

Exploring the College Enrollment of Parents: A Descriptive Analysis

By Laura W. Perna, Rachél Fester, and Erin Walsh

Laura W. Perna is professor of higher education management in the Graduate School of Education at the University of Pennsylvania.

Rachél Fester and Erin Walsh are Ph.D. candidates in this program.

This research was funded in part by the Lumina Foundation for Education. Rachél Fester's participation in the project was supported by the Institute of Education Sciences, U. S. Department of Education, through Grant R305C050041-05 to the University of Pennsylvania. The opinions expressed in this paper are those of the authors and do not necessarily represent the views of the Lumina Foundation, the U. S. Department of Education, or either organization's employees. An earlier version of this paper was presented at the annual meeting of the Student Financial Aid Research Network in Baltimore, Maryland in June 2008.

Despite the substantial size of the population, relatively little research has focused on the status and experiences of undergraduate parents. Using descriptive analyses of data from the NPSAS:04, this study provides a starting point for campus administrators, public policymakers, and educational researchers who seek to identify ways to better understand the characteristics of this population.

Currently 34 million working adults in the United States have not attended college and 54 million working adults have not earned a degree (Pusser, Breneman, Gansneder, Kohl, Levin, Milam & Turner, 2007). Addressing the barriers that limit the transition to postsecondary education for all individuals, including adult learners, is increasingly important to the nation's continued prosperity in a knowledge-based economy (Council for Adult and Experiential Learning, 2008).

One common policy lever for increasing college enrollment is student financial aid, as financial aid reduces the price of enrollment. Most financial aid (e.g., 67% of aid awarded to undergraduates in 2007-08) is awarded via federally-sponsored student financial aid programs (College Board, 2008). Nonetheless, state governments may also play an important role in promoting financial access to college. Between 1997-98 and 2007-08, the amount of funds awarded to undergraduates from state grant programs increased by 80% after controlling for inflation, a faster rate of growth than Federal Pell Grants (75% increase) and grants from colleges and universities (78% increase, College Board, 2008). In 2007-08, state grants totaled nearly \$8 billion, or 7% of all aid received by undergraduates (College Board, 2008).

These aggregate statistics mask variations in the availability of aid across states. Whereas criteria for receiving federal financial aid do not vary across states, both the amounts of state grants and the criteria for receiving state grants vary widely. For example, some states (e.g., South Carolina, New York, Georgia, and Kentucky) offer over \$1,000 in grant aid per full-time equivalent (FTE) undergraduate student, while others (e.g., Arizona, Hawaii, and Wyoming) offer less than \$10 per FTE (College Board, 2007).

These state variations provide an opportunity to explore variations in the college enrollment of one segment of the adult learner population – i.e., parents – based on the availability of financial aid. Capitalizing on state variations, this study uses descriptive analyses of data from the 2003-04 National Postsecondary Student Aid Survey (NPSAS:04) to explore whether college enrollment rates of parents vary based on the availability of state grants. Because little is known about the college enrollment of students who are also parents, the paper also uses descriptive analyses of the NPSAS:04 to describe the demographic and college-related characteristics of this population.

Review of Literature

As others have noted (e.g., Donaldson & Townsend, 2007), although a substantial body of research examines the enrollment of high school graduates directly into college, relatively little research has focused on the college enrollment characteristics or experiences of adult learners in general or parents in particular. The available research suggests that, for adult learners, access to postsecondary education is influenced by such forces as the accessibility of postsecondary education options (e.g., online courses, community colleges, off-campus centers, flexible class schedules), availability of employer-provided tuition assistance and other financial aid, availability of child care, and parental responsibilities (Lumina Foundation, 2007; Pusser et al., 2007), and that adult students benefit from flexible and accelerated programs, transition and transfer policies between programs and institutions, and financial aid policies and practices that allow for part-time study (Kazis et al., 2007).

Other research suggests the importance of financial aid to the college enrollment of adult learners (Lumina Foundation, 2007). Using difference-in-difference regression analyses and data from the Current Population Survey, Seftor and Turner (2000) found that, for low-income adult students, the introduction of the Pell Grant was associated with an increase in enrollment, but that restrictions in Pell eligibility after 1990 were associated with lower enrollment rates.

The positive association between financial aid and college enrollment is consistent with human capital theory. Rational models of human capital investment assume that individuals decide to invest in additional education based on a comparison of the expected benefits and costs (Becker, 1993). Financial aid is expected to increase the demand for higher education by reducing the costs of attendance (Becker, 1993).

Financial aid may also promote college enrollment indirectly by providing information on mechanisms for paying college prices. Among adult learners, parents of high school and college-age students may be particularly likely to experience this benefit of financial aid. Through the process of learning about ways to pay for their children's postsecondary education, these parents may gain and use information to promote their own college enrollment. Available research suggests that most parents of students attending four-year colleges participate in some aspect of their children's financial-aid related processes, including assisting with the financial aid application form, gathering financial aid information, and talking with a financial aid administrator and/or high school counselor (Stringer, Cunningham, O'Brien, & Merisotis, 1998).

These findings suggest the possibility that the college enrollment of parents may be higher in states with more substantial state grant programs than in other states, either because of the greater effect of aid on net price and/or because of parents' greater knowledge of the availability of aid. This study explores this possibility.

Method

This study uses descriptive analyses to examine the following research questions:

- 1) What are the demographic characteristics of parents who are enrolled as undergraduates?
- 2) How do undergraduate parents pay the price of attending postsecondary education?
- 3) How does the college enrollment of parents vary based on characteristics of the state grant program?

Sponsored by the National Center for Education Statistics (NCES), the NPSAS:04 provides data describing the characteristics of enrolled students and the ways that students and their families pay the price of postsecondary education. The sample includes about 80,000 undergraduates and 11,000 graduate and first-professional students enrolled at 1,400 four-year, two-year, and less-than-two year institutions nationwide at any time between July 1, 2003, and June 30, 2004, (Berkner & Wei, 2006). When weighted, the data are representative of the population of 19 million undergraduates and 3 million graduate and first-professional students (Berkner & Wei, 2006). The analyses for this study are limited to undergraduate students and weighted by the study weight for the sample (WTA00).

We define parents as students who are financially independent of their parents and who have at least one dependent child. The analyses consider several characteristics of parents (e.g., age of the youngest and oldest children, number of children), as well as a number of other indicators of students' demographic and enrollment characteristics.

The NPSAS:04 includes measures of the amount of state grant aid received by individual students, but no measures of the characteristics and availability of state grants within a state. Therefore, we constructed and integrated into the NPSAS dataset several measures from the National Association of State Student Grant and Aid Programs (NASSGAP). From the NASSGAP (2005) report, which provided data for the same academic year, 2003-04, as the NPSAS:04, we derived the following state-level measures of the magnitude of state grant aid: the amount of total state grant dollars relative to the population age 18 to 24, the amount of undergraduate state grant dollars relative to the undergraduate full-time equivalent enrollment (FTE), and the amount of need-based state grant dollars for undergraduates relative to undergraduate FTE. We also used data from the NASSGAP report to develop three measures of the criteria used to award state aid: the percent of total state aid awarded based only on need, the percent of total state aid based on need and merit, and the percent of total state aid based on only merit.

Results *Demographic Characteristics of Parents Enrolled in College*

In 2003-04, half of all undergraduates were financially dependent, 23% were independent without dependents, and 27% were independent with dependents. About 8% of independent undergraduates with dependents had dependents who were not children (i.e., 2% of all undergraduates). Thus, in 2003-04, 25% of all undergraduates were “parents,” i.e., financially independent with at least one dependent child. Because of the small number, independent students with dependents other than children are excluded from the remaining analyses.

Undergraduates who are parents differ from other undergraduates in terms of demographic characteristics such as gender, race/ethnicity, age, and their own parents’ educational attainment. Table 1 shows that, compared with other undergraduates, independent undergraduates with dependents are more likely to be female (71% compared with 53% of dependent undergraduates and 53% of independent undergraduates’ without dependents), Black (22% versus 10% of dependent undergraduates and 13% of independent undergraduates with no dependents), and age 30 or older (64% versus none of the dependent undergraduates and 39% of independent undergraduates with no dependents).

Educational attainment of the parents of undergraduates is substantially lower for undergraduates who themselves are parents than for other undergraduates. Nearly half (47%) of undergraduate parents have parents with no more than a high school education, compared with 25% of dependent undergraduates and 37% of independent undergraduates with no dependents. Only 25% of undergraduate parents have parents who have attained at least a bachelor’s degree, compared with 50% of dependent undergraduates and 36% of independent undergraduates with no dependents.

A higher percentage of parents (54%) than of independent students without dependents (32%) are married. But, this statistic also means that 46% of independent undergraduates with dependents are single parents. Nearly two-thirds (63%) of undergraduate parents had more than one dependent. Many of these undergraduate parents have children at an age that requires daycare or some sort of supervision, as 26% of undergraduate parents report that their oldest child is under age five and 42% indicate that their youngest child is under age five.

For 45% of undergraduate parents, the oldest child is under age 9, making it unlikely that these parents have enrolled in college because of college-related efforts they are making on behalf of their children. But, the data suggest that some undergraduate parents may have enrolled because of the college-related activities of family members. For 38% of undergraduate parents, the oldest dependent child is between the ages of 13 and 24. Nearly one-fifth (18%) of undergraduate parents report that another family member is also enrolled in college. For about half of these parents, the other family member enrolled in college is a spouse.

¹ Under the Title IV definition of dependency, any student age 24 and above on December 31 of the award year is automatically considered independent for federal student aid purposes.

Table 1: Distribution of undergraduates by dependency and parental status and demographic characteristics: 2003-04

Characteristic	Dependent	Independent, no dependents	Parent
Female	53.0%	53.0%	70.7%
Race/ethnicity			
White	67.2%	64.0%	55.7%
Black or African American	10.1%	12.7%	21.9%
Hispanic or Latino	12.0%	12.1%	14.3%
Asian	6.1%	6.0%	3.4%
Other	4.6%	5.3%	--
Age			
15-23	100.0%	13.7%	12.9%
24-29	--	47.2%	23.2%
30 or above	--	39.1%	63.9%
Parents' highest level education			
Do not know	1.8%	3.6%	4.1%
No more than high school	24.9%	36.8%	47.2%
Some college	23.6%	23.7%	24.1%
Bachelor's degree or higher	49.7%	36.0%	24.7%
Married	--	31.9%	54.1%
More than one dependent			63.2%
Age of oldest child			
Age 1-4	--	--	26.3%
Age 5-8	--	--	18.7%
Age 9-12	--	--	16.8%
Age 13-16	--	--	16.4%
Age 17-24	--	--	21.8%
Age of youngest child			
Age 1-4	--	--	42.2%
Age 5-8	--	--	21.2%
Age 9-12	--	--	15.0%
Age 13-16	--	--	11.5%
Age 17-24	--	--	10.0%
Number family members in college			
Dependent student	100.0%	--	--
1	--	91.3%	81.8%
2 or more	--	8.7%	18.1%
Spouse attending college	--	7.5%	7.8%
Total	100.0%	100.0%	100.0%

Note: Data weighted by WTA00. Source: Analyses of NPSAS:04

Table 2. Distribution of undergraduates by dependency and parental status and enrollment characteristics: 2003-04

Characteristic	Dependent	Independent, no dependents	Parent
Delayed enrollment into PSE			
Less than 5 years	99.7%	72.8%	65.6%
5 to 9 years	.3%	13.4%	13.1%
10 or more years	--	13.9%	21.4%
Has ever expected to earn least a bachelor's degree	94.0%	86.8%	82.2%
Undergraduate degree program			
Certificate or other	10.4%	22.0%	24.2%
Associate's degree	29.7%	38.5%	46.0%
Bachelor's degree	59.9%	39.5%	29.5%
Enrollment pattern			
Enrolled mostly full-time	76.2%	41.8%	39.4%
Enrolled mostly part-time	20.3%	54.9%	57.1%
Enrolled full-time & part-time equally	3.4%	3.4%	3.6%
Reason enrolled			
Job skills	13.7%	26.2%	34.5%
Personal interest	17.5%	27.9%	33.6%
Institutional type & control			
Public 2-year	35.5%	49.4%	56.6%
Public non-doctoral	18.2%	15.3%	10.7%
Public doctoral	22.5%	11.5%	5.3%
Private doctoral or non-doctoral	16.1%	10.0%	8.9%
Other	7.7%	14.8%	18.6%
Institution distance from home			
Less than 10 miles	25.6%	40.1%	39.3%
10 to 19 miles	12.2%	15.3%	17.4%
20 to 29 miles	11.6%	14.0%	16.0%
30 to 99 miles	22.6%	19.1%	19.7%
100 or more miles	27.9%	11.5%	7.5%
Institutional selectivity			
Most or very selective	16.8%	6.4%	2.9%
Moderately selective	35.3%	23.5%	17.2%
Minimally selective	7.8%	10.6%	11.3%
Open admission	39.6%	58.3%	67.4%
Major field of study – health sciences	8.8%	13.0%	20.6%
Total	100.0%	100.0%	100.0%

Note: Data weighted by WTA00. Source: Analyses of NPSAS:04

Enrollment Characteristics of Parents

Consistent with the age of undergraduate parents and other independent students, the analyses show that a substantial share of these students delayed enrollment into postsecondary education. Table 2 shows that about one-fifth (21%) of undergraduate parents and 14% of independent undergraduates with no dependents enrolled in postsecondary education more than 10 years after graduating from high school, while virtually all dependent undergraduates enrolled within five years of their high school graduation.

The majority of all undergraduates, including 82% of undergraduate parents, have at one time expected to earn at least a bachelor's degree. But, undergraduate parents appear less likely to attain this goal, as only 30% of undergraduate parents were enrolled in bachelor's degree programs in the 2003-04 academic year, compared with 60% of dependent undergraduates and 40% of independent undergraduates with no dependents. Time-to-degree is likely longer for parents than for dependent undergraduates, as 57% of undergraduate parents and 55% of other independent students are enrolled mostly part-time, compared with 20% of dependent undergraduates. Undergraduate parents are substantially more likely than dependent undergraduates to report being currently enrolled to enhance job skills (35% versus 14%) and for personal interest (34% versus 18%).

Undergraduate parents are similar to other independent undergraduates but unlike dependent undergraduates in terms of the types of institutions attended. Like other independent undergraduates, undergraduate parents tend to enroll in public two-year colleges (57% versus 36% of dependent undergraduates) and not enroll in public doctoral institutions (5% versus 23% of dependent undergraduates). Geographic proximity may be particularly important for independent students, as 39% of undergraduate parents but only 26% of dependent undergraduates attend an institution that is within 10 miles of their homes. Academic accessibility may also be important for this population, as 67% of undergraduate parents, as compared with 40% of dependent undergraduates, attend an open admissions institution.

The pattern of major field choice is remarkably similar across the four groups. The one notable difference is the share of students majoring in health-related fields. Table 2 shows that 21% of undergraduate parents report health majors, compared with 9% of dependent undergraduates and 13% of independent undergraduates with no dependents.

Pattern of Paying the Price of Postsecondary Educational Enrollment

The distribution of undergraduate parents by the net price of attendance is similar to that of other independent undergraduates but different than that of dependent undergraduates. Table 3 shows that, after considering grants, 88% of undergraduate parents face tuition and fees less grants below \$4,000, compared with 71% of dependent undergraduates. Looked at another way, about 40% of independent undergraduates face a student budget (i.e., price of attendance including tuition, fees, and non-tuition expenses adjusted for attendance status) less all grants below \$4,000, compared with 23% of dependent undergraduates.

A higher share of undergraduate parents than of other undergraduates receives federal need-based aid, particularly Pell Grants (41% versus 22% of dependent undergraduates and independent undergraduates with no dependents). Employer aid is relatively more common for independent than dependent undergraduates (13% of undergraduate parents versus only 2% of dependent undergraduates).

Table 3. Distribution of undergraduates by dependency and parental status and net price of attendance: 2003-04

Characteristic	Dependent	Independent, no dependents	Parent
Tuition & fees minus all grants:			
Less than \$4,000	71.0%	84.3%	88.0%
\$4,000 - 7,999	15.3%	9.5%	8.5%
\$8,000 - 11,999	5.1%	4.1%	2.5%
\$12,000 - 15,999	3.5%	1.3%	.7%
\$16,000 or more	5.1%	.9%	.2%
Student budget minus all grants:			
Less than \$4,000	23.1%	36.8%	39.8%
\$4,000 - 7,999	22.3%	27.6%	31.7%
\$8,000 - 11,999	20.7%	16.8%	15.4%
\$12,000 - 15,999	16.3%	10.3%	7.7%
\$16,000 or more	17.6%	8.5%	5.5%
Percent receiving various types of aid:			
Federal aid	47.8%	40.5%	49.6%
Federal need-based aid	38.9%	37.6%	48.4%
Pell Grant	21.9%	22.0%	40.5%
Stafford loan	35.7%	31.3%	30.7%
Veterans benefits	1.0%	4.1%	4.1%
State grant	17.9%	9.8%	12.8%
Institution grant	25.5%	11.0%	8.6%
Employer aid	1.8%	11.9%	12.5%
Private grant	9.8%	3.6%	3.7%
Private loan	6.9%	4.0%	3.0%

Note: Data weighted by WTA00. Source: Analyses of NPSAS:04

Relationship between Enrollment and Characteristics of State Grant Programs

Regardless of the characteristic of the state grant program that is considered, the distribution of undergraduates by dependency and parental status does not vary. Table 4 shows that enrollment patterns seem unrelated to the criteria used to award state aid (as measured by the emphasis of state aid on need, merit, or both need and merit) or the magnitude of available state aid dollars (as measured by undergraduate grant award per undergraduate FTE, total state grant award per the traditional college-age population, and the estimated need-based undergraduate grant award per undergraduate FTE).

Table 4. Distribution of undergraduates by dependency and parent status and characteristics of state aid: 2003-04

Characteristic	Dependent	Independent, no dependents	Parent
75% or more state aid awarded based on:			
Need only	36.4%	32.0%	32.2%
Need and merit	19.7%	24.0%	22.7%
Merit only	1.9%	2.1%	1.9%
Estimated undergraduate state grant dollars/Undergraduate FTE:			
Less than \$250	27.3%	28.8%	31.2%
\$250 – 499	35.8%	36.7%	34.1%
\$500 – 749	22.4%	21.7%	22.9%
\$750 or more	14.5%	12.8%	11.7%
Total state grant dollars/Population age 18-24:			
Less than \$250	73.8%	77.5%	77.8%
\$250 – 499	25.2%	21.2%	20.7%
\$500 – 749	1.1%	1.3%	1.5%
Need-based undergraduate state grant dollars/Undergraduate FTE:			
Less than \$250	40.1%	43.8%	47.6%
\$250 – 499	35.2%	35.9%	34.3%
\$500 – 749	15.2%	12.6%	11.9%
\$750 or more	9.5%	7.7%	6.1%

Note: Data weighted by WTA00. Source: Analyses of NPSAS:04

Discussion

Although this study is exploratory, descriptive, and based only on cross-sectional data, several conclusions may be drawn from our findings. First, parents comprise a substantial share of the undergraduate population. In 2003-04, about one in four undergraduates was a parent and half of all independent undergraduates were parents.

Second, although dependent and independent undergraduates consistently differ in terms of most demographic, enrollment, and other characteristics, undergraduate parents are similar in some characteristics and different in others when compared with other independent undergraduates. For example, like other independent undergraduates, undergraduate parents are relatively concentrated in public two-year institutions. But, compared with both dependent undergraduates and other independent undergraduates, undergraduate parents are disproportionately female and age 30 or older.

Third, for many parents, enrolling in undergraduate programs may first require finding childcare. Nearly half (46%) of independent undergraduates are single parents. For nearly half (42%) of undergraduate parents, the youngest child is under the age of five.

Fourth, a substantial share of undergraduate parents have characteristics that put them at risk for failing to complete an undergraduate degree (Horn, 1996). Like other independent students, most parents in undergraduate programs enrolled a substantial number of years after graduating from high school. More than half (57%) of undergraduate parents are enrolled mostly part time. Undergraduate parents also tend to have parents with low levels of education.

Finally, the availability of state aid seems unrelated to the college enrollment of parents. But, the descriptive analyses suggest that some parents may learn about postsecondary education through their spouse or child's enrollment. One in five undergraduate parents report having another family member also enrolled in college and 38% have an oldest dependent child between the ages of 13 and 24.

Implications for Policy, Practice, and Future Research

These analyses suggest several implications for policy, practice, and future research. In terms of public policy, the analyses suggest that state grant aid does not have a differential effect on the college enrollment of independent undergraduates, including undergraduate parents. Federal Pell Grants and employer aid appear to be more important sources of financial resources for independent students than state grant aid. Other reports suggest that financial aid is substantially less available for adult learners than for other students, given that many aid programs are limited to students who are enrolled full-time. The Council for Adult and Experiential Learning (2008) notes that 17 states do not provide any need-based aid for part-time students and that 18 states allocate less than 10% of their need-based aid to part-time students. About two-thirds (64%) of undergraduates age 25 and older are enrolled part-time, compared with only 24% of undergraduates under the age of 25 (NCES, 2008).

In terms of institutional practice, the analyses suggest that community colleges and other open admissions institutions currently have the greatest responsibility for promoting the success of undergraduate parents, as 57% of undergraduate parents attend community colleges and 67% of undergraduate parents attend open admissions institutions. The findings also underscore the need for these institutions to consider the ways that access and success for undergraduate parents may be limited by childcare demands.

The analyses also suggest several questions for future research, including: How can state and other financial aid programs be used to better promote the enrollment of undergraduate parents? Why are undergraduate parents relatively concentrated in health-related majors? How can institutions promote college access and success for undergraduate parents, particularly given the characteristics that put these students at-risk for academic failure? Raising the educational attainment of all adults, including independent undergraduates with children, requires more attention to these and other questions.

References

- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis with special reference to education* (3rd ed.). Chicago: University of Chicago Press.
- Berkner, L., and Wei, C.C. (2006). *Student financing of undergraduate education: 2003–04, with a special analysis of the net price of attendance and federal education tax benefits* (NCES 2006-186). Washington, DC: National Center for Education Statistics.
- College Board (2008). *Trends in student aid*. New York, NY: Author.
- Council for Adult and Experiential Learning (2008). *Adult learning in focus*. Chicago, IL: Council for Adult and Experiential Learning in partnership with the National Center for Higher Education Management Systems (NCHEMS). Retrieved February 24, 2009 from http://www.cael.org/pdf/State_Indicators_Monograph.pdf
- Donaldson, J., & Townsend, B. (2007). Higher education journals' discourse about adult undergraduate students. *Journal of Higher Education*, 78(1), 27-50.
- Horn, L. (1996). *Nontraditional undergraduates, trends in enrollment from 1986 to 1992 and persistence and attainment among 1989–90 beginning postsecondary students* (NCES 97–578). U.S. Department of Education, NCES. Washington, DC: U.S. Government Printing Office.
- Kazis, R., Callahan, A., Davidson, C., McLeod, A., Bosworth, B., Choitz, V., et al. (2007). *Adult learners in higher education: Barriers to success and strategies to improve results*. US Department of Labor Employment and Training Administration. Occasional Paper 2007-03. Boston, MA. Jobs for the Future.
- Lumina Foundation for Education (2007). *What we know about access, persistence, and success for adult learners in postsecondary education: A review of contemporary literature*. Retrieved July 13, 2007 from http://www.luminafoundation.org/research/what_we_know/
- National Association of State Scholarship and Grant Aid Programs (NASSGAP, 2005). *35th annual survey report on state-sponsored student financial aid: 2003-04 academic year*.
- National Center for Education Statistics (NCES, 2008). *Digest of education statistics 2007*. Washington, DC: Author. (NCES 2008022).
- Pusser, B., Breneman, D. W., Gansneder, B. M., Kohl, K. J., Levin, J. S., Milam, J. H., & Turner, S. E. (2007). *Returning to learning: Adults' success in college is key to America's future*. Indianapolis, IN: Lumina Foundation for Education, New Agenda Series.
- Seftor, N.S. & Turner, S.E. (2000). *Back to school: Federal aid policy and adult college enrollment*. *Journal of Human Resources*, 37, 336-352.
- Stringer, W.L., Cunningham, A. F., O'Brien, C. T., & Merisotis, J. P. (1998). *It's all relative: The role of parents in college financing and enrollment*. (New Agenda Series, Volume 1, Number 1). Indianapolis, IN: USA Group Foundation.