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Childhood family violence and perpetration and victimization of intimate partner violence: Findings from a national population-based study of couples

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Abstract

Purpose—We sought to examine the relation between childhood family violence and intimate partner violence (IPV).

Methods—We surveyed 1,615 couples from the US household population using multistage cluster sampling. Childhood family violence measures included moderate and severe child physical abuse and witnessing interparental threats or physical violence. IPV was categorized as non-reciprocal male-to-female partner violence (MFPV), non-reciprocal female-to-male partner violence (FMPV); reciprocal IPV (MFPV and FMPV) and no IPV. We used multinomial logistic regression to estimate unadjusted and adjusted odds ratios (ORs) and 95% confidence intervals (CIs) between childhood family violence and IPV.

Results—Men who experienced moderate (adjusted OR [AOR] 3.9, 95% CI: 1.3, 11.8) or severe (AOR 4.5, 95% CI: 1.1, 19.3) child physical abuse were at increased risk of non-reciprocal MFPV; a male history of severe childhood physical abuse or witnessing interparental violence was associated with a two-fold increased risk of reciprocal IPV. Women who witnessed interparental threats of violence (AOR 1.9, 95% CI: 0.8, 4.6) or interparental physical violence (AOR 3.4, 95% CI: 1.5, 7.9) in childhood were at increased risk of non-reciprocal FMPV. Women exposed to any type of childhood family violence were more than 1.5 times as likely to engage in reciprocal IPV. Many strong positive ORs had CIs compatible with no association.

Conclusion—We provide new evidence that childhood family violence is associated with an increased risk of non-reciprocal and reciprocal IPV. Treatment providers and policy makers should consider childhood family violence history in both men and women in the context of IPV.

MESH headings/key words

child abuse; violence; spouse abuse; partner abuse; battered women; abused women

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Exposure to family violence in childhood is widespread in the United States (US); one study estimates 54% of men and 40% of women are victims of violence committed by a parent or caregiver before 18 years of age.¹ Witnessing interparental physical violence is also prevalent with 14% to 18% of adults reporting exposure to this type of violence in childhood.^{2, 3} Adults who experience abuse in childhood are more likely to be in poor health^{3–5}, misuse alcohol^{4, 6–8}, use illicit drugs^{4, 7}, be depressed^{4, 7} and report other mental and physical health problems^{3–5} compared to individuals who do not experience child abuse. Several epidemiologic studies suggest that child abuse is associated with victimization by an intimate partner in adulthood.^{3, 9–13}

Population-based estimates indicate a substantial proportion of women (22% to 38%)^{1, 2, 14} are victims of intimate partner violence (IPV) in their lifetime. Research has consistently demonstrated that women who experience male-to-female partner violence (MFPV) are subjected to severe and frequent physical attacks^{1, 15} and suffer a wide range of physical and mental health problems.^{16–23 17, 19, 24–27} These women are also more likely to be injured than men victimized by an intimate female partner.^{1, 15, 28, 29} Perhaps because women experience injury and other evident problems from MFPV, women have been more readily identifiable and easier to study.^{3, 30} Several national population-based surveys suggest that female-to-male partner violence (FMPV) may be more frequent than previously believed.^{1, 29, 31} One study reports 7.4% of men experience FMPV in their lifetime¹; others report higher (18.2%–24.8%) one-year prevalence estimates.^{29, 31} Men who experience FMPV report similar adverse mental and health effects as women.^{11, 18, 32, 33} Several studies indicate that more than 40% of IPV is reciprocal, involving both MFPV and FMPV.^{15, 29, 34, 35} Limited evidence suggests most reciprocal violence comprises acts of violence initiated by both partners³⁵ and is more likely to result in escalating violence and injury than non-reciprocal violence.^{29, 35, 36}

Few epidemiologic studies have examined the relation between gender-specific childhood family violence and gender-specific perpetration of IPV.³⁷ We add new information on this topic using a nationally representative population-based sample of couples. We hypothesized that men who experienced childhood family violence are at increased risk of perpetrating non-reciprocal MFPV or reciprocal IPV. Similarly, we anticipated that women who experienced childhood family violence would be at increased risk of perpetrating non-reciprocal FMPV or reciprocal IPV. In addition to perpetration of IPV, we also examined the relation between childhood family violence and victimization of IPV.

METHODS

Setting

We conducted a survey of couples aged 18 years and older (N=1635 with an 85% response rate) in the 48 contiguous US in 1995 using a multistage random probability sampling method.³⁸ All respondents were interviewed face-to-face by a study interviewer in private using a structured questionnaire. We excluded four same-sex couples, a group too small to analyze. An additional 16 couples were excluded because the privacy of their interviews was compromised, leaving 1615 couples for this cross-sectional study.

Measures

Intimate partner violence—Participants were asked about a series of physically violent behaviors taken from the Conflict Tactics Scale, Form R, a widely used instrument that measures intimate partner violence.³⁹ Each respondent was asked whether (s)he or their partner had engaged in the following behaviors in the past year: thrown something; pushed, grabbed or shoved; slapped; kicked, bit or hit; hit or tried to hit with something; beat up; choked;

burned or scalded; forced sex; threatened with a knife or gun; used a knife or gun.³⁹ Each respondent reported separately their behavior toward their partner and their partner's behavior toward them. We categorized IPV status into four groups: non-reciprocal MFPV, non-reciprocal FMPV, reciprocal IPV (MFPV and FMPV) and no IPV. Non-reciprocal MFPV was considered present if either or both in the dyad reported the male had committed any of the specified violent behaviors in the past year and neither in the couple reported FMPV. Non-reciprocal FMPV was considered present if either or both dyad members reported the female had committed any of the listed behaviors in the past year and neither in the couple reported MFPV. Reciprocal IPV was considered present if either or both in the dyad reported the male and female had committed any of the specified violent behaviors in the past year. Couples where neither reported that any violent behaviors had occurred in the past year were categorized as not having experienced IPV.

Childhood physical abuse—Respondents who reported a parent or caregiver had ever: hit them with something; beaten them up; burned or scalded them; threatened them with a knife or gun; or used a knife or gun against them during childhood or adolescence were categorized as having a history of childhood physical abuse. Because many parents discipline their children by hitting them with an object, we separated those who reported having been hit with something only (“moderate childhood physical abuse”) from those who reported other types of violence regardless of whether they had been hit with something (“severe childhood physical abuse”). Those who reported no such history were categorized as not having experienced childhood physical abuse.

Witnessing interparental violence—Participants who reported having witnessed their parents or caregivers threaten one another with violence, without any physical violence, during childhood or adolescence were categorized as having witnessed interparental threats of violence. Participants who indicated that they had observed their parents or caregivers engage in physical violence with or without threats of violence in their childhood or adolescence were categorized as having witnessed interparental physical violence. The remaining participants who did not report having witnessed interparental threats or physical violence in childhood were categorized as not having this history.

Child-family violence—This measure combines the childhood physical abuse and witnessing of interparental violence measures defined above. We classified individuals who had experienced severe childhood physical abuse and/or observed interparental physical violence as having been exposed to severe child-family violence. Participants who had either been hit with something and/or had witnessed interparental threats of violence in childhood without having experienced severe childhood physical abuse or witnessed interparental physical violence were classified as having a history of moderate child-family violence. Those reporting no childhood family violence of any type were classified as not having experienced child-family violence.

Alcohol measures—Alcohol consumption was estimated based upon respondents' reported frequency and quantity of drinking over the past 12 months. A standard drink was defined as four ounces of wine, 12 ounces of beer or one ounce of spirits. Binge drinking was defined as drinking 5 or more drinks per occasion at least once within the past year. Participants who responded positively to having experienced at least one of 25 items encompassing alcohol-related problems in the past year such as withdrawal symptoms or health- or work-related problems were classified as having an alcohol problem.²⁴ We anticipated that alcohol-related characteristics, which are well-established risk factors for IPV^{1, 26, 40, 41}, may be in the causal pathway between childhood family violence and IPV.

Other measures—Ethnicity was categorized as follows: persons reporting Hispanic ethnicity were classified as Hispanic (“Hispanic”). The remaining subjects were classified as non-Hispanic white (“white”); non-Hispanic black (“black”); or non-Hispanic other, which included multi-ethnic individuals. Couples concordant on ethnicity were classified as that ethnicity; couples of non-Hispanic other ethnicity and couples discordant on ethnicity were classified as “other/mixed” ethnicity. Demographics including age, household income, and employment status were also included in the analyses.

Respondents who stated that they sometimes or always approve of a spouse being verbally aggressive or abusive, or physically violent toward their spouse were classified as approving of IPV. Those who stated they did not approve of any of these behaviors were classified as not approving of IPV.

Respondents who reported any use (at least once) of cocaine, crack cocaine, heroin, opium, marijuana, hash or grass in the 12 months prior to the survey were categorized as having a history of illicit drug use; otherwise respondents were considered not to have used illicit drugs.

All covariates considered were categorized for analyses as presented in Table 1. We anticipated demographic factors such as ethnicity, household income or age may confound associations of childhood family violence and IPV and that other factors such as drug use or approval of IPV could be a confounder or a consequence of childhood family violence.

Analysis

All estimates were weighted to adjust for the complex survey design, non-response and known population distributions (household informant ethnicity, metropolitan status and region of the country). Stata 10.0 was used to for all analyses (College Station, TX).

We computed the prevalence of childhood physical abuse and witnessing interparental physical violence overall and by gender. We calculated descriptive statistics for couples by IPV status across select characteristics. We conducted analyses of three male and female childhood family violence exposures in relation to IPV: childhood physical abuse, witnessing interparental violence and child-family violence. We used multinomial logistic regression to estimate unadjusted and adjusted odds ratios (ORs) and corresponding 95 percent confidence intervals (95% CIs). We identified potential confounding factors *a priori* and generated two adjusted models.

In our primary analysis, we adjusted for ethnicity, household income and the respondent’s age, factors unlikely to be a consequence of childhood family violence. We also wished to examine associations of childhood family violence and MFPV above and beyond the effects of subsequent adult behaviors that may (or may not) have been a consequence of childhood family violence. Thus, additionally adjusted models were controlled for factors in the primary analysis and also for behavioral factors such as binge drinking and drug use. Specific adjustment variables for each model were notated in Table 3. Potential confounding factors that did not meaningfully alter estimated associations were dropped from the models.

RESULTS

Sample characteristics

Overall, 65.4% of men reported a history of childhood physical abuse, of which 6.9% was severe childhood physical abuse. Nearly 51% of women reported a history of childhood physical abuse with 8.1% reporting severe childhood physical abuse. Similar proportions of women (18.9%) and men (17.8%) reported witnessing interparental physical violence in childhood.

Compared to those reporting no IPV, a greater proportion of men and women reporting IPV of any type tended to be black, Hispanic or mixed/other ethnicity; were younger; and positive for binge drinking, alcohol-related problems or illicit drugs use in the past year (Table 1). Generally, a greater proportion of men in couples reporting non-reciprocal MFPV or reciprocal IPV had a history of childhood family violence compared to men in couples reporting no abuse (Table 2). Likewise, a greater proportion of women in couples reporting non-reciprocal FMPV or reciprocal IPV had a history of childhood family violence than their counterparts reporting no abuse. All variables were missing less than 3% except household income which was missing 8.3%.

Non-reciprocal IPV

Our primary adjusted analysis of non-reciprocal MFPV indicated that men who experienced childhood physical abuse were approximately four times as likely to perpetrate non-reciprocal MFPV compared to those with no such childhood history (Table 3). Similarly men who experienced child-family violence were more than three times as likely to perpetrate non-reciprocal MFPV relative to men with no history of childhood family violence, though the confidence interval included no association. Associations between male witnessing of interparental violence and non-reciprocal MFPV were compatible with a wide range of estimates. Women exposed to child-family violence appeared to be more than twice as likely to be victims of non-reciprocal MFPV compared to women without this childhood history.

Regarding non-reciprocal FMPV, our primary adjusted analysis indicated women who witnessed interparental violence in childhood or experienced child-family violence were more likely to perpetrate non-reciprocal FMPV than their counterparts. Wide confidence intervals prevented us from interpreting associations between female childhood physical abuse and non-reciprocal FMPV. Men exposed to child-family violence appeared more likely to be victims of non-reciprocal FMPV compared to men without this history. Several of the estimates between childhood family violence and non-reciprocal MFPV or non-reciprocal FMPV had CIs compatible with no association.

Reciprocal IPV

In our primary adjusted analysis, men who experienced severe childhood physical abuse, witnessed interparental threats or physical violence, or experienced severe child-family violence were more than twice as likely to engage in reciprocal IPV compared to men with no history of childhood family violence; a male history of moderate child physical abuse or moderate child-family violence was also positively associated with an increased risk of reciprocal IPV. Women who experienced severe child physical abuse or severe child-family violence were more than three times as likely to engage in reciprocal IPV compared to women with no childhood family violence history; all other forms of female childhood family violence were associated with a greater than 1.5-fold increased risk of reciprocal IPV. Notably, many of the estimates between gender-specific childhood family violence and reciprocal IPV had CIs compatible with no association.

DISCUSSION

Our findings provide new evidence that women and men exposed to childhood family violence are at increased risk of perpetrating non-reciprocal and reciprocal IPV compared to subjects with no history of childhood family violence, even after controlling for other factors. Our results also suggest childhood family violence is positively associated with being victimized by an intimate partner.

Our prevalence estimates of childhood physical abuse were more than 10% higher than estimates from the one recent national population-based survey to measure it.¹ This discrepancy may be related to differences in defining child abuse (there is wide variation in how child abuse is measured^{1, 3, 4, 9}). Our broader definition included ever having been hit with something as child. The other study did not incorporate this type of violence into their definition of child abuse.¹ Since having been hit with something may not constitute abuse, prevalence of severe child physical abuse may be a better, though more conservative, estimate of child physical abuse. Though slightly higher, our estimates of witnessing interparental physical violence in childhood were similar for men and women and consistent with population-based estimates among women in Washington State.^{2, 3}

That men exposed to childhood family violence are more likely to perpetrate MFPV compared to men with no childhood family violence history is a relationship considered common knowledge by some⁴², yet we know of no other population-based study that has examined this question. A 1986 review reported male childhood family violence was a consistent risk factor in studies of MFPV, however estimates were not adjusted for factors such as age or ethnicity.¹⁰ We provide initial evidence that female childhood family violence is positively associated with perpetration FMPV. Though many epidemiologic studies have examined female childhood family violence history, they have only assessed how it related to being victimized by MFPV.^{2, 3, 9–11, 13} Our findings were consistent with these and one study in men¹¹ demonstrating that a history of childhood abuse is positively associated with being victimized by an intimate partner when compared to subjects with no such childhood history, though our estimates had CIs compatible with no association. That a history of childhood family violence is associated with perpetration and victimization of MFPV and FMPV in the context of reciprocal violence may have important implications. Given that studies have found reciprocal IPV is associated with an increased risk of escalating violence³⁶ and injury²⁹ relative to non-reciprocal IPV, both male and female childhood family violence histories may need to be considered when addressing IPV and in devising prevention efforts, particularly since reciprocal violence is the most prevalent form of IPV.

Many of our estimates were based on small numbers and had CIs compatible with no association; the small number of couples reporting IPV, particularly non-reciprocal IPV, limited our ability to interpret findings. The survey upon which this study was based was conducted in 1995, yet the estimated associations are likely to be applicable to the current setting since the prevalence of childhood physical abuse and IPV have remained relatively constant over the last several decades.^{31, 43, 44}

Though our data were cross-sectional, childhood family violence exposures clearly preceded our outcome. Our estimates, however, related to prevalent IPV which took place in the 12 months preceding the survey. As such, our findings may not be applicable to all couples in which IPV occurs. Moreover, we did not have incident-specific information on IPV such as who initiated the violence or whether it was in self defense. Nor did we have data on childhood sexual abuse, a factor known to be correlated with other types of child abuse. It is unclear whether some behaviors such as alcohol problems or drug use occurred as a result of childhood family violence and/or IPV, making the role of such factors difficult to ascertain. We minimized underreporting of IPV by using a positive report from either the male or female to identify couples in which it occurred. Childhood family violence measures are subject to both faulty recall and underreporting^{45, 46}; the respondent was only asked about his/her own childhood family violence history and participants may not have remembered or been willing to disclose their childhood family violence history. Underreporting of this type would likely bias estimates toward the null. Failure to recollect events in childhood would seem more common for less severe acts of violence such as witnessing interparental threats of violence or having been hit with something. This type of misclassification would likely bias estimates of moderate types

of childhood family violence toward the null but would be less likely to impact associations related to severe types of childhood family violence. Lastly, we had little missing data for most variables; consequently, incompleteness of individual records is unlikely to have biased the observed estimates to an important degree.

We provide new evidence that childhood family violence is associated with an increased risk of both perpetration and victimization of IPV. Our findings contribute to the understanding of risk factors for IPV and may help to identify couples at increased risk of IPV. Treatment providers and policy makers may wish to consider childhood family violence history in both men and women in the context of IPV. Larger confirmatory studies are needed to validate (or refute) our findings and provide additional information upon which treatment providers and policy makers can base decisions.

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Abbreviations

US	United States
IPV	intimate partner violence
MFPV	male-to-female partner violence
FMPV	female-to-male partner violence
OR	odds ratio
95% CI	95% confidence interval

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TABLE 1
 Characteristics of couples across intimate partner violence categories

	Non-reciprocal MFPV % (n=63)	Non-reciprocal FMPV % (n=147)	Reciprocal IPV % (n=239)	No IPV % (n=1166)
<i>Couple characteristics</i>				
Race/ethnicity				
White, non-Hispanic	74.8	70.9	61.9	80.4
Black, non-Hispanic	5.5	8.7	13.0	5.7
Hispanic	10.8	8.3	7.9	6.5
Mixed/other, non-Hispanic	9.0	12.1	17.2	7.5
Household income				
<\$10,000	4.2	12.5	12.7	7.7
\$10–19,999	12.7	18.5	20.8	12.4
\$20–29,999	8.6	11.4	14.6	17.3
\$30–39,999	29.5	13.1	15.4	14.1
≥\$40,000	45.0	44.6	36.5	48.5
<i>Male characteristics</i>				
Age group (in years)				
18–29	11.9	23.6	32.7	9.9
30–39	38.7	31.3	39.6	24.6
40–49	16.5	19.8	21.4	19.8
≥50	32.9	25.4	6.4	45.8
Education				
<high school	17.9	20.5	17.9	17.7
=high school	36.3	36.8	45.2	35.5
>high school	45.8	42.7	36.9	46.8
Employment status				
employed	79.3	75.3	85.2	72.1
retired/other	7.9	9.0	0.8	20.9
unemployed	12.9	15.7	14.0	7.0
Alcohol				
binge drinks	59.7	56.0	58.0	34.3
alcohol problems present	32.9	17.6	27.9	8.3
Has a history of illicit drug use	11.7	12.6	13.4	4.1
Approves of intimate partner violence	17.3	16.3	29.2	11.1
<i>Female characteristics</i>				
Age group (in years)				
18–29	28.0	27.5	43.6	13.2
30–39	20.5	37.4	39.4	25.6
40–49	21.9	17.2	13.6	21.1
≥50	29.6	17.9	3.5	40.2
Education				
<high school	12.0	16.7	17.5	15.5
=high school	34.9	44.7	40.8	39.8

	Non-reciprocal MFPV % (n=63)	Non-reciprocal FMPV % (n=147)	Reciprocal IPV % (n=239)	No IPV % (n=1166)
>high school	53.2	38.6	41.8	44.7
Employment status				
employed	75.3	61.2	71.7	59.0
homemaker	11.6	30.9	16.2	25.1
unemployed/retired/other	13.2	7.9	12.2	15.9
Alcohol				
binge drinks	15.1	27.3	36.5	10.7
alcohol problems present	15.5	15.4	17.9	4.7
Has a history of illicit drug use	9.8	2.6	7.0	1.3
Approves of intimate partner violence	5.7	17.3	27.7	4.5

Note: n=unweighted count and %=weighted percent

TABLE 2
Prevalence of childhood family violence history and unadjusted associations across categories of IPV

	No Abuse %	Non-reciprocal %	Non-reciprocal MFPV vs. no IPV Unadjusted OR & 95% CI	Non-reciprocal FMPV vs. no IPV Unadjusted OR & 95% CI	Reciprocal IPV vs. no IPV %	Unadjusted OR & 95% CI
<i>Male's childhood family violence history</i>						
Child physical abuse						
None	36.8	12.3	1.0	1.0	27.6	1.0
Moderate physical abuse	57.0	76.3	4.0 (1.3, 12.0)	1.4 (0.8, 2.6)	60.1	1.4 (0.8, 2.5)
Severe physical abuse	6.2	11.4	5.5 (1.5, 20.1)	1.0 (0.5, 2.1)	12.3	2.7 (1.3, 5.4)
Interparental violence						
None	76.5	65.5	1.0	1.0	51.7	1.0
Threats of violence	7.7	13.9	2.1 (0.5, 8.9)	3.0 (1.1, 8.3)	17.0	3.3 (1.6, 6.7)
Physical violence	15.9	20.6	1.5 (0.7, 3.2)	1.4 (0.7, 2.9)	31.3	2.9 (1.7, 5.0)
Child-family violence						
None	31.0	10.2	1.0	1.0	16.7	1.0
Moderate child-family violence	50.2	67.2	4.1 (1.2, 14.2)	2.1 (1.0, 4.7)	44.3	1.6 (0.8, 3.4)
Severe child-family violence	18.8	22.7	3.7 (1.2, 11.5)	1.9 (0.8, 4.8)	39.1	3.9 (2.0, 7.6)
<i>Female's childhood family violence history</i>						
Child physical abuse						
None	52.8	42.4	1.0	1.0	31.6	1.0
Moderate physical abuse	40.6	52.8	1.6 (0.6, 4.1)	1.8 (1.0, 3.3)	48.8	2.0 (1.3, 3.2)
Severe physical abuse	6.7	4.9	0.9 (0.3, 2.7)	1.8 (0.5, 5.8)	19.6	4.9 (2.5, 9.6)
Interparental violence during childhood						
None	77.5	62.4	1.0	1.0	56.9	1.0
Threatened each other only	6.9	17.3	3.1 (0.9, 10.4)	2.0 (0.9, 4.6)	12.6	2.5 (1.3, 4.9)
Physically violent with each other	15.6	20.4	1.6 (0.7, 3.7)	3.4 (1.6, 7.2)	30.5	2.7 (1.6, 4.5)
Child-family violence						
None	44.1	24.8	1.0	1.0	20.9	1.0
Moderate child-family violence	37.7	50.7	2.4 (0.8, 7.5)	2.3 (1.1, 4.6)	41.0	2.3 (1.3, 4.0)
Severe child-family violence	18.3	24.5	2.4 (0.8, 7.1)	4.3 (1.8, 10.4)	38.1	4.4 (2.5, 7.7)

Note: %, OR, and 95% CI = weighted percent, odds ratio and 95 percent confidence interval, respectively

TABLE 3
Adjusted associations between childhood family violence history by IPV

	Non-reciprocal MFVP vs. No IPV		Non-reciprocal FMPV vs. No IPV		Reciprocal IPV vs. No IPV	
	Primary OR (95% CI)	Additionally Adjusted OR (95% CI)	Primary OR (95% CI)	Additionally Adjusted OR (95% CI)	Primary OR (95% CI)	Additionally Adjusted OR (95% CI)
<i>Male's childhood family violence history</i> ^{1,2}						
Child physical abuse ³						
None	1.0	1.0	1.0	1.0	1.0	1.0
Moderate physical abuse	3.9 (1.3, 11.8)	3.1 (1.1, 9.0)	1.4 (0.8, 2.7)	1.6 (0.8, 3.1)	1.4 (0.7, 2.6)	1.5 (0.7, 3.0)
Severe physical abuse	4.5 (1.1, 19.3)	4.1 (1.0, 16.2)	1.0 (0.4, 2.2)	0.8 (0.4, 1.9)	2.2 (0.8, 5.5)	1.6 (0.6, 4.4)
Interparental violence ³						
None	1.0	1.0	1.0	1.0	1.0	1.0
Threats of violence	1.6 (0.4, 6.3)	1.7 (0.6, 5.3)	3.2 (1.2, 8.4)	2.9 (1.1, 7.3)	2.9 (1.3, 6.4)	2.8 (1.3, 6.4)
Physical violence	1.2 (0.6, 2.5)	1.1 (0.5, 2.3)	1.4 (0.6, 3.1)	1.1 (0.5, 2.4)	2.5 (1.4, 4.6)	2.0 (1.0, 3.9)
Child-family violence						
None	1.0	1.0	1.0	1.0	1.0	1.0
Moderate child-family violence	4.1 (1.1, 14.5)	3.2 (0.9, 11.2)	2.4 (1.2, 5.2)	2.5 (1.0, 5.8)	1.7 (0.8, 3.7)	1.3 (0.6, 3.1)
Severe child-family violence	3.7 (1.0, 12.9)	2.8 (0.7, 10.8)	2.0 (0.8, 5.3)	1.5 (0.6, 4.3)	3.7 (1.7, 8.1)	2.3 (0.9, 5.5)
<i>Female's childhood family violence history</i> ^{4,5}						
Child physical abuse ⁶						
None	1.0	1.0	1.0	1.0	1.0	1.0
Moderate physical abuse	1.5 (0.7, 3.4)	1.3 (0.5, 3.2)	1.6 (0.8, 3.2)	1.5 (0.7, 2.9)	1.7 (1.0, 2.9)	1.6 (0.9, 3.0)
Severe physical abuse	0.8 (0.3, 2.6)	0.7 (0.2, 2.6)	0.8 (0.2, 2.7)	0.7 (0.2, 2.3)	4.0 (1.6, 10.0)	3.4 (1.5, 8.1)
Interparental violence during childhood ⁶						
None	1.0	1.0	1.0	1.0	1.0	1.0
Threatened each other only	2.8 (0.8, 10.4)	4.1 (1.0, 16.5)	1.9 (0.8, 4.6)	2.0 (0.8, 4.6)	1.9 (0.9, 4.0)	1.8 (0.9, 3.7)
Physically violent with each other	1.6 (0.7, 3.7)	1.8 (0.8, 4.0)	3.4 (1.5, 7.9)	4.6 (2.0, 10.3)	1.7 (0.9, 3.2)	1.6 (0.8, 3.3)
Child-family violence						
None	1.0	1.0	1.0	1.0	1.0	1.0
Moderate child-family violence	2.2 (0.7, 6.9)	2.0 (0.6, 7.3)	2.0 (0.9, 4.2)	1.7 (0.8, 3.8)	1.9 (1.0, 3.5)	1.9 (1.0, 3.6)
Severe child-family violence	2.3 (0.8, 6.5)	2.3 (0.7, 7.3)	4.0 (1.5, 10.7)	4.7 (1.9, 11.7)	3.7 (2.0, 6.8)	3.4 (1.8, 6.5)

Note: OR & 95% CI = odds ratio and 95 percent confidence interval

For abbreviations, see legends to Table 1 and Table 2

- 1 Primary models adjusted for couple's race/ethnicity and household income and male's age
- 2 Secondary models also adjusted for female's age, female's childhood family violence history and male and female approval of IPV, binge drinking, alcohol problems and drug use
- 3 Primary and secondary models also adjust for male's exposure to other type of childhood family violence (either interparental violence or childhood physical abuse)
- 4 Primary models adjusted for couple's race/ethnicity and household income and female's age
- 5 Secondary models adjusted for male's age, male's childhood family violence history, and male and female approval of IPV, binge drinking, alcohol problems and drug use
- 6 Primary and secondary models also adjusted for female's exposure to other type of childhood family violence (either interparental violence or childhood physical abuse)