Chapter 13
The Influence of Intimate Partner Violence on Early and Unintended Parenthood

Marissa Landeis, Karen Benjamin Guzzo, Wendy D. Manning, Monica A. Longmore, and Peggy C. Giordano

13.1 The Influence of Intimate Partner Violence on Early and Unintended Parenthood

Compared to other industrialized countries, the United States has a high rate of unintended childbearing – that is, births occurring early in the life course or occurring to women who do not intend to get pregnant. Just under half of all pregnancies are reported as unintended (Finer & Zolna, 2016). Unintended childbearing is associated negatively with maternal and child health, although the causal linkages are debated (Abajobir et al., 2017; Chowdhury et al., 2020; Claridge, 2021; Everett et al., 2016; Gharaee & Baradaran, 2020; Guzzo & Hayford, 2014; Su, 2017; Yeatman & Smith-Greenaway, 2021). Unintended childbearing occurs disproportionately among young women, socioeconomically disadvantaged populations, and racial/ethnic minority women (Finer & Zolna, 2014, 2016). Although researchers have demonstrated negative associations between unintended childbearing and a range of well-being indicators, there are gaps in the explanations of the processes by which unintended parenthood affects well-being.

Like unintended childbearing, intimate partner violence (IPV) is linked to adverse outcomes for families and children (Black, 2011; Fong et al., 2019; Samankasikorn et al., 2019). Moreover, there is a body of work demonstrating associations between intimate partner violence and unintended childbearing. Scholars have documented

M. Landeis · W. D. Manning · M. A. Longmore · P. C. Giordano
Department of Sociology, and Center for Family and Demographic Research, Bowling Green State University, Bowling Green, OH, USA

K. B. Guzzo (✉)
Department of Sociology, and Carolina Population Center, University of North Carolina, Chapel Hill, NC, USA
e-mail: Karen.Guzzo@unc.edu

R. Schoen (ed.), *The Demography of Transforming Families*, The Springer Series on Demographic Methods and Population Analysis 56,
https://doi.org/10.1007/978-3-031-29666-6_13

two different associations between intimate partner violence and unintended childbearing. First, intimate partner violence may be a significant predictor of unintended childbearing by limiting women's abilities to manage their own sexual and contraceptive behavior (Grace et al., 2022**;** Sarkar, 2008). Specifically, women who have experienced violence may feel that they are unable to choose when and whether to have sex and whether to use contraception, thus increasing the risk of an unintended birth. Conversely, unintended childbearing could lead to intimate partner violence if the stress of an off-time or unwanted pregnancy increased conflict as some evidence has suggested that early pregnancy often is a period of heightened volatility (Macy et al., 2007; Wang et al., 2017). Although both views have received substantial analytical attention, yet more for the first argument, issues of causality and selection remain unaddressed. For instance, rates of intimate partner violence are highest in young adulthood compared with other stages in the life course (Hardesty & Ogolsky, 2020; Johnson et al., 2015), and births that occur in early adulthood are disproportionately characterized as unintended (Ahrens et al., 2018; Cronley et al., 2020; Finer & Zolna, 2016). To the extent that intimate partner violence corresponds with the stage in the life course associated with higher odds of unintended parenthood, the direct causal link may be overstated. In this chapter, we considered whether experiences of intimate partner violence have a causal impact on unintended parenthood using prospective survey data.

Drawing on a population-based cohort sample, the Toledo Adolescent Relationships Study (TARS), and using event history techniques, we investigated whether prior experiences with physical relationship violence were associated with (1) early parenthood (a birth by age 25), and (2) reported intendedness of the first birth. The TARS longitudinal data contained a rich set of correlates potentially associated with both intimate partner violence and unintended parenthood to establish temporal links between prior violence experiences and first births, including whether such births were unintended. Additionally, we incorporated the perspective and experiences of young men, who have received considerably less attention in both intimate partner violence as well as childbearing/parenthood research. The findings make an important contribution to the intimate partner violence and birth intendedness literatures by examining the causal relationship that prior intimate partner violence has, or does not have, with unintended parenthood for young adult men and women.

13.1.1 Intimate Partner Violence and Birth Intendedness

Nationally, roughly one in four women and one in ten men are victims of severe physical violence, and one in three women and one in three men have been pushed, slapped, or shoved by an intimate partner (Smith et al., 2017). Although much research has focused on male-to-female violence, in survey research mutual or reciprocal violence is the most common form of violence reported (Cunradi et al., 2020; Fernández-Montalvo et al., 2020; Giordano et al., 2016).

Intimate partner violence perpetration and victimization are, in general, more common among the disadvantaged (Breiding et al., 2014; Schumacher et al., 2001), as is early and unintended childbearing.

Prior research has demonstrated that women who have experienced intimate partner violence have an increased risk of an early pregnancy (Barber et al., 2018) and an unintended pregnancy (Miller & Silverman, 2010; Samankasikorn et al., 2019). One recent study showed that young women in violent relationships were more than twice as likely to desire a pregnancy than those in non-violent relationships (Barber et al., 2019). One explanation is that intimate partner violence and sexual intimacy are strongly linked, with couples in such volatile relationships often enmeshed and experiencing heightened emotionality (Corbett et al., 2009; Giordano et al., 2010; Kaestle & Halpern, 2005; Powers & Kaukinen, 2022). For example, early research showed that husbands' violence was associated with greater frequency of sexual activity in marriage (DeMaris, 1997). The potential emotionality and passion of these volatile relationships may increase pregnancy desires as a strategy to demonstrate devotion or in an attempt to stabilize the relationship. Some partners also explicitly try to convince a partner to have a baby (Barber et al., 2018), and women often adjust their pregnancy desires to correspond with their partners' desires (Barber et al., 2018; Miller et al., 2017).

Even if young adults who have experienced intimate partner violence, as victims, perpetrators, or both, do not actively desire to have a child, relationship as well as partner characteristics may increase the risk of an early or unintended birth. Issues of reproductive coercion in which partners control women's independent reproductive decisions certainly affect the risk of childbearing (Samankasikorn et al., 2019). Further, some scholars have argued that violent or controlling men want to impregnate their partners as a means of exerting dominance and demonstrating masculinity (Corbett et al., 2009; Grace & Anderson, 2018). Conversely, some young men are worried that partners may try to trap them into a relationship by becoming pregnant (Alexander et al., 2021; Silverman et al., 2007). For example, partners may deliberately sabotage contraceptive methods or exert pressure to have sex without contraception (Barber et al., 2018; Miller & Silverman, 2010).

Even when overt efforts to limit contraceptive use are not present, it seems that intimate partner violence may affect sexual risk-taking. For instance, teens and young adults who have experienced intimate partner violence, even in a past relationship, have reported high levels of risky sexual behaviors, such as greater number of sexual partners and greater frequency of unprotected sex (Alleyne-Green et al., 2012; Kusunoki et al., 2018; Peasant et al., 2018). As such, young adults who have experienced IPV potentially would have an elevated risk of early births, although accounting for contraceptive efficacy – degree of certainty about using contraception in sexual encounters (Longmore et al., 2003) – may attenuate the risk between past intimate partner violence experiences and early births.

Yet, much prior research omits the intentionality of births. There does, however, appear to be a link between intimate partner violence and unintended childbearing (e.g., Miller & Silverman, 2010; Samankasikorn et al., 2019). The relationship appears to work through reproductive coercion (Miller et al., 2014), but more

generally, intimate partner violence may increase the risk of an unintended birth through its effects on contraceptive use. Young adult daters who have experienced relationship violence have also reported less consistent condom use (Braham et al., 2019; Gibbs et al., 2014; Peasant et al., 2018). Women who have experienced physical or emotional abuse were less likely to use their preferred method of contraception relative to women who did not experience relationship abuse (Bergmann & Stockman, 2015; Paul & Mondal, 2021; Williams et al., 2008). If women are unable to control their own reproductive behaviors, then they are more likely to have an unintended birth. The causal ordering of these associations, however, is unclear because (a) pregnancy may lead to IPV, especially an unintended pregnancy that introduces stressors and strains and (b) the standard measurement of unintended itself may be unable to account for ambivalence and risk-taking.

Research on unintended childbearing has increasingly recognized that for many parents, their feelings about a particular birth cannot be neatly categorized (Aiken et al., 2016; Gomez et al., 2018). Thus, looking at both overall risks of a birth and types of births by intendedness provides important nuance to the conversation about intimate partner violence and childbearing.

In sum, although there appear to be ways that intimate partner violence may increase the risk of an unintended or ambivalent birth, it is not clear whether this is always the case, especially given the limitations of prior research. First, past research has relied on cross-sectional data so drawing causal conclusions is not possible (e.g., Miller & Silverman, 2010). Longitudinal data are necessary to analyze the timing of intimate partner violence experiences and parenthood. Second, many studies have only considered women's victimization (e.g., Yakubovich et al., 2018), yet mutual or reciprocal violence is the most common type of violence (Cunradi et al., 2020; Fernández-Montalvo et al., 2020; Giordano et al., 2016) and is also the type of violence in which women are more likely to experience serious physical harm (Smith et al., 2018). As noted above, most studies on intimate partner violence have focused primarily on women's experiences, and most studies of childbearing have focused on women as well; thus, whether intimate partner violence is associated with men's early and unintended parenthood remains unclear. Fourth, the bulk of prior studies have used dichotomous or narrowly defined measures of unintended childbearing (e.g., Yakubovich et al., 2018), ignoring the possibility that intimate partner violence may lead to a sense of ambivalence about childbearing. Finally, most prior research has been restricted to those with a birth, that is, studying the IPV experiences before, during, and after a pregnancy. In doing so, prior studies have not considered how intimate partner violence may be linked to the risk of a birth at all and so are, quite possibly, selecting on the dependent variable.

Perhaps the most critical shortcoming of much prior work is that it has not accounted for key factors that are associated with both intimate partner violence and early and unintended childbearing. For instance, the majority of births to young adults are unintended (Ahrens et al., 2018; Finer & Zolna, 2016), and rates of intimate partner violence are highest during young adulthood relative to other stages

in the life course (Hardesty & Ogolsky, 2020; Johnson et al., 2015). Similarly, relationship violence during pregnancy is concentrated among younger, poorer women, especially those not living with their partners (Daoud et al., 2012). As such, there is reason to expect that the association between intimate partner violence and unintended childbearing is weaker than prior work has suggested. For example, many prior studies are based on samples of only those with intimate partner violence experience, while others have looked only among those with a pregnancy; in both cases, selection on the dependent or key independent variable meant analyses were unable to account for other life course, relational, and reproductive characteristics associated with either intimate partner violence or unintended parenthood. Even those studies that have included socioeconomic and demographic factors, such as age, family background, and race/ethnicity often have not included union and family planning characteristics. For instance, union status is associated with both unintended childbearing and intimate partner violence (Capaldi et al., 2012; Finer & Zolna, 2016; Manning et al., 2018; Masho et al., 2018). Attitudes about contraception, and beliefs in being able to use contraception consistently and effectively, are associated with intimate partner violence and unintended childbearing (Gibbs, 2013; Guzzo & Hayford, 2018; Manning et al., 2012). Other behavioral factors, such as delinquency or poor school performance, might also influence intimate partner violence or unintended childbearing if they reflect risk-taking or difficulty adhering to contraception (Driscoll et al., 2005).

13.1.2 Current Study

In this study, we build on prior research to consider whether intimate partner violence is predictive of early parenthood as well as intendedness among men and women. Although prior research has suggested that intimate partner violence experiences increase the risk of an unintended birth, there is also reason to suspect that the association may be due to an elevated risk of early parenthood given that both intimate partner violence and unintended childbearing occur disproportionately during young adulthood. To account for this, we explicitly focus on the young adult years, up to age 25 (the mean age at first birth in the United States for women in 2012, the final year of data used in the current project, was 25.8 (Martin et al., 2019), with men's ages 2–3 years higher on average (Schweizer, 2019)). Moreover, the risk factors for both intimate partner violence and unintended childbearing suggest that accounting for other proximate factors, such as union type or contraceptive use, as well as indicators of disadvantage, such as involvement in criminal activity and substance use, may explain any established linkage.

We capitalized on longitudinal data that are uniquely suited to overcome many of the challenges identified above, including measures of both perpetration and victimization, nuanced categories of birth intendedness, and a rich set of background and union characteristics to better establish causal connections.

13.2 Data and Methods

13.2.1 Data

We analyzed longitudinal data from the Toledo Adolescent Relationships Study (TARS). TARS is a school-based sample based in Lucas County, Ohio. The 1321 respondents were selected in 2000 from publicly available records of students in the seventh, ninth, and 11th grade. The sampling frame, developed by the National Opinion Research Center, comprised 15,188 eligible students stratified by race/ethnicity (non-Hispanic White, non-Hispanic Black, and Hispanic), gender, and grade into 18 strata. Through random subsamples, 2273 students were selected from each stratum. Black and Hispanic students were oversampled. Of the 2273 students, we contacted 1625 and had 304 refusals, leaving 81.3% or 1321 students. At the time of the first interview to maintain privacy, each respondent had an in-home interview with a questionnaire in the form of the computer-assisted personal interview (CAPI). A parent or caregiver was interviewed separately at the first interview.

There are five waves of data included in this study. Interviews for wave 1 began in 2001, wave 2 was conducted in 2002/2003, wave 3 in 2004/2005, wave 4 in 2006/2007, and wave 5 in 2011/2012. In wave 1 respondents' ages ranged from 12–19 and at wave 5 respondents' ages ranged from 25–32. Respondents had to complete at least one interview beyond the first one to be included in the analyses. We began by excluding those who had a first birth before wave 1 or prior to age 13, resulting in 1283 respondents. Due to small cell sizes, we limited the sample to respondents who reported their race or ethnicity as White, Black, or Hispanic (n = 1257). Respondents who had missing data on the dependent or independent variables were omitted, resulting in 1239 respondents. Finally, we restricted the analysis of first births to those women and men whom we could observe to age 25 (n = 811). Of these respondents, 374 had their first birth by age 25.

13.2.2 Dependent Variable

Respondents reported on the exact dates of live births, and as noted above, those who had already had their first birth by the first wave were excluded from the analyses. At each interview, respondents were asked whether they had ever had any births or fathered any births, and if so, the date of each birth; we focused on live births because pregnancies that end in miscarriage or abortion are underreported in survey data (Lindberg et al., 2020).

The indicator of *intentions* is based on the following question. "At the time your found out you were pregnant [your partner was pregnant], would you say you: (1) Wanted to become pregnant [get your partner pregnant]; (2) Didn't want to become pregnant [get your partner pregnant]; (3) Hadn't thought about whether you

wanted to get pregnant [get your partner pregnant]; and (4) Didn't care one way or another." We created three variables including (1) a dichotomous indicator of a live birth; (2) a three-category variable of intendedness using the traditional categories in which ambivalence and not caring were grouped with unwanted (no birth, intended/wanted birth, unintended birth); and (3) a categorical measure that disaggregated unintended births (no birth, intended/wanted birth, unwanted birth, ambivalent birth, and a 'didn't care' birth).

13.2.3 Independent Variables

Intimate Partner Violence included items from the Revised Conflict Tactics Scale (Straus, 2013; Straus & Gelles, 1990) assessing mutual violence. Respondents were asked how often their current or most recent partner has "(1) thrown something at you; (2) pushed, shoved, or grabbed you; (3) slapped you in the face or head with an open hand; and (4) hit you." The responses ranged from "never" to "very often." To increase validity, consistent with a recommendation by Straus (2013) the items were not examined separately. Respondents were also asked the frequency of which they committed these violent behaviors towards their current or most recent partner. For both measures, we created dichotomous indicators of any violence. We considered perpetration and victimization separately; however, the results were similar, so we relied on the ever experience IPV indicator (not shown). This time-varying variable is used to assess the respondents' *prior IPV experience* at the last interview prior to conception (based on date of birth minus eight months). Note that this measure does not necessarily capture, for those who had children, the relationship with child's biological parent. We return to this in the limitations.

We included a number of sociodemographic variables in the models. *Age* and its squared term (in months) were time-varying. *Gender,* a binary variable, specified if the respondent was female. *Race/Ethnicity* (measured at the first interview) was classified into three binary variables: (1) White, (2) Black, and (3) Hispanic with White as the reference category. *Family structure,* from the first interview, was operationalized as two biological parent households versus every other family structure (e.g., stepfamilies, single parent families, living alone, etc.). *Relationship status,* which varies and is indexed to the prior wave, was coded into four categories: (1) single, (2) dating, (3) cohabiting, and (4) married. These were then constructed into four dichotomous variables that indicated relationship status at the month prior to risk. The reference category in models was married union status.

Additional variables included psychosocial factors linked to both IPV and childbearing. *Contraceptive efficacy* is measured by asking at each wave, "If you were to become intimate with someone, how sure are you that you could plan ahead to have some form of birth control available" (Longmore et al., 2003). Response categories included (1) "I never want to use birth control, (2) I never want to become intimate with someone before marriage, (3) very unsure (4) moderately unsure, (5) neither sure nor unsure, (6) moderately sure, and (7) very sure." We created a four-category

variable with (1) never use (response 1), (2) no intimacy before marriage (response 2), (3) unsure (response categories 3, 4, and 5), and (4) sure (response categories 6 and 7). Similar to IPV experience, this variable is time-varying, indexed to the last interview prior to the month at risk.

How far in school is a measure that asked respondents at wave 1 how far they think they will go in school. The variable is coded as (1) drop out before graduating from high school, (2) graduate from high school, (3) go to a business, technical school, or junior college after high school, (4) graduate from a four-year college, and (5) go to a graduate or professional school. *Grades,* self-reported at the first interview, were coded so that higher numbers reflected higher grades. *Delinquency*, an eight-item mean scale, asked respondents "In the last two years (or 24 months), how often have you: (1) stolen (or tried to steal) things worth $5 or less; (2) damaged or destroyed property on purpose; (3) carried a hidden weapon other than a plain pocket knife; (4) stolen (or tried to steal) something worth more than $50; (5) attacked someone with the idea of seriously hurting him/her; (6) sold drugs; (7) broken into a building or vehicle (or tried to break in) to steal something or just to look around; and (8) used drugs to get high (not because they were sick)" (Elliott and Ageton Elliot & Ageton, 1980). Responses ranged from (0) "never" to (8) "more than once a day," with a mean scale resulting in a range from 0 to 8 (the α ranged from 0.74 to 0.87 across waves). Although part of the original scale, "Been drunk in a public place" was excluded because we included a separate indicator of substance abuse. Respondents were asked these questions regarding their delinquency at each interview, and for each wave we created a mean scale. This variable is also time-varying, indexed to the last interview prior to the month at risk. *Substance abuse* prior to the birth of the child was operationalized as a 7-item mean scale in which respondents were asked "How often in the past 12 months have you experienced these things because of your drinking/using drugs:" (1) "Not felt so good the next day," (2) "Felt unable to do your best job at work or school," (3) "Hit one of your family members," (4) "Gotten into fights with others," (5) "Had problems with your friends," (6) "Had problems with someone you were dating," and (7) "Gotten into a sexual situation that you later regretted." Responses ranged from (1) never to (8) almost daily (the α ranged from 0.89 to 0.92 across waves).

13.2.4 Analytic Strategy

As noted, we used age 25 to define 'early' parenthood to be consistent with prior work (e.g., Hofferth & Goldscheider, 2010; Hynes et al., 2008; Joyner et al., 2012; Landeis et al., 2021). We excluded respondents who became parents before the first interview to account for the temporal ordering of events. To analyze how IPV experience is associated with expedited entry into parenthood (dichotomous) and the intendedness of this first birth (categorical), independent of related covariates, we estimated competing risk discrete-time logistic and multinomial logistic regression models using person-months (Allison, 2010), presenting the odds ratios (ORs) and

relative risk ratios (RRRs), respectively. Beginning with the first interview, we converted data to a person-month file in which respondents contributed monthly observations of pregnancy risk until they either report a pregnancy (date of birth with 8 months subtracted) or reached age 25 with no pregnancy. After accounting for their 25th birthday being the end of the risk period, we had 139,563 observations in the analyses.

Descriptive statistics are presented before proceeding to three multivariable models. We first examined whether prior IPV experience predicts having a first birth. Then we moved to two models that account for birth intentions. The first of these used the more common measure of intended, unintended, and no birth, and the second disaggregated the unintended category to create separate categories for unwanted: "had not thought about it" (risk-taking), and "did not care either way" (ambivalence). In the models, the prior IPV measure is the combined measure of having either perpetrated or been the victim of physical IPV because this scale measures mutual violence, the most common form of partner violence. We then discussed, but do not show, the results from sensitivity tests where we disaggregate victimization and perpetration.

13.2.5 Descriptive Results

Table 13.1 provided descriptive statistics for the overall sample and by parenthood status. We make two key observations: Parents reported significantly higher levels of any IPV compared to respondents without children and the overall sample. Parents in this sample also reported lower levels of contraceptive efficacy than respondents without children.

13.2.6 Regression Results

Table 13.2 showed the odds ratios for the results from the competing risk discrete-time logistic regression model predicting the probability of entering parenthood and also included relative risk ratios for the multinomial model predicting birth intendedness. Model 1 indicated that prior IPV experience was not associated with an increased risk of having a first birth. In bivariate analyses not shown there was a significant association between IPV experience and probability of entering parenthood, consistent with the descriptive results. Further analyses showed that once the respondents' grades were added to the model the significant association between IPV and entering parenthood was attenuated. With regard to demographic indicators, women compared to men in the sample were significantly more likely to enter parenthood by age 25. Single respondents, respondents who reported higher grades at wave 1, and those who reported living with their biological parents at wave 1 (adolescence) were also significantly less likely to enter parenthood by age

Table 13.1 Descriptive statistics measured at the final month of observation

	All respondents		Parents		Childless	
Variables	M or %	SD	M or %	SD	M or %	SD
Prior IPV experience	39%		43%		35%	
Controls						
Age	20.70	2.84	19.99	2.25	21.30	3.14
Gender						
Female	52%		62%		43%	
Male	48%		38%		57%	
Contraceptive efficacy (time-varying)						
Sure	67%		66%		68%	
Never use	4%		5%		3%	
Not before marriage	7%		5%		8%	
Unsure	22%		24%		21%	
Relationship status (time-varying)						
Single	33%		23%		42%	
Dating	49%		58%		41%	
Cohabiting	6%		10%		3%	
Married	12%		8%		14%	
Behavioral indicators (time-varying)						
Delinquency	30%	0.71	30%	0.62	31%	0.77
Substance abuse	21%	0.59	23%	0.64	19%	0.55
School performance						
Grades (wave 1)	5.92	2.02	5.44	2.07	6.33	1.89
How far in school	3.84	0.98	3.73	1.03	3.93	0.93
Race/ethnicity						
White	61%		52%		66%	
Black	28%		32%		24%	
Hispanic	13%		16%		10%	
Family structure at wave 1						
Two biological parents	45%		36%		52%	
Not two biological parents	55%		64%		48%	
Neighborhood poverty wave 1	−0.77	4.73	0.19	4.82	−1.60	4.50
N	811		374		437	

Source: Toledo Adolescent Relationships Study
Note: Contrast categories are in parentheses. Risk period excludes monthly observations after the 25th birthday
Person Months = 139,563

25 than their counterparts with different characteristics. Hispanic respondents and those who lived in neighborhoods with higher levels of neighborhood poverty were more likely to enter parenthood by age 25.

The next set of results reported the multinomial regression results for birth intendedness with each column representing a different contrast. First, we predicted how IPV influenced reporting an intended first birth, compared to not having a birth

Table 13.2 Odds ratios of having A birth and relative risk ratios of birth intentions from competing risk discrete-time logistic and multinomial logistic regression models, respectively

	Model 1: Any birth				Model 2: Traditional intendedness			
Variables	Birth vs. No birth		Intended vs. No birth		Unintended vs. No birth		Intended vs. Unintended	
Prior IPV experience	1.10		1.17		1.11		0.98	
Demographics								
Age	1.34	***	1.21	***	1.42	***	0.85	*
Age^2	1.00	***	1.00	***	1.00	***	1.00	**
Female	2.01	***	1.92	**	2.19	***	0.84	
Contraceptive efficacy								
Sure	–		–	–	–		–	
Never use	1.42		2.50	*	1.07		1.51	
Not before marriage	0.66	†	0.78		0.67		1.06	
Unsure	1.14		1.29		1.14		0.94	
Respondent relationship status								
Single	0.46	**	0.22	*	0.62	†	0.43	†
Dating	0.85		0.56		1.05	†	0.71	
Cohabiting	1.28		1.34		1.17		1.94	
Married	–		–		–		–	
Behavioral indicators								
Delinquency	0.84		1.05		0.82		1.24	
Substance use	1.15		0.51	†	1.42	**	0.51	†
School performance								
Grades (wave 1)	0.82	***	0.81	***	0.84	***	0.94	
How far in school	0.93		0.91		0.93		1.02	
Race/ethnicity								
White	–		–		–		–	

(continued)

Table 13.2 (continued)

	Model 1: Any birth				Model 2: Traditional intendedness			
Variables	Birth vs. No birth		Intended vs. No birth		Unintended vs. No birth		Intended vs. Unintended	
Black	1.09		0.75		1.29		0.66	
Hispanic	1.56	**	1.15		1.73	**	0.77	
Two biological parents at wave 1	0.67	***	0.66	†	0.68	**	0.88	
Neighborhood poverty (wave 1)	1.07	***	1.06	*	1.07	***	0.99	

Source: Toledo Adolescent Relationships Study
† $p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$
Person Months = 139,625

by age 25. The results indicated that there was no association between IPV and reporting an intended first birth relative to no birth. The next column showed that IPV was not significantly associated with having an unintended first birth as compared to not having a child by age 25. The final column showed the contrast between an intended versus unintended birth. Prior IPV experience was not associated with the intention status of the birth. The same pattern of results existed at the bivariate level (results not shown).

Age was associated with the odds of having an intended child with younger women reporting lower odds than older women (last column). Women were more likely to report both an intended or an unintended birth compared to no birth relative to men, but gender was not associated with the intention status of the birth (last column). Respondents who reported never using birth control were significantly more likely to have an intended first birth than no birth, but contraceptive use was not associated with having an unintended birth relative to no birth. Single respondents were likely to have a child and less likely to have an intended birth rather than an unintended birth than married respondents. Those who reported higher levels of substance use in the month prior to their month at risk were significantly more likely to have an unintended first birth than no birth. Individuals who reported higher grades were less likely to have a child before age 25 but shared similar odds of having an intended versus unintended birth (last column). Respondents who reported living with their biological parents at wave 1 (adolescence) were significantly less likely to have a child (unintended or intended) and had similar odds of having an intended rather than unintended child (last column). Hispanic respondents were more likely to report having an unintended birth compared to having no child relative to their non-Hispanic White counterparts. Young men and women living in areas with higher levels of neighborhood poverty at wave 1 were significantly more likely to have a first birth, but neighborhood poverty did not differentiate between having an unintended versus intended child (last column).

The results in the prior table showed no association between IPV and the probability of entering parenthood, as well as the likelihood of such births being characterized as intended. In the final set of models presented in Table 13.3, we consider whether traditional categories of intended versus unintended and ignore how IPV could be related to risk-taking or ambivalence. However, as can be seen in the first row of Table 13.3, there was again no association between IPV and the risk of a birth regardless of how respondents categorized such a birth. All of these were compared to not entering parenthood. Specifically, IPV was not associated with having a wanted first birth, an unwanted first birth, a birth characterized by risk-taking (hadn't thought about it), or a birth characterized by ambivalence (didn't care).

In terms of the remaining covariates, women were significantly more likely to have had a first birth across all four categories compared to men. Respondents who were single or dating in the month prior to their month at risk were significantly less likely to have a wanted first birth than no birth relative to married respondents, but union status was not related to the other indicators. Individuals who never used contraception were twice as likely to have an unwanted first birth than no birth. Also,

Table 13.3 Relative risk ratios of nuanced birth intentions from competing risk discrete-time multinomial logistic regression models

	Model 3: Nuanced birth intendedness vs. No birth							
Variables	Wanted vs. No birth		Didn't want vs. No birth		Hadn't thought vs. No birth		Didn't care vs. No birth	
Prior IPV experience	1.06		1.02		1.32		1.06	
Demographics								
Age	1.24	***	1.50	***	1.50	***	1.28	***
Age^2	1.00	***	1.00	***	1.00	***	1.00	***
Female	1.72	*	2.67	***	1.74	*	2.08	**
Contraceptive efficacy								
Sure								
Never use	1.43		2.09	*	0.94		1.13	
Not before marriage	0.76		0.68		0.50		0.74	
Unsure	0.95		1.49	†	0.66		1.73	†
Respondent relationship status								
Single	0.22	***	0.83		0.62		0.45	
Dating	0.47	*	1.28		1.26		0.97	
Cohabiting	0.87		1.78		0.43		2.56	†
Married	–		–		–		–	
Behavioral indicators								
Delinquency	0.86		0.91		0.79		0.91	
Substance abuse	0.50	†	1.55	**	1.19		0.87	
School performance								
Grades (wave 1)	0.80	***	0.83	**	0.86	*	0.81	**
How far in school	0.99		0.92		0.85		0.90	
Race/ethnicity								
White	–		–		–		–	
Black	0.87		1.13		0.97		1.60	
Hispanic	1.85	*	1.31		1.34		1.93	†
Two biological parents at wave 1	0.63	*	0.68	†	0.51	**	1.13	
Neighborhood poverty (wave 1)	1.03		1.08	***	1.08	**	1.07	*

Source: Toledo Adolescent Relationships Study
†$p < .10$, *$p < .0$, **$p < .01$, ***$p < .001$
Person Months = 139,563

respondents who reported higher levels of substance use had higher odds of having an unwanted birth than no birth. Further, respondents who reported higher grades were less likely to have a first birth across all categorizations. Compared to non-Hispanic White individuals, Hispanic individuals had a higher probability of reporting a wanted first birth and more often reported ambivalence (didn't care) than no birth. Respondents living with their biological parents at wave 1 less often

reported having a wanted birth than no birth and less often reported a birth categorized as risk-taking (hadn't thought) than no birth. Respondents who grew up in a neighborhood characterized by higher levels of poverty were more likely to report having an unwanted birth and more often characterized their first birth as ambivalent (didn't care) or risk-taking (hadn't thought).

13.2.7 Supplemental Analyses

While the results refute some prior literature, one argument may be perhaps the lack of significance is due to the IPV measure combining both perpetration and victimization. The justification for combining them is that in national surveys, about half of intimate partner violence victims are also perpetrators of aggression against partners (Anderson, 2013). In sensitivity analyses we explored how the results may differ once IPV experience is divided into whether respondents were a perpetrator or a victim. Like the analyses for any IPV, however, we did not find any statistically significant associations for perpetration alone or victimization alone (not shown but available upon request). This was true for all three dependent variables – any birth, the three-category measure of intendedness, and the five-category measure of intendedness.

13.2.8 Discussion

Compared to other westernized countries, the United States has high levels of unintended fertility. Intimate partner violence is also a concern in the United States, affecting men and women alike (Giordano et al. forthcoming, Giordano et al., 2016). We assessed whether there was an association between intimate partner violence and entry into early parenthood as well as having an unintended first birth. Based on prior work on women, we expected that IPV experience would be associated with early entry into parenthood and greater odds of classifying first births as unintended (Barber et al., 2018). The primary rationale rests on contraceptive use challenges for individuals who have experienced relationship violence. Moreover, many of the same factors, including risky behaviors (substance use, criminal behavior, poor school performance) and economic disadvantage, that are associated with elevated experiences with IPV are also linked to early parenthood and unintended parenthood. Given these shared risk profiles and that IPV and unintended fertility peak in the teenage and early adult years, the links could be largely correlational and not causal.

The results indicate that at the bivariate level respondents who experienced IPV in a given survey wave did have a higher probability of entering early parenthood by the next wave compared to those who did not experience IPV. However, this association was explained with the inclusion of adolescent performance in school.

Thus, it appears that the link between IPV and early entry into parenthood is explained by adolescent indicators that are often excluded from analyses. Teens with better grades might have more to lose by entering into more serious relationships during young adulthood, thus limiting the risk of both IPV and fertility (Longmore et al., 2009, 2013). They may have more resources and knowledge to identify unhealthy relationships and to protect themselves against the risk of pregnancy. Grades during adolescence may also be an indicator of planful competence and purposive efforts (Clausen & Jones, 1998), which may be a protective factor against both IPV and early and unintended fertility. Finally, good grades in adolescence may tap into parental support, peer support, school connectedness) and other background resources (Bradley et al., 2021; Kaufman-Parks et al., 2021) that may help youths avoid, or disengage from, relationships with higher risk of IPV or unintended fertility. The contraceptive use indicators did not explain the association between IPV and early entry into parenthood. These results held for both IPV overall and when disaggregated by perpetration and victimization.

The analysis of birth intentions indicates that young men and women who experienced IPV had similar odds of having an unintended birth as their counterparts who had no prior IPV experiences. These findings exist at both the bivariate and multivariate levels. Similar results were obtained when we relied on a more nuanced indicator of intendedness that included ambivalence and risk-taking. In contrast to prior work, then, the findings suggest that there is no strong association between IPV and unintended fertility, at least among young adults; put differently, these findings suggest that the link found in prior literature may not be causal.

While this study provides new insights into IPV and unintended fertility, there are a few limitations. First and foremost, the reports of IPV experience are not necessarily from the same relationship as the pregnancy. The experience of IPV on fertility may be a result of IPV experienced in a specific relationship; future work would ideally link IPV to specific relationships and the risk of fertility within that relationship. Second, we have no direct measure of reproductive coercion, which may influence how individuals are reporting the intention of their first birth. Future work should consider how reproductive coercion influences the odds of parenthood and the intentions of births. Further, TARS is not a nationally representative dataset, and these results may not reflect the general patterns of IPV and birth intendedness. We also only analyzed respondents' first birth in early parenthood; results may not be generalizable to all births.

Additionally, our operationalization of intimate partner violence used the revised conflict tactics scale. The scale was designed to measure violence used during family conflicts. Specifically, it assesses whether both men and women have perpetrated a range of aggressive tactics or have been victims of aggression at the hands of intimate partners (Straus et al. 1996). The theoretical perspective underlying the revised conflict tactics is the family violence perspective. An assumption of this perspective is that conflict per se is not problematic because conflict is a part of all relationships. However, destructive, violent approaches to conflict resolution are problematic. The family violence perspective emphasizes assessing violence in community or population-based samples as opposed to known groups, such as

women in shelters seeking protection from violent partners, individuals seeking medical attention for injuries, or those who have come to the attention of law enforcement due to intimate partner violence. In national and community surveys a controversial but common finding that has emerged using the conflict tactics scale as well as supported by extensive reviews of the literature (e.g., Ali et al., 2016; Bates & Graham-Kevan, 2016; Hardesty & Ogolsky, 2020) is that rates of women's perpetration of violence are similar to or exceed the levels reported by men (e.g., Cooper et al., 2021; Giordano et al., 2021; Hardesty & Ogolsky, 2020; Nowinski & Bowen, 2012). This gender symmetry finding, however, is not consistent with some findings drawn from other sources of data that are not based on community surveys. Johnson (1995, Kelly & Johnson, 2008) attempted to address the controversial gender symmetry finding by distinguishing between different types of intimate partner violence. For example, situational couple violence is a form of intimate partner violence that includes mutual or reciprocal violence and is most often documented in community surveys. Conversely, intimate terrorism is one-sided violence (primarily men's violence against women) based on coercive control, and is most often found in known group samples such as women's shelters, social service agencies, and criminal justice settings. Consequently, it is possible that findings would be different if we examined women who experienced intimate terrorism.

13.3 Conclusions

Despite these limitations, this study adds to the literature on how IPV and the timing of parenthood, as well as birth intendedness, may be related. The results highlight that rather than a causal relationship between IPV and the entrance to parenthood, IPV and unintended fertility are linked because both are concentrated among young adults. That is, there does not appear to be a causal relationship where IPV directly influences birth intendedness. This is especially true given the results suggest the importance of early adolescent academic achievement – this is an interesting finding that merits additional work to determine what, exactly, it is about academic achievement during adolescence that seems to be protective against early fertility in the context of IPV. These results also give insight to potential policy implications. One in particular would be to simultaneously address IPV and early childbearing in programs geared toward adolescents and young adults (rather than separate programs for each). Further, there is a continued need for better sexual education for teens and young adults, along with greater access to family planning services. These policy improvements could contribute to a decline in the number of young individuals experiencing IPV and unintended fertility.

Acknowledgements This research was supported by grants from The Eunice Kennedy Shriver National Institute of Child Health and Human Development (HD036223 and HD044206), the Department of Health and Human Services (5APRPA006009), the National Institute of Justice, Office of Justice Programs, U. S. Department of Justice (Award Nos. 2009-IJ-CX-0503 and

2010-MU-MU-0031), and in part by the Center for Family and Demographic Research, Bowling Green State University, which has core funding from The Eunice Kennedy Shriver National Institute of Child Health and Human Development (P2CHD050959). The opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the official views of the National Institutes of Health, Department of Health and Human Services, or Department of Justice.

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