

# **Relationship Violence and Condom Use Among Young Adult Dating Relationships: The Context of Violence Severity, Frequency, and Perpetrator**

**Jennifer Manlove, Amanda Berger, Nicole Steward-Streng & Sabrina Nettles  
Child Trends**

## **Extended Abstract**

### **Overview**

An expanding research literature has found the relationship context and partner characteristics are associated with contraceptive use and condom use among young adults.<sup>14-16</sup> Relationship violence--often termed intimate partner violence (IPV)--is one dimension of relationships that has received extensive research attention in local-area samples, clinic-based samples and qualitative research focusing on contraceptive use outcomes, but a relatively limited focus in national surveys of contraceptive use.<sup>6</sup> Existing research often relies on dichotomous measures of relationship violence and may fail to detect potentially important differences in outcomes related to the nature or severity of the acts.<sup>19</sup> Additionally, many studies have relied solely on the report of one partner (typically on the report of the female partner),<sup>5,24,27</sup> and studies of male partners have focused primarily on their perpetration vs. receipt of violence<sup>5,6</sup> – these types of studies fail to address the relationship context of violence, which may be reciprocal, as opposed to unidirectional.<sup>29</sup> A better understanding of relationship violence and its association with condom use will better inform program efforts to reduce high rates of STDs and unintended pregnancy among young adults. This study extends previous research by using nationally representative data to examine multiple levels of severity of violence, to assess male and female reports of both experiencing and perpetrating violence, and to create an index that combines the relative frequency, severity, and perpetration of violence.

To assess the association between intimate partner violence and condom use among young adults, we used nationally-representative data from Wave III (2001-2002, aged 18-28) of the National Longitudinal Study of Adolescent Health (Add Health) to assess relationship-specific associations between young adult male and female reports of past year intimate partner violence and condom use at most recent sex. Incorporating power dynamics and relationship turbulence approaches, we first examined associations between the severity of violence experienced in each relationship (no violence, threatening, hitting, or injury) and condom use. Second, we also created an index of violence based on the relative frequency, severity and perpetrator of violence in a couple's dating relationship to compare condom use among those who have experienced partner-intense violence, common couple violence, or respondent-intense violence with those who experienced no relationship violence. Third, because of gender differences in reports and experience of relationship violence,<sup>5,29</sup> we examine associations separately by gender. Results indicated that, among both men and women, those who reported past year violence that resulted in injury had lower odds of condom use at most recent sex. Results also indicated that both men and women who reported partner-intense violence (violence that was primarily perpetrated by

their partner) had lower odds of condom use at most recent sex. These results primarily support a power dynamics approach.

### **Conceptual Framework / Prior Research**

We incorporate two conceptual frameworks in our analyses linking relationship violence and condom use among young adults in dating relationships: power dynamics and relationship turbulence. A power dynamics approach suggests that relationship violence occurs when a power imbalance exists within a couple's relationship,<sup>7,9,25</sup> and many theorists conceptualize intimate partner violence as indicative of a larger pattern of power and control.<sup>8,16,20</sup> This approach considers that power imbalances in more violent relationships will be associated with reduced condom use. An extensive, primarily qualitative, small-scale and local area sample research literature supports this approach by finding strong negative associations between intimate partner violence and condom use, primarily based on studies of male-initiated violence as reported by females.<sup>1,3,13,18,19,21,23,28,30,31</sup> Based on a power dynamics approach, we hypothesize that more severe, partner-initiated violence will be associated with reduced condom use.

In contrast, a relationship turbulence perspective considers that some relationships are more conflict-ridden or volatile than others, based on violence that occurs only occasionally in the context of interpersonal conflict and that is perpetrated equally by both male and female partners ("common couple" violence).<sup>12</sup> Some researchers posit that most physical IPV (especially violence captured in large-scale surveys) can be categorized as common couple violence, thus indicating a need to consider both severity and directionality of violence in relationships. A relationship turbulence approach considers that relationships with higher levels of common couple violence will be associated with reduced condom use because of relationship volatility that may impair decision-making around condoms and other coitus-dependent methods. Some research supports links between less severe reports of violence and reduced condom use, including lower condom use among teens in relationships with verbal but not physical violence<sup>24</sup> and reduced condom use in relationships with greater relationship conflict.<sup>15</sup> However, we could not identify research linking common couple violence to contraceptive use. Based on a relationship turbulence approach, we hypothesize that common couple violence will also be associated with reduced condom use; however, the association will not be as strong as that of partner-initiated violence.

Although most administrative information collected on intimate-partner violence has reported much higher prevalence of male-perpetrated violence,<sup>5,12</sup> data from national surveys have found a relatively high percentage of female-initiated violence.<sup>12,29</sup> Some research suggests that males as well as females, may experience negative effects of relationship violence, although very limited research assesses the role of IPV in contraceptive use reported by males.<sup>5</sup> We extend previous research by examining associations separately for males and females. Because some research suggests that male-intensive violence is more severe,<sup>12</sup> we hypothesize that the associations between relationship violence and condom use will be significant for males, but not as strong as associations for females.

## Methods

### Data and Measures

We used data from Wave III of the National Study of Adolescent Health (Add Health), a nationally-representative sample of 27,000 youth in grades 7-12 during the 1994-95 school year (Wave I). Respondents were re-interviewed in 2001-02 when they were aged 18-28 (Wave III) and were asked detailed questions about up to three previous relationships. We limited our sample to 25,710 heterosexual dating relationships of white, black, Hispanic, and Asian respondents who were 18-25 years old, had sex with their partner, and had valid sample weights. We dropped relationships with non-response on key violence questions ( $n=15,719$ ) and those without valid responses on the outcome measure ( $n=1,504$ ) for an analytic sample of 8,487 ( $n=4,588$  female-reported relationships and  $n=3,899$  male-reported relationships).

**Dependent Variable: Condom Use.** For each relationship, respondents were asked if they used *condoms at their most recent sexual intercourse* with that partner. We created a binary measure of condom use at last sex and replaced missing reports of condom use with 0 if the respondent reported not using any contraceptive with that partner at most recent sex.

**Independent Variables: Intimate Partner Violence.** Two measures of IPV were used: a *Severity of Violence* scale and a *Violence Index*. *Severity of Violence* was based on questions which asked respondents how many times in the previous year that they or their partner threatened, threw something at, pushed or shoved one another (“threatened”); they or their partner slapped, hit, or kicked one another (“hitting”); or they or their partner injured one another (“injury”). Responses were recoded into six indicators of respondent- and partner-specific violence in the prior year. Using these indicators, we created a four-category Severity of Violence scale of the most severe type of violence that either the respondent or partner perpetrated in the prior year. The *Violence Index* was based on the same six indicators of respondent- and partner-specific violence in the prior year and was a four-category index based on the frequency of violence and the perpetrator (no relationship violence, partner-intense violence, common couple violence, respondent-intense violence). Partner-intense violence was defined as any case where the partner injured the respondent, or where the frequency of the partner threatening or hitting the respondent was greater than the frequency of the respondent perpetrating these behaviors. Respondent-intense violence was coded likewise. Common couple violence was defined as a case where the respondent reported that both they and their partner committed the same type of non-injury relationship violence at a similar low-level frequency (never, once, twice). For this categorical measure, reports of partner-intense violence trumped all other reports, followed by respondent-intense and then common couple violence.

**Control Variables.** We controlled for both individual and relationship characteristics. Individual characteristics included *race/ethnicity* (white, black, Hispanic, or Asian); *place of residence* at of the survey date (living alone, with their parents, or with others, such as roommates); *education* (less than a high school education, a high school education, or at least some college education); and two measures of the *sexual history* of the respondent (age at first sex and lifetime number of sexual partners, capped at four). Relationship characteristics included *how long they knew their partner before they had sex* (one day or less, two to seven days, one or two week, two to four

weeks, one to five months, six months to a year, or a year or more); *partner age difference* (if partner was younger, older, or the same age); *relationship duration* (less than or more than three months); *type of dating relationship* the respondent was reporting on (dating casually or exclusively); a *history of violence* in other dating relationships; and a measure of *hormonal or long-acting contraceptive use at most recent sex* with that partner.

Additionally, we ordered the relationships reported by each respondent and controlled for whether the relationship included in these analyses was current at the time of the interview and for whether the relationship was the respondent's first reported dating relationship.

## **Analytic Methods**

Gender differences in violence measures and in individual and relationship characteristics were assessed using T-test and chi-square analyses. In multivariate analyses, random effects models were used to assess the odds ratios of the associations between violence severity and the violence index and condom use at most recent sex. Model 1 was used to examine unadjusted associations between violence and condom use; Model 2 included controls for individual characteristics, and Model 3 included individual and relationship characteristics. All analyses were weighted and single imputation was used to replace missing data on variable with less than 5% missing.<sup>26</sup>

## **Preliminary Results**

### **Descriptive Analyses**

Slightly more than half (55%) of the analytic sample reported using condoms at their most recent sexual intercourse (Table 1). The majority of young adults reported no relationship violence with their partner in the last year; however, 22% of female relationships and 15% of male relationships included some type of violence. In 6% of dating relationships threatening was reported as the most severe type of relationship violence (8% female and 5% male), in 8% the most severe violent behavior reported was hitting (10% female and 7% male), and in 3% injury was the most severe type of relationship violence reported (4% female and 3% male). Nearly one in ten dating relationships involved partner-intense relationship violence (9% female and 10% male), 2% experienced common couple violence, and 7% (11% female and 3% male) included respondent-intense violence.

The sample was evenly split by gender (51% female), and the average age was 22 years. Most respondents were white (71%), 16% were black, 10% were Hispanic, and 4% were Asian. Slightly less than half lived alone, and slightly less than half lived with their parents (44% and 45%, respectively); the remaining 11% lived with other people. The majority had completed some college (62%), with a quarter (28%) having completed only a high school education and a tenth (10%) having completed less than a high school education. The average age at first sex was 16, and the average number of lifetime sex partners was three.

On average, respondents knew their partner (for the reported relationship) for five months before initiating sex. Nearly all (90%) reported an overall duration of the reported relationships of more than three months, though 30% indicated that the relationship was casual. About half (46%) said

that their partners were older, a third (31%) said that their partners were younger (31%) and a fifth (23%) said they were the same age. Slightly more than a third (38%) reported that they had used a hormonal or long-lasting contraceptive method at their most recent sex with the partner.

## Multivariate Analyses

### *Severity of Violence*

**Females.** Model 1 revealed that the women who reported violence that resulted in injury had lower odds of reporting condom use at most recent sex than those who reported no violence (odds ratio (OR): 0.52) (Table 2). After adding individual characteristics in Model 1, injury remained significantly associated with lower odds of condom use (OR: 0.55). In Model 3, controlling for individual characteristics and relationship characteristics, the association between injury and condom use strengthened; those who reported injury were less than half as likely to report using a condom at last sex as those who did not experience IPV (OR: 0.41). Less severe violence (threatening or hitting) was not significantly associated with the odds of condom use. Among women, being black (vs. white), having a high school education (vs. less than a high school education), knowing a partner for a longer time before initiating sex, having an older age of sexual initiation and having an older partner (vs. a same-aged partner) were associated with increased odds of condom use, whereas having more sex partners, having a relationship duration of less than three months and using a hormonal or long-lasting contraceptive method at most recent sex were associated with lower odds of condom use.

**Males.** For males, Model 1 indicated that those who reported violence that resulted in injury had lower odds of condom use than those who reported no relationship violence (OR: 0.26). In Models 2 and 3, the association between injury and condom use reduced slightly, but remained significantly associated with lower odds of condom use (ORs: 0.28 and 0.25, respectively); neither hitting nor threatening was associated with condom use. Among males, being black and having an older age at first sex were associated with increased odds of condom use, whereas having a younger partner and using a hormonal or long-lasting contraceptive method at most recent sex were associated with decreased odds of condom use.

### *Violence Index*

**Females.** In Model 1, those who reported partner-intense violence had lower odds of condom use at their most recent sex than those who reported no violence (OR: 0.65) (Table 3). Adding in individual characteristics in Model 2, this association remained (OR: 0.67), and, again. Controlling for both individual and relationship characteristics in Model 3, the association between partner-intense violence and condom use strengthened; those who reported partner-intense violence had less than half the odds of condom use at last sex as those who did not experience IPV (OR: 0.49). Condom use was not significantly associated with common couple or respondent-intense violence. In the full violence index model among females, associations between control variables and condom use showed similar directions and strengths to those seen in the analyses examining associations between severity of violence and condom use.

**Males.** In Model 1, those who reported partner-intense violence were less likely to report

condom use (OR: 0.57), compared to those who did not report any violence. Neither the addition of individual characteristics in Model 2, nor the addition of both individual and relationship characteristics in Model 3 modified these findings; partner-intense violence was associated with reduced odds of condom use (ORs: 0.58 and 0.53, respectively), and neither respondent-intense nor common couple violence was significantly associated with condom use. In the full model, being black and having an older age at first sex were associated with increased odds of condom use, whereas being older, having a younger partner and using a hormonal or long-lasting contraceptive method at most recent sex were associated with decreased odds of condom use.

### **Preliminary Discussion and Next Steps**

Our analyses found that relationship violence is fairly common, with 22% of dating relationships reported by young adult females and 15% of relationships to males experiencing some type of violence. Females are more likely to report relationship violence than males, particularly violence that they have initiated (11% of females and only 3% of males reported respondent-initiated violence). These findings are consistent with prior survey research indicating that young women are more likely than young men to report using physical aggression in their relationships.<sup>29</sup> Researchers have suggested a number of reasons for these differences including that 1) women are more likely than men to report physical aggression against their partner;<sup>11</sup> 2) men are unlikely to retaliate if struck;<sup>29</sup> 3) men are less willing to report violence than women;<sup>2</sup> and 4) a non-clinical survey like this may better capture common-couple or situational violence rather than the severe intimate partner violence that is characterized by control and often ends in serious injury.<sup>12</sup>

Relatively few violent relationships led to injury in our sample (4% of female relationships and 3% of male relationships). However, as hypothesized under a power dynamics perspective, violence resulting in injury was associated with dramatically reduced odds of condom use, both before and after controlling for individual and relationship-level characteristics. This finding supports research from a prison-based study indicating that the severity of violence is important for condom use decision-making.<sup>19</sup> Also as hypothesized under a power dynamics perspective, we found that only partner-initiated violence (and not common couple or respondent-initiated violence) is associated with reduced condom use. This finding supports a power dynamics perspective, which suggests that power imbalances are associated with reduced contraceptive use. Research – primarily focusing on females – suggests that one way in which violent partners may attempt to exercise their power is in controlling the use of condoms.<sup>6</sup> In some cases, one partner may exert control over the other by actively trying to get pregnant/get the partner pregnant.<sup>10,17</sup> Other qualitative research suggests that those who experience IPV may fear their partner's reaction to a request to use condoms<sup>10,22</sup> or may feel less control over their sex lives,<sup>6</sup> and, subsequently, less efficacious in negotiating condom use.

Despite some research suggesting that most violence in sexual relationships is common couple violence, we found that relatively few young adults in our sample reported this type of less severe bi-directional violence (2% of relationships reported by females and males). We recognize that this low percentage is due, in part, to the way that we created this measure – only including those violent relationships with similar frequency of male and female violence that did not result in injury. Under a relationship turbulence perspective, we hypothesized lower condom use within these relationships involving common couple violence, but our analyses indicate that

there was no significant association between either common couple or respondent-initiated violence and condom use. However, as hypothesized, the association between common couple and respondent-initiated violence and condom use was weaker than the association for partner-initiated violence. Thus, in this sample, bi-directional violence (indicating potentially more violent or turbulent relationship dynamics) is not associated with condom use.

We also examined the association between relationship violence and condom use separately by gender. Contrary to our hypothesis that relationship violence – particularly more severe violence and partner initiated violence - would be more strongly associated with condom use in relationships reported by females than males, both males and females showed a similar size and direction of these associations (future analyses will test for gender interactions). Interestingly, separate analyses (not shown here) indicate that the types of violence included in partner-initiated violence differ for males and females: for females, partner-initiated violence is more than 50% more likely to result in injury than it is for males. Despite these gender differences, partner-initiated violence is associated with reduced odds of condom use for males as well as females. This finding supports other research noting that males may be as likely as females to experience negative effects of partner-perpetrated relationship violence.<sup>12</sup> Also, while there has been limited research linking relationship violence (particularly female-initiated violence) to condom use among males, this finding is somewhat supported by a recent study linking greater relationship conflict to reduced condom use in young adult relationships reported by males and females.<sup>15</sup>

These findings expand on previous research by examining the severity, perpetration and relative frequency of violence in young adult dating relationships. The strong associations between severe relationship violence (and partner-specific violence) suggest that program approaches should expand from individual, knowledge-based approaches to avoiding unintended pregnancy and STDs to more relationship-oriented approaches that consider multiple dimensions of the relationship dyad, including relationship power and control. The negative associations for males, as well as females, suggests the importance of addressing female-initiated as well as male-initiated violence.

Future analyses will test gender interactions in associations and further describe individual and relationship-level characteristics associated with condom use in these young adult dating relationships.

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Table 1. Weighted Descriptives for the Presence of Violence in the Relationship, by Gender Adjusted for Complex Survey Design

	Total	Female	Male	
<i>Condom use</i>				
Used condoms at last sex	55%	54%	57%	
<i>Gender</i>				
Female	51%	--	--	
<b>Severity of Relationship Violence</b>				
no violence with partner in past year (ref)	82%	78%	85%	***
threatened, threw something at, pushed or shoved as most severe	6%	8%	5%	
slapped, hit, or kicked as most severe	8%	10%	7%	
injury as most severe	4%	4%	3%	
<b>Violence Index</b>				
no violence with partner in past year (ref)	82%	78%	85%	***
partner intense violence	9%	9%	10%	
bidirectional violence	2%	2%	2%	
respondent intense violence	7%	11%	3%	
<i>Individual Controls</i>				
Age	21.6	21.5	21.7	**
Race				**
white	71%	70%	72%	
black	16%	18%	14%	
Hispanic	10%	9%	11%	
Asian	4%	3%	4%	
Living situation				**
living in own place	44%	46%	42%	
live with parents	45%	42%	48%	
live with others	11%	11%	11%	
Educational attainment				***
less than high school	10%	9%	11%	
high school	28%	25%	31%	
at least some college	62%	67%	58%	
Age at first sex	16.5	16.4	16.5	
Number of partners	3.2	3.2	3.2	
<i>Relationship Controls</i>				
Length of time knew partner before sex	5.0	5.3	4.8	***
Age of partner				***
same age	23%	22%	25%	
partner younger	31%	12%	51%	
partner older	46%	67%	24%	
Hormonal or long-lasting contraceptive use	38%	42%	33%	***
Current relationship	36%	38%	34%	***
Casual relationship	30%	27%	33%	***
Relationship duration (< 3 months)	10%	7%	14%	***
Violence in a prior relationship	3%	4%	2%	**

Sample: Dating relationships for young adults 18-25 year olds with valid weights who had sex with their partner and are not missing on the violence or condom use measures (n=8487)

Table 2. Random Effects Models for the Odds of Condom Use for Females (n=4588) and Males (n=3899) from Weighted Logistic Regression

	Females			Males		
	M1	M2	M3	M1	M2	M3
<b>Severity of Relationship Violence</b>						
no violence with partner in past year (ref)	1.000	1.000	1.000	1.000	1.000	1.000
threatened, threw something at, pushed or shoved as most severe	0.961	0.966	0.791	1.633	1.621	1.433
slapped, hit, or kicked as most severe	0.901	0.870	0.790	0.614	0.614	0.567
injury as most severe	0.523*	0.551*	0.410**	0.261**	0.280*	0.251*
<i>Individual Controls</i>						
Age		0.980	0.967		0.923	0.897
Race						
white		1.000	1.000		1.000	1.000
black		1.750***	1.901***		2.439***	2.746***
Hispanic		1.274	1.176		1.555	1.558
Asian		1.232	1.098		1.817	1.822
Living situation						
living in own place		1.000	1.000		1.000	1.000
live with parents		0.877	0.980		0.885	0.962
live with others		1.364	1.499		0.685	0.640
Educational attainment						
less than high school		1.000	1.000		1.000	1.000
high school		1.630*	1.704*		1.175	1.283
at least some college		1.342	1.496		1.044	1.244
Age at first sex		1.076**	1.092**		1.088	1.110*
Number of partners		0.869*	0.821**		0.876	0.870
<i>Relationship Controls</i>						
Length of time knew partner before sex			1.128**			1.079
Age of partner						
same age			1.000			1.000
partner younger			1.270			0.518**
partner older			1.508*			0.834
Hormonal or long-lasting contraceptive use			0.664*			0.594**
Casual relationship			0.971			0.908
Relationship duration (< 3 months)			0.569*			0.828
Violence in a prior relationship			1.010			0.718

<sup>†</sup>We order the relationships reported for each respondent and control for the first dating relationship reported that was eligible for our sample. For males, this increased the odds of condom use and was significant at the  $p < .05$  level in the final model. We also include a control for if the relationship they are reporting on is current. This variable reduced the odds of condom use for both females and males at the  $p < .001$  level.

Table 3. Random Effects Models for the Odds of Condom Use for Females (n=4588) and Males (n=3899) from Weighted Logistic Regression

	M1	Females M2	M3	M1	Males M2	M3
<b>Violence Index</b>						
no violence with partner in past year (ref)	1.000	1.000	1.000	1.000	1.000	1.000
partner intense violence	0.645*	0.671*	0.493**	0.570*	0.579*	0.526*
bidirectional violence	0.895	0.932	0.839	0.973	0.938	0.890
respondent intense violence	1.011	0.962	0.888	1.276	1.289	1.145
<i>Individual Controls</i>						
Age		0.980	0.967		0.922	0.896*
Race						
white		1.000	1.000		1.000	1.000
black		1.727***	1.866***		2.407***	2.708***
Hispanic		1.279	1.181		1.550	1.555
Asian		1.214	1.076		1.814	1.824
Living situation						
living in own place		1.000	1.000		1.000	1.000
live with parents		0.872	0.976		0.883	0.960
live with others		1.364	1.508		0.679	0.636
Educational attainment						
less than high school		1.000	1.000		1.000	1.000
high school		1.633*	1.716*		1.162	1.266
at least some college		1.348	1.510		1.040	1.232
Age at first sex		1.076**	1.092**		1.089	1.111*
Number of partners		0.870*	0.820**		0.877	0.873
<i>Relationship Controls</i>						
Length of time knew partner before sex			1.124**			1.078
Age of partner						
same age			1.000			1.000
partner younger			1.269			0.509**
partner older			1.506*			0.813
Hormonal or long-lasting contraceptive use			0.662*			0.603**
Casual relationship			0.970			0.900
Relationship duration (< 3 months)			0.574*			0.828
Violence in a prior relationship			1.007			0.750

<sup>1</sup>We order the relationships reported for each respondent and control for the first dating relationship reported that was eligible for our sample. For males, this increased the odds of condom use and was significant at the  $p < .05$  level in the final model. We also include a control for if the relationship they are reporting on is current. This variable reduced the odds of condom use for both females and males at the  $p < .001$  level.