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PARENTAL DIVORCE, EDUCATIONAL EXPECTATIONS, AND EDUCATIONAL ATTAINMENT AMONG YOUNG ADULTS

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Abstract

Previous research has consistently shown lower educational attainment among children with divorced parents than those with continuously married parents. However, most research has focused on the educational outcomes of children as opposed to young adults. Moreover, among young adults, education beyond a bachelor's degree, and possession of a graduate or professional degree in particular, has become increasingly important to their future economic success. Yet, little research has examined the effect of parental divorce on educational attainment beyond a bachelor's degree. Using data from the National Longitudinal Survey of Youth 1997, we investigate whether and how parental divorce affects young adult children's post-baccalaureate educational attainment, measured by graduate/professional school enrollment and attainment of a degree. We also examine the role of parental educational expectations with respect to this relationship. Parental divorce was negatively associated with enrolling in a graduate/professional program and obtaining a degree. Adult children whose parents had lower educational expectations for them had lower post-baccalaureate educational attainment. Parental educational expectations of divorced and continuously married parents were not statistically different from one another and did not help explain the gap in educational attainment between children with divorced versus continuously married parents. Researchers should therefore continue to investigate explanations for lower post-baccalaureate educational attainment among children of divorce.

Keywords

divorce, educational attainment, educational expectations, young adults

Introduction

In the United States, about half of marriages end in divorce, and 40 percent of American children born to married parents will experience their parents' divorce by age 18 (Amato, 2005; Kennedy and Ruggles, 2014). Although the divorce rate declined somewhat during the Great Recession, parental divorce remains a common experience for American children (Cohen 2014; Eickmeyer 2014). It is well-known that children who have experienced parental divorce have lower levels of well-being than children from intact married-couple households (Amato, 2010; Conger, Conger, & Martin, 2010). Compared to children with continuously married parents, children whose parents divorced have poorer outcomes in multiple realms, including externalizing behaviors, psychological adjustment, social competence, and self-concept. They have weaker ties to parents in childhood and adulthood and have more troubled marriages should they marry (Bouchard and Doucet 2011; Krampe and Newton 2012; Magnuson and Berger 2009; Mandara, Rogers, and Zinbarg 2011; Strohschein, 2005).

Notably for this study, previous research indicates that parental divorce has a substantial negative impact on children's academic achievement and educational attainment. For example, children from divorced families have lower math and reading scores, grade point averages, and school engagement. They engage in fewer extracurricular activities, have lower educational expectations, and are less likely to complete high school than children with continuously married parents (Anguiano, 2004; Carlson & Corcoran, 2001; Cavanagh, Schiller, & Riegle-Crumb, 2006; Chatterji, 2005; Heard, 2007; Lee & Bowen, 2006; Rodgers & Rose, 2001; Sun & Li, 2011; Tillman, 2007). However, these studies focus primarily on children and adolescents, with little attention to how parental divorce affects the outcomes of adult children of divorce.

Specifically, research is lacking on the educational outcomes of *emerging adults*, typically defined as young adults age 18 to 29. Until relatively recently, the transition to adulthood was relatively straightforward. For previous generations, adult status was achieved primarily through marriage and childbearing and most young adults in their twenties were married and raising young children. These days,

young men and women are making the transition to adulthood more slowly. Today's young adults are increasingly pursuing higher education and exploring their options with respect to work, career, and family. In his book *Emerging Adulthood: The Winding Road from the Late Teens through the Twenties* (2014), Jeffrey Arnett writes, "Such freedom to explore different options is exciting, and this is a time of high hopes and big dreams. However, it is also a time of anxiety, because the lives of young people are so unsettled, and many of them have no idea where their explorations will lead" (p. 5). In a Clarke University poll of emerging adults, 36 percent said that "accepting responsibility for yourself" was the key becoming an adult, followed by "becoming financially independent" (30 percent) and "finishing education" (16 percent; Clarke University, 2013). Only 4 percent said, "getting married." Despite this, few studies have examined how parental divorce affects the educational outcomes of this group. In particular, few studies examined the effect of parental divorce on adult children's *post*-baccalaureate educational attainment, namely enrollment in graduate/professional school and attainment of an advanced degree.

This is an important topic to pursue because a four-year college degree has become vital to the economic success of young adults. Adults ages 25 to 32 with bachelor's degree earn roughly \$15,000 more per year than those with less education and have substantially lower rates of unemployment and poverty (Pew Research Center, 2014). The percentage of men and women with a four-year college degree increased by an average of 73% between 2000 and 2013 (U.S. Department of Education, 2014). Increasingly, an advanced degree has also become a requirement for entry into many professions and is strongly related to income (Thomas & Zhang, 2005). Jobs requiring a graduate or professional degree (e.g., M.D., D.D.S., J.D.) are expected to increase by an average of 18% between 2008 and 2018 in the United States, "due to the growing shift towards a knowledge-based economy" (Crosby & Moncarz, 2006, p. 46). Postbaccalaureate enrollment had been steady at 1.6 million in the late 1970s and early 1980s but rose 78% between 1985 and 2010, with a majority of the increase due to enrollment during 2008-2010 (U.S. Department of Education, 2013). In particular, master's, professional, and doctoral degrees increased by an

average of 70% between 2000 and 2013 with each degree increasing by 68%, 83%, and 75%, respectively (U.S. Department of Education, 2014).

Few studies have investigated the effect of parental divorce on adult children's post-secondary educational outcomes, namely entry into college and bachelor's degree completion (Black & Sufi, 2002; Bulduc, Caron, & Logue, 2007; Conley, 2001; Perna & Titus, 2005). They indicate that divorce has longterm negative effects on children's educational success. Even fewer have examined post-baccalaureate educational attainment, and these studies focus on family structure as opposed to parental divorce (Björklund, Ginther, & Sundström, 2007), focus on non-U.S. samples (Björklund & Sundström, 2006), or exclude children from divorced families (Melby et al., 2008). Thus, the effect of parental divorce on educational attainment beyond a four-year degree is currently unknown. In addition, studies have not examined the mechanisms underlying this relationship. Numerous studies indicate that parents' educational expectations for their child are positively associated academic outcomes (Davis-Kean, 2005; Dika & Singh, 2002; Fan & Chen, 2001; Englund et al., 2004; Kim & Schnieder, 2005; Perna & Titus, 2005; Reynolds & Burge, 2008), including enrolling in college and completing a 4-year degree (Nichols and Islas, 2015; Wu, Schimmele, & Hou 2015). Therefore, in addition to parental divorce, we examine how parents' expectations that their children will obtain a college degree affects whether there child enrolls in a graduate/professional program and obtains a degree, and whether differences in parental educational expectations between children from divorced families and children from intact families explain the effect of divorce.

Parental Divorce and Post-Baccalaureate Educational Attainment

The American family has gone through remarkable changes in the last five decades, creating a multitude of family structures including married, divorced, cohabitating families, stepfamilies, single parent families, and intergenerational households. Nevertheless, marriage remains a coveted status in society, and children from stably-married families have better outcomes than those from other family forms. Decades of research has been dedicated to understanding how parental divorce affects children. As noted above, numerous

studies indicate that children who experienced parental divorce are at risk for a variety of negative outcomes, including poor academic performance and lower educational attainment.

Although several studies have examined the effect of parental divorce on the educational success and attainment among young adults, these do not include post-baccalaureate educational attainment. Ginther and Pollack (2004) investigated the relationship between family structure and high school graduation, college enrollment, college graduation, and total years of schooling. They found that children from stepfamilies (both stepchildren and shared biological children) had lower educational attainment than children reared in original two-parent families. Wallerstein and Lewis (2007) found similar results in a sample of adults from their clinical practice (from high schools in which 92% went on to college). Of these, 57% of children with divorced parents obtained a bachelor's degree compared with 90% of those from intact families (Wallerstein & Lewis, 2004). We are aware of only two studies that have examined the effect of a non-intact family structure on children's educational attainment beyond a 4-year college degree. In a study of Swedish families, Björklund and Sundström (2006) compared the educational outcomes of siblings in which one was under 18 at the time of parental separation and the other was 18 or older. Although the younger sibling had a lower level of educational attainment (including a graduate degree) as an adult, the difference disappeared once shared family characteristics were controlled. These authors using the same methodology found similar results in corresponding U.S. sample (Björklund et al., 2007).

In the current study, post-baccalaureate educational attainment was measured in terms of both graduate/professional school enrollment and highest degree completed. There are other measures of educational achievement that could be used as indicators of success beyond obtaining bachelor's degree, such as undergraduate GPA and one's score on the Graduate Record Examination (GRE), the Medical College Admission Test (MCAT), and the Law School Admission Test (LSAT). Although standardized tests are important for graduate and professional school enrollment , they are poor predictors of actual degree completion (Miller & Stassun , 2014; Saguil et al., 2015; York, Gibson, & Rankin, 2015).

A high undergraduate GPA is important for graduate school admission, but is only weakly related to degree completion (English & Umbach, 2016). Achieving an advanced degree is more dependent on successfully completing the number of credits established by the institution. Depending on the type of degree, students must also complete a thesis, dissertation, independent research, or an internship, residency, or practicum. GPAs and test scores are also not a major factor in hiring decisions (McKinney et al. 2003; National Association of Colleges and Employers, 2009). Success in today's competitive job market is foremost determined by is whether or not a candidate has a degree in the field. Because a bachelor's degree has become a basic prerequisite for getting a job candidate's resume read, a post-baccalaureate degree provides an advantage over the basic job applicant (Crosby & Moncarz, 2006; Fischer, 2013). Nevertheless, it is important to include enrollment in this study because our cohort of young adults, who are between the ages of 26 and 32, may still be working on their degree. Therefore we measure educational attainment in terms of both graduate/professional program enrollment and completion.

Social Capital and Parental Divorce

There are various explanations of the negative relationship between parental divorce and children's wellbeing. Each perspective makes a unique contribution to understanding the effect of divorce on children. These include high family stress after divorce, poor parental adjustment, low parental involvement, interparental conflict, economic hardship, subsequent family transitions, and the selection of those from lower socioeconomic strata into divorce, as well as those with mental health problems, poor relationships skills, and who themselves had divorced parents. (Lamanna, Riedmann, & Stewart, 2015).

Another explanation for worse outcomes among children of divorce is that they have less access to human and social capital than do children from intact families. Human capital is generally measured by parental education and income (Coleman, 1988). For example, adult children who have one or two parents with a college degree are more likely to complete a bachelor's degree (Nichols and Islas, 2015) and a graduate/professional degree (Mullen, Goyette, & Soares, 2003; Perna, 2004; St. John & Wooden, 2005).

Spouses who eventually divorce have lower educations and incomes than those who stay married which is (Brown, Manning, & Stykes, 2015). Most children of divorce also experience significant economic hardship or at minimum a drop in their standard of living which have been linked to worse educational outcomes in children (Strohschein 2005; Wallerstein and Lewis 2007). Both of these are partially responsible for their lower educational attainment. These effects extend into children's adulthood. Data from the Health and Retirement Study indicate that, compared with continuously married parents, divorced parents give less money to their adult children (Shapiro and Remle 2010). Wallerstein (Wallerstein and Blakeslee 1989; Wallerstein and Lewis 2007, 2008) found that financing college was especially problematic for children of divorce, even among those who were middle-class. Sixty percent of the children in her study received less education than their fathers and 45 percent received less than their mothers. Even divorced fathers who had retained close ties, who had the money or could save it and who ascribed importance to education, felt less obligated to support their children through college. In a Canadian study, the parents of children from alternative family structures were less likely than children with married parents to have made financial preparations for their child's college (Wu et al., 2015).

That children with divorced parents have less access to human capital is just part of the story. Even controlling for parent's education and income, children from divorced households still lag behind children from two-parent families on socioemotional, educational, and economic outcomes (Amato 2010; Fomby et al. 2016; Kim 2011). Access to social capital is equally important. Social capital refers to the social relationships in children's lives which help them access the benefits of their parent's human capital, as well as parental social and emotional investment in their children (Coleman, 1988). "As a family maintains its stability, the more developed the group norms, expectations, and obligations, and thus, the higher level of social capital...as such, families must cultivate their stability and subsequently, their social capital, to flourish and maintain their existence" (Shriner, Mullis, & Schlee, 2009, p. 447).

Common measures of social capital in families are parental monitoring and involvement, parent-child relationship quality, and parent-school involvement (Amato, 2010; Furstenberg, 2005; Qian & Blair, 1999).

Children with divorced parents have less of these resources than do children with continuously married parents. For example, parental monitoring (e.g., parents' update of children's whereabouts and who children spend time with) is lower divorced families (Ribar 2015; Wu et al. 2015). Parent-child relationship quality (e.g., warmth, closeness) is lower in divorced families, and children from divorced households display less motivation in academics and school activities and have lower career aspirations (Dika & Singh, 2002; Turley, Desmond & Bruch, 2010; Wu et al. 2015). Parent-school involvement is lower in divorced families, and children from nontraditional family structure are less likely to be enrolled in enrichment activities that have been shown to contribute to their future academic and professional success (Fan & Chen, 2001; Hill et al., 2004; Zhan, 2006). In a study based on the Canadian Youth in Transition Survey by Wu et al. (2015), children from non-intact family structures had parents with lower educational aspirations for them, which partially explained lower college enrollment and completion among these children, for example, accounting for 21% of the gap in college enrollment for girls.

Compared to children from married couple households, children in divorced and single-parent households also have a smaller social network of supportive friends and family on which to draw (Westphal et al. 2015). Nichols and Islas (2015) compared parental educational expectations of first-generation and second-generation college students. In addition to the fact that the parents of second-generation students had significantly higher educational expectations for them, they had a history of contact with college-educated individuals in the types of careers they could aspire. The authors describe them as being "pulled" through college by parents and others who provide specific advice about how to do well. Conversely, firstgeneration college students relied primarily on their parents' social and emotional support and are "pushed" through college. First-generation college students were also less inclined to seek help from professors, less confidence, and a lacked the sense of entitlement more common among second-generation students.

In our study, we measured social capital using parental divorce and parents' educational expectations for their children, both of which are associated with children's educational success (Davis-Kean, 2005; Dika & Singh, 2002; Englund et al., 2004; Fan & Chen, 2001; Kim & Schnieder). We tested four hypotheses. First, we hypothesized that adult children with divorced parents would have lower postbaccalaureate educational attainment than adult children with continuously married parents. Second, we expected that parental educational expectations would be positively related to children's post-baccalaureate educational attainment. Third, we hypothesized that parents' educational expectations would be lower for children with divorced parents than children with continuously married biological parents. Fourth, we anticipated that parental educational expectations would fully or partly mediate the relationship between parental divorce and young adults' post-baccalaureate educational attainment. We controlled for variables that in previous work have been shown to be associated with children's educational achievement, parental educational expectations, and educational attainment: parents' level of education (Lee & Bowen, 2006; Rodgers & Rose, 2001), household income (Melby et al. 2008; Paulsen & St. John, 2002), and the race/ethnicity and gender of the child (Ermisch & Francesconi, 2001; Mullen, Goyette, & Soares, 2003; Perna, 2004; Qian & Blair, 1999; English & Umbach, 2016).

Method

Data

This study is based on the National Longitudinal Survey of Youth 1997 (NLSY97), a nationally representative sample of roughly 9,000 youth born between 1979 and 1983. Produced by the U.S. Bureau of Labor Statistics, this survey provides data on the children's demographic characteristics, labor market activity, family transitions, and well-being. The NSLY97 contains an oversample of African Americans and Hispanics, important given higher divorce rates among minorities (Aughinbaugh, Robles, & Sun, 2013) and the increase in college enrollment among these groups (Perna, 2004). In Round 1 of the survey, both the eligible youth and a parent received hour-long personal interviews and completed an extensive questionnaire. The youth, but not their parents, continue to be interviewed on an annual basis. The retention rate of the survey has been excellent. Eighty-three percent of the Round 1 sample completed the most recent

round (National Longitudinal Surveys, 2014). This study is based on 8,984 youth who completed the most recent survey fielded in 2011-2012 (Round 15), who are now between the ages of 26 and 32.

The NLSY97 is well-suited for the present study in that its main goal was to document the transition from school to work in young adulthood. Toward that end, extensive information was collected about respondents' educational experiences over time. Educational data include youth's schooling history, performance on standardized tests, course of study, and timing and types of degrees obtained. Information from the parent questionnaire relevant to this study included parents' relationship history, educational attainment, household income, and their educational expectations for their child.

Analytic Sample

Our analytic sample was limited to youth whose parent questionnaire was filled out by a biological parent, either the biological mother or the biological father (N=8,300). Therefore, youth whose parent questionnaire was filled-out by an adoptive, step, foster, guardian or non-relative parent were removed from the sample (8%). The sample was further limited to youth who were born within a marriage (N=5,856). Thus, youths born outside of marriage were removed from the sample (27%). The assumption was made that if a child born within a marriage, the child was the product of that marriage.

The analytic sample included youth whose biological parents' marriage ended in legal divorce and youth whose biological parents' marriage remained intact. Parents whose marriage ended in either physical separation, legal separation (but not divorced) or were widowed were removed from the sample (11%). We created two samples of youth from this group. The first analytic sample was comprised of 4,855 youth with the sample criteria listed above (referred to as "Sample 1"). A second sample ("Sample 2") of 1,853 youth was created because questions about parents' educational expectations for their children were limited to youth between the ages of 15 and 18 at Round 1 (i.e., children age 12 to 14 were dropped). A comparison of the frequency distributions of Sample 1 and Sample 2 can be found in Table 1.

Table 1 about here

Variables

Post-Baccalaureate Educational Attainment. Post-baccalaureate educational attainment was assessed at Round 15 of the survey, the most recent survey year. At each round, the youth were asked "current college enrollment status as of the survey year." The NLSY97 categories included (a) not enrolled, no high school degree, no GED, (b) not enrolled, GED, (c) not enrolled, high school degree (d) not enrolled, some college, (e) not enrolled, 2-year college graduate, (f) not enrolled, 4-year college graduate, (g) not enrolled, graduate degree, (h) enrolled in grades 1-12, not a high school graduate, (i) enrolled in a 2-year college, (j) enrolled in a 4-year college, and (11) enrolled in a graduate /professional program. The youth was asked, "What is the highest degree [respondent] has received ever?" The response categories included (a) none, (b) GED, (c) high school diploma, (d) associate/junior college, (e) bachelor's degree, (f) master's degree, (g) Ph.D., and (h) professional degree (e.g., DDS, JD, MD).

The information about college enrollment and educational attainment were combined to create three different measures of educational attainment. The first was a dichotomous measure of post-baccalaureate educational attainment that includes enrollment. Youth who reported having obtained a graduate/professional degree or were ever enrolled in a graduate or professional program (yes or no). A second similar dichotomous measure of post-baccalaureate educational attainment did not include enrollment (i.e., they had obtained a graduate/professional degree but were not enrolled). Third, because the NLSY97 measured parents' educational expectations only in terms of attainment of a four-year degree as opposed to a graduate/professional degree, we created a third dichotomous measure that measured whether the youth had obtained a four-year degree or greater or not.

Parental Divorce. Parental divorce was assessed using a combination of several variables. To capture children whose parents divorced prior to Round 1, parental divorce was gleaned from the parent's Round 1 questionnaire. The responding parent was asked, "Are you currently married, separated, divorced or

widowed?" If the condition applied, the responding parent answered "in what month and year did you marry [this spouse/partner]?" for up to six spouses. For each marriage, the responding parent was asked, "Are you currently separated, divorced, and widowed from [that] spouse?" If the parent reported "yes," they were asked "How did the marriage to spouse(s) end?" The resulting categories were created included (a) legal separation only, (b) physical separation but no legal separation, (c) divorce, and (d) death. If the response was "divorced," the parent was asked what month and year the divorce occurred. If there was no indication that the marriage ended in divorce (such as the absence of an end date) then it was assumed that the marriage was intact at Round 1 of the survey. The union within which the child was born was determined by whether or not the youth's birth date fell within a particular marriage using the start date and end date of a marriage.

A different strategy was employed to capture youth whose parents divorced after Round 1. In Rounds 6, 11, and 13 the youth was asked whether their biological parents had divorced within the previous five years. Because this question was not asked at Round 15, it is important to note that missing from this group is youth whose parents divorced in the previous two years. However, this is likely to be a very small group because the majority of parental divorces happen before the child reaches age 25 (Fraley & Heffernan, 2013). Information from the parent Round 1 questionnaire and youth questionnaires were combined to create a dichotomous variable in which the youth's parents are divorced or are married.

Parental Educational Expectations. *Parental educational expectations* were reported at Round 1 for children age 15 to 18. Parents were asked, "What is the percent chance that [youth] will have a four-year college degree by the time [he/she] turns 30?" Responses ranged from 0% chance to 100% chance. Parental educational expectations were measured in two ways. First, when parental educational expectations served as a dependent variable in models, the measure remained a continuous variable from 0% to 100%. Second, when parental educational served as an independent variable a dichotomous variable was used, coded as "low" (0 to 70%) and "high" (71 to 100%).

Demographic Characteristics

Parental educational background (maternal and paternal) are based on an NLSY constructed variable based on the highest grade completed by respondent's biological mother and biological father at Round 1. Responses ranged from first grade (1) to eighth year of college or more (20). Based on this information, parental educational background was recoded as (a) high school or less, (b) some college, (c) four-year college degree, and (d) greater than a four-year degree. A set of dummy variables was created for education for both mothers and fathers, (a) high school or less, (b) some college, (c) bachelor's/four-year degree, (d) with greater than a bachelor's/four-year degree. Parental household income for the most recent year was reported by the child's parent at Round 1. The NLSY97 defined income as gross wage/salary for respondent, along with data on other income sources (rental property, small business investments, inheritance, child support, annuities, etc.). Respondents who do not provide exact dollar answers were asked to select the applicable category from a predefined list of ranges. Based on this information, we created variables based on income quartiles: (a) low [less than or equal to \$23,100], (b) medium [less than or equal to \$51,400], and (c) high [less than or equal to \$246,500]. Gender of youth was self-reported at Round 1 coded as (a) male and (b) female. Race/ethnicity of youth is a self-reported four-category measure coded as (a) white (Non-Black/Non-Hispanic), (b) black/African American, (c) Hispanic, and (d) other (Non-Hispanic).

Analytic Strategy

First, we present descriptive statistics pertaining to the two analytic samples used in the analysis. Second, we conducted a bivariate analysis to assess statistically significant relationship between parental divorce, parental educational expectations, and youth educational attainment. Third, we assessed these relationships in a multivariate context using logistic regression, an appropriate technique for categorical dependent variables, controlling for the sociodemographic variables described above (DeMaris, 2005). In our multivariate analysis, we first tested whether adult children with divorced parents had lower educational attainment compared children with two continuously married biological parents (Hypothesis 1). This hypothesis was tested in three separate models. First, based on the full sample of youth ages 12 to 18 at Round 1 (Sample 1), we regressed youth's educational attainment on parental divorce using the three variations of dependent variable measurements. The next set of analyses was based on youth age 15 to 18 at Round 1 (Sample 2). We examined whether parental educational expectations were lower for children with divorced parents compared to children with continuously married parents (Hypothesis 2). We then tested whether parental educational expectations meet lower for children with divorced parental educational expectations were positively related to children's educational attainment (Hypothesis 3). Finally, we examined whether parental educational expectations mediated the relationship between parental divorce and educational attainment (Hypothesis 4). To determine whether parental educational expectations in models with and without educational expectations. A statistically significant reduction in the size of the coefficient between models would indicate that parental educational expectations either partially or fully explain the relationship between parental divorce and children's educational attainment.

RESULTS

Description of the Sample

Table 1 presents the distribution of the variables used in the analysis for the total sample of youth age 12 to 18 at the first round (Sample 1) and the corresponding sample of youth age 15 to 18 (Sample 2), weighted to reflect the national population. Seventeen percent of youth had either attained a graduate/professional degree or reported ever having enrolled in a graduate/professional program. Ten percent the youth had obtained a graduate/professional degree, and 41% had attained a bachelor's degree or higher. The educational expectations of the parent were limited to youth who were 15 to 18 years old at the time of Round 1 (Sample 2). Approximately 66% of parents had "high" expectations (71 – 100% chance) that their child would obtain a college degree by the time they turned 30, compared to 33% of parents who

had "low" expectations (0 - 70%) chance) of their children obtaining a college degree. The demographic profile of the older sample of youth was very similar to that of the total sample.

Of the full sample of youth, 36% reported having divorced parents. About three-fourths of this sample was of White, approximately 12% of youth were Hispanic, 8% were Black, and 1% were of some other race. This sample was 51% male and 49% female. The majority of their mothers had at least some college, with one in three having a bachelor's degree or higher. Mothers had slightly higher educational attainment than fathers. In terms of household income, 14% of households were in the lowest third of respondents, 44% of the households were in the middle third, and 42% of the households were in the highest third.

Bivariate Results

Table 2 compares the educational attainment of youth with divorced and non-divorced parents. First, a significantly lower percentage of youth (27%) with divorced parents had a bachelor's degree or higher than youth with continuously married parents (50%). Similarly, a significant lower proportion of youth with divorced parents attained a graduate/professional degree or was currently or ever enrolled in a graduate/professional program than continuously married parents (12% compared to 20%). Nearly twice as many youth with continuously married parents obtained a graduate degree (12%) than youth with divorced parents (7%). There were differences in the racial and ethnic profile of youth with divorced parents versus continuously married parents. A higher percentage of youth with divorced parents were black and a higher percentage of youth with continuously married parents were Hispanic. Youth with continuously married parents were more educated than children with divorced parents. A third of children with continuously married parents. The difference was even greater for fathers. Among children with continuously married parents, 35% of fathers had at least a bachelor's degree compared to 16% of children (Table 3). The percentage of parents with low (0 – 70%) expectations that their child would obtain a bachelor's degree by age 30 was

about 40% for children with divorced parents compared to about 30% of continuously married parents. The sociodemographic characteristics of the sample of older youth was similar to that of the total sample.

Table 2 and Table 3 about here

Multivariate Results

We tested whether adult children with divorced parents had lower educational attainment than children with two continuously married parents net of controls (Table 4). Three variations of the dependent variable were used: (a) has bachelor's degree or higher, (b has a graduate/professional degree or has enrolled in a graduate/professional program, (c) has a graduate/professional degree. Results showed there is a significant negative relationship between parental divorce ever and youth's educational attainment (all three measures), controlling for the gender and race of the youth and parents' education and income. The greatest gap in educational attainment between children with divorced versus continuously married parents was the odds of obtaining a bachelor's degree or greater, which were 44% lower ($\beta = -.579$; p < .001). The odds of adult children with divorced parents obtaining a graduate/professional degree or ever having enrolled in a graduate/professional program were 20% lower ($\beta = -.216$; p < .01) than those of adult children with continuously married parents. The disparity was greater for obtaining a graduate/professional degree, which were at 29% lower ($\beta = -.340$; p < .01) for children with divorce parents. Hypothesis 1 was therefore supported. Regarding the sociodemographic variables in the model, educational attainment was significantly greater among women, whites (compared to Hispanics; not blacks or other race), youth with mothers and fathers with more education, and youth who were from families with higher incomes.

Table 4 about here

We ran two sets of supplemental analysis regarding the effect of divorce (results not shown). We first tested the relationship between parental divorce and educational attainment held when the sample was limited to older children age 15 to 18. We found that whereas parental divorce was associated with 47 lower

odds of attaining a bachelor's degree or higher (β = -.340; p < .001), parental divorce was not associated with post-baccalaureate educational attainment. Similarly, we examined whether the age of the child at the time of the divorce was associated with their educational attainment. We regressed youth's educational attainment (all three measures) on parental divorces that occurred prior to Round 1 (child was between the age of 12 and 18) versus parental divorces that occurred after Round 1 (child was over age 18). Results showed that the age of the child at the time of the divorce was negatively related to youth obtaining a bachelor's degree and higher but was not related to the odds of their obtaining a graduate/professional degree or enrollment. Specifically, the odds of youth obtaining bachelor's degree were 35% lower for children whose parents divorced pre-Round 1.

We next examined the association between parental divorce and parental educational expectations (Hypothesis 2). We did not find support for the hypothesis that divorced parents have lower educational expectations for their children than continuously married parents (results not shown). Although in the right direction, parental educational expectations were not significant lower for children with divorced parents. Hypothesis 3 stated that parental educational expectations would be positively related to children's postbaccalaureate educational attainment. We found a significant positive relationship between parental educational expectations and youth's educational attainment (all three measures). The odds of youth with high parental educational expectations obtaining a graduate/professional degree or having ever enrolled in a graduate/professional program were nearly 7 times higher than youth whose parents had low educational expectations ($\beta = 1.918$; p < .001). The difference between youth with divorced versus non-divorced youth was nearly 5 times greater for obtaining a graduate degree ($\beta = 1.517$; p < .001) and were nearly 7 times higher for obtaining a bachelor's degree or more ($\beta = 1.929$; p < .001).

The last set of models tested Hypothesis 4 that parental educational expectations would mediate the relationship between parental divorce and post-baccalaureate educational attainment (results not shown). This hypothesis was not supported. The coefficient for parental divorce was not statistically different across

models. The negative relationship between parental educational expectations and educational attainment remained statistically significant controlling for parental divorce.

Table 5 about here

DISCUSSION

There are currently an estimated 75 million adults between the ages of 18 and 34 in the United States. Referred to as the Millennial Generation, the number of men and women in this group has surpassed the Baby Boomers which was until recently was the largest generation in U.S. history (Fry, 2016). For Millennials, holding an advanced degree has become increasingly important determinant of economic success. Although research has consistently shown that parental divorce has a negative effect on children's educational outcomes, few studies have examined how parental divorce affects the outcomes of adult children of divorce, and specifically post-baccalaureate educational attainment. A principle contribution of this study was the inclusion of multiple measures of educational attainment, as well as the examining the role of parental educational expectations with respect to this relationship. We argued that children with divorced parents have less social capital on which to draw which may negatively affect their educational success.

Indeed, we found support for our hypothesis that young adults with divorced parents have lower educational attainment than young adults with continuously married parents, both in terms of obtaining an undergraduate degree and a graduate/professional degree. This relationship held even when accounting for lower human capital (parental education and income) among children with divorced parents as well as the gender and race/ethnicity of the youth. The disparity was greater at the bachelor's degree level than that of a post-baccalaureate degree. Our analysis also revealed that children who were children (under age 18) at the time of their parents' divorce had lower odds of obtaining a bachelor's degree than did children who were 18 and older, indicating that parental divorce during childhood, as opposed to adulthood, has a greater negative effect on later educational outcomes. Although parental educational expectations were strongly related to educational attainment, we found that parental educational outcomes were similar for divorced versus non-divorced parents.

This study has several important limitations. One is the sole focus on parental divorce, which excludes other nontraditional family structures (single motherhood, cohabitation, same-sex couples, etc.). This is problematic because given substantial growth in these family forms (Dorius, 2015). However, since research on the effect of family structure on children's post-baccalaureate educational attainment is relatively new, and the specific effect of parental divorce is not fully understood, the present study is important in establishing a baseline that can be drawn upon for future research. Another limitation of this study was that parental educational expectations were only assessed for older youth (age 15 to 18). Therefore, it is unknown whether results would apply to broader age range of children. Moreover, parents were asked about their children's odds of obtaining a bachelor's degree only as opposed to a graduate degree. It's possible that divorced parents have lower expectations of their child obtaining an advanced degree than continuously married parents.

The necessity for a college degree, especially a graduate degree is increasing. The costs associated of earning a college or graduate degree have also increased significantly in the last decade. Students are able to apply for federal aid assistance through the Free Application for Federal Student Aid (FAFSA) program, established by the Higher Education Act of 1965 under Title IV (United States Department of Education, 2014). FAFSA rules depend on the student's family structure history. If a student's parents are divorced, the custodial parent is responsible for filling out the FAFSA and the income of the non-custodial parent is not considered (FinAid, 2014). Even with federal financial assistance, the costs of higher education are a barrier for children of parental divorce. States are divided on whether courts can order child support after the child reaches age 18 to cover college costs. Some states do not require a noncustodial parent to pay for child support after age 18 while others do (United States Department of Justice, 2014). However, even controlling for income, children with divorced parents are less likely to pursue and attain four-year and advanced degrees.

Future research should examine how family structure affects children's educational attainment into adulthood. It is important to continue to investigate the long-term effects of family instability on the educational success Millennials and subsequent generations of young adults.

References

- Ahrons, C. (2007). Family ties after divorce: long-term implications for children. *Family Process* 46: 53-65.
- Amato, P. R. (2005). The impact of family formation change on the cognitive, social, and emotional wellbeing of the next generation. *The Future of Children 15*: 75-96.
- Amato, P. R. (2010). Research on divorce: Continuing trends and new developments. *Journal of Marriage and Family* 72: 650-666.
- Anguiano, R. V. (2004). Families and schools: The effect of parental involvement on high school completion. *Journal of Family Issues* 25: 61-85.
- Arnett, J. J. (2014). *Emerging Adulthood: The Winding Road from the Late Teens through the Twenties*. Oxford, England: Oxford University Press.
- Aughinbaugh, A., Robles, O., & Sun, H. (2013). Marriage and divorce: Patterns by gender, race, and educational attainment. *Monthly Labor Review 136*: 1.
- Bjorklund, A., & Sundstrom, M. (2006). Parental separation and children's educational attainment: A sibling analysis on Swedish register data. *Economica* 73: 605-624.
- Bjorklund, A., Ginther, D. K., & Sundstrom, M. (2007). Family structure and child outcomes in the USA and Sweden. *Journal of Population Economics* 20: 183-201.
- Brown, S. L., Manning, W. D., & Stykes. J. B. (2015). Family structure and child well-being: Integrating family complexity. *Journal of Marriage and Family* 77: 177-190.
- Bulduc, J. L., Caron, S. L., & Logue, M. E. (2007). The effects of parental divorce on college students. *Journal of Divorce & Remarriage 46*: 83-104.
- Carlson, M., & Corcoran, M. (2001). Family structure and children's behavioral and cognitive outcomes. *Journal of Marriage and Family 63*: 779-792.
- Cavanagh, S. E., Schiller, K. S., & Riegle-Crumb, C. (2006). Marital transitions, parenting, and schooling: Exploring the link between family-structure history and adolescents' academic status. *Sociology of Education 79*: 329-354.

- Chatterji, M. (2005). Achievement gaps and correlates of early mathematics achievement: Evidence from the ECLS-K-first grade sample. *Education Policy Analysis Archives 13*: 1-35.
- Clark University. (2012). "New Clark Poll: 18 to 29-year-olds are traditional about roles in sex, marriage, and raising children." Retrieved January 26, 2016 from http://news.clarku.edu/news/2012/08/07/new-clark-poll-18-to-29-year-olds-are-traditional-aboutroles-in-sex-marriage-and-raising-children/.
- Clark University. (2013). "What is the key to being an adult? Clark releases new poll findings." Retrieved January 26, 2016 from http://news.clarku.edu/news/2013/06/17/what-is-the-key-to-being-an-adult-clark-releases-new-poll-findings/.
- Cohen, Philip N. (2014). Recession and divorce in the United States, 2008–2011. *Population Research and Policy Review 33*: 615-628.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology* 94: 95-120.
- Conger, R. D., Conger, K. J., & Martin, M. J. (2010). Socioeconomic status, family processes, and individual development. *Journal of Marriage and Family* 72: 685-704.
- Conley, D. (2001). Capital for college: Parental assets and postsecondary schooling. *Sociology of Education* 74: 59-72.
- Crosby, O., & Moncarz, R. (2006). The 2004-14 job outlook for college graduates. *Occupational Outlook Quarterly*: 42-57.
- Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement:The indirect role of parental expectations and the home environment. *Journal of FamilyPsychology 19*: 294-304.

DeMaris, A. (1995). A tutorial in logistic regression. Journal of Marriage and Family 57: 956-968.

Dika, S. L., & Singh, K. (2002). Applications of social capital in educational literature: A critical synthesis. *Review of Educational Research* 72: 31-60.

- Dorius, C. (2015). Family Instability. In C. L. Shehan, & C. L. Shehan (Ed.), *The Encyclopedia of Family Studies*. Hoboken, NJ: Wiley-Blackwell.
- English, D., & Umbach, P. D. (2016). Graduate school choice: An examination of individual and institutional effects. *The Review of Higher Education 39*: 173-211.
- Englund, M. M., Luckner, A. E., Whaley, G. J., & Egeland, B. (2004). Children's achievement in early elementary school: Longitudinal effects of parental involvement, expectations, and quality of assistance. *Journal of Educational Psychology 96*: 723-730.
- Ermisch, J., & Francesconi, M. (2001). Family Matters: Impacts of family background on educational attainments. *Economica*, 68: 137-156.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review 13*: 1-22.
- FinAid. (2014). "Divorce and Financial Aid." Retrieved June 6, 2016 from http://www.finaid.org/questions/divorce.phtml.
- Fischer, K. (2013, March 12). "A College Degree Sorts Job Applicants, but Employers Wish it Meant More." Retrieved March 12, 2013 from <u>https://chronicle.com/article/The-Employment-Mismatch/137625/#id=overview</u>.
- Fraley, R. C., & Heffernan, M. E. (2013). Attachment and parental divorce: A test of the diffusion and sensitive period hypotheses. *Personality and Social Psychology Bulletin 39*: 1199-1213.
- Frisco, M. L., Muller, C., & Frank, K. (2007). Parent's union dissolution and adolescents' school performance: comparing methodological approaches. *Journal of Marriage and Family* 69: 721-741.
- Fry, Richard. 2016. "Millennials Overtake Baby Boomers as American's Largest Generation." Retrieved August 1, 2016 from http://www.pewresearch.org/fact-tank/2016/04/25/millennials-overtakebaby-boomers/.

- Furstenberg, F. F. (2005). Banking on families: How families generate and distribute social capital. *Journal of Marriage and Family* 67: 809-821.
- Ginther, D., & Pollak, R. (2004). Family structure and children's educational outcomes: Blended families, stylized facts, and descriptive regressions. *Demography* 41: 671-696.
- Heard, H. E. (2007). Fathers, mothers, and family structure: Family trajectories, parent gender, and adolescent schooling. *Journal of Marriage and Family* 69: 435-450.
- Hill, N. E., Castellino, D. R., Lansford, J. E., Nowlin, P., Dodge, K., Bates, J. E., et al. (2004). Parent academic involvement as related to school behavior, achievement, and aspirations: Demographic variations across adolescence. *Child Development* 75: 1491-1509.
- Kennedy, S., & Ruggles. S. (2014). Breaking up is hard to count: The rise of divorce in the United States, 1980–2010. *Demography 51*: 587-598.
- Kim, D. H., & Schneider, B. (2005). Social capital in action: Alignment of parental support in adolescents' transition to postsecondary education. *Social Forces* 84: 1181-1206.
- Lamanna, M. A., Riedmann, A., & Stewart, S. D. (2015). *Marriages, Families, and Relationships*. Stamford, CT: Cengage Learning.
- Lee, J.-S., & Bowen, N. K. (2006). Parent involvement, cultural capital, and the achievement gap among elementary school children. *American Educational Research Journal 43*: 193-218.
- Magnuson, K., & Berger, L. M. (2009). Family structure states and transitions: Associations with children's well-being during middle childhood. *Journal of Marriage and Family 71*: 575-591.
- McKinney, A. P., Carlson, K. D., Mecham, R. L., D'Angelo, N. C., & Connerley, M. L. (2003).
 Recruiters' use of GPA in initial screening decisions: Higher GPAs don't always make the cut.
 Personnel Psychology 56: 823-845.
- Melby, J. N., Fang, S.-A., Wickrama, K., Conger, R. D., & Conger, K. J. (2008). Adolescents' family experiences and educational attainment during early adulthood. *Developmental Psychology* 44: 1519-1536.
- Miller, C., & Stassun, K. (2014). A test that fails. *Nature 510*: 303-304.

- Mullen, A. L., Goyette, K. A., & Soares, J. A. (2003). Who goes to graduate school? Social and academic correlates of educational continuation after college. *Sociology of Education* 76: 143-169.
- National Association of Colleges and Employers. (2009). *Job Outlook 2010*. Bethlehem, PA: NACE Research.
- National Longitudinal Surveys. (2014). The NLSY97 Sample: An Introduction. Retrieved February 19, 2014 <u>https://www.nlsinfo.org/content/cohorts/nlsy97/intro-to-the-sample/nlsy97-sample-introduction-0</u>.
- Nichols, L., & Islas, A. (2015). Pushing and pulling emerging adults through college: Generational status and the influence of parents and others in the first year. *Journal of Adolescent Research*, 0743558415586255.
- Paulsen, M. B., & St. John, E. P. (2002). Social class and college costs: Examining the financial nexus between college choice and persistence. *Journal of Higher Education* 73: 189-236.
- Perna, L. W. (2004). Understanding the decision to enroll in graduate school: sex and racial/ethnic group differences. *The Journal of Higher Education* 75: 487-527.
- Perna, L. W., & Titus, M. A. (2005). The relationship between parental involvement as social capital and college enrollment: An examination of racial/ethnic group differences. *The Journal of Higher Education 76*: 485-518.
- Pew Research Center. (2014). "The Rising Cost of Not Going to College." Retrieved on June 23, 2016 from http://www.pewsocialtrends.org/2014/02/11/the-rising-cost-of-not-going-to-college/.
- Qian, Z., & Blair, S. L. (1999). Racial/ethnic difference in educational aspirations of high school seniors. Sociological Perspectives 42: 605-625.
- Reynolds, J. R., & Burge, S. W. (2008). Educational expectations and the rise in women's post-secondary attainments. *Social Science Research* 37: 485-499.
- Ribar, David C. (2015). Why marriage matters for child well-being. The Future of Children: 11-27.
- Rodgers, K., & Rose, H. A. (2001). Personal, family, and school factors related to adolescent academic performance. *Marriage & Family Review 33*: 47-61.

- Saguil, A., Dong, T., Gingerich, R. J., Swygert, K., LaRochelle, J. S., et al. (2015). Does the MCAT predict medical school and PGY-1 performance? *Military Medicine 180*: 4-11.
- Shriner, M., Mullis, R. L., & Schlee, B. M. (2009). The usefulness of social capital theory for understanding the academic improvement of young children in stepfamilies over two points in time. *Journal of Divorce & Remarriage 50*: 445-458.
- St. John, E. P., & Wooden, O. S. (2005). Humanities pathways: A framework for assessing postbaccalaureate opportunities for humanities graduates. In M. Richardson (Ed.), *Tracking Changes in the Humanities* (pp. 81-112). Cambridge, MA: American Academy of Arts and Sciences.
- Strohschein, L. (2005). Parental divorce and child mental health trajectories. *Journal of Marriage and Family* 67: 1286-1300.
- Sun, Y., & Li, Y. (2011). Effects of family structure type and stability on children's academic performance trajectories. *Journal of Marriage and Family* 73: 541-556.
- Thomas, S. L., & Zhang, L. (2005). Post-baccalaureate wage growth within 4 years of graduation: The effects of college quality and college major. *Research in Higher Education 46*: 437-459.
- Tillman, K. H. (2007). Family structure pathways and academic disadvantage among adolescents in Stepfamilies. *Sociological Inquiry* 77: 383-424.
- U.S. Department of Education. (2013). *Postbaccalaurate Enrollment Report 1985-2010*. Washington DC: National Center for Education Statistics.
- U.S. Department of Education. (2014). Degrees conferred by degree-granting institutions, by level of degree and sex of student: Selected years, 1869-70 through 2021-22. Retrieved on February 18, 2014 from <u>http://nces.ed.gov/programs/digest/d12/tables/dt12_310.asp</u>.
- United States Department of Education. (2014). "About Us: Federal Student Aid." Retrieved on June 6, 2014 from https://studentaid.ed.gov/about.

United States Department of Justice. (2014). "Federal and State Child Support Guidelines." Retrieved June 6, 2014 from

http://www.justice.gov/criminal/ceos/citizensguide/citizensguide child support.html.

- Wallerstein, J. S., & Blakeslee, S. (1989). Second Chances: Men, Women, and Children a Decade after Divorce. New York: Ticknor and Fields.
- Wallerstein, J. S., & Lewis, J. M. (2007). Disparate parenting and step-parenting with siblings in the postdivorce family: Report from a 10-Year longitudinal study. *Journal of Family Studies 13*:224–235.
- Wallerstein, J. S., & Lewis, J. M. (2008). The unexpected legacy of divorce: Report of a 25 year study. *Psychoanalytic Psychology 21*: 353-370.
- York, T. T., Gibson, C., & Rankin, S. (2015). Defining and measuring academic success. *Practical* Assessment, Research & Evaluation 20: 2.
- Zhan, M. (2006). Assets, parental expectations and involvement, and children's educational performance. *Children and Youth Services Review* 28: 961-975.

Table 1. Description of the Sample ^a				
	Samp	ole 1	Sam	ple 2 ^b
	(N=4	,855)	(N=1	,853)
Variables	Percent	SD	Percent	SD
Educational attainment				
Bachelor's degree and higher	41.4	0.68	42.8	0.64
Graduate/professional degree (ever or currently enrolled)	16.9	0.92	18.5	0.84
Graduate/professional degree (not enrolled)	10.1	1.15	11.9	1.00
Parental educational expectations ^c				
Low (0 – 70%)	-	-	33.4	3.69
High (71 – 100%)	-	-	66.6	0.64
Parents are divorced				
Yes	36.0	0.71	39.0	0.66
No	64.0	0.69	61.0	0.64
Gender of youth				
Male	51.3	0.66	50.2	0.62
Female	48.7	0.70	49.8	0.66
Race/ethnicity of youth				
White	79.5	0.64	80.6	0.62
Black	7.9	1.82	7.2	1.76
Hispanic	11.8	1.42	11.2	1.33
Other	0.8	3.74	0.9	3.38
Mother's education				
High School or less	46.3	0.70	46.8	0.66
Some college	25.5	0.80	25.2	0.75
Bachelor's degree	17.0	0.93	17.4	0.86
Graduate/professional degree	11.2	1.11	10.6	1.06
Father's education				
High School or Less	52.6	0.69	52.7	0.66
Some College	19.1	0.89	19.8	0.83
Bachelor's degree	14.7	0.99	14.8	0.92
Graduate/professional degree	13.6	1.01	12.7	0.97
Household Income				
Low (≤ \$23,100)	13.9	1.11	13.7	1.04
Medium (\leq \$51,400)	44.3	0.69	44.6	0.66
High (\leq \$246,500)	41.8	0.68	41.7	0.63
^a Weighted to reflect the national population.				
^b Limited to youth ages 15 to 18 at Round 1.				
^c Chances that child will earn a college degree by age 30 (in perce				

Tuble 2. Bivarade Readonship between Futerian Bivoree and	Depents Even Diverged	Domenta Continously Married		
	(N-1749)	Parents Continously Married		
X7 ' 11	(IN=1,748)	(N=3,017)	CI :	1
Variables	Percent	Percent	Chi-square	p-value
Educational attainment				
Bachelor's degree and higher	26.9	49.6	144.1	<.001
Graduate/professional degree (ever or currently enrolled)	12.2	19.6	25.9	<.001
Graduate/professional degree (not enrolled)	6.6	12.0	21.9	<.001
Gender of youth				
Male	52.6	53.6	10.4	<.001
Female	47.4	46.4		
Race/ethnicity of youth				
White	79.2	79.6	18.0	<.001
Black	10.3	6.5		
Hispanic	9.8	13.0		
Other	0.7	0.9		
Mother's education				
High School or less	47.6	45.6	29.2	<.001
Some college	29.6	23.2		
Bachelor's degree	14.1	18.6		
Graduate/professional degree	8.7	12.6		
Father's education				
High School or Less	65.8	45.1	141.6	<.001
Some College	17.9	19.8		
Bachelor's degree	8.3	18.3		
Graduate/professional degree	8.0	16.8		
Household Income				
Low (≤ \$23,100)	24.0	8.2	196.2	<.001
Medium (\leq \$51,400)	47.0	42.9		
High (≤ \$246,500)	29.0	48.9		
^a Weighted to reflect the national population.				

L ,	Parents Ever Divorced	Parents Ever Divorced Parents Continuesly Married		
	(N=1748)	(N=3.017)		
Variables	Percent	Percent	Chi-square	p-value
Educational attainment				P
Bachelor's degree and higher	27.6	52.6	62.6	<.001
Graduate/professional degree (ever or currently enrolled	d) 14.1	21.4	8.7	<.05
Graduate/professional degree (not enrolled)	8.6	14.0	6.8	<.05
Parental educational expectations ^c				
Low $(0 - 70\%)$	38.9	29.8	9.3	<.05
High $(71 - 100\%)$	61.1	70.2		
Gender of youth				
Male	46.7	52.5	3.4	n.s.
Female	53.3	47.5		
Race/ethnicity of youth				
White	82.2	79.6	8.8	<.05
Black	8.9	6.1		
Hispanic	8.3	13.1		
Other	0.6	1.2		
Mother's education				
High School or less	48.7	45.6	5.0	n.s.
Some college	27.2	24.0		
Bachelor's degree	14.7	19.0		
Graduate/professional degree	9.4	11.4		
Father's education				
High School or Less	65.4	44.6	56.6	<.001
Some College	19.2	20.1		
Bachelor's degree	7.5	19.6		
Graduate/professional degree	7.9	15.7		
Household Income				
Low (≤ \$23,100)	22.7	7.9	65.1	<.001
Medium (\leq \$51,400)	47.2	42.9		
High (\leq \$246,500)	30.1	49.2		
^a Weighted to reflect the national population.				
^b Limited to youth age 15 to 18 at Round 1.				
^c Chances that child will earn a college degree by age 30				

Table 4. Relationship Between						
	Bachelor's degree		Graduate/professional degree		Graduate/professional degree	
	or Higher		(ever/currently enrolled)		(not enrolled)	
Variables	β	SE	β	SE	β	SE
Intercept	1.054***	0.137	-0.579***	0.140	-1.336***	0.171
Parents ever divorced	-0.579***	0.079	-0.216**	0.107	-0.340**	0.140
Gender of youth						
Female	0.585***	0.094	0.559***	0.118	0.680***	0.071
Race/Ethnicity of youth						
Black	0.188	0.138	0.032	0.179	-0.106	0.108
Hispanic	-0.306*	0.156	-0.485*	0.216	-0.419***	0.104
Other	-0.635	0.647	-1.195	1.058	-0.116	0.42
Mother's education						
High school or less	-1.375***	0.161	-1.382***	0.209	-1.280***	0.134
Some college	-0.887***	0.148	-0.724***	0.181	-0.781***	0.133
Bachelor's degree	-0.466***	0.145	-0.299	0.17	-0.168	0.141
Father's education						
High school or less	-0.938***	0.152	-0.777***	0.188	-1.185***	0.123
Some college	-0.576***	0.153	-0.449*	0.187	-0.684***	0.128
Bachelor's degree	-0.144	0.145	-0.166	0.172	-0.269*	0.134
Household income						
Low (≤ \$23,100)	-0.868***	0.212	-0.888***	0.295	-0.908***	0.131
Medium (≤ \$51,400)	-0.127	0.104	-0.118	0.13	-0.321***	0.077
^a Unweighted results.						
Notes: Reference categories are "male," "white," "graduate degree" (mother/father), and "high" income (≤ \$246,500).						
*p-value <0.05; **p-value <0.0	01; ***p-value <0.001.					

rube 5. Readonship Between Fu	Destated				··· 4··· 4· /···· 6· -· :-··· 1 4· ····	-	
	Bachelor's degree	Graduate/professional degree		G	raduate/professional degree	;	
	or Higher		(ever/currently enrolled)		(not enrolled)		
Variables	β	SE	β	SE	β	SE	
Intercept	-0.662***	0.275	-2.162***	0.368	-2.353***	0.428	
Parents expectations							
High	1.927***	0.163	1.918***	0.284	1.517***	0.328	
Gender of youth							
Female	0.338	0.118	0.361*	0.151	0.348	0.184	
Race/Ethnicity of youth							
Black	0.01	0.167	0.112	0.207	-0.23	0.271	
Hispanic	-0.654***	0.179	-0.598*	0.261	-0.705*	0.336	
Other	-0.386	0.798	-0.506	0.975	-12.523***	0.415	
Mother's education							
High school or less	-1.071***	0.222	-1.442***	0.254	-1.563***	0.297	
Some college	-0.809***	0.227	-1.026***	0.246	-1.037***	0.282	
Bachelor's degree	-0.305	0.238	-0.472*	0.24	-0.610*	0.269	
Father's education							
High school or less	-0.935***	0.206	-0.548*	0.239	-0.318	0.282	
Some college	-0.485*	0.213	-0.458	0.245	-0.251	0.286	
Bachelor's degree	0.024	0.225	-0.211	0.239	-0.259	0.281	
Household income							
Low	-0.647	0.213	-0.342	0.3	-0.709	0.492	
Medium	-0.361	0.127	-0.061	0.163	-0.092	0.912	
^a Unweighted results.							

Notes: Reference categories are "chances child will earn a bachelor's degree by age 30," "male," "white," "graduate degree" (mother/father), and "high" income (≤ \$246,50 *p-value <0.05; **p-value <0.01; ***p-value <0.001.