23.5	12.7	38.8	20.6	4.4
Nonrecipient	26.9	15.7	48.3	6.4	2.6
Full-time students					
Total	32.3	19.1	32.6	12.6	3.4
Pell recipient	26.1	14.8	32.5	22.1	4.6
Nonrecipient	35.3	21.2	32.7	8.0	2.8

*Other institutions include public less-than-2-year institutions, private not-for-profit less-than-4-year institutions, and private for-profit 4-year institutions.

NOTE: Detail may not add to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996 Beginning Postsecondary Students Longitudinal Study, “First Follow-up” (BPS:96/98).

(table A). Differences in enrollment patterns were also notable among full-time students, with 26 percent of Pell Grant recipients attending public 4-year institutions and 22 percent attending private for-profit less-than-4-year institutions. In contrast, 35 percent of full-time nonrecipients attended public 4-year institutions and 8 percent attended private for-profit less-than-4-year institutions.

Because Pell Grant recipients are primarily low-income students, they were more likely than nonrecipients to qualify for and receive additional types of financial aid such as loans, work-study, and other grant aid. Among Pell Grant recipients, those enrolled at private not-for-profit 4-year institutions were more likely than those at other institutions to receive other financial aid.

Academic Background and Enrollment Characteristics

Taking into account low- and middle-income students only, Pell Grant recipients were less well prepared academically than their counterparts who did not receive a Pell Grant. Among students enrolled at 4-year institutions, Pell Grant recipients were more likely than nonrecipients to have SAT I (or equivalent ACT) scores that fell in the lowest quartile and less likely to have completed a rigorous curriculum while in high school. Those attending less-than-4-year institutions were less likely than nonrecipients to have received a high school diploma (i.e., they did not graduate or they finished high school with a GED or high school completion certificate).

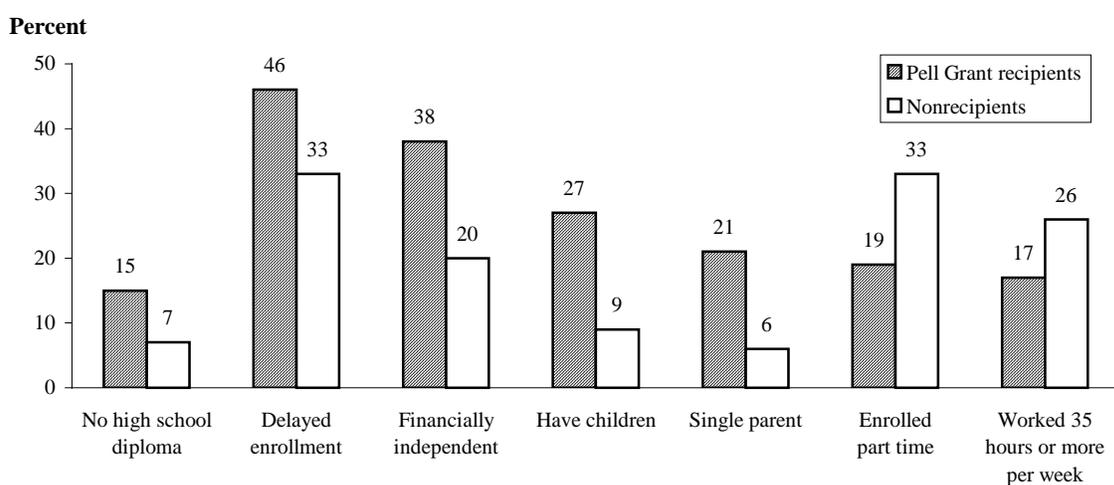
Low- and middle-income Pell Grant recipients attending less-than-4-year institutions differed in some respects from nonrecipients in their educational objectives. Recipients at public 2-year institutions were more likely than nonrecipients to be pursuing an associate's degree and less likely to be working toward a vocational certificate. Pell Grant recipients enrolled at private for-profit less-than-4-year institutions were more likely than nonrecipients to be pursuing *no* degree and less likely to be pursuing a vocational certificate.

Pell Grant recipients enrolled at public 2-year institutions also were more likely than nonrecipients to enroll full time and less likely to work while enrolled. This may be due in part to the Pell Grant program's requirements. Both part-time attendance and income earned from employment can decrease eligibility for a Pell Grant.

Persistence Risk Factors

Seven characteristics have been shown to be associated with leaving postsecondary education without a degree (Horn and Premo 1995): not graduating from high school (or finishing with a GED or high school completion certificate), delaying enrollment in postsecondary education, being financially independent (i.e., for financial aid purposes), having dependents other than one's spouse, being a single parent, attending part time, and working full time while enrolled. Among low- and middle-income beginning students, Pell Grant recipients were more likely than nonrecipients to have each of these persistence risk factors except for full-time employment and part-time enrollment (figure A). Recipients also had a higher average number of risk factors than did nonrecipients. Recipients' likelihood of having such factors varied

Figure A.—Percentage of 1995–96 low- and middle-income beginning postsecondary students with persistence risk factors, by receipt of Pell Grant



NOTE: Low- and middle-income students include all dependent students whose parents had an annual income in 1994 of less than \$70,000 and all independent students who, combined with their spouse's earnings, had an annual income in 1994 of less than \$25,000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996 Beginning Postsecondary Students Longitudinal Study, "First Follow-up" (BPS:96/98).

by institution type, with those at less-than-4-year institutions more likely than those at 4-year institutions to be at risk. Within each institution type, however, Pell Grant recipients were more likely than nonrecipients to be independent, to have children, and to be single parents.

Three-Year Rates of Persistence

Examination of 3-year rates of persistence included comparisons of students by institution type and academic background, comparisons of Pell Grant recipients by receipt of other financial aid or parental support, and a multivariate analysis taking into account several variables associated with persistence.

The 3-year persistence rates of Pell Grant recipients initially enrolled at 4-year institutions and those enrolled at less-than-4-year institutions were examined separately to account for differences in the academic preparation and educational goals of students at different types of institutions. Because Pell Grant recipients were less well prepared academically and reported more persistence risk factors than nonrecipients, it might be expected that Pell Grant recipients would have lower rates of persistence and attainment than nonrecipients. However, with a few exceptions this appeared in large part not to be observed in this study.

Persistence at 4-Year Institutions

Considering all low- and middle-income beginning students who were enrolled at 4-year institutions in 1995–96, no differences in 3-year persistence rates were detected between Pell Grant recipients and nonrecipients. Furthermore, with one exception, no differences were detected in persistence between Pell recipients and nonrecipi-

ents when taking into account either SAT I/ACT composite test scores (table B) or high school curriculum (table C). The exception was for those who scored in the lowest SAT I/ACT quartile (table B): Pell grant recipients were *less* likely than nonrecipients to leave postsecondary education without a degree (16 versus 26 percent).

Private Not-For-Profit 4-Year Institutions

When examining low- and middle-income students in 4-year institutions separately within sector, some differences were observed among students enrolled at private not-for-profit institutions. Specifically, among those who had completed a mid-level high school academic curriculum, nonrecipients were more likely than Pell Grant recipients to remain enrolled at an institution of the same level or higher (64 versus 80 percent). Among those who had taken a rigorous high school curriculum, however, no differences in persistence rates were detected between recipients and nonrecipients (89 percent for both groups).

Public 4-Year Institutions

Among low- and middle-income beginning students enrolled at public 4-year institutions, differences were found among students scoring in the lowest and middle quartiles on their entrance exams: Among those scoring in the lowest quartile, Pell Grant recipients were less likely to leave without a degree (15 versus 28 percent), while among those scoring in the middle quartiles, Pell Grant recipients were more likely to leave without a degree (17 versus 12 percent). However, in neither of these test score groups (lowest or middle quartiles) were differences detected in the likelihood of remaining enrolled at an institution of the same level or higher.

Table B.—Percentage distribution of 1995–96 low- and middle-income beginning postsecondary students enrolled at 4-year institutions according to their enrollment status in 1998, by receipt of Pell Grant and SAT I/ACT composite score

Receipt of Pell Grant	Remained enrolled at same or higher level institution in spring 1998 ¹	Stopped out or transferred to lower level institution ²	Left postsecondary education without a degree by spring 1998
Total in public and private not-for-profit 4-year institutions			
Total	65.0	20.2	14.8
Pell recipient	62.9	20.9	16.2
Nonrecipient	66.1	19.9	14.0
Low quartile (400–700)			
Total	51.9	27.8	20.4
Pell recipient	53.7	30.8	15.5
Nonrecipient	49.9	24.5	25.6
Middle quartiles (710–1020)			
Total	64.0	22.4	13.6
Pell recipient	63.2	21.4	15.4
Nonrecipient	64.4	23.0	12.6
High quartile (1030–1600)			
Total	79.0	13.1	7.9
Pell recipient	81.2	10.5	8.3
Nonrecipient	78.3	13.9	7.8

¹Percentage who were continuously enrolled or made immediate lateral or upward transfers to other institutions.

²Percentage who made downward transfers (for example, transferring from a 4-year institution to a less-than-4-year institution) or left for more than 4 months and then returned (i.e., stopped out).

NOTE: Detail may not add to 100 because of rounding. Low- and middle-income students include all dependent students whose parents had annual incomes in 1994 of less than \$70,000 and all independent students who, in combination with their spouse’s earnings, had annual incomes in 1994 of less than \$25,000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996 Beginning Postsecondary Students Longitudinal Study, “First Follow-up” (BPS:96/98).

Persistence at Less-Than-4-Year Institutions

Among low- and middle-income students enrolled at less-than-4-year institutions, Pell Grant recipients averaged more persistence risk factors than nonrecipients and were less likely than nonrecipients to have graduated from high school. Despite such risk attributes, no differences in 3-year persistence rates were detected between Pell Grant recipients and nonrecipients attending either public 2-year or private for-profit less-than-4-year institutions.

Persistence of Pell Grant Recipients Receiving Other Financial Aid or Parental Support

The study also examined 3-year persistence rates for full-time beginning students with a Pell Grant in light of other types of financial assistance received, in particular loan aid and assistance from parents. Among full-time Pell Grant recipients enrolled at private institutions (both not-for-profit 4-year and for-profit less-than-4-year institutions), those who received loan aid during their first year of enrollment were more likely than those who did

Table C.—Percentage distribution of 1995–96 low- and middle-income beginning postsecondary students enrolled at 4-year institutions according to their enrollment status in 1998, by receipt of Pell Grant and level of high school curriculum

Receipt of Pell Grant	Remained enrolled at same or higher level institution in spring 1998 ¹	Stopped out or transferred to lower level institution ²	Left postsecondary education without a degree by spring 1998
Total in public and private not-for-profit 4-year institutions			
Total	65.0	20.2	14.8
Pell recipient	62.9	20.9	16.2
Nonrecipient	66.1	19.9	14.0
Core curriculum or lower ³			
Total	57.6	23.5	18.9
Pell recipient	57.6	24.6	17.8
Nonrecipient	57.6	22.9	19.5
Mid-level curriculum ⁴			
Total	70.0	20.8	9.2
Pell recipient	67.0	21.4	11.6
Nonrecipient	71.6	20.5	7.8
Rigorous curriculum ⁵			
Total	85.9	10.3	3.8
Pell recipient	87.0	7.9	5.2
Nonrecipient	85.5	11.2	3.4

¹Percentage who were continuously enrolled or made immediate lateral or upward transfers to other institutions.

²Percentage who made downward transfers (for example, transferring from a 4-year institution to a less-than-4-year institution) or left for more than 4 months and then returned (i.e., stopped out).

³Core curriculum includes 4 years of English, 3 years of social studies, 3 years of mathematics, and 3 years of science.

⁴Mid-level curriculum includes the Core curriculum requirements and also requires 1 year of a foreign language, geometry, and algebra 1, and 2 of the following classes: biology, chemistry, or physics.

⁵Rigorous curriculum includes 4 years of English, 4 years of mathematics (including precalculus or higher), 3 years of a foreign language, 3 years of social studies, 3 years of science (including biology, chemistry, and physics), and at least 1 Advanced Placement (AP) class or test taken.

NOTE: Detail may not add to 100 because of rounding. Low- and middle-income students include all dependent students whose parents had annual incomes in 1994 of less than \$70,000 and all independent students who, in combination with their spouse's earnings, had annual incomes in 1994 of less than \$25,000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996 Beginning Postsecondary Students Longitudinal Study, "First Follow-up" (BPS:96/98).

not receive any loans to remain enrolled at an institution of the same level or higher. No such differences in persistence were detected among Pell Grant recipients enrolled at public 2-year or public 4-year institutions.

Finally, Pell Grant recipients were examined with respect to the relationship between persistence and financial support from parents.¹ Unlike the results found for loan aid, no differences in

¹Dependent students do not necessarily receive financial support from parents even though, for financial aid eligibility determination, their parents' income and assets are taken into consideration.

persistence were observed between Pell Grant recipients who reported receiving financial support from their parents and those who did not.

Relationship of Specific Variables to Persistence

Finally, a multivariate analysis was conducted analyzing the likelihood of remaining enrolled at an institution of the same level or higher for 3 years. The analysis included all full-time low- and middle-income beginning students enrolled at all types of institutions. It took into account Pell Grant receipt and several other variables associated with persistence, including type of institution first attended, demographic characteristics (gender, race/ethnicity, age, and parents' education level), income level (low versus middle), and persistence risk factors.² Taken together, these variables accounted for 8.5 percent of the variance in

the likelihood of remaining enrolled for 3 years at an institution at the same or higher level.

Before any of the background variables were taken into consideration, among all full-time low- and middle-income beginning students enrolled at all postsecondary institutions, Pell Grant recipients were less likely to remain enrolled than their nonrecipient counterparts. However, the findings from the multivariate analysis showed that no differences in persistence could be detected after controlling for the covariation of related variables. In other words, after taking into account such variables as type of institution first attended, income, parents' education, age, and persistence risk factors, the analysis failed to find a difference in persistence between Pell Grant recipients and non-recipients.

²Bivariate correlations showed that the effect sizes of the independent variables on the likelihood of remaining enrolled for 3 years were small, with correlations ranging from .012 to .190. See appendix B for methodological details.