



TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Demographic and Academic Characteristics of Pell Grant Recipients at Community Colleges

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Abstract

Using data on more than 50,000 community college students who first enrolled during the 2005–06 academic year at one of nine community colleges in three large states, this paper presents demographic and academic characteristics of students who did and did not receive a Pell Grant. The descriptive findings suggest that, despite lower levels of initial college readiness, Pell recipients had a stronger academic focus than non-Pell recipients. Yet, while Pell recipients had higher credit completion ratios and were more likely to complete an award, they were also more likely to be enrolled in the same college with more than 30 credits after five years. This suggests that Pell recipients at community colleges may be taking a longer period of time to complete an academic credential than is prudent.

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1. Introduction and Background

The U.S. Federal Pell Grant program was established in 1972 with the goal of increasing access to postsecondary education. The program uses a need-based formula tied to students' Expected Family Contribution (EFC) in order to allocate funds for undergraduate study at participating institutions. While Pell Grants have historically served as the primary source of aid for low-income students, the size of the program has swelled in recent years—the number of Pell Grant recipients in both community colleges and other educational institutions has increased dramatically. Given the sharply rising cost of the program and the strong interest in reducing federal spending generally, it is important to have an understanding of the students who receive Pell awards, particularly those who attend community colleges, where about one third of all Pell Grant recipients are enrolled. Gaining a clearer picture of the student characteristics and educational outcomes of Pell Grant recipients at community colleges is valuable for assessing the program's overall success and for identifying potential areas for improvement.

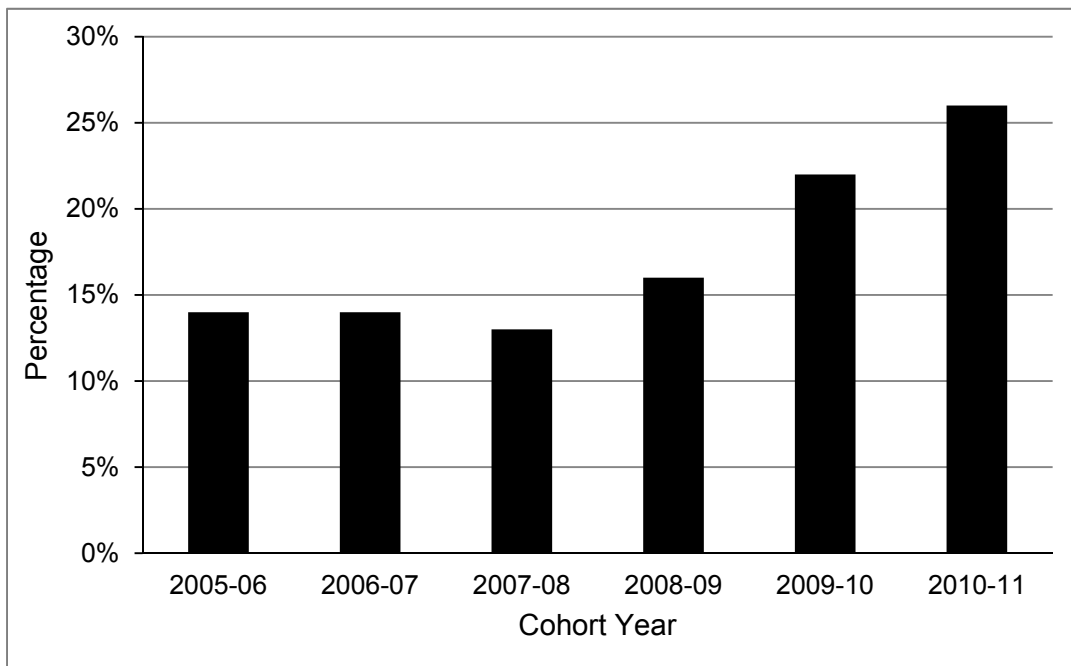
Using student-level and course-level administrative data from a sample of nine community colleges in three states, this short paper identifies demographic and academic characteristics of Pell Grant recipients attending community colleges and how they differ from characteristics of community college students who do not receive Pell awards. In terms of academic characteristics, we focus on the declared majors of students as well as their observable academic outcomes. We conclude with a discussion on policy implications.

1.1 Growth of the Program and Current Fiscal Climate

Figure 1 shows the growth of Pell Grant receipt among community college students in their first term of enrollment, based on a sample of first-time-in-college student cohorts that attended community colleges from academic year 2005–06 through 2010–11. In the 2005–06 cohort, about 14 percent of first-time college students in the sample received a Pell Grant. By the time the 2010–11 cohort enrolled, the proportion had risen to over 26 percent (an increase of more than 80 percent). National data on students at all institutions during this period show an equally substantial increase in the Pell Grant program, in terms of number of recipients, average grant received per student,

and total program expenditures (Baine & Mullin, 2011; Baum et al., 2013; Congressional Budget Office, 2013). Nationally, from 2006–2007 to 2010–2011, real (inflation-adjusted) spending on Pell Grants increased by 158 percent, which resulted from an 80 percent increase in the number of recipients and a 43 percent real increase in the average grant amount during that period (Congressional Budget Office, 2013). During the most recent award year for which data are available (July 1, 2011, to June 30, 2012), the program provided \$33.6 billion in grants to some 9.4 million students at U.S. educational institutions (Congressional Budget Office, 2013).

Figure 1
Percentage of Students Receiving Pell Grants
in Their First Term of Community College Enrollment, by Cohort



Note: Student *N* ranges from 149,282 in the 2005-06 cohort to 174,673 in the 2010-11 cohort. The students in these cohorts attended nine community colleges in three large states.

By and large, in spite of its costs and federal debt constraints, the Pell Grant program has been positively regarded on both sides of the U.S. political spectrum (Baime & Mullin, 2011). This is in part because Pell Grants are viewed as a key mechanism for enhancing social mobility opportunities among disadvantaged students through increased access to education beyond high school. In fact, investments in postsecondary success have risen in importance during recent years, as an increasing proportion of jobs in the

United States require candidates with postsecondary degrees (Baum et al., 2013). Nevertheless, record levels of federal debt, along with challenges resulting from the global financial crisis and its aftermath, have necessitated a closer look at the characteristics of students who receive these grants.

1.2 Pell Grants in Community Colleges

Pell Grant recipients can attend a variety of postsecondary institutions, including (1) public and private four-year not-for-profit colleges, (2) public and private two-year not-for-profit colleges, and (3) private for-profit colleges (U.S. Department of Education, 2011). Community colleges, included in the second category, have long been highly attended among Pell Grant recipients. Since 1992, more than 30 percent of all recipients have enrolled in community colleges (Baime & Mullin, 2011). In 2010–11, the most recent academic year for which public data are available, community colleges held the highest proportion of Pell Grant recipients across all institutional types, at over 35 percent (U.S. Department of Education, 2011). Community colleges represent a particularly important sector for the Pell Grant program because they provide students with relatively inexpensive and easily accessible options for pursuing and attaining a postsecondary degree.

2. Data

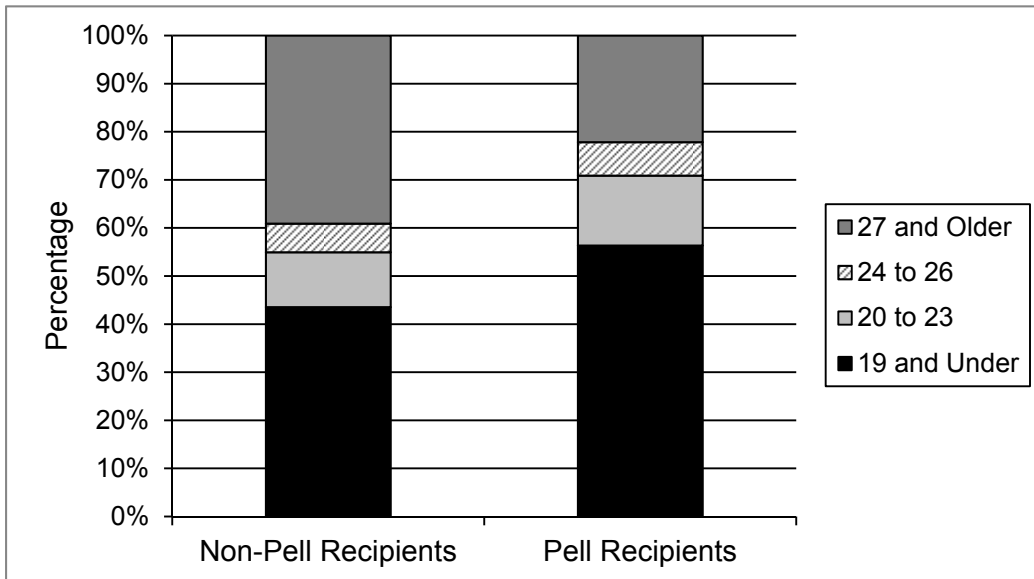
Our data include student characteristics and full transcript information on 56,595 first-time college students who enrolled during the 2005–06 academic year at one of nine community colleges in three large states. These data include information on basic student demographics, declared major, financial aid receipt, and enrollment and completion (including number of credits and grades) for all courses taken at the community college. Students are categorized by whether or not they received Pell funds of any amount during their first term at community college. Additionally, information on these students from the National Student Clearinghouse (NSC) was used to track student enrollment and degree completion for those students who transferred to a four-year institution within five academic years (i.e., through 2009–10).

3. Findings

3.1 Demographic Characteristics

Figure 2 shows the age distribution of Pell versus non-Pell students in our dataset. In our sample, more students who were 19 years old or younger received Pell Grants than did students from older age groups. This finding differs from national trends in the age distribution of Pell recipients, which are typically skewed toward older students (U.S. Department of Education, 2011).¹ However, national information on students is reported at the aggregate level and includes figures for all Pell recipients in all postsecondary institutions, whereas our dataset contains only Pell recipients at community colleges, which may account for the difference in our figures. Additionally, our dataset contains only *first-time* college students, whereas national-level data include students who had

Figure 2
Age Distribution



previously already had some form of postsecondary education. Baum et al. (2013) provide a detailed discussion of the somewhat distinctive implications of the Pell Grant program for non-traditional age students, who typically enter community colleges to

¹ Due to missing age information, 163 respondents in our dataset were excluded.

enhance specific labor force skills after a significant period of time away from postsecondary education.

Figures 3 and 4 show the dependency status and number of dependents declared, respectively, as reported by students in our dataset. Of the 56,595 students, 13,108 reported a dependency status (i.e., they reported whether they declared themselves dependent or not) on their FAFSA form. Among these, 44 percent of Pell recipients were independent, compared with 31 percent of non-Pell recipients. Of the 56,595 students, only 4,173 reported whether or not they had dependent children. Among these, a much higher percentage of Pell recipients than non-Pell recipients declared that they were caring for one or more children (55 percent versus 23 percent, respectively). These figures are consistent with the national-level data (U.S. Department of Education, 2011).

Figure 3
Dependency Status

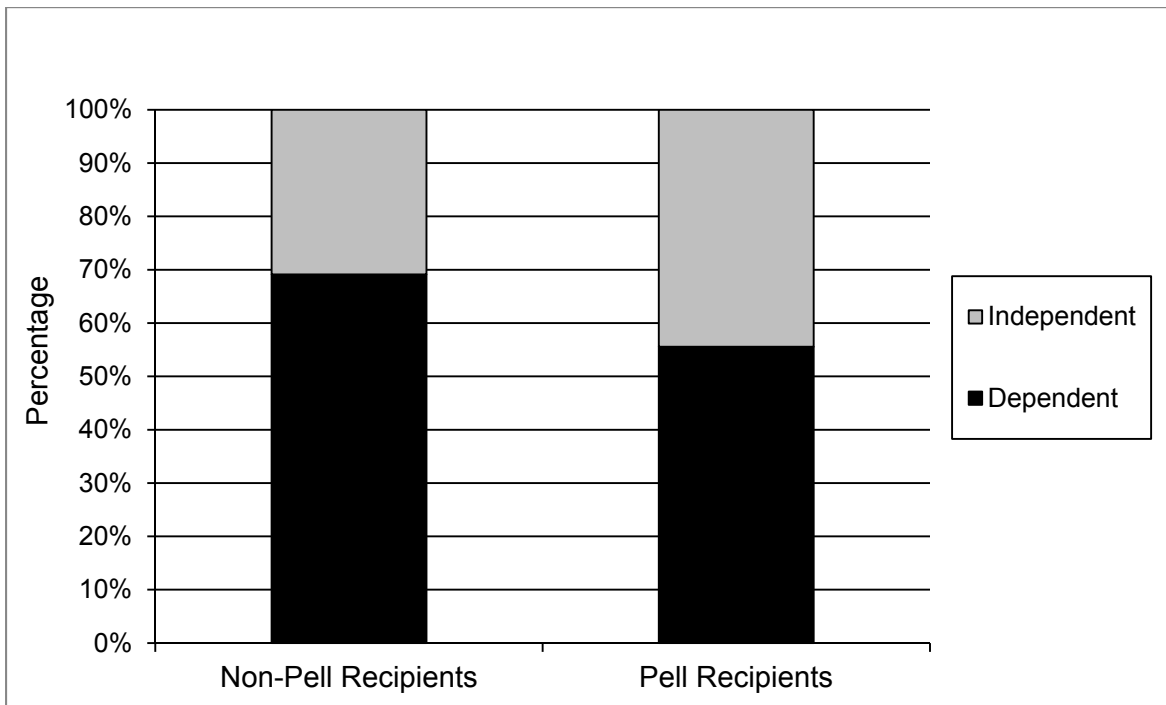
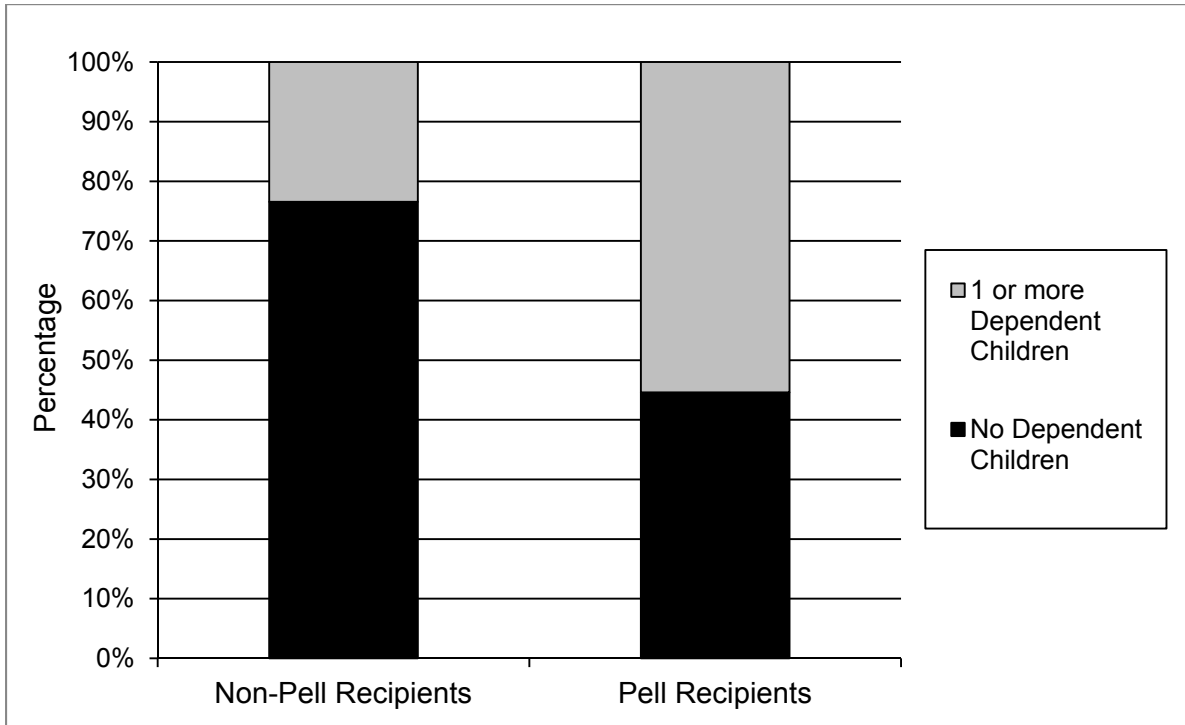


Figure 4
Number of Dependents Declared



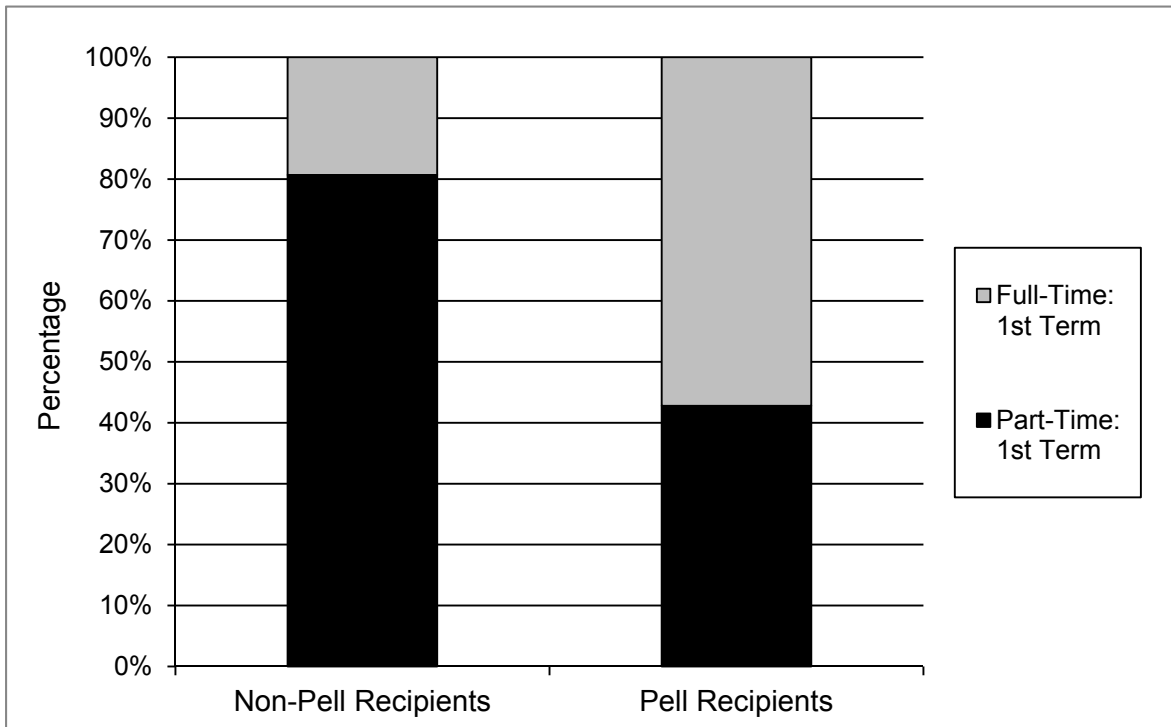
Pell recipients in our sample were of a lower socioeconomic status than non-Pell recipients, as measured by an index generated from the characteristics of their U.S. Census block groups. Additionally, Pell recipients tended to live in areas that fell into the lowest quintiles for median household income, whereas non-Pell recipients tended to be more evenly spread across lower and higher income areas. In terms of actual income, our dataset contains information on each student’s EFC, which is a measure of the financial strength of the student’s family. The average EFC for Pell recipients was about \$4,285, less than half the average EFC of non-Pell recipients, which was about \$8,817. These data on income are unsurprising—Pell eligibility is largely based on household income by way of the EFC calculation.

In terms of other demographic characteristics, a slightly higher proportion of Pell recipients than non-Pell recipients in our sample were female (61 percent versus 56 percent, respectively). About 29 percent of Pell recipients were African American, compared with 16 percent of non-Pell recipients.

3.2 Academic Characteristics

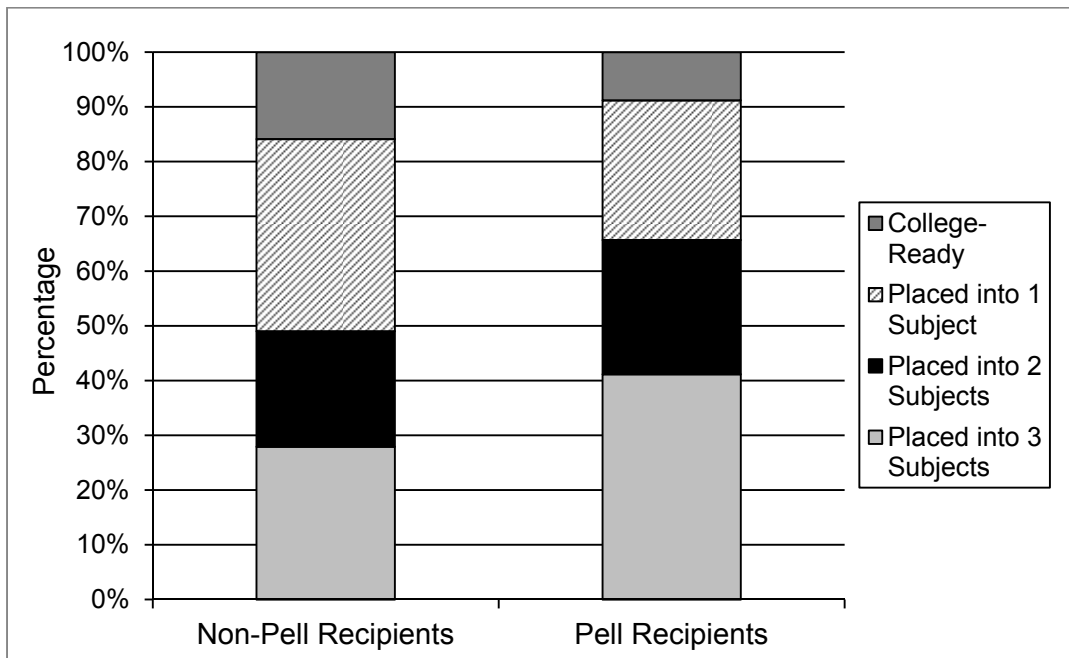
Figures 5 and 6 show the enrollment intensity status and level of academic preparedness of students upon entry, respectively. In our dataset, a full-time course load was defined as comprising at least 12 credits in the first term. Pell recipients in our sample were more likely to be full-time rather than part-time students, a finding that held true even for Pell recipients who had one or more dependent children. The much higher rate of full-time enrollment status relative to non-Pell recipients (57 percent versus 19 percent) is probably due to financial incentives, as students who enroll full-time are eligible to receive more Pell dollars per term. Current rules specify that students can receive Pell Grant awards for two full-time semesters during a given academic year (Baum et al., 2013).

Figure 5
Enrollment Intensity Status



In terms of college readiness, the majority (over 85 percent) of students in our sample were placed into developmental education courses in math, reading, or writing. Pell recipients were much more likely than non-Pell recipients to be placed into three or more developmental education subjects (41 percent versus 28 percent). This suggests that Pell recipients were less academically prepared than non-Pell recipients.

Figure 6
Referral to Developmental Education Courses in Math, Reading, and Writing

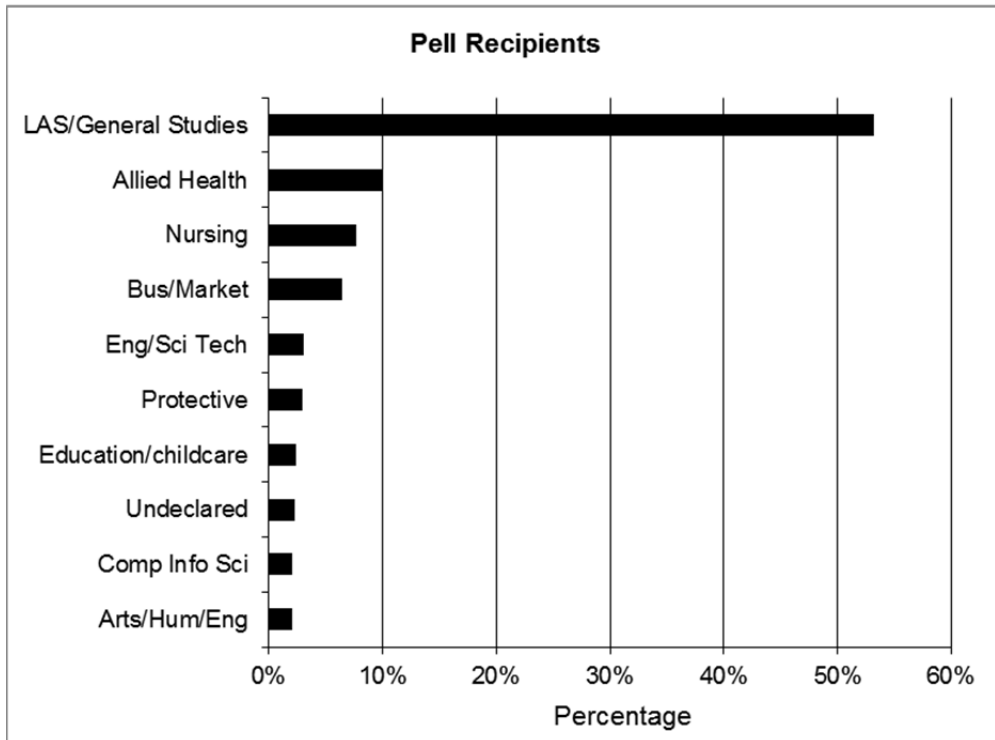
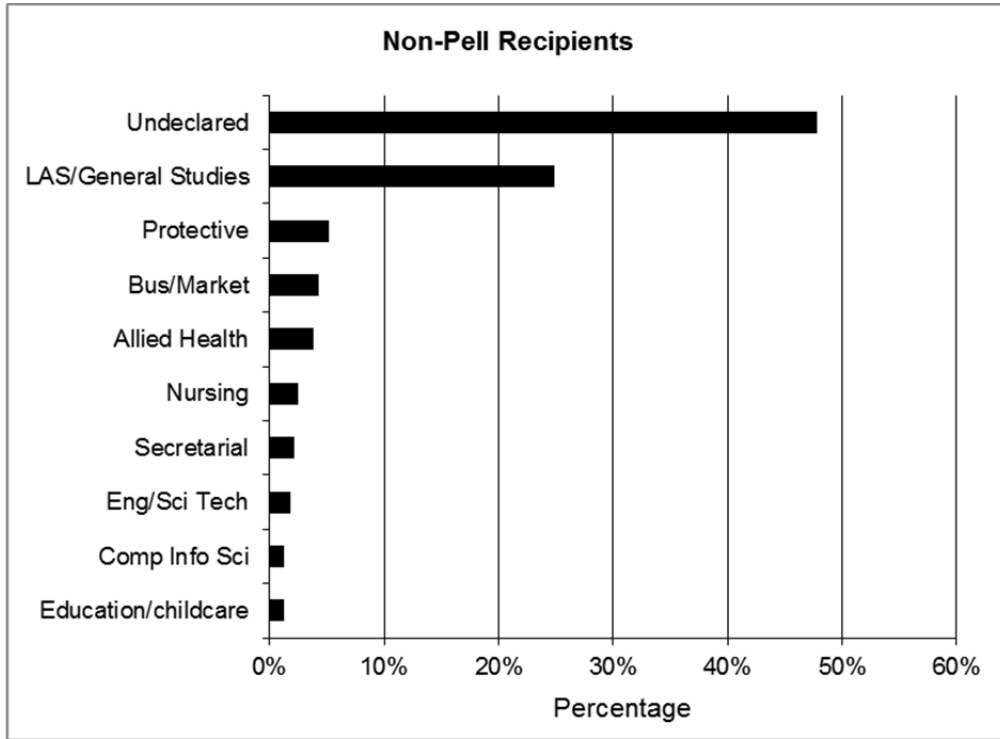


3.3 Major Declaration

Because Pell Grant receipt is in most cases contingent upon major declaration in a field of study, only 2 percent of Pell recipients did not declare a major within five years, compared with 48 percent of non-Pell recipients. Figure 7 shows these proportions of undeclared students along with the nine most popular declared fields of study among non-Pell and Pell recipients in our sample.²

² Our data are collected from several colleges, which designate students in slightly different ways. We define students in our dataset as undeclared if they have no record of major declaration or if a college categorizes these students as transfer-seeking and taking core curriculum coursework for ease of transfer with no further designation.

Figure 7
Top Nine Majors (Declared Fields of Study) and
Proportion of Undeclared Students



The most popular field of study among Pell recipients was liberal arts and sciences (LAS) and general studies (GS). Essentially, this kind of declaration denotes an interdisciplinary academic program that is often comprised of general education core courses that students need in order to transfer to a four-year college. When asked about their educational objective during their first term, 56 percent of Pell recipients indicated a desire to transfer, compared with 24 percent of non-Pell recipients, suggesting that for the majority of Pell students, their end goal was indeed to attain a bachelor's degree. Among non-Pell recipients, LAS and GS were also popular field-of-study choices, though a much larger proportion of students were undeclared. The fact that LAS and GS were so common among Pell students could indicate a higher degree of focus to accumulate general education credits and to transfer. However, it could also be the case that students who chose LAS and GS were declaring these more general fields of study due to an overall lack of direction in their educational goals.

Other popular fields of study among Pell recipients were allied health and nursing, which are much more specific and structured programs than LAS and GS. Typically, allied health and nursing are highly competitive programs, leading to higher employment outcomes post-graduation than many other programs. A higher percentage of Pell recipients elected to enter these fields than non-Pell recipients, perhaps indicating more career-driven educational aspirations among Pell students.

3.4 Educational Outcomes

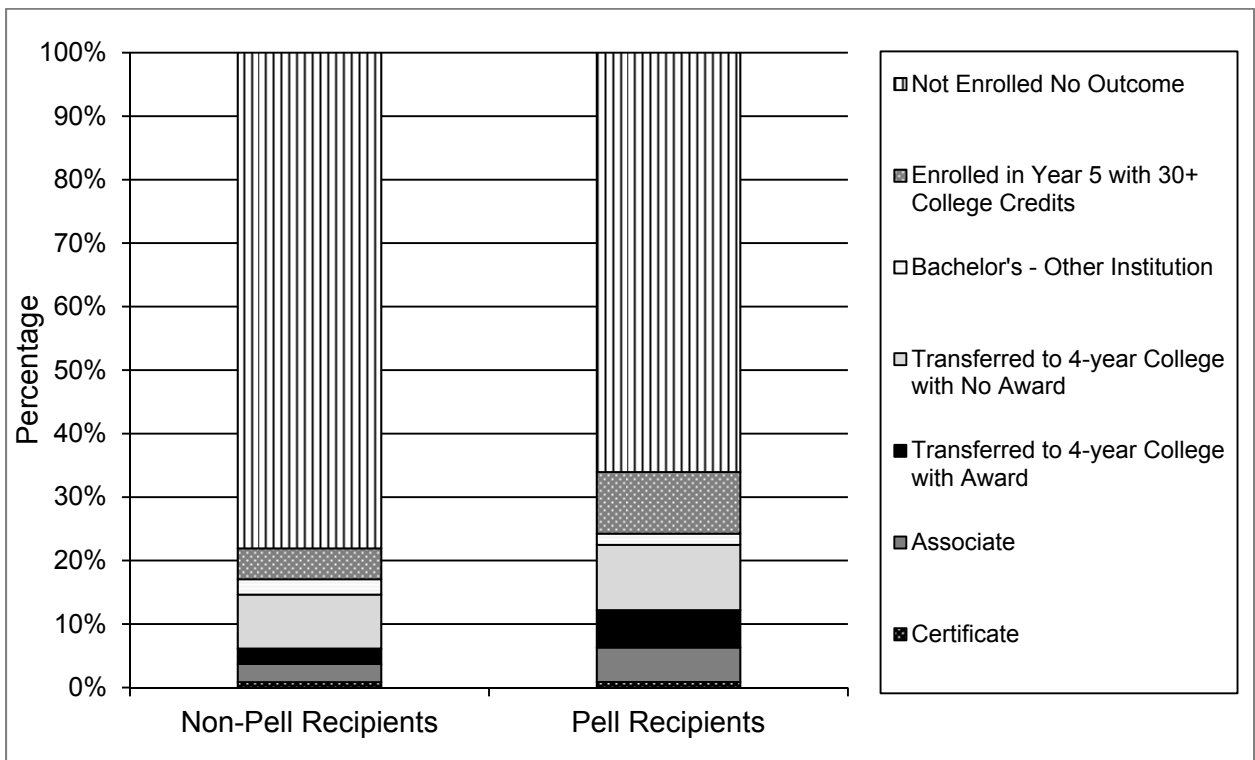
On average, Pell recipients in our sample took more credits per term than non-Pell recipients, probably due to the financial incentive associated with taking more credit hours.³ Pell recipients had a course completion ratio of 0.58, compared with 0.42 for non-Pell recipients. That is, of the total credits they attempted, Pell recipients completed about 58 percent, whereas non-Pell recipients completed about 42 percent.

Figure 8 shows mutually exclusive educational outcomes after five academic years for the students in our sample. After five years, Pell recipients were more likely to have earned some type of award at their home institution, in the form of a certificate or associate degree; these students were also more likely to have transferred to a four-year

³ It is worth noting that full-time students taking more than 12 credits per term did *not* receive additional Pell funds.

college. Pell recipients were less likely than non-Pell recipients to be no longer enrolled or to have no observable outcomes (i.e., no award completions within our timeframe), though the proportion was still substantial (65 percent among Pell recipients versus 78 percent among non-Pell recipients). Sixteen percent of Pell recipients transferred to a four-year institution within five years, either with or without an award from the community college, compared with 10 percent of non-Pell recipients. However, after five years, 10 percent of Pell recipients were still enrolled at the community college with more than 30 completed college credits, compared with only 5 percent of non-Pell recipients. As discussed below, this finding, which shows a greater propensity for “lingering” at college on the part of Pell recipients, may be related to the fact that the Pell Grant program incentivizes a longer period of study.

Figure 8
Educational Outcomes After Five Years



Note: “Bachelor’s – Other Institution” indicates a student earning a bachelor’s degree at another institution, identified by using National Student Clearinghouse data.

4. Discussion and Conclusion

The Pell Grant program has been a longstanding source of basic aid for disadvantaged college students. Postsecondary success will only become more critical in the U.S. economy as labor markets become more concentrated toward those with greater technical skills. As a result, it is vital that this core program continue to make it possible for motivated students to carry on their education beyond high school, particularly for students who attend community colleges. It is important to recognize that major initiatives that have been undertaken to increase college completion rates among U.S. students are necessarily focused on community colleges, where there is the most room for growth in terms of successful outcomes and where a large proportion of Pell recipients begin their postsecondary education.

The descriptive results of the current study shed some light on the characteristics of Pell recipients in community colleges. Pell recipients in our sample were generally younger and poorer than non-Pell recipients at the same colleges. Yet, on average, despite lower levels of initial college readiness, Pell recipients in our sample appear to have shown a higher degree of academic focus than non-Pell recipients. This is illustrated by their higher rate of declared majors in competitive fields, their higher rate of transfer-oriented educational objectives, and their higher credit completion ratios. The data on student outcomes also indicate that a larger percentage of Pell recipients received some type of an award at the end of five years compared with non-Pell recipients. These generally positive findings for Pell recipients may be attributed to higher levels of motivation among these students or to federal aid eligibility requirements that provide an incentive for persistence, or to a combination of both.

Yet it is also the case that a greater proportion of Pell recipients than non-Pell recipients in our sample were still college “lingers” after five years; that is, they were still enrolled in their fifth year with more than 30 college-level credits completed and without a degree from the community college. They may thus have been taking a longer period of time to complete their programs of study at the community college than non-Pell recipients. This may be due to the structure of the Pell Grant program itself. As mentioned in Baum et al. (2013), the current system incentivizes a longer period of study, because it provides more funding to students who spread their studies out over time. For

example, students who enroll in a third term over the summer in addition to the two full-time semesters do not receive extra funding, nor do students enrolled beyond 12 credit hours in any given semester. A closer examination of our data supports this notion of Pell as a form of income for community college students. Pell recipients categorized as lingerers did in fact come from poorer areas; interestingly, this was not the case for non-Pell lingerers, who tended to be from wealthier areas.⁴ In light of these findings, it may be useful to consider whether changes to the current system of Pell award allocation might be beneficial in terms of accelerating completion to a degree.

Pell Grants have been successful at increasing postsecondary enrollment among low-income populations, and Pell recipients who attend community colleges appear to have stronger academic outcomes than non-Pell recipients. However, the program could be made more efficient by restructuring payment schemes to incentivize faster completion or faster transfer to a four-year college. Further research should be conducted to assess the mediating factors relating Pell Grant receipt to the observed outcomes outlined here.

⁴ Poor areas are defined as Census tract areas that are in the lowest quintile for median household income, and wealthier areas are defined as Census tract areas that are in the highest quintile for median household income. The average EFC for Pell lingerers was about \$644, compared with over \$10,000 for their non-Pell lingerer counterparts.

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