

## *Social Norms and Expectations about Student Loans and Family Formation\**

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Social norms and expectations regarding marriage or childbearing while in debt—or with an indebted partner—may explain links between student loans and lower family formation rates. This study analyzes an original survey of college students (N = 2,990) at two universities examining how student loans *will*, *would*, or *should* affect romantic relationship and family formation decisions. A significant minority believed marriage should be delayed and nearly half believed childbearing should be delayed when people have student loan debt. Many reported they would hesitate to marry someone with high student debt, their loans would delay family formation, and they would form families earlier if their debt were forgiven. Those with loan debt and higher debt were more willing to partner with those who had high student debt. Women were less likely to believe people *should* delay childbearing and marriage because of loans, but more hesitant to marry a partner with high student debt. Findings suggest social norms underlie childbearing and marriage delays among those with loans, and student loan debt creates a class divide among the highly educated.

### Introduction

Declining investments in public higher education have led to increasing tuition for public colleges and universities; with state education budgets failing to keep pace with growth in population, demand for education, and associated living costs, costs of higher education have increasingly fallen to individuals (Archibald and Feldman 2012), part of a larger shift in the social contract and reflecting the increasingly privatized nature of risk (Hacker 2008). Student loans have become common, with only 31 percent of graduates of four-year nonprofit colleges in 2014 avoiding them (Institute for College Access and Success 2015). The average college attendee with loans in 2015–2016 borrowed \$7,600 for that year; even if this amount did not increase year to year, it would sum to over \$30,000 over 4 years (Radwin et al. 2018). U.S. fertility rates have recently reached record lows, while marriage rates have declined and median age at marriage has increased to record highs (Hamilton et al. 2019; Parker and Stapler 2017). Student loans are associated with delayed marriage and childbearing among college attendees, contributing to these trends (Addo 2014;

Gicheva 2016; Nau, Dwyer, and Hodson 2015). Yet mechanisms linking loans to these delays have not been explored, with prior research focused on secondary analyses of pre-existing datasets with limited variables.

We add to this literature by analyzing a new survey dataset of undergraduates at two universities, collected in Spring 2017 (N = 2,990), to explore expectations and norms related to student loans, marriage and childbearing (or “family formation”) and romantic relationships. We examine whether students with loans anticipated their debt would delay family formation, and whether they would marry and have children sooner if their debt were forgiven. We also examine how students anticipated reacting to a hypothetical romantic partner’s loans, how they believed people *should* behave regarding family formation when they have student loans, and differences by whether or not respondents had loans, the amount of loans they anticipated having at graduation, and gender.

### ***Student Loans and Delayed Family Formation***

Student loans have been linked to lower and delayed rates of family formation among the 61 percent of U.S. adults over 25 who have attended at least some college, and the 35 percent who have graduated (Bozick and Estacion 2014; Gicheva 2016; Min and Taylor 2018; Nau, Dwyer, and Hodson 2015; U.S. Census Bureau 2018). Explanations for this pattern among those with loans have not been fully explored, and may result from several factors. First, it is theoretically possible that those with loans may be more career-focused and less family-focused than those without loans because of self-selection into college attendance among those with limited finances. Those with the financial means to pay for college without loans may be more likely to attend college even if they are not focused on a specific career plan because they do not have to take on student debt that must be repaid. Romantic relationship avoidance and delayed family formation among those with loans may therefore be a selection effect, resulting from career focus rather than loans. However, evidence suggests this is not the case; in separate results from the survey used in this study (available from authors) we found those with loans were marginally *more* likely to report having or wanting to have children compared to those without loans, and were equally likely to report choosing a major because they thought it would help them get a job where they can earn enough to live comfortably, earn a lot of money, or a job where they would not have to work long hours so they would have more time for family and/or other interests.

Second, loans may delay family formation by increasing the education that young adults are able to obtain; more education is associated with delayed marriage and childbearing (Baudin, De La Croix, and Gobbi 2015). Third, loans may delay family formation by reducing young adults’ disposable income, and

therefore their financial stability, which can affect their willingness to marry and have children, their behavior within a relationship, or others' willingness to form romantic relationships or families with them. Fourth, loans may affect family formation rates if those with student loans subscribe to beliefs that people generally *should* delay marriage and childbearing until they have repaid their debt, or if people hesitate to or will not date, marry, or have children with others who have student debt. Underlying this fourth explanation are *social norms*—expectations about how people *should* behave (Gibbs 1965)—regarding whether those with student debt should delay family formation, or are desirable partners. Importantly, these beliefs may affect their personal decisions, but it is also true that personal decisions may shape attitudes, as people seek to resolve internal conflicts between their professed beliefs and the realities of their lives.

### *A New Class Divide*

Unlike measures of socioeconomic status (or “class”) related to education, occupational prestige, income, or wealth, student debt is a unique class signifier that is nonlinear, complicating understandings of social class. Loans signal a lower-class background compared to those who attend college debt-free; those with loans are more likely to have parents with lower wealth and education compared to those without loans (Millett 2003). Yet, loans enable higher education, which can generate class mobility and reduce the stigma of student debt compared to other forms of debt, particularly as their use has become common. Especially high levels of debt may result from attending a graduate program, increasing a graduate's potential income (Cilluffo 2019). Loans also restrict class mobility and reproduce inequalities by imposing an additional “tax” on those without the means to pay for college outright. While some are able to pay their debt off quickly, others delay or reduce payments due to low income, while interest on their debt accrues and the principal may remain untouched. Having loans, especially in large amounts, may potentially be a “stigmatized status” (Goffman 1963), signaling to others an inability to attain financial stability, or even indicating to others financial irresponsibility, and generating a new divide among college students who attend debt-free and those who attend with the support of student loans. This stigma potentially varies based on eventual occupation and income attained, but may in part explain a delay in attaining traditional markers of the “transition to adulthood,” including family formation (Furstenberg et al. 2004), among those with loans. The college-educated have higher marriage rates (Cherlin 2020) and marriage is arguably increasingly a marker of middle-class status; its delay is therefore a further limitation on the class mobility loans enable.

***Social Norms Related to Family Formation, Financial Stability, and Debt***

Stigma related to student debt may both influence and reflect norms regarding partnering with those with loans, or having children or marrying while in debt. Social norms, which can vary by gender and other social groups, guide desired partner and partnership types, as well as romantic relationship and marriage formation, childbearing timing, and sequencing intentions, decisions, and outcomes (Goldscheider, Kaufman, and Sassler 2009; Hagewen and Morgan 2005; Iacovou and Tavares 2011; Kuperberg and Padgett 2016; Liefbroer and Billari 2010; Moll-born 2009). Attending college may alter these social norms, influencing behavior (Blossfeld and Huinink 1991; Bryant 2003; Liefbroer and Billari 2010; Lottes and Kuriloff 1994; Milem 1998). Norms regarding family formation while holding student debt may also affect these behaviors.

Although most young adults expect to marry, most are also hesitant about marriage, especially when financially unstable, and many prioritize achieving financial prerequisites before marrying (Cherlin 2009; Edin and Kefalas 2005). In recent decades, marriage has become less economically necessary for women, and more of a symbolic achievement that couples build to by cohabiting, starting careers, saving money for wedding receptions, and paying down debt (Cherlin 2009; Edin and Kefalas 2005; Lundberg, Pollak, and Stearns 2016; Smock, Manning, and Porter 2005). Subsequently, young adults are more likely to marry if they have more education, as those with higher education levels earn more money and face stronger labor markets, increasing financial stability (Harknett and Kuperberg 2011).

Links between financial stability and childbearing are less clear-cut—and sometimes counter to marriage trends. More highly educated women have fewer children, despite their higher marriage rate, as a result of delaying childbearing while completing education (Baudin, De La Croix, and Gobbi 2015; Kuperberg 2009). When marriage prospects are weak, low-income women still have children, but avoid marriage with partners who are not economically secure, as childbearing outside of marriage carries little stigma (Edin and Kefalas 2005). Yet, when economic conditions were less stable during the Great Recession, childbearing rates among low-income women dropped, and low-income women reported financial barriers to childbearing (Schneider and Hastings 2015).

Although financial insecurity does not typically delay childbearing for those with less education, student loans and the education they enable may; debt as a source of financial instability may operate differently than do low education and income with regards to family formation. Compared to women with less education and no college plans, those who attend college—such as those we examine in this study and those with student loans in general—may see more advantages to delaying childbearing while pursuing well-paying

careers that require a college degree, forming stable relationships with more economically secure men, and diverting money they would have spent on raising a child to repaying loans more rapidly before beginning childbearing (Wilde, Batchelder, and Ellwood 2010). Those with a college education may also expect higher parenting expenses due to social norms about childrearing expenditures that vary by social class (Lareau 2011), making them more hesitant to take on those expenses when in debt.

### *Variance in Norms by Loans, Gender, and Other Characteristics*

Whether or not someone has student loans themselves—their student loan status—can affect willingness to marry someone with loans, potentially leading to stratified mate selection patterns that increase inequality between families (Kalmijn 1998). Those with higher loan amounts may also be more willing to marry or have children before loans are repaid, and may be less likely to agree people *should* delay family formation due to loans. Having loans may make some more willing to partner with someone with loans, because they are familiar with that type of debt; loans may be normative to this group, reducing the stigma those without loans may perceive as being attached to others' debt. Conversely, those with loans may be less willing to partner with someone with large amounts of loans that would add to their own debt burden. Ideas about how other people *should* behave may also differ from expected reactions to one's own or a partner's loans; expectations for one's own life often differ from ideals applied to others (Mazelis 2017).

Gender may be related to beliefs about whether loans should delay family formation, due to biological and financial constraints and gendered norms regarding childbearing, marriage, and financial roles (Bech-Sørensen and Pollet 2016; Lever, Frederick, and Hertz 2015; Raley and Bratter 2004). Women marry and become parents at younger ages than men do, and their ability to conceive and bear children is age-limited; women may therefore limit how long they are willing to delay marriage and childbearing, even with loans (Martinez, Daniels, and Chandra 2012). Norms related to financial roles within relationships, including the expectation that men will be the primary providers, may also affect student loan and family formation norms, if men who are not able to meet breadwinner expectations or pay for expensive dates because of loan payments are seen as less desirable by potential partners (Lever, Frederick, and Hertz 2015; Lundberg, Pollak, and Stearns 2016). Given the difficulties in combining work and motherhood, the lower average pay of women and especially mothers, and the lack of paid maternity leave in the United States (Williams 2001), having a partner with more financial resources—and less debt—may be more important to women so that they can buffer the costs of having a child. As a result both of these norms and of related financial constraints, women are

less willing than men to marry someone with unstable employment, low earnings, or who earns less than them, and value a high earning potential in a mate more than men do (Bech-Sørensen and Pollet 2016; Raley and Bratter 2004). Conversely, widely held expectations that women will take on a primary parenting role (Williams 2001) may make women with loans less desirable to men seeking a partner able and willing to reduce their work hours upon childbirth.

Additional characteristics may be related to beliefs about family formation, and to the rate at which young adults take out loans, potentially confounding results. Those whose parents have less education are more likely to take out loans and marry later, though they do not have a later ideal age at marriage (Fuller, Frost, and Burr 2015; Millett 2003). Cultural norms about not delaying marriage due to financial constraints because of the belief that “God will provide,” and religious stigma regarding cohabitation and premarital sex may influence earlier expected marriage timelines among more religious young adults (Fuller, Frost, and Burr 2015; Tevington 2017). Racial differences in norms and expectations related to family formation (Crissey 2005; Fuller, Frost, and Burr 2015) and student loan rates (Millett 2003) could also affect results, just as college class standing can affect results due to age (a factor we found was collinear with class standing) and expected time to graduation. Parental divorce, separation, or death can be related to both loan amounts and relationship sentiments, including willingness to take financial risks within relationships by marrying someone with loans. In statistical models we controlled for these factors to account for these potential selection effects, but do not discuss results in-depth.

### *The Present Study*

We add to prior research finding a link between student loans and later reduced marriage and childbearing rates (Addo 2014; Gicheva 2016; Nau, Dwyer, and Hodson 2015) by asking college students about beliefs and expectations regarding student loans, loan forgiveness, and a potential romantic partner with a large amount of loans, allowing us to directly assess social norms related to loan debt and family formation, and differences by loan presence and amount, and gender. While we do not have a specific hypothesis about the relationship between loan debt presence and amount and sentiments about a partner with debt because there are theoretical reasons to believe this relationship may go in either direction, we expect that:

- H1*** Compared to students without loans, those who have loans will be less likely to report people with loan debt *should* delay family formation.

- H2** Those with higher loan amounts will be more likely to expect delays in family formation as a result of their loans, but less likely to report people with loan debt *should* delay family formation. And:
- H3** Women will be less likely to report family formation delay or that people *should* delay family formation due to loan debt, but will be more likely to report hesitation to marry a partner with loans.

## **Method**

### ***Data***

The larger project of which this study is a part used a mixed method approach, although we focus on quantitative survey results in this article. In March 2017, we used findings from qualitative interviews we conducted in 2016 at two universities (with 24 randomly selected graduating seniors who reported having loans) to develop a survey that was broadly distributed to all undergraduate students enrolled at both universities where we collected interview data. One was located in the northeast in a higher cost-of-living area, and the other was located in the southeast where cost-of-living is lower. Both schools have been rated “best bang for your buck” by *The Washington Monthly*, and attract similar profiles of diverse local students, including many first-generation college students; the southeastern school is also a designated Minority Serving Institution (MSI). These schools were the “best case scenario” when it comes to loans, being regional public research universities which are less costly than flagship campuses and private universities. Surveys were incentivized with raffled gift cards.

We sent the survey to the emails of 19,268 students enrolled in the two institutions, inclusive of all undergraduate students at both universities, asking students to participate in a survey about “paying for college and the college experience.” In line with typical rates for web surveys (Groves 2006; Laguilles et al. 2011), 3,727 students partially or wholly completed the surveys, providing a 19.3 percent response rate. Survey response rates were lower at the northeastern university (14.8%, N = 706) compared to the southeastern university (20.9%, N = 3,021), with the smaller sample size at the northeastern university also reflecting a much smaller student body at that school. 3,281 of the surveys had complete information on student loan status but of those, 37 did not have complete information for at least one independent variable and 254 were removed from the sample for missing information on all outcome variables, leaving a total sample of 2,990 students. Some respondents did not answer some outcome questions but did answer others; to make full use of data we did

not remove these students from the sample, leaving smaller *Ns* for some questions. Some students were already married (9.2% of those with loans and 9.9% of the total sample) and some already had children (13.1% of those with loans and 12.9% of the total sample) at the time of survey; we retain these in the sample, so that rates represent those of all students rather than only unmarried or childless students. We also report additional descriptive statistics for anticipated effect of loans and of loan forgiveness on marriage and childbearing for those unmarried or childless at survey.

To estimate whether respondents were representative of undergraduate students at each university, we compared demographic sample statistics to parameters obtained from institutional research offices, using one-sample *t*-tests. Women were significantly more likely to answer the survey, comprising 59 percent of students versus 75 percent of respondents at the northeastern university, and 66 percent of students versus 78 percent of respondents at the southeastern university. Overall, women comprised 77.3 percent of all respondents and 77.5 percent of the sample in this article (see Table 1). Although Latin American students at one school were underrepresented in our survey, we did not find significant variation between our survey and institutional data in terms of percent White, Black, or Asian. Seniors were overrepresented at both schools. Models controlled for class standing, gender, and race to account for these discrepancies.

### *Outcome Variables Collected Among Those with Loans*

We asked students with loans, “When you are done with your undergraduate degree, how do you expect loans will affect your future?” We present results for “I will delay having children,” “I will delay marriage,” and “I will delay getting into a serious romantic relationship” in tables, with full responses presented in Figure A1. We explored our qualitative participants’ attitudes about what people should do in situations related to loan forgiveness, relationships, and childbearing. We used interview findings to develop survey responses. In surveys, we asked respondents with loans: “A year after you graduate college, Congress decides that they best way to deal with student loan payments is to forgive everybody’s student debt. The law is passed, and your student loan debt suddenly goes to \$0. What would you do differently?” We present results for the options “have children sooner” and “get married sooner,” and the full range of responses in Figure A2. These two questions capture similar sentiments, but allow for students to consider the question of how loans will affect their future directly, and (much later in the survey) how they would react to hypothetical loan forgiveness, providing a sensitivity test for question wording, and allowing us to directly assess students’ expected reaction to a potential



**Table 1 Descriptive Statistics (N in Parenthesis)**

Has student loans	66.49% (1988)	<i>How will loans impact future? (if loans)</i>	
No loans	33.51% (1002)	Delay children	31.64%
Average loans (has loans, not imputed)	\$33,553 (1311)	Delay marriage	18.87%
Average loans (all, not imputed)	\$19,017 (2313)	Delay serious romantic relationships	8.21%
Women	77.49% (2317)	N	1950
Men	21.27% (636)	<i>If Congress forgives loans (if loans)</i>	
Other gender	1.24% (37)	Have children sooner	30.90%
White	52.31% (1,564)	Get married sooner	21.94%
Black	25.38% (759)	N	1942
Latin American	8.39% (251)	<i>If considering marrying partner but had \$75k debt:</i>	
Asian American	6.42% (192)	Yes, I would not agree to marry them	2.63%
Mixed race or other race	7.49% (224)	Yes, I would put off marriage	17.79%
Freshmen	14.38% (430)	No, it would not affect my plans for marriage with them	36.32%
Sophomores	17.99% (538)	It might affect my plans depending on the circumstances	43.26%
Juniors	26.02% (778)	N	2968
Seniors	40.84% (1221)	<i>If partner of 6 months had \$100k loans:</i>	
Class standing unknown	0.77% (23)	Hold off on moving in with them until they had paid off some of their debt	23.30%
Parents less than H.S.	5.08% (152)	Hold off on getting legally married until they had paid off some of their debt	33.60%

**Table 1**  
(continued)

Parents H.S.	16.39% (490)	Hold off on getting legally married until they had paid off all of their debt	7.84%
Parents some college/ associates/technical school	28.83% (862)	Start paying for more things in the relationship	14.29%
Parents B.A. or post-bac certificate	27.76% (830)	Feel closer to them because we both have debt	16.58%
Parents M.A. or professional or doctorate degree	20.64% (617)	Avoid going on expensive trips or doing expensive activities with them	38.53%
Parents' education unknown	1.30% (39)	Have a talk with them about how they plan to pay it off	63.02%
Does not attend religious services	34.41% (1029)	Be worried that they were irresponsible with money	13.54%
Attends religious services 1–11× per year	37.49% (1121)	Feel bad for them	25.60%
Attends religious services 12 + per year	28.09% (840)	Consider breaking up with them	5.74%
Parents married	49.77% (1488)	Definitely break up with them	0.74
Parents not married	50.23% (1502)	It would not affect how I felt about them	36.41%
Southeastern School	82.01% (2452)	N	2961
Northeastern School	17.99% (538)	<i>People should delay getting married until loans paid off</i>	22.55
N	2,990	N	2967
		<i>People should delay having kids until loans paid off</i>	46.89%
		N	2956
		<i>People should not have kids if can't pay off loans until 50s</i>	17.02%
		N	2967

policy (loan forgiveness) that has recently been the subject of public discussion (Cowley and Bernard 2020).

### ***Outcome Variables Collected among all Undergraduate Students***

We asked *all* undergraduate students—those with and without loans—how they would react to a hypothetical partner who disclosed they had a large amount of loans at different points in a relationship. In particular, we asked students, “If you were considering getting engaged to be married to someone you were in a serious relationship with and then they told you that before you agreed to get married you should know they still had around \$75,000 in student loans to pay off, would it affect whether you would agree to marry, or how long you would wait to marry?” We also asked, “How would you react if you were in a relationship for six months and your partner told you they had \$100,000 in student loans?” We present the full range of responses in Table 1; students were able to check all that apply.

The amounts in the above questions capture high, but not unheard of, amounts of debt, and we determined amounts after qualitative interviews with participants. Our initial qualitative questions asked participants how they would react to a partner with a “large” amount of debt, but several asked for clarification about the amount, with one participant spontaneously mentioning \$100,000, which we used subsequently when participants asked for clarification about the amount, and then in the survey as well. In 2016, 7 percent of student debt holders with unpaid balances, including 23 percent of those with a post-graduate degree, owed over \$100,000 in student debt (Cilluffo 2019). Of our survey respondents with loans, approximately 4 percent anticipated owing more than \$100,000 after graduation, 8 percent anticipated owing more than \$75,000 and 19.5 percent anticipated owing over \$50,000.

Finally, we asked, “Should people delay getting married until they have paid off their loans?” “Should people delay having kids until they have paid off their loans?” and “Should people not have kids if they have loans to pay off and they think they will not be able to pay them off until they are in their 50s?” The third question in this series allows for the assessment of whether respondents believed childbearing should be forgone entirely if debt could not be paid off before the end of childbearing years, and we developed it to mirror a probe in qualitative interviews when participants indicated those with loans should delay having children.

### ***Independent Variables***

We examined whether responses differed by gender, loan amounts, and loan status (whether they had loans) for questions not limited to those with student loans. We determined whether respondents had taken out student

loans or not by responses to two questions: “How do you pay for your tuition and other educational expenses (like textbooks)? Check all that apply” and “How do you pay for your other living expenses while in college (housing, food, car, entertainment, etc.)? Check all that apply.” We counted the responses, “public subsidized loans,” “public unsubsidized student loans,” “private student loans,” or “student loans, but I’m not sure whether they are private or public” as having student loans. Students who responded to the two questions but did not indicate that they had loans were counted as not having loans. 1,988 respondents (66.5%) indicated they had taken out loans and 1,002 indicated they had not (see Table 1), in line with national rates (Institute for College Access and Success 2015) and in line with institutional data on percent of students with loans at the two schools in our study (approximately 65% of students at each university). Student loan amount was calculated based on responses to the question “By your best guess, when you are done with school, around how much do you expect to owe in student loans?” We coded those with no loans as 0. 1,151 respondents with loans provided a specific amount for this question, while the remainder reported they did not know or did not respond to the question, reflecting qualitative findings that participants often did not know their exact loan amounts. 160 additional respondents reported they did not know their loan amount upon graduation but did report a current amount of loans; for these respondents we imputed the current loan amount as their amount upon graduation, likely underrepresenting the loan amount they would have upon graduation. In total these responses added up to 1,311 students with loans; 677 respondents (34% of those with loans) had missing loan amounts, including 626 who responded they did not know how much their loans would be upon graduation and did not report a current amount, and 51 who did not respond to the question. In models examining the impact of loan amount on responses, we impute the loan amount of these respondents as the average amount for all those reporting loan amounts (\$33,553), and include a dichotomous control variable for “missing loan amount.” As a sensitivity test we also calculated alternative models in which we dropped respondents who reported having loans but were missing amounts, and another set imputing amount for those missing data but reporting loans as “0” and including a dichotomous variable for “missing loan amount.” These sensitivity tests did not reveal substantial differences in the effect of loan amount on outcome variables (see Table A1). We divided loan amounts by 10,000; odds ratios in models examining amounts represent the effect of each \$10,000 increase in expected loan amount at graduation.

We measured gender with the question, “What is your sex/gender identity?” with options including “female,” “male,” “male-to-female transgender,”

“female-to-male transgender,” “genderqueer,” “intersex,” and “other”; participants could check all that apply. We combined all identities other than male or female into a dichotomized variable for “other gender” which we controlled for in models, but given the small sample size ( $N = 37$ ) and the diverse nature of this group, these results should be interpreted with caution.

### ***Control Variables***

Regressions additionally controlled for race/ethnicity, class standing, parents’ education and marital status, religiosity, and school attended. We measured race/ethnicity with the question, “What is your race or ethnicity?” Respondents who indicated more than one category were coded in the “Mixed race or other race” with one exception: the Census has considered adding “Middle Eastern” as a distinctive racial/ethnic category, but included it under “White” in the 2010 Census (Bahrampour 2016). We coded those who indicated both Middle Eastern and White as “White,” and those who indicated they are Middle Eastern but not White in the “Mixed race or other race” category. Those who responded, “Native American or Pacific Islander,” or “Other” were also included in that category, so models ultimately included “White or White/Middle Eastern” as the reference category, with dichotomous control variables for “Black/African American,” “Latin American,” “Asian American/Asian,” “Mixed Race or Other.”

We measured class year with responses to “what is your current class standing?” with the reference being senior (graduate students were not surveyed) and those who responded they did not know their class standing being coded into a separate dichotomized category to retain them in the survey. We based the measure of parents’ education on responses to, “Thinking about the following people, what is the highest level of education that they have?” regarding “your mother” and “your father.” We included a measure of the highest level of education of either parent, with the reference category being “both have less than a high school degree” and dichotomous variables for at least one parent having “a high school diploma or GED,” “some college or technical or associate’s degree,” “bachelor’s degree or post-bachelor’s certificate,” and a “master’s degree or doctorate or professional degree.” We also included a category for those who did not know their parents’ education to retain them in the sample. We measured religiosity via responses to, “How often have you attended religious services within the past year?” with the response “never” being the reference, and additional dichotomized control variables for the categories “1–11 times in the past year” and “at least once a month.” A question asked, “What is the current relationship of your biological or adoptive parents”; this was coded into a dichotomous variable including those whose parents were currently married (reference) and those whose parents never married, divorced,

separated, or one or both was deceased at the time of first survey. Finally, a dichotomized variable indicated which of the two schools the respondent attended. Descriptive statistics for these variables are included in Table 1.

### *Analysis*

We recoded responses to each survey question and vignette as dichotomous variables, which were predicted using student loan status or (in separate models) amount and missing loan amount, gender, and controlling for race, class standing, religiosity, parental highest level of education and parental marital status. We estimated random effects logistic regression models that accounted for clustering at the two schools as a random effect. Random effects models allowed for consideration of unobserved factors such as campus culture across the two schools in the survey (Rabe-Hesketh and Skrondal 2008). To calculate models, we used the *melogit* command in Stata, presenting odds ratios. For the results related to anticipated responses to a partner with \$75,000 in debt, we calculated a random effects multinomial logistic regression, using the *gsem* command in Stata, and specifying school as a latent variable. We combined the small category “would not marry” with “would put off marriage” into a single category, and compared that and the category “it depends” to the baseline category “would not affect plans.”

## RESULTS

### *Anticipated Reactions to Loans and Loan Forgiveness among Those with Student Loans*

Table 1 includes descriptive statistics for all variables included in this study. Just under one third of undergraduates with loans (31.6%) anticipated their loans would lead to a delay in having children; when limiting the sample to only those who were childless at survey, this rate was 36.3 percent. Delaying romantic relationships was less common; only 8 percent of those with loans anticipated delaying entering a serious romantic relationship as a result of loans. Almost one fifth of students with loans reported they would delay marriage as a result of loans (18.9%), including 20.8 percent of those who were unmarried at survey. When asked how they would react if Congress forgave all student debt, 31 percent of students with loans reported they would have children sooner if their loans were forgiven. 22.8 percent of students who reported already having children said they would have children sooner if their loans were forgiven, likely referring to additional children; among childless students this rate was 32.1 percent. 22 percent of all students with loans reported they would marry sooner if loans were forgiven; among unmarried students this rate was 24.1 percent.

Table 2 shows selection into anticipated loan effects by student loan amount, gender, and other characteristics based on regression models. Higher loan amounts increased the likelihood that undergraduates reported their loans would delay serious relationships, but were not significantly related to child-bearing or marriage responses. Those who did not know their loan amount were significant less likely than those who did know their amount to respond they would delay having children or delay marriage as a result of their loans, and were less likely to report they would get married sooner if their loans were forgiven.

While undergraduates did not differ by gender in percent anticipating delaying having children or marrying, men were almost twice as likely as women to anticipate delaying serious romantic relationships as a result of their loans, and marginally more likely than women to state that if their loans were forgiven they would have children earlier. There were no gender differences in percent of undergraduates who would marry sooner in either question. Students also significantly differed in their responses to these questions by race, class standing, parents' education and marital status, and religiosity.

### ***Hypothetical Reactions to a Partner with Loans***

In Tables 1, 3, and 4 we present results regarding a partner with loans based on two vignettes, one asking about a potential marriage with a serious partner who discloses they have \$75,000 in loans, and one asking about expected reactions to a partner of 6 months who discloses they have \$100,000 in loans. For the first scenario, only around one-third of survey respondents—36.3 percent—stated a partner's loans would not affect their marriage plans. An additional 17.8 percent of undergraduates reported that they would delay marriage, and 2.6 percent stated that they would not marry the partner at all. The most common answer—43.3 percent—was that a partner's loans may affect marriage plans, depending on the circumstances. Qualitative data revealed what circumstances might be relevant to participants' decisions, including how responsible their partner seemed, if they had a plan for repaying the debt, what the student loans were for (how many years, what kind of degree), what type of job they had, how much money they were earning, how serious the relationship was, their own level of debt, and if they felt they had been purposely misled.

The most commonly reported anticipated reaction to a romantic partner of 6 months who disclosed \$100,000 in loans would be to have a talk with them about how they planned to pay it off (63%). Only around a third (36.4%) of undergraduates said it would not affect how they felt about a romantic partner, similar to the percent reporting that it would not affect marriage plans. Yet, only 5.7 percent would consider breaking up and just 0.7 percent would definitely break up with a partner who had \$100,000 in student debt. Around one

**Table 2 Random Effects Logistic Regression Models Predicting Anticipated Reactions to Own Loan Debt and Debt Dissolution among Those with Loans (Odds Ratios)**

	How do you expect student loan payments will affect your future?			What would you do differently if loan debt forgiven?	
	Delay having children	Delay marriage	Delay serious romantic relationship	Have children sooner	Get married sooner
Amount loans	1.01	1.03	1.07**	1.02	.99
Amount missing	.65***	.60***	.77	.90	.78*
Male	1.04	1.10	1.93***	1.26 <sup>†</sup>	1.01
Other gender	.28*	.52	1.08	1.90	1.22
Black	.89	.82	1.23	.54***	.79 <sup>†</sup>
Latin American	1.35	1.13	1.60	.55**	.80
Asian	1.06	1.47	1.81	.96	1.54 <sup>†</sup>
Mixed/other	1.15	1.02	1.27	1.19	1.24
Juniors	1.21	1.09	.93	1.01	1.39*
Sophomores	1.53**	.91	.92	1.07	1.26
Freshmen	1.58**	1.13	1.08	.92	1.61**
Class unknown	.39	.70	1.57	1.66	1.50
Parents H.S.	.87	.84	.40*	.57*	1.22
Parents some college	1.02	.94	.59	.66 <sup>†</sup>	1.17
Parents B.A.	1.12	1.05	.60	.64 <sup>†</sup>	1.21
Parents' grad	1.10	.92	.48 <sup>†</sup>	.64 <sup>†</sup>	1.18



**Table 2**  
(continued)

	How do you expect student loan payments will affect your future?			What would you do differently if loan debt forgiven?	
	Delay having children	Delay marriage	Delay serious romantic relationship	Have children sooner	Get married sooner
Parents' education unknown	.70	.96	1.11	1.71	.43
Religious services 1-11x/year	1.05	.87	1.04	.93	1.25 <sup>†</sup>
Religious services 12+ /year	.81	.57**	.88	.86	1.13
Parents not married	.97	1.01	.68*	1.03	.92
N	1950	1950	1950	1942	1942

Note: <sup>†</sup> $p < .10$  \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  indicates significant differences in random effects models, controlling for clustering within universities. Reference groups: students with no loans, White, parents with no H.S. degree, seniors, no religious services attendance, married parents.

third (33.6%) reported that they would delay marriage until after their partner had repaid some of their loans, and 7.8 percent reported that they would delay marriage until they had paid off *all* of their loans. Just under a quarter (23.3%) reported that they would delay moving in together until their partner had repaid some debt. Other responses included avoiding expensive trips or activities with their partner (38.5%), feeling bad for their partner (25.6%), feeling closer to their partner because they both had debt (16.6%), starting to pay for more

**Table 3 Random Effects Multinomial Logistic Regression Model Predicting Anticipated Reaction to Potential Marriage Partner with \$75,000 in Student Loan Debt (Odds Ratios)**

If you were considering getting engaged to be married to someone you were in a serious relationship with and then they told you that before you agreed to get married you should know they still had around \$75,000 in student loans to pay off, would it affect whether you would agree to marry, or how long you would wait to marry?

	Would put off or not agree to marriage		Depends on circumstances	
Has loans	.57***		.71***	
Amount loans		.88***		.95**
Amount missing		.74*		.86
Male	1.10	1.11	.82 <sup>†</sup>	.82 <sup>†</sup>
Other gender	.34	.36	1.90 <sup>†</sup>	1.99 <sup>†</sup>
Black	1.04	1.08	.73**	.74**
Latin American	1.68**	1.69**	1.04	1.04
Asian	1.25	1.26	1.00	1.01
Mixed/other	.99	.99	.81	.81
Juniors	1.00	.99	1.14	1.13
Sophomores	1.08	1.08	.99	.98
Freshmen	1.22	1.25	1.25 <sup>†</sup>	1.27 <sup>†</sup>
Class unknown	.70	.80	.65	.70
Parents H.S.	1.57	1.59 <sup>†</sup>	1.16	1.16
Parents some college	1.40	1.46	1.29	1.31
Parents B.A.	1.51	1.58 <sup>†</sup>	1.42 <sup>†</sup>	1.46 <sup>†</sup>
Parents grad	1.42	1.51	1.36	1.42
Parents' education unknown	1.88	2.13	.77	.85
Religious services 1–11×/year	.96	.95	1.01	1.01
Religious services 12+ /year	.68**	.67**	.85	.84
Parents not married	.90	.88	.98	.97
N	2968	2968	2968	2968

Note: <sup>†</sup> $p < .10$  \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  indicates significant differences in random effects multinomial logistic regression models, controlling for clustering within universities and comparing results to those who would not change their marriage plans. Reference groups: students with no loans, White, parents with no H.S. degree, seniors, no religious services attendance, married parents.

things in the relationship (14.3%), and being worried that that their partner was irresponsible with money (13.5%).

In regression results, whether or not students had loans and amount of loans anticipated at graduation influenced hypothetical reactions to a partner with loans. Those with loans—and those with more loans—were significantly less likely to state they would delay or avoid marriage to a partner with \$75,000 in loans, or that it would depend on the circumstances, than they were to say it would not affect marriage plans, the reference group (see Table 3). In response to a hypothetical partner with \$100,000 in loan debt, those with loans were significantly less likely than those without loans to say they would hold off on moving in together until their partner had repaid some of their debt, would avoid marriage until their partner had paid off *all* of their debt, would consider breaking up, and that they would worry that partner was irresponsible with money (see Table 4). Those with loans were also more likely to say it would not affect how they felt about a partner and that they would feel closer to a partner because they both had debt. Those with a higher amount of loans were significantly less likely to report they would consider breaking up with a partner, hold off on moving in with a partner, delay marriage until all debt was repaid, or worry a partner with \$100,000 in student loans was irresponsible with money. They were also more likely to state it would not affect how they felt about a partner or that they would feel closer to a partner with debt. Students with loans who did not know the amount were significantly less likely to respond they would delay or avoid marriage with a partner with \$75,000 in student loan debt. When asked about a partner with \$100,000 in debt, those who did not know their debt amount were less likely to respond that they would delay marriage until some debt was repaid, avoid expensive trips or activities with their partner, talk about plans to pay off debt, and were more likely to state it would not influence their feelings for their partner.

In Table 3, when asked about a partner they wanted to marry who disclosed \$75,000 in loans, men were marginally less likely than women to respond that their reaction would depend on the circumstances. In response to a hypothetical romantic partner of 6 months who disclosed \$100,000 in loans, women were more likely than men to say they would have a talk with their partner about their plans to pay off their debt, or delay moving in with a partner or marrying a partner until they had repaid at least some of their debt (see Table 4). They were also more likely to say they would avoid expensive trips or activities with their partner. Men were more likely to say they would start paying for more things in the relationship. Race, class standing, religiosity, and parents' education were also related to anticipated reactions to a hypothetical romantic partner with a high amount of student loan debt.



**Table 4**  
(continued)

	Talk about plans to pay off debt	Worry they are irresponsible w/ money	Feel bad for them	Consider breaking up	Definitely Break up	Would not affect feelings for partner
Has loans	.96	.76*	1.03	.51***	.85	1.41***
Amount loans	.99 <sup>†</sup>	.93*	.99	.82***	.82	1.06**
Amount missing	.65***	.78	.88	.61 <sup>†</sup>	.27	1.24*
Male	.67***	.88	1.11	1.40 <sup>†</sup>	.81	.93
Other gender	1.21	1.03	2.95**	1.85	2.17	1.02
Black	.78*	.51***	.71**	.55*	.60	1.15
Latin American	1.09	1.28	.85	.71	1.06	.79
Asian	1.15	1.34	.71 <sup>†</sup>	.30*	2.03	.89
Mixed/other	.95	.97	1.12	.84	.56	.96
Juniors	.83 <sup>†</sup>	.63***	.74**	.51**	.41	.43
Sophomores	1.02	.95	1.05	.99	.62	.64
Freshmen	.84	.89	.89	.52*	1.07	1.25 <sup>†</sup>
Class unknown	.68	.85	.27 <sup>†</sup>	.00	.00	.191
Parents H.S.	1.00	1.14	.74	.85	.88	.99
Parents some college	.97	.99	.77	.81	.76	.80
Parents B.A.	1.07	1.34	.84	.85	.54	1.02
Parents grad	1.11	1.12	.74	.46 <sup>†</sup>	.22 <sup>†</sup>	.97
Parents' education unknown	.93	2.20	1.08	.74	.29	.99
Religious services 1-11x/year	1.31**	.86	.86	.91	.86	.84
Religious services 12+/year	1.26*	.78 <sup>†</sup>	.71**	1.01	.25 <sup>†</sup>	.85
Parents not married	1.07	1.03	.97	.88	.99	1.01
N	2961	2961	2961	2961	2961	2961

Note: <sup>†</sup>  $p < .10$  \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  indicates significant differences in random effects models, controlling for clustering within universities. Reference groups: students with no loans, White, parents with no H.S. degree, seniors, no religious services attendance, married parents.

***How do Undergraduates Believe People with Student Loans Should Behave?***

Tables 1 and 5 presents results about respondents' beliefs regarding whether people *should* delay marriage or childbearing as a result of student debt, and whether people should avoid childbearing entirely if they can't pay off their loans until their 50s. Just under one quarter of respondents (22.5%) thought marriage should be delayed until loans have been repaid, and almost half—46.9 percent—thought people should delay childbearing until they have paid off their loans. When asked if people should forgo childbearing if they would not be able to pay off their loans until their 50s, 17 percent agreed.

Regressions revealed that those without loans were significantly more likely to say people should delay having kids or getting married until they have paid off their loans (see Table 5). Loan amounts also influenced responses: those with a higher amount of loans were less likely to agree that people with loans should delay marriage or childbearing. Those who did not know their loan amount were also less likely to agree those with loans should delay childbearing and marginally less likely to agree they should delay marriage. Men were significantly more likely than women to believe people should delay or forgo childbearing and delay marriage until loans have been repaid. All other variables controlled for in models also were related to sentiments about how people with loans *should* behave.

**Discussion**

Findings indicate that despite the rising prevalence of student loans, over one-fifth of college students who responded to our survey believed marriage *should* be delayed and nearly half believed childbearing should be delayed—at least for a time—when young adults have student debt. Nearly 1 in 5 (17%) believed childbearing should be foregone entirely if loans cannot be entirely repaid before a couple would be too old to have children. Significant minorities of respondents with loans also anticipated that their loans would influence their childbearing, marriage, and relationship formation decisions, and many students reported they would alter their family formation behavior if a partner had substantial student debt or if their loans were forgiven. Findings indicate having student loan debt—especially large amounts of debt—represents a stigmatized status for some young adults, as a marker of increased financial instability that may delay or preclude family formation.

As expected in our first and second hypotheses, those who had loans (as compared to those without loans) and those with higher amounts of loans anticipated at graduation were less likely to believe family formation *should* be delayed if people have loans to pay, and were more likely to state that they would not alter their marriage plans if a serious romantic partner disclosed

**Table 5 Random Effects Logistic Regression Models Predicting Norms about Student Loans and Family Formation Delay (Odds Ratios)**

	People should delay marriage until loans paid off	People should delay having kids until loans paid off	People should not have kids if can't pay off loans until 50s
Has loans	.66***	.53***	.69***
Amount loans	.93**	.93***	.97
Amount missing	.82†	.79*	.96
Male	1.33**	1.43***	1.34*
Other gender	.88	.82	1.55
Black	1.32*	.79*	.91
Latin American	1.58**	1.59**	1.41†
Asian	1.45*	1.14	1.65**
Mixed/other	1.50*	1.22	1.08
Juniors	1.21†	1.15	.95
Sophomores	1.07	1.37**	.91
Freshmen	1.36*	1.65***	1.17
Class unknown	.17†	.62	.45
Parents H.S.	.94	1.25	.95
Parents some college	1.02	1.58*	1.13
Parents B.A.	.85	1.58*	.98
Parents grad	.89	1.57*	1.09
Parents' education unknown	1.27	1.34	1.23

**Table 5**  
(continued)

	People should delay marriage until loans paid off	People should delay having kids until loans paid off	People should not have kids if can't pay off loans until 50s
Religious services 1-11 x/year	.97	.90	.66***
Religious services 12+/year	.77*	.69***	.73*
Parents not married	.91	.83*	.90
N	2967	2956	2967

*Note:* †  $p < .10$  \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  indicates significant differences in random effects models, controlling for clustering within universities. Reference groups: students with no loans, White, parents with no H.S. degree, seniors, no religious services attendance, married parents.



\$75,000 in loans. However, in contrast with our second hypothesis, loan amount did not affect the degree to which students expected they would delay family formation, with one exception: those with more loans were more likely to anticipate delaying forming a serious romantic relationship. This may be because relationships were more relevant to their lives, and marriage and child-bearing more distant in their future.

We also found a pattern in which students who did not know their loan amount were less likely to expect their loans would affect their future, say they would put off or avoid marriage with a partner with high student debt, think a partner's loan amounts would affect their feelings about their partner, or believe people with loans *should* delay family formation. This may reflect overall lower levels of financial literacy, or may be related to the type of students who do not know their loan amounts; perhaps some of these students expect their parents to pay them off or have very low loan amounts. This may also reflect a lower level of general concern about loans among some students, likely also reflected in findings that those who did not know their loan amount were less likely to say they would avoid expensive trips or activities with a partner with a high amount of student loan debt, or have a talk with them about how they would pay off that debt. Students who do not know their loan amounts may also have a particularly high amount of loans and owe so much that they do not keep track of their loan amounts, and do not anticipate that adding a partner's debt to their own will make much of a difference. Future qualitative and quantitative research should delve more closely into examining students' knowledge among the large number of students who do not know their loan amounts.

Although many students with and without loans would hesitate to marry someone with a substantial amount of debt, we found a similar pattern whenever significant differences by loan status or amount occurred: those *without* loans or with *lower* loan amounts were *more* hesitant to engage in partnerships with those who have high student debt. Those with loans may see student loans as a more typical and normal part of college life, lessening anticipated impacts. This can lead to a previously undescribed form of segregation in marital relationships by student loan status, in which class-background-based homogamy persists among those with similar education levels. Educational matching in marriage can increase inequality between families (Kalmijn 1998); matching by loan status can further increase inequality by matching those who graduate college debt-free with their debt-free counterparts.

Responses to hypothetical partners with debt also point to a hidden disadvantage those with loans face. Whereas those without student debt never have to worry about whether, how, or when to tell a partner about their debt burden, how they should negotiate whose responsibility it would be to repay debt

should they marry, or how to navigate paying student debt while also contributing to a future household with that partner, those with student debt must consider all those things. Student debt can also hinder relationships by reducing dating prospects, because many are reluctant to marry people with student loans, or because those with loans are reluctant to marry or engage in relationship-seeking activities because they feel fewer people would partner with them due to their debt. Those with the greatest need for student loans to gain access to a college education may be in the worst position to repay those loans after graduation, in part because they may be more likely to face their debt either without partners to help shoulder the burden or with partners who have substantial loan obligations as well.

Young adults' beliefs about whether student loans should delay marriage and childbearing also differed by gender. In line with our third hypothesis, men—facing fewer biological constraints regarding childbearing and with breadwinning expectations—were more likely to say people *should* delay childbearing and marriage until paying off loans, and more likely to say they *would* delay forming a serious romantic relationship as a result of their loans. Women were marginally more likely than men to say that whether or not they would marry a partner with \$75,000 in loans would depend on the circumstances. They were also more likely to say they would delay moving in with a partner with \$100,000 in loan debt, and delay marriage until some of that \$100,000 debt was paid off. Although we did not collect information on sexual orientation, the large majority of college students are heterosexual (Kuperberg and Padgett 2016). Therefore, these findings may reflect broader social norms regarding men as primary providers. Women may be more hesitant than men to marry or move in with a partner with a high debt burden who therefore might not be able to fulfill normative expectations that place men in the primary breadwinner role, in which they are expected to shoulder the larger share of relationship-related expenditures while dating (Bech-Sørensen and Pollet 2016; Lundberg, Pollak, and Stearns 2016; Raley and Bratter 2004; Williams 2001). The finding that women were less likely than men to say they would start paying for more things in the relationship if they found out a romantic partner had a large amount of loans may also reflect these norms. The higher rate of women saying they would avoid engaging in expensive activities with partners with large amounts of debt perhaps reflects assumptions that their partners would be paying for them.

This study had some limitations. First, the sample is limited to two public non-elite research universities in the northeast and southeast, and therefore is not nationally representative. It is possible that our results differ from those that would be found if the study were repeated at more elite universities, private universities, smaller liberal arts colleges, universities in other regions of the

country, or universities with higher tuition. Second, questions about potential partners focused on relatively high (but not unheard of) amounts of loan debt. Responses may have differed if we asked questions about hypothetical partners with closer to average or below average levels of student debt. In future research we plan to explore the extent to which hypothetical partners' different debt amounts may influence sentiments. Third, sentiments about debt while in college and about hypothetical situations may differ from sentiments once students are making loan payments and facing real-life family formation decisions. In future research we will survey and interview students again several years after graduation, in order to examine whether their sentiments about how loans would affect their lives are related to post-graduate outcomes. We will also examine the extent to which they still hold the same sentiments once faced with the reality of debt payments. While not the focus of this study, we also find significant differences in norms related to debt and family formation by race, religiosity, parents' education, parents' marital status, and class standing; future qualitative and quantitative research should focus more closely on how and why these characteristics are related to these norms.

### **Conclusion**

Past research has established a link between student loans and delayed family formation (Bozick and Estacion 2014; Gicheva 2016; Nau, Dwyer, and Hodson 2015) despite no evidence in our survey that those with student loans have an increased career focus or decreased interest in forming a family; we add to this research by exploring the underlying social norms that contribute to this delay. We find that a significant minority of respondents believed marriage and childbearing *should* be delayed due to loans, and reported anticipating that they will delay family or romantic relationship formation because they have loans. These social norms and expectations surrounding student debt indicate it is not a reduction in disposable income alone that drives trends, but that norms and stigma surrounding student loan debt are important factors to consider.

Although student loans enable education—which is associated with higher marriage rates—they can also hinder marriage or having children as early as preferred, compared to those able to complete college without acquiring student debt. Widening inequality and rising tuition means that some—such as those with parents who help them avoid loans while gaining a degree—are transitioning to adulthood with relative ease, while others struggle to “gain the skills and credentials required for a job that can support the family they wish to start (or perhaps have already started)” (Furstenberg et al. 2004: 34).

As large numbers of young adults now take out loans to fund higher education, it is no surprise that average age at first marriage has increased, and childbearing rates have dropped to historic lows (Hamilton et al. 2019; Parker

and Stapler 2017). Our findings also have implications for the wellbeing of children in the next generation. Past research has found that young adults who postpone marriage for financial reasons may still have children (Edin and Kefalas 2005), but these children are more likely to be born outside of marriage, facing higher dissolution rates of parental relationships and less stable living situations, which are associated with a number of negative outcomes (Brown 2004).

Proposed political remedies for student loans include reduced income-based loan payments for federal loans and an easier path to loans being paid off after a 20-year period, with some advocating for loan forgiveness as an alternative, along with free tuition at public colleges for those whose parents earn up to \$125,000 (Biden Campaign 2020; Cowley and Bernard 2020; Thrush 2021). While remedies that reduce loan payments help reduce the financial impacts of federal student loan payments on family formation, they do not address private loans, nor do they address the stigma and role expectations related to debt and family formation, as such policies potentially leave debt in place until long beyond when most young adults marry and have children. A one-time loan forgiveness policy also does not address one of the main underlying causes of growing student debt that will continue to affect future generations of college students: increases in the cost of tuition at both public and private universities (U.S. Department of Education, 2019). Policy remedies that focus on reducing loans, such as tuition subsidies or free tuition at public universities and increased direct funding for higher education, along with policies focusing on forgiving debt, would in combination be more likely to address both underlying causal mechanisms—financial instability and norms about debt—linking student debt and family formation delay.

Findings indicate that although student loans can enable social mobility in the form of increasing opportunities to invest in human capital for those who might otherwise forgo a college education, they also temper the degree of attainable mobility. The debt students face as a result may exacerbate inequality among college graduates by reducing the disposable income of those with loans. Norms related to student loans and how they should affect family formation can further exacerbate that inequality, by leading those with loans to be more likely to marry others with loans, less likely to marry in general, and more likely to forgo or delay childbearing. Student loans therefore create a unique dimension of class inequality, enabling higher education for those unable to pay for college up front, but leading to stratified outcomes among the highly educated.

## ENDNOTES

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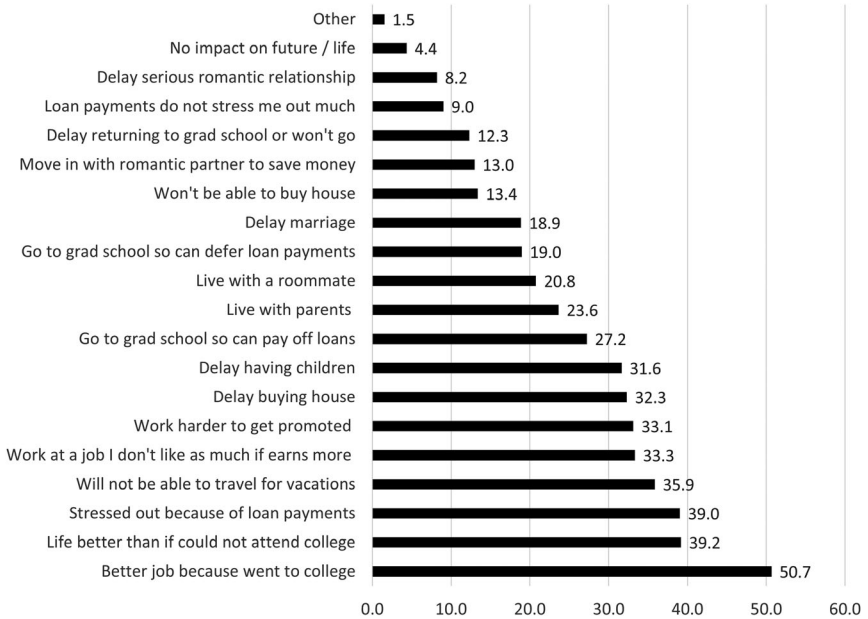
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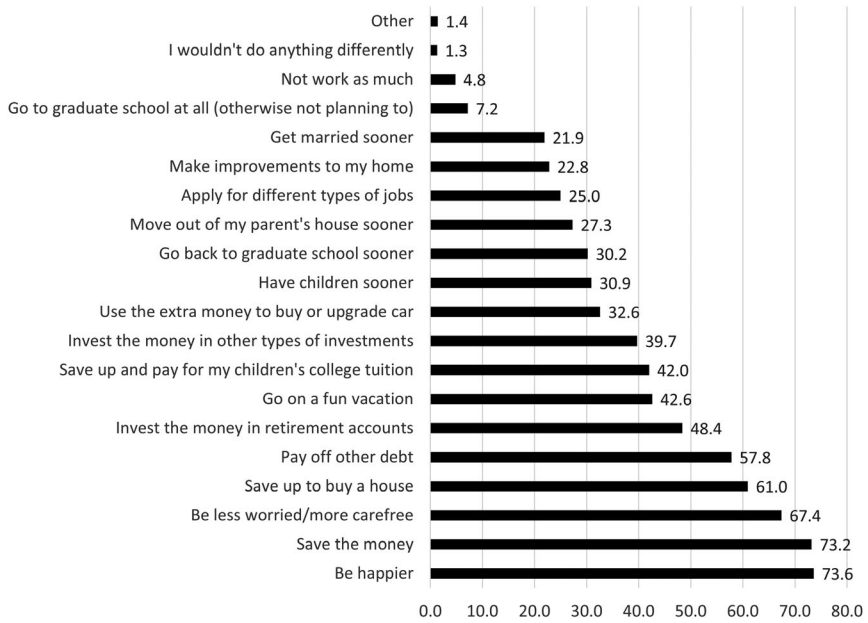
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## Appendix



**Figure A1** When you are done with your undergraduate degree, how do you expect student loan payments will affect your future?



**Figure A2** If Congress decided to forgive all student loan debt, what would you do differently?

**Table A1 Sensitivity Tests for Measurement of Loan Amount: Odds Ratios for Effect of Loan Amount on Outcomes**

	Missing loans imputed as average + control for missing	Missing loan amount removed from dataset	Missing loans imputed as 0 + control for missing
<i>How will loans impact future? (if loans)</i>			
Delay children	1.01	1.02	1.01
Delay marriage	1.03	1.03	1.03
Delay serious romantic relationships	1.07**	1.07**	1.07**
N	1950	1310	1950
<i>If Congress forgives loans (if loans)</i>			
Have children sooner	1.02	1.02	1.02
Get married sooner	.99	.99	.99
N	1942	1304	1942
<i>If considering marrying partner and discloses \$75k loans</i>			
Yes, I would not agree to or put off marriage	.88***	.88***	.88***
It might affect my plans depending on the circumstances	.95**	.94**	.95**
N	2968	2303	2968
<i>If partner of 6 months has \$100k loans</i>			
Hold off on moving in	.94**	.94**	.94**

**Table A1**  
(continued)

	Missing loans imputed as aver- age + control for missing	Missing loan amount removed from dataset	Missing loans imputed as 0 + control for missing
Hold off on marriage until paid off some debt	.98	.98	.98
Hold off on marriage until paid off all debt	.92*	.92*	.92*
Start paying for more things in relationship	.96 <sup>†</sup>	.96 <sup>†</sup>	.96 <sup>†</sup>
Feel closer to them because have debt	1.18***	1.19***	1.18***
Avoid expensive trips / activities	1.00	1.00	1.00
Have a talk about plan to pay it off	.99	.99	.99
Be worried they were irresponsible with money	.94*	.94*	.94*
Feel bad for them	.99	.99	.99
Consider breaking up	.82***	.82***	.82***
Definitely break up	.82	.83	.82
No effect	1.06**	1.06***	1.06**
N	2961	2299	2961

**Table A1**  
(continued)

	Missing loans imputed as average + control for missing	Missing loan amount removed from dataset	Missing loans imputed as 0 + control for missing
<i>People should delay marriage if loan debt</i>	.93**	.93**	.93**
N	2967	2299	2967
<i>People should delay kids if loan debt</i>	.93***	.93***	.93
N	2956	2290	2956
<i>People should not have kids if can't pay off debt by 50s</i>	.97	.97	.97
N	2967	2298	2967

Note: <sup>†</sup> $p < .10$  \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  indicates significant differences in random effects models, controlling for clustering within universities, gender, race, class standing, parent's education and marital status, and religiosity.