



Original Research

Student Debt Spans Generations: Characteristics of Parents Who Borrow to Pay for Their Children's College Education

Katrina M. Walsemann¹ and Jennifer A. Ailshire²

¹Department of Health Promotion, Education, and Behavior, Arnold School of Public Health, University of South Carolina, Columbia. ²Davis School of Gerontology, University of Southern California, Los Angeles.

Correspondence should be addressed to Katrina M. Walsemann, Department of Health Promotion, Education, and Behavior, Arnold School of Public Health, University of South Carolina, 915 Greene Street, Room 529, Columbia, SC 29208. E-mail: kwalsema@sc.edu

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Abstract

Objectives: Discussions of student debt often overlook the debt parents take on to pay for their children's education. We identify characteristics of parents with child-related educational debt among the late baby boom cohort.

Method: Data come from the National Longitudinal Survey of Youth 1979, a nationally representative sample of individuals born between 1957 and 1964. We restrict our sample to parents who had any children aged ≥ 17 and answered questions on educational debt during midlife (n = 6,562). Craggit models estimated (a) having any child-related educational debt and (b) the amount of debt owed among debtors.

Results: Black parents and parents with more education, higher income, and higher net worth were more likely to report child-related educational debt than White parents and parents with no degree, low-income, or negative net worth. Among debtors, high-income parents had more debt than low-income parents.

Discussion: Our findings suggest concerns about the student debt crisis should extend to aging parents.

Keywords: Income-Race/ethnicity-Wealth

Americans currently hold an astounding \$1.35 trillion in educational debt (Federal Reserve Board, 2016). The media and researchers have focused almost exclusively on debt acquired by students, but parents also acquire a large share of educational debt. Midlife and older adults hold around \$400 billion in educational debt (Brown, Haughwout, Lee, Scally, & van der Klaauw, 2014); about one-quarter of which stems from loans borrowed to pay for children's college education (Jeszeck, 2014). Acquiring child-related educational debt at midlife may compete with parents' other economic priorities and needs, such as saving for retirement and paying down mortgages, which may heighten their financial risk in older adulthood (Jalbert, Stewart, & Johnson, 2010). Moreover, debt has been associated with delayed retirement among older adults (Mann, 2011); borrowing to pay for children's college education may therefore influence retirement timing.

Among students, Blacks and those from middle-income families are more likely to borrow than Whites and those from low- or high-income families (Addo, Houle, & Simon, 2016; Houle, 2014; Jackson & Reynolds, 2013). Characteristics of parent borrowers, however, may differ from those of students. Parents with higher socioeconomic status have greater levels of cultural and financial capital they can draw on to both help their children get into college (Perna, 2006) and defray the cost of college to their children (Addo et al., 2016; Houle, 2014; McCabe & Jackson, 2016). Other family constraints, such as the number of college-aged children in the family or family wealth, may influence how much parents can or need to borrow (Cha, Weagley, & Reynolds, 2005). Surprisingly, there is very little information about the characteristics of parent borrowers.

The current study identifies parental characteristics associated with whether, and how much, parents borrow to pay for their children's college education. We focus on parents in midlife because this is a key period in the life course for thinking about and planning for retirement and a time when parents are most likely to acquire child-related educational debt (Jeszeck, 2014).

Methods

Data come from the National Longitudinal Survey of Youth 1979 cohort (NLSY79), a nationally representative sample of individuals born between 1957 and 1964. Respondents were interviewed annually from 1979 through 1994, and biennially thereafter. We use data from 2004 through 2012. As of 2012, there remains a 73% retention rate.

We restrict our sample to respondents who (a) had at least one child (biological, adopted, or step) aged ≥ 17 and (b) provided data about child-related educational debt (n = 6,562). We imputed values on covariates with missing data using *mi impute* with chained equations in Stata 13.

Measures

Dependent variable

To assess *child-related educational debt*, parents were asked "Are you or your spouse/partner responsible for making payments on any student loans for your child/ren? Please only include loans that have been made in your or your spouse/partner's name for your child/ren's education." Those who answered yes were asked how much they owed. We used the maximum amount of debt reported across four waves in which educational debt was collected—2004, 2008, 2010, and 2012—in order to reduce potential bias from excluding parents who have already paid off their educational debt. For respondents reporting no debt between 2004 and 2012, their most recent observation was used. Over 80% provided data in 2012, whereas 9%, 6%, and 5% provided data in 2010, 2008, and 2004, respectively.

All remaining variables were measured in the survey year corresponding to the year our dependent variable was measured, with the exception of net worth (details below).

Socioeconomic characteristics

Education was measured as respondents' highest degree attained and categorized as no degree, GED, high school diploma, Associate's degree, and Bachelor's degree or higher. *Household income* in the past year was categorized as <\$30,000, \$30,000-\$63,999, \$64,000-\$119,999, and ≥\$120,000. Other specifications of income were considered (e.g., continuous, quartiles, deciles), but this categorization

provided the best model fit. *Employment* during the prior calendar year was categorized as employed all year, out of the labor force but not unemployed, unemployed <5 weeks, and unemployed for 5–52 weeks.

In 2004, 2008, and 2012, respondents answered a series of questions about their assets and debts, which were used to calculate respondents' *net worth* (amount of debt subtracted from assets, excluding child-related educational debt). Values ranged from -\$1,000,000 to \$3,865,589. Descriptive plots revealed a nonlinear relationship between child-related educational debt and net worth. To capture this nonlinearity we categorized net worth using the inflection points where the relationship between child-related educational debt and net worth changed (<\$0, \$0-\$3,599, \$3,600-\$61,999, \$62,000-\$275,999, \$276,000-\$788,999 and $\ge \$789,000$). Net worth was measured in the year the dependent variable was measured, except for 2010. For these respondents, net worth was assessed in 2008.

Demographics

Measures included self-reported race/ethnicity (non-Hispanic white, non-Hispanic Black, Hispanic, and other), marital status (married, never married, divorced/separated/widowed), number of children aged ≥ 17 (1, 2, and ≥ 3), gender (male, female), age (in years), and region (South, Northeast, North Central, West, and Outside United States).

Analytic Strategy

Following Houle (2014), we employ a Craggit model to estimate (a) the probability of having child-related educational debt and (b) the amount of child-related educational debt among *debtors*, which we log-transformed due to skewness. The Craggit model is used to estimate a dependent variable where the most common value is zero and is often preferred over the Tobit model because it does not assume the underlying process predicting the probability of having educational debt is the same as the process determining the amount of debt (Burke, 2009).

All analyses were weighted to account for NLSY's complex sampling design and differential attrition (Heeringa, West, & Berglund, 2010). Estimates from multiply imputed data were combined following Rubin's rule.

Results

Table 1 summarizes sample characteristics and bivariate associations between sample characteristics and child-related educational debt. Almost 13% had child-related educational debt. Among debtors, the average amount of debt was \$21,243. Most respondents were White (74.3%), with a mean age of 50.8 years. Two-thirds were married and about a quarter had only one child aged \geq 17. The modal education level was a high school diploma (49.3%). Almost 69% were employed and 10.7% had negative net worth.

	Full sample, mean (<i>SE</i>) or %, <i>N</i> = 6,562	% w/Child-related educational debt ^a , N = 6,562	Mean debt (\$) among debtors, N = 778
Any child-related educational debt (%)	12.7		
Amount of child-related educational			21,243 (1137)
debt (\$) ^b			
Demographics			
Race/ethnicity (%)			
Non-Hispanic White (reference)	74.3	13.6	22,101 (1386)
Non-Hispanic Black	14.7	9.7*	16,579 (1371)*
Hispanic	8.1	9.7*	22,437 (2754)
Other	2.9	12.6	13,267 (3392)*
Age (years)	50.8 (.04)		
Gender (%)			
Men (reference)	49.1	11.8	21,592 (1724)
Women	50.9	13.5	20,949 (1507)
Marital status (%)			
Married (reference)	65.2	16.2	21,898 (1267)
Never married	5.6	4.4*	15,387 (5355)
Divorced/separated/widowed	29.2	6.3*	18,276 (2745)
Number of children >17 years (%)			
1 (reference)	24.4	9.9	13,642 (1416)
2	37.5	16.5*	25,328 (1941)*
3 or more	38.1	10.7	19,547 (1644)*
Region (%)			, , ,
South (reference)	38.7	9.0	15,703 (1279)
Northeast	14.9	20.3*	30,615 (3348)*
North Central	28.9	15.3*	20.382 (1769)
West	16.9	9.8	18,511 (2225)
Outside United States	0.6	17.3	14.641 (7365)
Socioeconomic characteristics			<i>y</i> - (<i>y</i>)
Educational attainment (%)			
No degree (reference)	8.2	3.3	14,640 (3870)
GED	11.8	5.5	18,956 (2980)
High school diploma	49.3	13.3*	19,284 (1394)
Associate's degree	8 9	16.0*	22 204 (3581)
Bachelor's degree or higher	21.8	17 3*	25,163 (2527)
Household income (%)b	21.0	17.5	25,105 (2527)
<pre>>\$30.000 (reference)</pre>	23.9	3 5	13 520 (2233)
\$30,000 (reference)	25.9	10.5*	14 842 (1793)
\$64,000 \$119,999	29.8	17.4*	19,599(1471)
>\$120,000	29.8	17.4	19,339 (1471)
\geq 5120,000	20.4	12.4	29,437 (2755)
Employed all year (reference)	<u>(8 0</u>	14.7	21 021 (1212)
Out of the labor force not	21.6	14.7 2 9*	21,931(1312) 17 791 (2255)
unemployed	21.0	0.8	17,701 (3333)
unemployed	1.4	10.7	12 12 (2070)*
Unemployed <5 weeks	1.4	19.7	$13,136(28/8)^{\circ}$
Unemployed 5–52 weeks	8.2	9.9*	21,631 (2903)
Net worth (%)	10 5	()	1 < 0.10 (20.52)
<\$0 (reference)	10.7	6.3	16,819 (3953)
\$U-\$3,377	9.3	1./*	13,822 (4106)
\$3,600-\$61,999	20.0	8.4	16,155 (1593)
\$62,000-\$275,999	30.1	16.2*	21,911 (2088)
\$276,000-\$788,999	19.9	21.2*	20,960 (1624)
≥\$789,000	9.9	10.5	31,422 (6134)

Table 1. Sample Characteristics of NLSY79 Respondents With Children ≥17 Years Old, Weighted Estimates

^aRow percentages reported. ^bNot adjusted for inflation.

*p < .05; chi-square (any debt) and t-test (mean debt), Bonferroni adjustment for multiple comparisons.

In bivariate associations, race/ethnicity, marital status, number of children aged ≥ 17 , region, education, household income, employment, and net worth were associated with having child-related educational debt. Many of the characteristics associated with having debt, however, were not associated with the amount of debt held among debtors.

Results from multivariable Craggit models (Table 2) show parents who were divorced/separated/widowed (b = -.23, standard error [SE] = .08), out of the labor force (b = -.18,

Table 2. Weig	ghted Estimates From Two-Stage Craggit Model Predicting Likelihood of Any Child-Related Educa	ational Debt
(Probit) and A	Amount of Child-Related Educational Debt Among Debtors (Truncated Regression), NLSY79 Resp	ondents With
Children ≥17`	Years Old (<i>N</i> = 6,562) ^a	

	Any child-related educational debt		Logged debt amount given any debt ^b	
	В	(<i>SE</i>)	В	(SE)
Demographics				
Race/ethnicity (reference=NH White)				
Non-Hispanic Black	.14*	(.07)	.01	(.11)
Hispanic	00	(.08)	.09	(.12)
Other	.25	(.18)	27	(.26)
Age	16*	(.01)	.04*	(.01)
Female (reference = male)	.09	(.06)	.11	(.10)
Marital status (reference = married)				
Never married	15	(.15)	04	(.26)
Divorced/separated/widowed	23*	(.08)	16	(.16)
Number of children > 17 years (reference = 1)		X /		· · · · ·
2	.47*	(.08)	.38*	(.12)
3 or more	.34*	(.08)	.18	(.12)
Region (reference = south)		()		()
Northeast	.52*	(.08)	.58*	(.14)
North Central	.28*	(.07)	.22	(.12)
West	.08	(.09)	.23	(.14)
Outside United States	.83*	(.40)	09	(.62)
Socioeconomic characteristics		()		()
Educational attainment (reference = no degree)				
GED	.07	(.17)	.31	(.38)
High school diploma	.48*	(.14)	.16	(.31)
Associate's degree	.5.5*	(.17)	.33	(.34)
Bachelor's degree or higher	.56*	(.16)	.33	(.33)
Household income (reference < \$30,000)		()		()
\$30.000-\$63.999	.36*	(.10)	- 12	(.19)
\$64,000-\$119,999	.49*	(.12)	.18	(.20)
>\$120,000	.59*	(.14)	.46*	(.2.2)
Employment history (reference = employed all year)	10 5	(••••)		()
Out of the labor force not unemployed	- 18*	(08)	- 31	(17)
Unemployed < 5 weeks	.55*	(.20)	24	(.20)
Unemployed 5–52 weeks	15	(11)	19	(16)
Net worth (reference $< \$0$)	.10	(••••)	.17	(.10)
\$0_\$3 599	_ 44*	(17)	39	(38)
\$3 600-\$61 999	07	(12)	32	(.30)
\$62,000_\$275,999	.07 29*	(11)	.52	(.21)
\$276,000-\$788,999	43*	(13)	.12	(21)
>\$789.000	02	(16)	.12	(.21)
Intercent	.02	(.10)	.12	(.30)
Sigma	3.10	(1.07*	(03)
Jigilia			1.07	(.03)

^aEducational debt, income, and wealth are not adjusted for inflation. Estimates adjusted for inflation produce comparable estimates and are available upon request. ^bThe dependent variable is logged child-related educational debt. SE = .08), and had \$0-\$3,599 in net worth (b = -.44, SE = .17) were less likely to have child-related educational debt than parents who were married, employed, or had negative net worth. Conversely, parents with ≥ 2 children, who were Black, lived in the northeast or north central United States, had at least a high school diploma, made more than \$30,000, were unemployed for <5 weeks, or had net worth between \$62,500 and \$788,999 were more likely to have child-related educational debt than parents with one child, who were White, lived in the south, did not have a degree, made less than \$30,000, were employed, or had negative net worth.

Among debtors (Table 2, Column 2), having two children (b = .38, SE = .12), living in the northeast (b = .58, SE = .14) or reporting income \geq \$120,000 (b = .46, SE = .22), were associated with greater amounts of debt than having one child, living in the south, or reporting income <\$30,000.

Discussion

We undertook this study to gain a better understanding of the characteristics of parents who borrow to pay for their children's college. Almost 13% of midlife parents held child-related educational debt. Among debtors, the average debt amount was over \$21,000, which is comparable to estimates from the Parent PLUS loans program ("Federal Student Aid," n.d.). Parents with greater financial and cultural capital were more likely to take on childrelated educational debt. This corresponds to research that finds these parents often help their children cover the costs of college because they want to protect them from student debt (McCabe & Jackson, 2016). Additionally, their children may be attending more selective universities (Hearn & Rosinger, 2014), which require greater financial investment. In multivariable models, Black parents were also more likely to report child-related educational debt. The racial disparity may reflect Black students' greater likelihood of attending schools that offer less financial aid relative to the cost of attendance (Cellini & Goldin, 2014; Rodriguez, 2015). As a result, their parents may borrow to cover the remaining financial need.

Among debtors, high-income parents reported more debt than low-income parents. Wealth, however, was unrelated to amount of debt. Though wealth is often used to pay for education-related expenses, over 60% of middleclass families' wealth originates from their home equity (Shapiro, 2006). Thus, wealthy parents may be more willing to borrow (because of their home equity), but may not have the financial liquidity to pay for their children's college directly. This may also explain why the wealthiest parents were less likely to have child-related educational debt than the least wealthy parents.

We highlight three study limitations. First, the NLSY79 asked parents about current child-related educational debt, but not how much they originally borrowed. Parents who paid off their child-related educational debt prior to being interviewed were missed in this analysis. Our findings mirror national estimates so we suspect this resulted in minimal bias. Second, for some parents, data collection occurred during the recession (15%). Models that adjusted for interview year, however, produced similar results to those presented. Finally, information about children's college enrollment or the characteristics of the institutions they attended was unavailable for the NLSY79 cohort. Nevertheless, our study provides important information about the characteristics associated with child-related educational debt among midlife parents in the United States.

Conclusion

Parents are often overlooked in policy debates about educational debt, even though they also take on debt to pay for their children's college education, and do so at a time when building wealth and retirement income is paramount. Indeed, a potential downside of borrowing to pay for children's education is foregone retirement income (Jalbert et al., 2010). Given that 50% of midlife adults have \$12,000 or less saved for retirement (Rhee, 2013), an increasing number of older adults will be relying on social security wages in retirement. The US government can garnish these wages to repay educational debt (Sandman, 2015). Withholding even small amounts of social security wages may place financial hardship on some older adults. The implications of child-related educational debt for aging parents is unclear, however, because few national surveys of older adults collect detailed information about parental borrowing to pay for children's college education. Our findings suggest the student debt crisis is likely a concern for midlife and older adults and that this population needs to be considered in future research and policy on educational debt.

Supplementary Material

Supplementary data is available at *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences* online.

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Conflict of Interest

None.

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