"Revisiting the Decoupling of Marriage and Childbearing: Couples' Fertility Intentions and Unwed Mothers' Relationship Trajectories"

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Drawing on the 2006-2015 cycles of the National Survey of Family Growth (NSFG) pregnancy file, I consider mothers' relationship trajectories following a first, nonmarital birth. Among 5,211 mothers having a first nonmarital birth, 2,336 occurred in cohabiting unions with 2,875 occurring to single mother. Discrete-time event history models (n = 92,681 person-months for cohabiting mothers and n = 156,991 person-months for single mothers), document an association between couples' intentions and relationship trajectories. Preliminary findings suggest that consideration of couples' intentions improves our understanding of unintended childbearing and stability of cohabiting birth unions. Couples where the mother did not intend the birth experienced a higher risk of dissolution, but couples' intentions had less consistent associations with the transition to marriage. The association between couples' intentions and single mothers' relationship trajectories was largely explained by sociodemographic characteristics, which underscores the importance of selection in understanding single mothers' relationship trajectories.

The decoupling of marriage and childbearing has emerged as one of the most influential trends in the contemporary US family and has been used to frame the vast majority of recent scholarship on the union context of childbearing. In the US, nonmarital childbearing is concentrated among economically disadvantaged, non-white, and younger parents (Smock and Greenland 2010). Nonmarital childbearing can occur to cohabiting or single parents. Recent scholarship has illustrated that the increase in nonmarital childbearing is driven by increases in births to cohabiting mothers, but a sizeable portion of nonmarital childbearing still occurs to single mothers (Manning et al. 2015).

Nonmarital Childbearing and Relationship Trajectories

Much work on nonmarital childbearing was spurred by US-based marriage promotion policies that were intended to lift unwed mothers and their children out of poverty. Key findings from this body of scholarship emphasized: (1) unwed mothers expressed a desire to marry, but faced barriers to do so (Edin and Kefalas 2005; Gibson-Davis et al. 2005), (2) unwed mothers do not reap the same benefits from marriages as their counterparts who entered marriage childless (Williams et al. 2008), and (3) unwed mothers who transitioned to marriage and subsequently divorced experienced a decline in economic well-being compared to their initial, unwed state (Lichter et al. 2003).

In light of these findings, recent developments have either focused on cohabiting birth unions and relationship stability (Guzzo and Hayford 2012; Manlove et al. 2012) or incorporating dates of conception into discussions of marital childbearing (Gibson-Davis and Rackin 2014; Gibson-Davis et al. 2016). This research has improved our understanding of unintended childbearing and led us to develop a more nuanced understanding of the association between marriage and childbearing. However, the majority of research in this area has

considered *individual* experiences in nonmarital childbearing and union outcomes, typically among mothers. Some have considered nonmarital childbearing and relationship outcomes as a *couple-level* phenomenon by considering both mothers' and fathers' perspectives (see Gibson-Davis et al. 2005), but this approach is less common than those considering unwed mothers and their subsequent union transitions.

I assert that fertility intentions, which have already been linked with nonmarital childbearing (Finer and Zolna 2014; Musick 2002), stability among cohabiting birth unions (Guzzo and Hayford 2012; Manlove et al. 2012), and relationship trajectories among unwed mothers (Lichter et al. 2016; Maddow-Zimet et al. 2016) provide a meaningful framework that facilitates a couple-level approach to nonmarital childbearing and relationship trajectories. In addition, the current study provides an important update to prior work on nonmarital childbearing and relationship trajectories (Carlson et al. 2004; Maddow-Zimet et al. 2016), by considering intentions and union transitions among unwed mothers in a recent, nationally representative sample.

Couples' Intentions and Relationship Trajectories

Prior scholarship has emphasized that couples provide a more appropriate unit of analysis when linking childbearing desires with birth outcomes (Thomson 1997). Yet, most research on unintended childbearing has continued to employ an individual-level approach to unintended childbearing (Stykes 2018). An emergent body of scholarship has demonstrated that couples' intentions provide a more nuanced framework to understand how unintended childbearing is associated with subsequent health behaviors (Hohmann-Mariott 2009; Martin et al. 2007; Moore et al. 2009), child outcomes (Saleem and Surkan 2014), and relationship stability among cohabiting parents (Guzzo and Hayford 2012; Manlove et al. 2012). This body of research has

emphasized the utility of a couple-level approach, but it has not yet considered how couples' fertility intentions are linked with relationship trajectories among both cohabiting and single mothers.

A notable challenge that accompanies couple approaches to unintended childbearing concerns data availability. However, Stykes (2018) demonstrated that mothers' proxy reports of the birth father's intentions (which are available in the NSFG) show promise in this regard as mothers' proxy reports of fathers' intentions matched men's own reports for 75% of couples.

Current Research

Herein, I consider the association between couples' intentions (as reported by mothers) and relationship trajectories among cohabiting and single mothers. After documenting variation in mothers' sociodemographic characteristics according to couples' intentions (i.e., both intended, only mother intended, only father intended, and neither intended) for cohabiting and single mothers separately, I employ discrete-time event history techniques to better understand how couples' intentions are associated with mothers' relationship trajectories.

DATA and METHOD

The NSFG is a nationally representative sample of men and women aged 15-44 funded by the National Center for Health Statistics. Since 2006, the NSFG employed a continuous interviewing cycle, which facilitates pooled analyses of multiples cycles. These data include detailed and complete relationship and fertility histories for women as well as demographic characteristics. The NSFG data are the only public-use data set that can facilitate analyses of couples' intentions and its association with mothers' relationship trajectories (via exhaustive marital histories with specific dates of transitions).

Sample Selection

39,393 pregnancies were identified in the pooled 2006-15 pregnancy files. I apply three sample restrictions to identify my analytic sample. First, analyses were limited to first births (n = 10,157). Then, only couples having clean data (i.e., nonmissing or "known") on both mothers' and fathers' fertility intentions were included (n = 9,264). Lastly, analyses were limited to mothers who were unwed at the time of their first birth (n = 2,336 cohabiting mothers an n = 2,875 single mothers).

Measures

Dependent variables. Among cohabiting mothers, I created a categorical indicator that differentiated couples who were: (1) censored by interview, or remained cohabiting (reference), (2) reported dissolving the union prior to the date of interview, or (3) transitioned to marriage prior to interview. In contrast, for single mothers, I differentiated between those who were: (1) censored by interview, or remained single mothers through the period of observation (reference), (2) entered into a cohabiting relationship after experiencing a single birth, or (3) entered directly into a marital union after experiencing a single birth.

Focal Independent variable. The NSFG asked women a series of questions to assess fertility intentions. Initially, respondents were asked, "Right before you became pregnant, did you yourself want to have a(nother) baby at any time in the future?" Those responding positively were then asked a question about the timing of the pregnancy, "So would you say you became pregnant too soon, at about the right time, or later than you wanted?" Congruent questions were asked of the female respondents' perceptions of the child's father. Based on this information, I constructed a categorical indicator that cross-referenced mothers' own intentions with the father's (i.e., both parents intended the birth (reference), only the mother intended the birth, only the father intended the birth, and neither parent intended the birth).

Additional covariates. I control for a number of maternal sociodemographic characteristics: *Racial and ethnic status* was operationalized as a categorical variable with four responses: white (reference), black, Hispanic, and "other" (including multiracial/ethnic). *Educational attainment* was also coded as a categorical indicator of the mother's highest level of education (at the time of interview): at least a bachelor's degree (reference), some college experience, high school diploma/GED, and no degree. *Age at first birth* was a continuous indicator ranging from 9 to 44. *Household poverty status* situated the respondent's household income in relation to the poverty threshold and was coded as a categorical indicator: household income is at least 275% of the poverty threshold (reference), household income 200-274% of the poverty threshold, household income 150-199% of the poverty threshold, household income 100-149% of the poverty threshold, and household income is below the poverty threshold. The *number of additional children* is a continuous variable that notes the number of higher-order births a mother experienced. A crude indicator of *family background* considers the mothers' family structures growing up. Respondents who lived with married biological/adoptive parents during adolescence up are flagged as "1" and all other scenarios are "0." Lastly, *religious attendance* was coded as a continuous indicator ranging from 0 to 6, where higher numbers correspond to more frequent church attendance. In models predicting dissolution (see below), we also account for the presence of additional children. In addition analyses control for year of birth.

Analytic Strategy

Analyses proceed in two distinct stages. The first documents variation in couples' intentions among unwed mothers. Then, data were transformed into a person-month data file (n = 92,681 for cohabiting mothers and n = 156,991 for single mothers), in order to assess variation in

unwed mothers' relationship trajectories according to couples' fertility intentions. Life table estimates describe how relationship trajectories vary by couples' intentions. Then, multinomial logistic regression analyses are estimated to assess multivariate associations. Duration dependence is modeled as a continuous, linear indicator of *months* since birth.

PRELIMINARY FINDINGS

Variation in Couples' Intentions

Panel A in Table 1 presents mothers' characteristics among the cohabiting and single analytic samples according to couples' fertility intentions. *Among cohabiting mothers*, similar shares report breaking up or remaining in stable cohabiting unions (38%) whereas just under one-in-four transitioned to marriage (23%). Almost half (47%) were white with one-third being Hispanic and approximately 10% being either black or of an "other" racial/ethnic status. In terms of mothers' education, the majority (64%) of cohabiting mothers were either high school graduates or had some college experience but no degree. One-in-ten cohabiting mothers was college-educated, and just over one-fourth had no degree. The average age at first birth was 22, and the majority (58%) of cohabiting mothers were either impoverished or near poverty. On average, cohabiting mothers had one additional child, reported somewhat low levels of religiosity (2.5 out of 6) with the majority having grown up with two married, biological parents. This table also suggests that mothers' union outcomes and sociodemographic characteristics differ according to couples' fertility intentions. A more detailed discussion (with bivariate analyses) will be presented in the full paper.

Panel B in Table 2 provides a description of single mothers in this sample. Two-thirds of single mothers will go on to form a cohabiting relationship. Though it is much less common, a reasonable share of single mothers (14%) enter into marriage directly. Single mothers are

disproportionately black (34%) with white mothers being notably underrepresented. In addition, single mothers report, relatively low levels of education, with the majority having either a high school diploma or some college experience. On average, single mothers were 20 at time of birth. Well over half (60%) of single mothers' household incomes fall under 150% of the poverty threshold. On average, single mothers have 1.5 additional children and report slightly higher levels of religious attendance than cohabitors. Almost half (46%) were raised by two married, biological parents. Once again, descriptive patterns suggest that noteworthy variation exists in both single mothers' union formation and sociodemographic characteristics according to couples' fertility intentions. A more detailed discussion (with bivariate analyses) will be presented in the full paper.

Table 1. Mothers' Characteristics According to Couple's Fertility Intentions

Panel A: Among those Cohabiting at 1st Birth

	Total		Both Intended		Only Mother Intended		Only Father Intended		Neither Intended	
Union Outcome										
Remain cohabiting	786	38.5	287	38.1	73	37.7	123	38.9	303	38.9
Dissolve	1,039	38.3	275	26.9	83	39.6	229	45.6	452	44.8
Transition to Marriage	511	23.2	244	35.0	51	22.7	61	15.5	155	16.3
Racial/ethnic status										
White	879	46.6	241	39.2	93	52.2	117	39.6	428	54.2
Black	373	10.8	121	8.5	30	8.7	98	15.4	124	11.4
Hispanic	930	33.6	401	41.3	71	27.4	164	39.1	294	26.4
Other (incl. multiracial/ethnic)	154	9.0	43	11.0	13	11.7	34	5.9	64	8.0
Educational Attainment										
Bachelor's degree or higher	160	10.4	51	11.2	18	7.3	19	5.3	72	12.5
Some college	657	31.1	177	24.1	68	31.5	109	26.8	303	38.6
High school/GED	805	32.7	268	31.7	70	37.9	150	39.2	317	29.7
No degree	714	25.8	310	33.0	51	23.3	135	28.7	218	19.2
Age at first birth	21.8	0.2	23.2	0.3	23.1	0.4	20.5	0.3	20.9	0.3
Household poverty status										
At least 274% of poverty threshold	341	20.9	107	18.2	29	16.5	53	15.0	152	26.6
200-275% of poverty threshold	254	9.9	77	9.6	24	13.1	39	8.2	114	10.1
150-199% of poverty threshold	228	11.3	68	8.6	25	11.6	37	8.4	98	14.7
100-149% of poverty threshold	458	16.8	156	16.5	32	14.4	78	17.9	192	17.2
< 100% of poverty threshold	1,005	41.1	398	47.1	97	44.4	206	50.5	354	31.4
Number of additional children	1.2	0.0	1.1	0.1	0.9	0.1	1.6	0.1	1.1	0.1
Family Background										
Two married, biological parents	1,066	51.1	413	55.4	101	54.7	161	45.9	391	48.7
Religious Attendance	2.5	0.1	2.5	0.1	2.4	0.3	2.6	0.2	2.3	0.1
N	2,336		806	34.0	207	9.9	413	15.9	910	40.2

Table 1 (continued). Mothers' Characteristics According to Couple's Fertility Intentions

Panel B: Among those Single at 1st Birth

	Total		Both Intended		Only Mother Intended		Only Father Intended		Neither Intended	
Union Outcome										
Enter a cohabiting union	1,798	66.1	269	56.0	141	65.5	299	67.6	1,089	68.5
Enter a direct marriage	316	14.3	65	22.7	19	9.4	46	11.5	186	13.3
Racial/ethnic status										
White	776	37.8	74	229.	73	36.4	77	26.5	552	44.8
Black	1,270	34.4	208	37.5	89	24.2	277	45.1	696	31.1
Hispanic	659	20.0	158	33.1	51	17.8	98	21.9	352	16.3
Other (incl. multiracial/ethnic)	170	7.8	32	6.5	18	11.6	19	6.5	101	7.8
Educational Attainment										
Bachelor's degree or higher	204	9.2	29	9.2	22	9.6	28	5.5	125	10.1
Some college	831	28.1	114	23.6	73	27.5	142	23.5	502	30.4
High school/GED	1,041	40.4	161	36.7	88	45.8	172	46.0	620	39.3
No degree	799	22.3	168	30.5	48	17.1	129	25.0	454	20.2
Age at first birth	19.6	0.1	21.9	0.4	22.6	0.5	18.9	0.2	18.8	0.1
Household poverty status										
At least 275% of poverty threshold	377	17.1	50	11.5	25	12.6	39	10.8	263	20.6
200-274% of poverty threshold	299	9.9	40	10.1	24	8.5	41	5.0	194	11.3
150-199% of poverty threshold	294	11.8	42	7.1	17	5.9	55	12.1	180	13.7
100-149% of poverty threshold	440	15.4	72	19.3	36	14.3	66	12.8	266	15.1
< 100% of poverty threshold	1,465	45.8	268	52.0	129	58.7	270	59.3	798	39.3
Number of additional children	1.4	0.0	1.4	0.1	1.0	0.1	1.6	0.1	1.4	0.1
Family Background										
Two married, biological parents	1,168	46.0	233	51.0	108	52.1	158	39.5	669	45.5
Religious Attendance	2.8	0.1	2.9	0.2	2.7	0.2	2.8	0.2	2.7	0.1
N	2,875		472	16.6	231	7.9	471	11.5	1,701	13.3

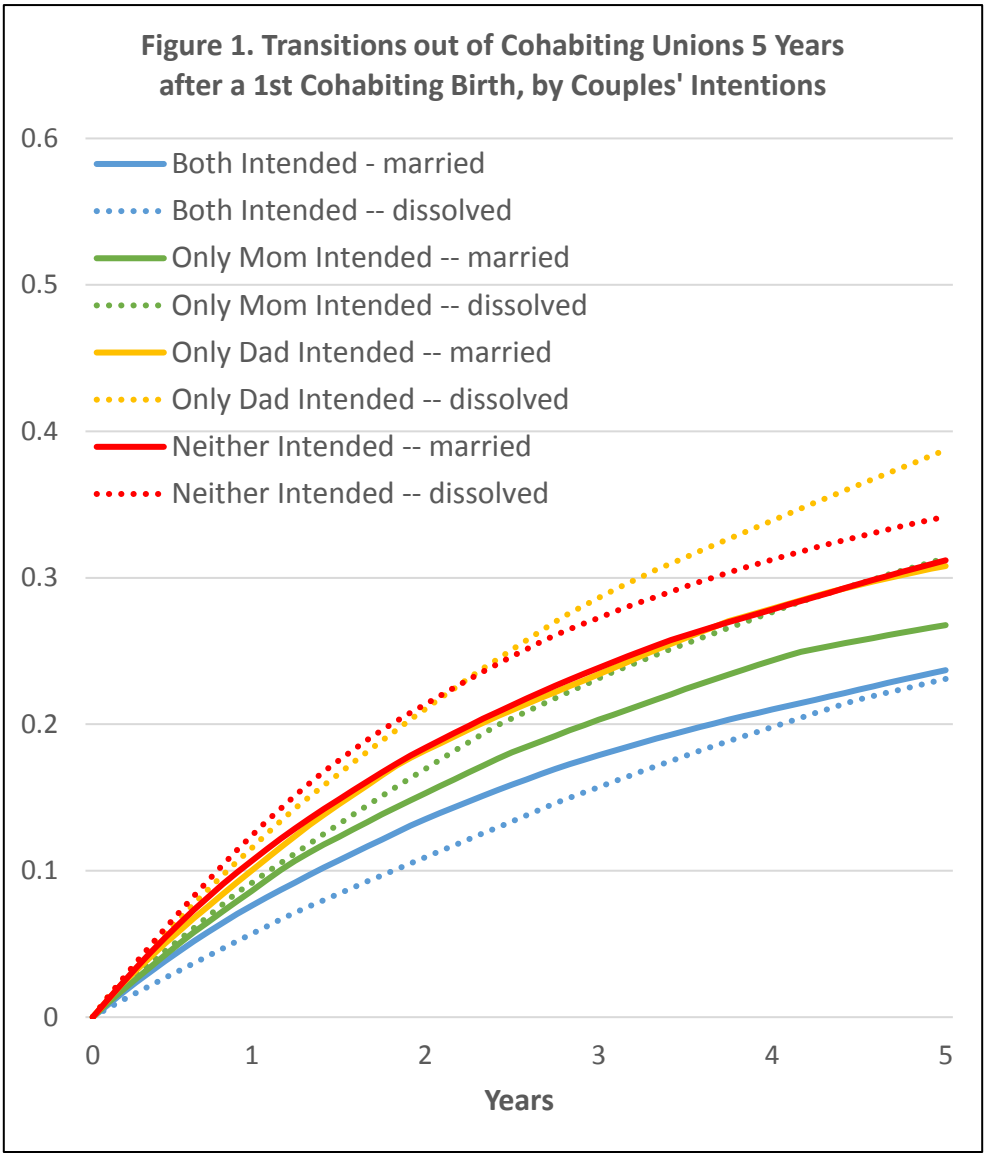

Figure 1 depicts the findings from multiple decrement life table estimates that model the transition to marriage and dissolution as competing risks in the five years following a first, cohabiting birth. Cohabiting birth unions where both parents intended the union are the most stable and have a comparable risk of ending in the transition to marriage or dissolution. Those couples where only the father intended the birth are the least stable – with most ending in dissolution.

Figure 2 emphasizes single mothers' transitions into either marital or cohabiting unions in the decade following a first, single birth. Differences in couples' intentions appear less stark. Rather, the key divergence occurs when considering entry into cohabitation (which the majority of all mothers do) versus direct entry into marriage – which is quite common regardless of couples' intentions.

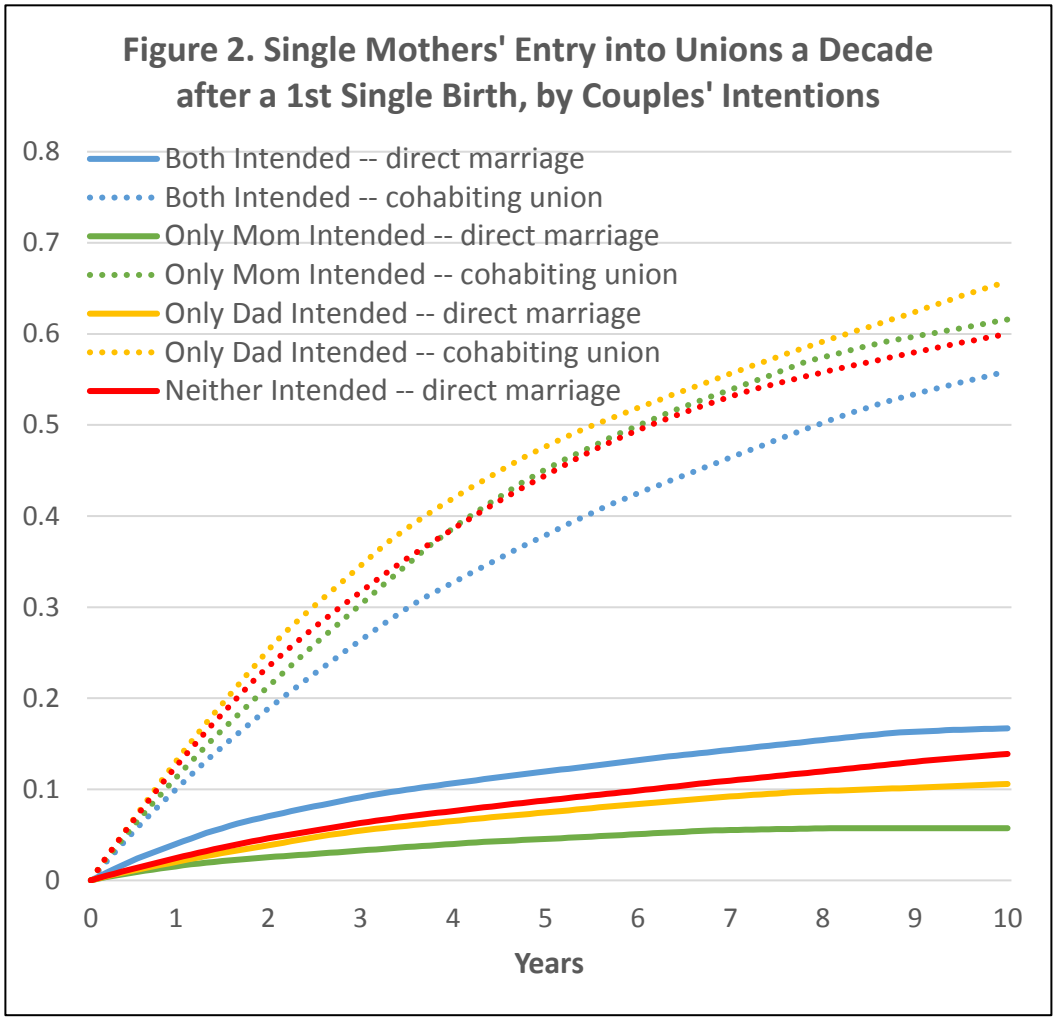

Table 2 presents relative risk ratios from multinomial logistic regression models that predict the transition to marriage and dissolution as competing risks for cohabiting mothers. Model 1 only considers couples' intentions, months since birth, and year of birth (covariate not shown). Findings indicate that couples where both parents intended the birth are relatively stable. Specifically, when only the mother intended the birth (rather than both parents), there is a 68% increase in the odds of dissolving the cohabiting union. The increase in dissolution for couples where only the father or neither parent intended the birth, rather than both parents, is more pronounced. In terms of transitioning to marriage, fewer significant differences exist. When only the father (rather than both parents intended the birth), there is a 27% decrease in the odds of transitioning to marriage. A similar, though marginally significant finding existed for situations where only the mother intended the birth. Model 2 demonstrates that conclusions remain largely unchanged when sociodemographic variables are introduced in the model. The percent increase in the risk of dissolution is less pronounced for couples where only the father or neither parent intended the birth, and there is no longer a statistically significant in the risk of dissolution for couples where only the mother versus neither parent intended the birth. In terms of the transition to marriage, there is no real change after including covariates. The marginally significant difference in couples were only versus neither parent intended the birth is reduced to nonsignficance.

Table 2. Multinomial Logistic Regression Analyses predicting Transitions out of Cohabiting First Birth Unions, Presenting Relative Risk Ratios

	Model 1 (Remain Intact)		*Model 2* (Remain Intact)	
	Dissolve	Marry	Dissolve	Marry
Intercept	0.00*	0.00***	0.00	0.00***
Couples' intentions				
(Both intended)				
Only mother intended	1.68 *	0.70 †	1.46	0.71
Only father intended	2.22 ***	0.73 *	2.00***	0.73*
Neither intended	2.31 ***	0.88	1.76***	0.81
Racial/ethnic status				
(White)				
Black			0.82	0.95
Hispanic			0.44***	0.79
Other (incl. multiracial/ethnic)			0.56*	0.89
Educational Attainment				
(Bachelor's degree or higher)				
Some college			0.81	1.32
High school/GED			0.62†	1.85*
No degree			0.79	1.78†
Age at first birth			0.93***	0.98
Household poverty status				
(At least 275% of poverty threshold)				
200-274% of poverty threshold			0.82	0.77
150-199% of poverty threshold			1.25	0.97
100-149% of poverty threshold			1.11	0.55*
< 100% of poverty threshold			1.43	0.68†
Number of additional children			0.82***	0.55***
Family Background				
Two married, biological parents			0.93	1.30*
Religious Attendance			0.98	0.97
Duration (in months)	0.99 **	1.04 ***	0.99*	1.05***
Log Likelihood	-8,178.35		-8,041.00	
N	92,681		92,681	

† p<0.10, * p<0.05, ** p<0.01, *** p<0.001.

Please note. Due to small sample sizes, birth year was included as a control rather than dummy birth cohorts in all models.

Table 3. Multinomial Logistic Regression Analyses predicting Single Mothers' Transitions into Cohabiting versus Marital Unions, Presenting Relative Risk Ratios

	Model 1 (Remain Single)		*Model 2* (Remain Single)	
	Cohabit	Marry	Cohabit	Marry
Intercept	0.00**	0.00	0.00***	0.00
Couples' intentions				
(Both intended)				
Only mother intended	1.13	0.43*	1.14	0.41 †
Only father intended	1.20	0.50*	1.16	0.53 †
Neither intended	1.25*	0.56*	1.10	0.51 *
Racial/ethnic status				
(White)				
Black			0.54***	0.43 ***
Hispanic			0.75**	0.94
Other (incl. multiracial/ethnic)			0.64**	0.67
Educational Attainment				
(Bachelor's degree or higher)				
Some college			1.39*	0.77
High school/GED			1.67**	0.66
No degree			1.42†	0.46 *
Age at first birth			0.97*	1.00
Household poverty status				
(At least 275% of poverty threshold)				
200-274% of poverty threshold			1.20	1.01
150-199% of poverty threshold			0.95	1.02
100-149% of poverty threshold			0.96	1.24
< 100% of poverty threshold			0.77*	0.72
Number of additional children			1.11**	1.19 **
Family Background				
Two married, biological parents			0.87†	0.82
Religious Attendance			0.94 **	1.13 **
Duration (in months)	0.99***	0.99**	0.99***	0.99 *
Log Likelihood	-1,1974.49		-1,1807.56	
N	156,991		156,991	

† p<0.10, * p<0.05, ** p<0.01, *** p<0.001.

Please note. Due to small sample sizes, birth year was included as a control rather than dummy birth cohorts.

Lastly, Table 3 presents single mothers' union formation following a single, first birth. It is not surprising that mothers' sociodemographic characteristics appear to be a more salient predictor of subsequent union formation among *single* mothers. However, initial models (only controlling for months since birth and birth year) demonstrate that neither parent intending the birth (rather than both parents) is associated with an increased odds of entering a cohabiting relationships. In contrast, both parents intending the birth, is associated with an increased risk in directly entering a marital union. After sociodemographic characteristics are modeled, couples' intentions are no longer associated with single mothers' entry into cohabiting union. However, couples' intentions remain linked to the likelihood that mothers enter directly into marriage. Once again, both parents intending the birth is associated with an increased odds of marrying directly – though the difference was only marginally significant when contrasting couples where at least one parent intended the birth.

NEXT STEPS

The completed paper, which I am confident will be completed in time for PAA, will include:

1. a more comprehensive, thematic literature review that:
    a. justifies *all* covariates and the focus on first births,
    b. provides a more detailed discussion of recent developments on intentions and relationship trajectories broadly,
    c. and defends the traditional survey approach to unintended childbearing
2. a traditional current study section wherein contributions to existing work frame the discussion of guiding research questions and hypotheses,
3. a more thorough, technical discussion of the results (including bivariate statistics),
4. additional covariates:
    a. prior relationship histories and
    b. and male partners' fertility histories
5. sensitivity analyses for duration dependence (i.e., simple linear versus quadratic etc.) will be conducted.
6. a traditional discussion section – having a more substantive discussion of findings in relation to existing research, discussion of limitations, and implications for future research/policy.

PRELIMINARY REFERENCES

Carlson, Marcia, Sara McLanahan, and Paula England. 2004. "Union Formation in Fragile Families." *Demography* 41(2): 237-261.

Edin, Kathryn and Maria Kefalas. 2005. *Promises I can Keep: Why Poor Women put Motherhood before Marriage.* University of California Press: Berkeley, CA.

Finer, Lawrence B. and Mia R. Zolna. 2014. "Shifts in Intended and Unintended Pregnancies in the United States, 2001-2008." *American Journal of Public Health* 104(1):43-48.

Gibson-Davis, Christina M., Elizaboth O. Ananat, and Anna Gassman-Pines. 2016. "Midpregnancy Marriage and Divorce: Why the Death of Shotgun Marriage has been Greatly Exaggerated." *Demography* 53(6): 1693-1715.

Gibson-Davis, Christina M., Kathryn Edin, and Sarah McLanahan. 2005. "High Hopes but Even Higher Expectations: The Retreat from Marriage among Low-Income Couples." *Journal of Marriage and Family* 67(5):1301-1312.

Gibson-Davis, Christina M. and Heather Rackin. 2014. "Marriage or Carriage? Trends in Union Context and Birth Type by Education." *Journal of Marriage and Family* 76(3):506-519.

Guzzo, Karen Benjamin and Sarah R. Hayford. 2012. "Unintended fertility and the stability of coresidential relationships." *Social Science Research* 41:1138-1151.

Hohmann-Marriott, Bryndl E. 2009. "The couple context of pregnancy and its effects on prenatal care and birth outcomes." *Maternal and Child Health Journal* 13(6):745-754.

Korenmann, S., Kaestner, R., & Joyce, T. (2002). Consequences for infants of parental disagreement in pregnancy intention. Perspectives on Sexual and Reproductive Health, 34(3), 198-205.

Lichter, Daniel T., Deborah Roempke Graefe, and J. Brian Brown. 2003. "Is Marriage a Panacea? Union Formation among Economically Disadvantaged Unwed Mothers." *Social Problems* 50(1):60-86.

Licther, Daniel T., Katherine Michelmore, Richard N. Turner, and Sharon Sassler. 2016. "Pathways to a stable union? Pregnancy and childbearing among cohabiting and married couples." *Population Research and Policy Review* 35(3): 377-399.

Maddow-Zimet, Isaac, Laura Duberstein Lindberg, Kathryn Kost, and Alicia Lincoln. 2016. "Are pregnancy intentions associated with transitions into and out of marriage?" *Persepctives on Sexual and Reproductive Health* 48(1): 35-43.

Manning, Wendy D., Susan L. Brown, and J. Bart Stykes. 2015. *Trends in Briths to Single and Cohabiting Mothers, 1980-2013*. Family Profile 15-03. National Center for Family & Marriage Research. Retrieved from https://www.bgsu.edu/content/dam/BGSU/college-of-arts-and-sciences/NCFMR/documents/FP/FP-15-03-birth-trends-single-cohabiting-moms.pdf.

Manlove, Jennifer, Elizabeth Wildsmith, Erum Ikramullah, Suzanne Ryan, Emily Holcombe, Mindy Scott, and Kristen Peterson. 2012. "Union transitions following the birth of a child to cohabiting parents." *Population Research and Policy Review* 31(3): 361-386.

Martin, Laurie T., Michelle J. McNamara, Alyssa S. Milot, Tamara Halle, and Elizabeth C. Hair. 2007. "The effects of father involvement during pregnancy on receipt of prenatal care and maternal smoking." *Maternal and Child Health Journal* 11(6):595-602.

Miller, Warren B, Marjorie R. Sable, and Jonathon J. Beckmeyer. 2009. "Preconception motivation and pregnancy wantedness: Pathways to toddler attachment security." *Journal of Marriage and Family* 71(5):1174-1192.

Moore, Kristin A., Suzanne Ryan., Jennifer Manlove, Lisa Mincieli, and Erin Schelar. 2009. "High-risk subsequent births among co-residential couples: The role of fathers, mothers, and couples." *Fathering: A Journal of Theory, Research, & Practice about Men as Fathers* 7(1):91-102.

Musick, Kelly, 2002. "Planned and Unplanned Childbearing among Unmarried Women." *Journal of Marriage and Family* 88(2):543-572.

Saleem, Haneefa T. and Pamela J. Surkan. 2014. "Parental pregnancy wantedness and child social-emotional development." *Maternal and Child Health Journal* 18(4):930-938.

Smock, Pamela J. and Fiona Rose Greenland. 2010. "Diversity in Pathways to Parenthood: Patterns, Implications, and Emerging Research Directions." *Journal of Marriage and Family* 72(3): 576-593.

Stykes, J. Bart. 2018. "Methodological considerations in couples' fertility intentions: Missing men and the viability of women's proxy reports." *Maternal and Child Health Journal* 22(8):1-8.

Thomson, Elizabeth. 1997. "Couple Childbearing Desires, Intentions, and Births." *Demography* 34(3):343-354.

Williams, Kristi, Sharon Sassler, and Lisa M. Nicholson. 2008. "For Better or For Worse? The Consequences of Marriage and Cohabitation for Single Mothers." *Social Forces* 86(4): 1481-1511.