

**Tentative title:** Who benefit from college education? Relationship outcomes of cohabitators in the United States.

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## **Introduction and Background**

In the United States, college graduates today are more likely to experience patterns of union formation that lead to stable family life. Specifically, as compared with their lower-educated peers, college graduates are more likely to marry and stay in marriage. When cohabiting, they are also more likely to advance their cohabiting relationships to marriage (Ellwood and Jencks 2004; Goldstein and Kenney 2001; Raley and Bumpass 2003; Smock and Manning 1997). By focusing on the union transition behavior of contemporary U.S. young adult cohabitators, this study examines how past *college experiences* shape the process of entering marriage beyond degree attainment.

Two emerging trends in the higher education serve as important motive for this study. One is the expansion of opportunities in higher education. The other is the rising cost of higher education and increasing loads of college debts among recent college students (Rothstein and Rouse 2011). Over the past decades, access to higher education in the U.S. has dramatically increased with more disparate institutes (e.g., two-year community colleges) offering a larger number of choices and opportunities to a more heterogeneous population of students with respect to their socioeconomic background and academic preparation. Although college enrollment rates are high today, non-completion rates are also high (Attewell, Heil and Reisel 2011), resulting in a growing population of the *some-college* educated—ever enrolled in college but not receiving a college degree. The rising cost of college education and increasing loads of college loan debts among more recent college-goers may play a more critical role in influencing the wellbeing of this some-college educated folks. As Bozick and Estacion (2014) found that among those college degree recipients, student loan debts are negatively associated with female college graduates' odds of entering marriages despite the promising labor market prospects a college degree promises or actually brings, it is likely for us to expect that college experience that incurs student loans but does not result in a degree will place young adults in a difficult situation when it comes to marriage.

The goal of this current study is to extend the existing scholarly understanding of how higher education shapes American young adults' family formation behavior by focusing cohabitators' union transition and see how varied levels of college experience interact with loads of college loan debts and labor market outcomes in shaping cohabitators' union transition behavior—progression to marriage or separation. I will first develop more detailed measures that can better capture the college education experience of those who matriculated at a college but did not attain a college degree by considering, for example, the cumulative time enrolled in college as well as number of credits earned. Then, I will consider how education quality, namely, whether it is a two-year or four-year college, student loans, and labor market outcomes may condition the association between college education and cohabitators' union transition.

### **Data and Methods**

Data for the study are from the fifteen rounds of National Longitudinal Survey of Youth (1997). NLSY 97 respondents were born between 1980 and 1984. At the fifteen round (2011), they were aged between 27 and 32. Data sets for the analysis are person-month data sets include all premarital cohabiting unions that NLSY respondents had ever initiated from age 23 up to 32. The reason for this age restriction is because by age 23, majority of (on-time) college-goers could have received college degrees. The analytic sample comprises 1,714 female respondents with 2,197 cohabiting relationships and 1,624 men with 2,130 cohabiting relationships.

To capture the variety in levels of college education, I differentiate those who have ever enrolled in college from those who actually received a degree. That is, I measure the cumulative levels of education cohabitators received at the start of cohabiting union with five mutually exclusive categories: 1) No high school diplomas, 2) Have high school or GED, 3) Ever attended a two-year or four-year postsecondary institution but no degrees attained, 4) AA recipients, and 5) BA recipients. Table 1 shows the educational compositions of cohabiting relationships. 40% - 45 % of cohabiting relationships initiated when cohabitators were less-than high school-educated. 8.46% of the cohabiting relationships were initiated when female cohabitators were some-college educated with no degrees attained—nearly twice of that for male respondents when they initiated cohabitation. 28.22 % of cohabiting relationships were initiated

when female respondents have received BA degrees; the corresponding number in male cohabiting sample is only 16.67%.

[Table 1 inserted here]

I estimate discrete-time event history models with multinomial logistic regression respectively for men and women to understand the role of student loan debts in conditioning the influence of college education on transitioning to marriage from cohabitation. Models also include variables such as age at cohabitation, parental education, family structure at age 12, employment status and earnings, residential areas, and duration of union as control variables.

### **Some Preliminary Results**

Table 2 shows the coefficients from multinomial logistic regression models estimating union transitions for men and women, separately. The results show that for male cohabitators, past post-secondary education experience is positively associated with the odds of transitioning to marriage no matter whether they attain a degree (AA or BA). However, male cohabitators who received a Bachelor Degree is significantly less likely to break up as compared with those who had some college education but received no degree or only receive an AA degree. Results for women are slightly different. The results show that past college experience facilitates progression to marriage only for those who have a BA degree. Those who receive an AA degree are no more likely than those who have college experience but no degree attained to transition to marriage. These preliminary results suggest that how college enrollment experience shape union transition behavior of cohabitators may go beyond degree attainment and vary by sex.

### **Future Plan**

In the future analysis, I will include measures such as cumulative number of college credits to examine the associations between college experience and cohabitators' marital behavior and how college loan debt plays a role in conditioning how college education shapes young adults' union formation particularly when they are in the cohabiting relationships.

Table1 Educational attainment at the start of each  
premarital cohabiting relationship, by sex (Weighted %)

	Female	Male
Less than high school	40.25	44.91
HS/GED	17.47	29.88
Some College no degrees	8.46	4.22
AA	5.59	4.32
BA	28.22	16.67
# of pre-marital cohabitations	2,197	2,130

Table 2 Coefficients from multinomial logistic regression models estimating relationship outcomes of premarital cohabiting

	Men		Women	
	Marry vs Stay Intact	Separate vs Stay	Marry vs Stay Intact	Separate vs Stay
<i>Race-ethnicity (Ref. Non-Hispanic White)</i>				
African Americans	-0.306*** (0.08)	0.178 (0.11)	-0.688*** (0.07)	0.419*** (0.10)
Hispanics	-0.412*** (0.10)	0.022 (0.08)	-0.478*** (0.06)	0.142* (0.06)
Other non-Hispanic racial-ethnic groups	-0.743*** (0.04)	0.212+ (0.11)	-0.473* (0.21)	0.062 (0.13)
<i>Age at cohabitation</i>				
Age at cohabitation	-1.225*** (0.25)	-0.709* (0.31)	0.024 (0.15)	-0.676* (0.29)
Age at cohabitation ^2	0.023*** (0.00)	0.012* (0.01)	-0.001 (0.00)	0.012* (0.01)
<i>Annual earnings (log\$0</i>				
Annual earnings (log\$0	0.116+ (0.06)	0.048 (0.05)	0.094* (0.05)	-0.018 (0.02)
<i>Employment Status (Ref. not employed)</i>				
Full-time	0.033 (0.09)	-0.443*** (0.05)	-0.006 (0.06)	-0.292*** (0.07)
Part-time	-0.291* (0.13)	-0.127* (0.06)	-0.110 (0.14)	-0.263*** (0.06)
<i>Educational levels at the start of cohabitation (Ref. Some college educated no degrees received)</i>				
No high school diplomas	-0.364*** (0.05)	0.179 (0.14)	-0.220** (0.07)	0.138 (0.11)
High school or GED	-0.545*** (0.07)	0.150 (0.16)	-0.443*** (0.11)	0.083 (0.15)
AA degrees	-0.071 (0.06)	-0.037 (0.15)	-0.106 (0.13)	0.178 (0.26)
BA degrees	0.039 (0.03)	-0.303*** (0.07)	0.198*** (0.04)	-0.034 (0.12)
Constant	11.241*** (2.89)	6.278 (4.69)	-4.579** (1.70)	5.911 (3.91)
# of person-months	44934		43574	

Standard errors in parentheses

+ p<0.1 \* p<0.05 \*\* p<0.01 \*\*\* p<0.001

## References

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