

**Testing the Cycle of Violence Hypothesis:
Child Abuse and Adolescent Partner Abuse as
Predictors of Intimate Partner Violence in Young Adulthood**

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Intimate partner violence (IPV) is a pervasive public health problem in the United States. Nearly 29% of American women and 23% of males have experienced IPV, broadly defined as psychological, physical or sexual violence perpetrated by a current or former spouse, partner or lover, during their lifetimes (1). Women between the ages of 16 and 24 are at the greatest risk for non-fatal IPV, the time during life when they are most likely to be dating (2, 3). Dating violence is alarmingly common among adolescents, with 32% of in-school adolescents reporting some form of psychological or physical abuse by heterosexual partners (4). IPV is a serious human rights and health issue, and a better understanding of its risk factors is necessary for the development of effective public health interventions.

The cycle of violence hypothesis postulates that children who experience abuse and maltreatment are more likely to experience and perpetrate violence as they age (5). Abused children may often be rejected by their “normal” peers and seek friendships with deviant peer groups, choosing romantic partners from these peers during adolescence and young adulthood (6). Indeed, many studies find a greater risk of adulthood violence victimization and perpetration among victims of childhood abuse (5, 7-15). However, parental maltreatment of children may represent a constellation of other disadvantages, including sociodemographic, economic, cultural and environmental influences that are risk factors for later aggression (16).

Social disorganization theory incorporates contextual factors that may precede childhood abuse and adult IPV. The theory suggests that a lack of neighborhood cohesiveness affects communities’ ability to mobilize resources to address crime and violence. The confluence of poverty, racial heterogeneity and residential instability affect collective-efficacy by limiting the formation of lasting relationships, community attachment and common goals (17). Sampson and colleagues apply social disorganization theory to the study of collective efficacy and violent crimes in Chicago neighborhoods. The authors find that three dimensions of neighborhood social characteristics (concentrated disadvantage, immigrant concentration and residential stability) explain 70% of neighborhood variation in collective efficacy. Browning extends the work of Sampson in Chicago neighborhoods to the study of community-level processes influencing IPV (18). Both Browning and Sampson find that the influence of the three areas of social factors on violence is mediated by collective-efficacy.

Little quantitative research incorporates parental and social factors in examining the association between childhood abuse and adult IPV. This study aims to fill a gap in the literature by using a longitudinal, nationally representative school-based survey of adolescents to examine the impact of parental childhood abuse and adolescent partner abuse on the likelihood of IPV in young adulthood.

Methods

Data

Data from three waves of the National Longitudinal Study of Adolescent Health (Add Health) are utilized. Add Health is a nationally representative, school-based study of youth in grades 7 to 12 conducted during the 1994-95 school year. Respondents were interviewed again during Waves 2 (1996) and 3 (2001-02). All interviews used in this study were conducted in the homes of the respondents. During Waves I and II, audio computer assisted self interview technology was used for sensitive subjects (e.g. sexual activity and drug use). Additionally, parents were interviewed during Wave 1, and 1990 census data has been linked to individual records. The methods are detailed elsewhere (19).

This analysis utilizes a subset of 4,191 Add Health respondents. Inclusion criteria for the study are 1) having completed a Wave 2 and Wave 3 interview; 2) having engaged in at least one romantic or sexual relationship after the age of 18; and 3) being age 22 or older at Wave 3. While

the key independent and dependent variables are drawn from Wave 2 and Wave 3, the age truncation is necessary to allow for exposure to adult IPV. That is, it is believed that respondents who are 22 or older, who have completed four years of their young adult lives and who are either in or beyond the prime age group for IPV, are the most valid sample for this analysis.

Measures

Both IPV perpetration and victimization are examined as outcome variables in this analysis. In the Wave 3 interview, respondents list in a relationship roster all romantic and sexual partners since the summer of 1995. Recent sexual relationships and relationships that respondents identified as important are selected for a more detailed relationship history. For each selected partner, respondents are asked a series of questions related to IPV, adapted from the revised Conflicts and Tactics Scale (CTS) (20). All abuse questions are asked in terms of both perpetration and victimization. The ordinal outcome variables include three categories: no violence, less severe violence and more severe violence. Less severe violence includes threats of violence, pushing or shoving, throwing objects that could injure a partner, kicking, slapping or hitting. Most severe violence includes forced sex and physical abuse that led to an injury, such as sprains, bruises and cuts. Each relationship that began after the age of 18 is examined for both IPV perpetration and victimization. Because only relationships that were initiated in adulthood are included in this analysis, there is no overlap between the adult and adolescent partner abuse measures. On average, respondents have 2.4 sexual or romantic partners during young adulthood, ranging from 2.1 for those aged 25 or older to 2.6 for 24-year-olds.

The key independent variables are childhood abuse and adolescent partner abuse. Childhood abuse is measured retrospectively at Wave 3. Childhood abuse is a dichotomous variable, with respondents coded as “1” if they reported ever being slapped, kicked, hit or forced to have sex with a parent or caregiver before the 6th grade.

Adolescent partner abuse is measured at Wave 2 and captures only victimization. Items from the CTS assess psychological and physical abuse from a maximum of three sexual and three romantic partners (20). For a maximum of six reported sexual or romantic partnerships, respondents are asked if the partner ever (1) called them names, insulted them, or treated them disrespectfully in front of others, (2) swore at them, (3) threatened them with violence, (4) threw something at them that could hurt them or (5) pushed or shoved them. Adolescents reporting only items 1-3 for any partner are considered to have experienced less severe abuse, while those reporting items 4-5 experienced more severe abuse.

Family factors included in the final models were parent’s income in 1995 and family structure. Parent’s income is included as categorical variables for less than \$16,000, \$16,000-\$29,999, \$30,000-\$49,999, \$50,000-\$79,999 and more than \$80,000. Eleven percent of the subsample did not have a parental interview; rather than dropping these observations from the analysis, a variable is included that indicates that no parental data was available. Additionally, nearly 9% of observations are missing parental income, so a variable indicating whether income was missing was included in multivariate regression models. Family structure, as reported by the adolescent in Wave 1, is included as categorical variables indicating whether the respondent lived with two biological parents, two other parents, a single father, a single mother or other.

Three indices as a proxy for collective self-efficacy are used to examine social disorganization. Using Principal Components Analysis, measures are created with 1990 Census data at the census tract level. The concentrated disadvantage index includes the proportion of the population living below the poverty line, receiving public assistance, under age 18, African American, and of households that are headed by females. The residential stability index reflects the proportion of the population that has not moved since 1985 and houses that are owner-occupied.

Immigrant concentration includes the proportion of population that are Latino and foreign-born. Each index is entered in the model as a continuous variable.

Sociodemographic factors from the Wave 3 interview included in the models are: age at the time of interview, gender, educational attainment (some high school or less, received high school diploma or GED, some post-secondary, received college degree or higher) and relationship status (married, cohabitating or neither). Immigrant status is also included, indicating whether the respondent was foreign-born (first generation), U.S.-born to foreign-born parents (second) or U.S.-born to U.S.-born parents (third plus generation) (21). Wave 1 characteristics include region (West, Midwest, South, Northeast) and race/ethnicity (mutually exclusive categories for Latino, Non-Latino Black, Non-Latino Asian, Non-Latino Native American, Other Non-Latino, Non-Latino White). Additionally, the models include a variable that indicates whether the respondent reported a romantic or sexual partner of the same sex in the relationship history at Wave 3.

Analytic Approach

Descriptive statistics, including weighted frequencies and means, are tabulated. Multivariate, ordered logit models are estimated using Stata/SE 9.2 statistical software. Survey commands in Stata are utilized to account for sample design features of Add Health, including stratification, clustering and sample weights, and to produce unbiased Taylor series linearized standard errors.

Results

Higher levels of childhood and adolescent abuse are reported by young adult perpetrators and victims than the full sample. For example, while only 12% of the sample report childhood abuse, 19% of perpetrators and 18% of victims report being abused as children. Perpetrators and victims are more likely to be female, black, cohabitating and have less than a college education. Their parents are more likely to have income in the lowest two categories and are slightly less likely to have lived with two biological parents at wave 1. There is a higher mean level of concentrated disadvantage and lower level of residential stability among the perpetrators and victims. The most notable demographic difference between victims and perpetrators is gender. While 53% of victims are female, 61% of perpetrators are women.

For each set of multivariate models, individual socio-demographic characteristics are first entered, followed by separate models including parental and social factors, and a final model with all three sets of variables. Specific odds ratios and confidence intervals refer to the results of the final model with individual, parental and social factors, unless otherwise noted. Across the models, childhood abuse and both levels of severity of adolescent abuse are highly significant and predictive of young adult IPV perpetration. In the final model, victims of childhood abuse have a 97% higher odds of perpetrating IPV as young adults compared to those who were not abused. More severe adolescent abuse is associated with an 82% increase in the odds of violence perpetration, while less severe abuse increases the odds by 60%. Growing up with a single mother is a protective (OR 0.70, 95% CI 0.52 - 0.95). None of the social disorganization factors have a statistically significant relationship with IPV perpetration. Across the models, women are significantly more likely to perpetrate violence as compared to men.

For young adult IPV victimization, again, childhood abuse and both forms of adolescent abuse are highly predictive of the outcome. The effect is not attenuated with the addition of parental and social factors to the model. Respondents with parents in the highest two income categories are less likely to be victimized by sexual and romantic partners as young adults. The social factors are not statistically significant. Being female increases the risk of violence victimization.

Because of the significant effect of being female in both the perpetration and victimization models, the models are stratified by gender. While childhood abuse and adolescent partner abuse

remain highly significant, less severe adolescent abuse presents a slightly greater risk of violence perpetration for males. Males who experienced only psychological abuse have an 80% increase in the odds of perpetrating IPV in young adulthood, while those who experienced physical abuse have a 75% increase in the odds of perpetration. Among parental factors, only single fatherhood is a significant risk factor for violence perpetration. Males who are in single father households have greater odds of perpetrating IPV (OR 2.83, 95% CI 1.13 - 7.10). Social factors do not have a statistically significant impact.

In the case of male victimization, more severe adolescent abuse is the most salient historical abuse factor. Males who had been physically abused by partners as adolescents are much more likely to be victimized as adults than those who had not (OR 2.80, 95% CI 1.68-4.68). Less severe adolescent abuse continues to have a strong and significant effect (OR 1.94, 95% CI 1.39-2.70), while men who had been abused as children have a 66% greater odds of being victims of relationship abuse as adults. No parental or social factors have a statistically significant impact on male relationship victimization in young adulthood.

For female perpetration of violence in young adulthood, childhood abuse and more severe adolescent abuse are significant predictors. Women who experienced childhood abuse have a 94% greater odds of perpetrating adult IPV. The effect of severe adolescent abuse was similar (OR 1.96, 95% CI 1.28-2.99). Unlike for males, less severe adolescent partner abuse is only nearly significant ($p=0.08$) and associated with a 43% increase in the odds of violence perpetration. Among parental factors, women with parental income of \$50,000-\$79,999 are significantly less likely to perpetrate IPV compared to those with parental income of less than \$16,000. No social factors are statistically significant.

For female IPV victimization in young adulthood, childhood abuse is highly significant, with victims of childhood abuse having a 210% increase in the odds of victimization as compared to women who were not abused. More severe adolescent abuse also has a significant influence on the likelihood of adult victimization (OR 1.67, 95% CI 1.14-2.46). Less severe adolescent abuse does not have a significant association with victimization of females in young adulthood. Among social factors, concentrated disadvantage has a slightly protective effect (OR 0.91, 95% CI 0.84-0.99). Parental factors do not reach statistical significance in this model.

Discussion

Taken together, the results of this analysis indicate that parental childhood abuse and adolescent partner abuse are highly predictive of young adult IPV and are not attenuated by parental or social factors. In fact, in many of the models, the effects of childhood abuse and adolescent relationship abuse grow stronger with the inclusion of parental and social factors in the model.

These results have important implications for public health interventions and programs. First, childhood abuse prevention is paramount, as both the short- and long-term consequences of abuse are significant. Second, the long-term consequences of childhood abuse should be considered in counseling efforts. Though certainly not all children who are abused go on to be perpetrators or victims of violence, there is such an elevated likelihood of violence, it is vital to consider the implications of childhood abuse for future transmission of violence. Third, nearly a third of respondents had already experienced partner abuse by their wave 2 interview (grades 10-12). Since even less severe psychological abuse is generally strongly predictive of both young adult IPV perpetration and victimization, interventions to educate adolescents on healthy relationships may be an important opportunity to stop the cycle of violence (22). If adolescents develop ideals and expectations about relationships during this precocious time when abuse is common, intervening may provide an opportunity to reduce the likelihood of both adolescent and adult IPV.

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