

Prevalence and Correlates of Dating Violence in a National Sample of Adolescents

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ABSTRACT

Objective: Dating violence is an important but understudied public health concern in adolescents. This study sought to examine the lifetime prevalence of serious forms of dating violence in 12- to 17- year-olds, risk and protective factors associated with dating violence, and the relation between dating violence and mental health. **Method:** A nationally representative sample of adolescents ($N = 3,614$) completed a telephone-based interview that assessed serious forms of dating violence (i.e., sexual assault, physical assault, and/or drug/alcohol-facilitated rape perpetrated by a girlfriend, boyfriend, or other dating partner). **Results:** Prevalence of dating violence was 1.6% (2.7% of girls, 0.6% of boys), equating to approximately 400,000 adolescents in the U.S. population. Risk factors included older age, female sex, experience of other potentially traumatic events, and experience of recent life stressors. Findings also suggested that dating violence is associated with posttraumatic stress disorder and major depressive episode after controlling for demographic variables, other traumatic stressors, and stressful events. **Conclusions:** These findings indicate that dating violence is a significant public health problem in adolescent populations that should be addressed through early detection, prevention, and intervention. *J. Am. Acad. Child Adolesc. Psychiatry*, 2008;47(7):755–762. **Key Words:** serious dating violence, risk factors.

Serious dating violence, defined as physical and/or sexual assault in the context of a dating relationship, has long been considered an important but under-researched public health problem.¹ Substantial efforts have been made to understand the magnitude and impact of this problem since the early 1980s.^{2–6} Although much has been learned from this research, our understanding of the scope and public health implications of this problem in adolescent popula-

tions is limited. Notably, prevalence estimates, risk/protective factors, and psychiatric correlates associated with dating violence have not been examined in a nationally representative adolescent population.

Studies using adult samples have indicated that dating violence is a relatively frequent event, with prevalence estimates of dating violence victimization ranging from 21%⁷ to 45%⁸ (these estimates refer to the percentage of individuals rather than the percentage of couples experiencing dating violence). These studies have used relatively broad definitions of dating violence, whereas the present study focuses directly on serious forms of dating violence. Although there is a significant body of literature examining the prevalence of dating violence in adulthood, it is expected that adolescent and adult dating relationships differ in significant ways relating to contextual, social, developmental, and familial influences. Thus, it is important to isolate adolescents in population-based research to examine prevalence and risk/protective factors specifically associated with dating violence in this population.

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PREVALENCE AND RISK FACTORS ASSOCIATED WITH DATING VIOLENCE AMONG ADOLESCENTS

It is important to identify populations at particular risk for experiencing dating violence so that researchers, clinicians, and other youth-serving professionals know where to focus their efforts for further assessment as well as when and with whom they should intervene. To date, studies conducted with adolescents have generally used broad definitional criteria for dating violence and have reported prevalence estimates ranging from 3.6% to 20%.^{5,9-15} For example, data from the National Longitudinal Study of Adolescent Health examined the prevalence of verbal aggressiveness (i.e., name calling and swearing) and physical violence (limited to verbal threats, throwing objects, pushing, and shoving) in heterosexual dating partners.¹⁴

Risk/protective factor analyses have offered limited insight into predictors of dating violence in adolescent populations. First, studies have generally reported higher prevalence estimates for girls than boys,^{5,16} with a few exceptions.¹⁷⁻¹⁹ Differences are most often found when emphasis in research is on sexual victimization^{10,19} and severe violence.¹⁹ Second, the relation between age group and dating violence is unclear. Of the few studies examining age as a predictor of dating violence, almost none has used an adolescent sample. One study using an adolescent sample found that age was unrelated to risk for dating violence.²⁰ Third, only two studies that have explored racial and ethnic differences in dating violence have used an adolescent sample.^{3,12} Both of these studies found a higher prevalence of dating violence in African Americans compared to whites.

DATING VIOLENCE IN RELATION TO YOUTH MENTAL HEALTH

Several studies have investigated the relation between dating violence and psychopathology in teens.^{6,9,13,19} Dating violence in adolescence has been linked with suicidality,^{9,13} substance use problems,^{9,13} emotional distress,¹⁹ depression,⁶ and posttraumatic stress disorder (PTSD) symptoms.⁶ These studies provided important contributions to the literature, but were limited with regard to use of convenience samples, broad definitional criteria for dating violence, and use nondiagnostic interviews.

PRESENT STUDY

Although previous work has greatly extended our knowledge of the problem of dating violence in adolescence, there are several limitations to the existing research. First, many studies have used relatively small sample sizes. Second, many studies used convenience samples that likely have limited generalizability. Third, most studies have focused on adult samples; few have recruited adolescents. Fourth, many of the studies that have focused on adolescents limited their samples to narrow age groups that do not allow for comparisons between younger and older adolescents. Fifth, methodologies and operational definitions of dating violence have varied widely across studies. Sixth, few studies have carefully explored the relations between dating violence and mental health outcomes in multivariable models.

Using a large, national sample of adolescents ages 12 to 17, the present study attempted to shed light on the population prevalence of serious forms of dating violence in adolescence. The criteria for dating violence in this study are stringent, including only physical assault, sexual assault, and drug/alcohol-facilitated rape (DAFR). Prevalence is determined for each of these three subtypes. In addition, this study attempts to resolve discrepancies in the literature and further our understanding of variables associated with dating violence. Finally, we examined the relation between dating violence and psychopathology by assessing whether dating violence is associated with PTSD and a major depressive episode (MDE), controlling for key demographic and other relevant variables in multivariable analyses.

METHOD

Overview

The 2005 National Survey of Adolescents (NSA) is an epidemiological study of 3,614 youths ages 12 to 17 years. The primary goals of the NSA were to identify the population prevalence of major life stressors, such as physical assault, sexual assault, dating violence, and witnessed violence in the home, school, and community; identify the population prevalence of specific mental health disorders known to be associated with exposure to traumatic events; examine risk factors associated with violence exposure and mental health outcomes; and make trend comparisons that examine current population prevalence estimates versus estimates generated by a similar study conducted by our research group in 1995 with a nationally representative sample of 4,023 youths ages 12 to 17 years. Because dating violence was not

assessed in the context of the 1995 NSA study, we cannot make trend comparisons.

Participants

The full sample included a national household probability sample and an oversample of urban-dwelling adolescents. Recruitment of participants began after the study was approved by the institutional review board of the Medical University of South Carolina. During recruitment, 6,694 households were contacted, which resulted in both a completed parent interview and identification of at least one eligible adolescent. Of these, 1,268 (18.9%) parents refused adolescent participation. In 188 (2.8%) additional cases, the parent consented, but the adolescent refused to be interviewed, and in another 119 (1.8%) cases, the adolescent interview was initiated but not completed. Finally, in 1,505 (22.5%) cases, parental consent was given and a parent interview was completed, but the identified eligible adolescent was unreachable or not available for interview at any of our contacts or call backs to the family during the field period. The remaining 3,614 cases resulted in completed parent and adolescent interviews. This included 2,459 adolescents in the national cross-section and an oversample of 1,155 urban-dwelling adolescents.

Because adolescents were oversampled in urban areas, cases were weighted to maximize representativeness of the sample to the U.S. adolescent population. A weight was created to restore the urban cases to their true proportion of the urban/suburban/rural variable, based on U.S. Census estimates. Next, weights were created to adjust the weight of each case based on age and sex. We generated sample frequencies by age cohort and sex and compared this distribution to the U.S. Census estimates. Weightings were assigned to each sex \times age group cell within the sample. This procedure resulted in weighted sample distributions that closely approximated U.S. Census estimates.

Measures

Serious Dating Violence. Serious dating violence was defined as experiencing one or more of the following types of violence from a dating partner (i.e., girlfriend, boyfriend, or other dating partner): physical assault, sexual assault, and DAFR. Physical assault was defined as experiencing an attack with or without a weapon in which the participant was badly injured or beaten up and/or being threatened with a dangerous weapon (e.g., gun, knife). Sexual assault was defined as forced anal, vaginal, and/or oral sex; forced digital penetration and/or foreign object penetration; and/or forced touching of genitalia. DAFR was defined as being the victim of unwanted sex (i.e., vaginal, anal, and/or oral penetration) while high, drunk, or passed out from drinking or taking drugs. DAFR was coded "yes" if participants took the drugs or alcohol on their own accord or if they were given the drug by the perpetrator or someone else. The DAFR module was administered only to female adolescents, whereas the physical assault and sexual assault modules were administered both to male and female participants. Lifetime history of serious dating violence was assessed for all three types of dating violence.

Other Potentially Traumatic Events. Participants were assessed to determine whether they experienced any other potentially traumatic events in their lifetime. Nondating violence potentially traumatic events assessed were sexual assault or DAFR by someone other than a partner; physical assault or abuse by someone other than a partner; serious motor vehicle accident, serious accident, fire, or natural

disaster; loss of a close friend or loved one due to homicide or drunk driving accident; witnessing community violence; and witnessing parental violence.

Stressful Life Events. Experience of stressful life events occurring in the past year was also assessed. Stressful life events assessed were death of a parent, sibling, or friend; serious and life-threatening illness (self, sibling, or parent); and parental divorce or separation.

PTSD. Lifetime PTSD was assessed using the PTSD module of the NSA survey,²¹ a structured diagnostic interview that assessed each *DSM-IV* symptom with a yes/no response. Research on this measure has provided support for concurrent validity and several forms of reliability (e.g., temporal stability, internal consistency, diagnostic reliability).^{22,23} The measure was validated against the PTSD module of the Structured Clinical Interview for the *DSM* administered by mental health professionals.²⁴ The interrater κ coefficient was .85 for the diagnosis of PTSD, and comparisons between the NWS-PTSD module and SCID yielded a κ coefficient of .77.

MDE. Lifetime MDE was assessed using the depression module of the NSA survey, a structured interview that targets MDE criteria using a yes/no response format for each *DSM-IV* symptom. Psychometric data support the internal consistency²⁵ and convergent validity²⁶ of the depression module. Boscarino and colleagues²⁶ compared the depression module against the depression scale of the Brief Symptom Inventory-18, yielding a sensitivity of 73% and specificity of 87% in the detection of MDE as classified by our instrument. MDE identified by this measure is also associated with lower reported work quality²⁶ and mental health treatment seeking after controlling key variables and assault history variables.²⁷

Procedures. A highly structured telephone interview was designed to collect information across several domains, including demographic variables, traumatic event history, witnessed violence, and mental health history. Data collection procedures were similar to those used in the 1995 National Survey of Adolescents.²⁴ Participants were selected using a multistage, stratified, random-digit dial procedure within each region of the country; the full sample included a national household probability sample as well as an oversample of urban-dwelling adolescents. The structured telephone interview took about 43 minutes to complete. The interview was administered in English or Spanish, based on respondents' preference, by trained interviewers employed by Shulman, Ronca, and Bucuvalas, Inc., a survey research firm with significant experience managing survey studies. A computer-assisted telephone interview system aided this process by prompting interviewers with each question consecutively on a computer screen, and supervisors conducted random checks of data entry accuracy and interviewers' adherence to assessment procedures.

Interviews began with parental consent and a brief parent interview consisting primarily of demographic questions, several of which were later corroborated by the adolescent. The majority of the interview was conducted with the adolescent. The data used in this study were obtained directly from the adolescent interview. In keeping with ethical and legal guidelines, an institutional review board-approved "adolescent in danger" protocol was in place to assess whether the adolescent was in current danger. A potential adolescent in danger was identified when an adolescent reported a recent assault incident occurring in the home that had not been reported to someone in authority. All such cases were reported to one of the project co-investigators (all doctoral level, licensed mental health professionals), who then staffed the case with project faculty to determine potential risk for harm and need to recontact. Only 29 of 3,614 adolescents (0.8%) needed to be recontacted via this

protocol. In all 29 instances, issues of risk were addressed without the need to break confidentiality.

As anticipated, a small percentage of adolescents reported distress on completion of the interview. Adolescents who were distressed were asked whether they were willing to be contacted by one of the project investigators (i.e., licensed clinical psychologist). In such cases, the adolescent was recontacted for further assessment of the adolescent's current distress and provided an appropriate mental health referral if necessary. In all incidents in which a respondent was recontacted by a project team member under this protocol, the respondent reported no significant distress during the follow-up telephone call and no further action was necessary.

Statistical Analysis

Participants were considered victims of serious dating violence if they reported experiencing one or more of the following from a boyfriend, girlfriend, or other dating partner: sexual assault; physical assault; or DAFR. Prevalence data are reported first and then risk factor findings are presented. Separate logistic regression analyses were conducted to identify variables within each predictor set (i.e., demographic, other potentially traumatic, or recent life stressors) that were significantly associated with the dependent variable (dating violence, PTSD, and MDE, respectively). Significant predictors emerging from these first-stage analyses were then entered into final multivariable logistic regression analyses for each of these three dependent variables. For analyses predicting PTSD and MDE, dating violence was included as a predictor in each of the final models. All of the logistic regression analyses were conducted in survey data analysis to retain the sample weighting.

RESULTS

Prevalence

Overall, the prevalence of serious dating violence among adolescents ages 12 to 17 years was 1.6%. This equates to a population estimate of roughly 400,000

TABLE 1

Participants Reporting Dating Violence or No Dating Violence Across the Age and Racial/Ethnic Groups

Group	Dating Violence (%)	No Dating Violence (%)
12-y-olds	0 (0.0)	588 (100.0)
13-y-olds	3 (0.5)	593 (99.5)
14-y-olds	11 (1.7)	614 (98.3)
15-y-olds	10 (1.7)	584 (98.3)
16-y-olds	14 (2.3)	589 (97.7)
17-y-olds	22 (3.6)	577 (96.4)
Asian American	2 (2.7)	87 (97.3)
Native American	1 (1.2)	88 (98.8)
Hispanic	7 (1.9)	366 (98.1)
African American	8 (1.7)	456 (98.3)
White	36 (1.4)	2452 (98.6)

Note: These numbers were obtained using the weighted sample; raw numbers do not add up to the total sample size for the racial/ethnic category due to missing data for this variable.

TABLE 2

Final Model of Risk Factors for Dating Intimate Partner Violence

Predictors	β	SE	Wald	OR	95% CI
Other traumas	1.81	0.66	7.48**	6.13	1.67–22.50
Stressful events	.93	0.29	10.31***	2.53	1.44–4.46
Sex	1.54	0.37	17.43***	4.66	2.26–9.60
Age	1.07	0.34	9.98***	2.93	1.50–5.71

Note: *df* = 1 for all variables. Wald = Wald statistic; OR = odds ratio; 95% CI = 95% confidence interval for OR.

****p* < .01; ***p* < .001.

U.S. adolescents, based on 2005 Census data. Sexual assault was the most common form of serious dating violence with a prevalence of 0.9%. Next, the prevalence of physical assault in the context of dating violence was 0.8%, and finally 0.1% of the sample reported having experienced a DAFR by a dating partner. Across the three types of dating violence, prevalence for boys was generally lower, with a 0.6% overall prevalence estimate: 0.3% for sexual assault and 0.4% for physical assault. For girls, prevalence estimates were 2.7% for any of the three types of dating violence, including 1.5% for sexual assault, 1.2% for physical assault, and 0.2% for DAFR. Table 1 shows the prevalence estimates at every age and for each racial group.

Risk and Protective Factors for Dating Violence

Results of the final logistic regression are provided in Table 2. As noted above, an initial set of logistic regression analyses was first conducted to identify variables to be included in final model analyses. Variables that are not included in our final model analyses (e.g., racial/ethnic status) therefore were not significantly associated with dating violence in these first-stage analyses. In the final model, the following

TABLE 3

Final Model of Variables Predicting PTSD

Predictors	β	SE	Wald	OR	95% CI
Other traumas	1.11	0.30	14.19***	3.05	1.71–5.45
Stressful events	.75	0.15	23.87***	2.11	1.56–2.84
Sex	.68	0.16	18.03***	1.98	1.44–2.71
Age	.66	0.16	16.70***	1.93	1.41–2.64
Dating violence	1.28	0.32	15.96***	3.58	1.92–6.71

Note: *df* = 1 for all variables. PTSD = posttraumatic stress disorder; Wald = Wald statistic; OR = odds ratio; 95% CI = 95% confidence interval for OR.

****p* < .001.

variables (all coded dichotomously) were associated with significantly greater risk for experiencing dating violence: older age group (15- to 17-year-olds, odds ratio [OR] 2.93 versus 12- to 14-year-olds); female sex (OR 4.66 versus male sex); history of another potentially traumatic event (OR 6.13 versus no other traumatic events); and experiencing a recent stressful life event (OR 2.53 versus no stressful life events in the past year). Race/ethnicity was not a significant risk factor for dating violence.

Dating Violence in Relation to PTSD

The final model (Table 3) included age, sex, history of other traumatic event, recent stressful event, and dating violence. Increased likelihood of PTSD diagnosis was significantly associated with older age group (15- to 17-year-olds, OR 1.93 versus 12- to 14-year-olds), female sex (OR 1.98 versus male sex), experiencing a traumatic event other than dating violence (OR 3.05 versus no traumatic event history), experiencing a stressful life event in the past year (OR 2.11 versus no stressful event), and experiencing dating violence (OR 3.58 versus no dating violence). Thus, dating violence uniquely contributed to the model beyond variance accounted for by demographic and stressor variables.

Dating Violence in Relation to MDE

The final model included sex, age, history of another trauma, experiencing a recent stressful life event, and dating violence (Table 4). Increased likelihood of experiencing MDE was significantly associated with older age group (OR 2.12 versus younger age group), female sex (OR 2.76 versus male sex), experiencing a nondating-violence traumatic event (OR 2.67 versus no other traumatic event history), experiencing a stressful

life event in the past year (OR 1.56 versus no stressful event), and dating violence (OR 3.68 versus no dating violence). Thus, experiencing dating violence was significantly associated with MDE after controlling for significant demographics and other potentially traumatic and stressful events.

DISCUSSION

This study used a nationally representative sample of adolescents to estimate the prevalence of dating violence in the U.S. population of adolescents, identify risk factors for dating violence, and assess whether experiencing dating violence is associated with PTSD and MDE after controlling for key demographic and other relevant variables. Older age, female sex, and exposure to previous and recent life stressors were associated with greater risk for experiencing dating violence. In addition, dating violence was significantly associated with PTSD and MDE after controlling for significant relevant variables.

The prevalence of severe dating violence was estimated to be 2.7% for girls and 0.6% for boys, equating to U.S. population estimates of about 335,000 girls and 78,000 boys. The prevalence of dating violence in this study may have been lower than in previous studies^{5,12} for three reasons. First, the inclusion of 12- and 13-year-olds is uncommon for many previous studies investigating dating violence in adolescents, with the majority of studies limited to high school students. To provide a complete picture of adolescent dating violence prevalence in the United States, as well as to examine age as a risk factor (i.e., comparisons between younger and older adolescents), we included the entire range of adolescent ages. As our results demonstrate, older age is associated with higher prevalence. Thus, our prevalence would have been meaningfully higher had we excluded this important group, as many have done previously. Our finding is also consistent with previous research demonstrating that on average, adult prevalence estimates (many of which were determined using college student samples) are higher than adolescent prevalence estimates of dating violence. However, differences in operational definitions of dating violence across studies limit comparability.

Second, it is noteworthy that this prevalence is in all of the adolescents in the national sample and was not restricted to adolescents who had dating experiences. It

TABLE 4
Final Model of Variables Predicting MDE

Predictors	β	SE	Wald	OR	95% CI
Other traumas	.98	0.22	20.21***	2.67	1.74–4.09
Stressful events	.45	0.13	12.03***	1.56	1.21–2.01
Sex	1.01	0.15	48.93***	2.76	2.08–3.67
Age	.75	0.14	28.76***	2.12	1.61–2.80
Dating violence	1.30	0.34	14.90***	3.68	1.90–7.12

Note: *df* = 1 for all variables. MDE = major depressive episode; Wald = Wald statistic; OR = odds ratio; 95% CI = 95% confidence interval for OR.

****p* < .001.

is likely that a meaningful percentage of adolescents in our sample have never had a dating partner, although this was not specifically assessed. Thus, our estimate is one that applies to the full population of adolescents and the prevalence specific to those with dating histories would have been higher. Interestingly, the only other study assessing the presence of dating violence using the entire range of adolescent ages in a nationally representative sample reported a prevalence of 3.6%.¹⁵ Similar to the present study, this prevalence estimate included all of the adolescents in the national sample regardless of dating history. Thus, the present findings are consistent with previous work using similar methodology. The prevalence estimate in the present study is likely to be slightly lower because the present study assessed only severe dating violence.

Third, our operational definition for dating violence includes physical assault causing harm, threat with a weapon, rape, or forced sexual activity. Participants were not detected as victims of dating violence if they experienced verbal threats, hitting or slapping without injury, shoving without injury, or verbal aggressiveness (e.g., name calling). These forms of dating violence were not assessed in the interview. We selected forms of dating violence that we hypothesized would be associated with high risk for mental health problems. It is important to consider the severity of dating violence assessed in the present study when evaluating the impact of this problem.

This study also revealed a higher prevalence of dating violence victimization for girls compared to boys. This finding is in accordance with other studies that use stringent criteria for dating violence,¹⁹ but not with studies that are more inclusive of a wider range of incidents,³ suggesting that the way in which dating violence is defined significantly affects the strength of association between sex and risk for dating violence. Prevalence estimates were highest for sexual assault, followed by physical assault, and then DAFR. Overall, these findings suggest that dating violence in adolescence is a significant public health issue to address, particularly for older adolescent girls.

In addition to age and sex, experiencing other traumatic events and/or stressful life events were key risk factors for dating violence. This finding lends support to the rationale for considering the role of life stressors in the context of previous traumatic and other major life experiences. This is particularly important in

light of research suggesting that exposure to multiple forms of violence is common (20%–22%)^{28,29} and highly predictive of PTSD symptoms in children²⁹ and that more exposure to traumatic events is associated with greater likelihood of developing PTSD³⁰ and depression³¹ in adulthood. Similarly, previous work has shown that individuals with a history of exposure to traumatic events are at greater risk for PTSD after a subsequent traumatic event than those who had not experienced previous traumatic events.^{32,33}

The strong association observed between dating violence and having experienced a previous traumatic event also underscores the importance of screening children in schools and other settings for exposure to potentially traumatic events. Adolescents who endorse histories of potentially traumatic experiences may be good candidates for psychoeducation to reduce future risk for dating violence and other forms of interpersonal violence and traumatic stress. Moreover, such screening practices provide a good opportunity to identify children who have significant symptoms of PTSD, MDE, or other mental health problems that may be addressed with effective interventions.

Dating violence was also associated with PTSD and MDE diagnoses. This finding has important implications for public health, prevention, assessment, and intervention. More specifically, this study demonstrates that severe dating violence does occur in the adolescent population and that this phenomenon has a negative impact on the mental health of those individuals who are experiencing dating violence in their communities. Dating violence was found to make a unique contribution to models predicting both of these diagnoses after controlling for significant demographic variables, lifetime history of other traumatic events, and stressful life events in the past year. Specifically, participants who experienced partner violence were nearly four times more likely to have diagnoses of PTSD and MDE than participants who did not experience dating violence. Adolescents who are physically and/or sexually assaulted by their partners are a high-risk group. It may be beneficial to develop new (and redesign existing) resources to address this risk via educational and secondary prevention approaches. For example, programs that provide education to middle school students about conflict resolution in relationships may help to teach young adolescents appropriate behaviors to manage disagreements in future dating relationships.

Similarly, prevention programs could be delivered to high school students, particularly girls who are at risk for experiencing dating violence. Interventions that provide information about dating safety, assertiveness, and developing plans for addressing acute and chronic dating violence situations could help to reduce the cases of dating violence for these girls not only during their adolescent years but also potentially protect them from future adult interpersonal violence. Although the present study did not assess the risk for revictimization subsequent to dating violence, this may also be a key target of such interventions. Finally, although the present study did not examine risk factors for dating violence perpetration, this is an important group with which to intervene as well. Future research should explore this issue and develop prevention programs targeting this group of adolescents. Teaching these adolescents anger management and other coping skills, as well as informing them of the negative repercussions of their use of violence in dating relationships may be effective ways to reduce dating violence and should be examined empirically.

One limitation to be noted in the present study is the cross-sectional design, hindering the types of hypotheses that can be tested. Future research should expand on the present findings by using a longitudinal design and assessing whether the experience of dating violence in adolescence predicts psychopathology, experience of other traumatic events, and experience of partner violence in adulthood. Also, as discussed above, this study did not assess whether participants had dating histories. This information may have been useful in obtaining more descriptive information about adolescent dating violence. Similarly, we did not assess other potentially informative areas such as sexual orientation, dating habits, or academic achievement. Likewise, we did not comprehensively assess socioeconomic status, which may have also been a relevant variable to include in the regression models.

Another limitation to be noted is that due to statistical power issues associated with the low base rate of serious dating violence, we focused on predictors of lifetime PTSD and MDE, whereas a focus on current (e.g., past 6 months) PTSD and MDE would have been preferable. To maximize power, we also chose to limit the number of variables entered as predictors in each model. We selected the variables most relevant to this area, based on the previous literature. Thus, some variables that may have

been interesting to examine, such as substance use and/or abuse, were not included in the models. In addition, statistical power constraints, due to the low base rates of dating violence in this sample, also prevented us from conducting analyses that examined variable interactions that may have contributed explanatory variance. Finally, one methodological weakness of this study, common to many studies of adolescent populations, was that we were limited to surveying only those households with a consenting adult available.

Taken together, these findings support and significantly extend the existing research base on dating violence, while assisting in clarifying the role of age, sex, and race/ethnicity in dating violence. Furthermore, they illustrate the potential impact of dating violence on PTSD and MDE in adolescence. Education and prevention programs in early adolescence (i.e., while adolescents are just beginning to form intimate dating partnerships and are not yet at high risk for experiencing dating violence) may be beneficial, particularly for older adolescents (i.e., ages 15–17 years) who endorse key risk factors for dating violence. Prevention of dating violence may be influential in preventing subsequent development of PTSD and MDE in adolescents. In addition, dating violence should be assessed by clinicians and school counselors working with adolescents presenting with PTSD and/or MDE symptoms as part of their standard assessments of life stressors.

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Healthy Steps for Young Children Program in Pediatric Residency Training: Impact on Primary Care Outcomes Niederman LG, Schwartz A, Connell KJ, Silverman K

Objective: Incorporating Healthy Steps for Young Children into pediatric practice has been shown to have positive effects for children and families. Although this model of care has also been integrated into several pediatric and family medicine training programs, published reports to date have focused only on residents' perceptions of their interactions with the model of care. In this study, we report the impact on primary care outcomes after integrating Healthy Steps for Young Children into residency training. *Methods:* Continuity of care, longitudinal care in the practice, quality of primary care services, and rates of behavioral, developmental, and psychosocial diagnoses were measured for 3 cohorts: (1) Healthy Steps-enrolled children, (2) non-Healthy Steps-enrolled children who were followed at the same site of care, and (3) non-Healthy Steps-enrolled children who were receiving primary care at a similar residency training site within the same training program. All data were extracted from patient charts at the 2 practice sites. *Results:* Continuity of care was significantly better for Healthy Steps-enrolled children compared with non-Healthy Steps-enrolled children at the Healthy Steps site for both total visits and health maintenance visits. Longitudinal care and quality of primary care services did not differ within or between sites. The rates of documentation of behavioral, developmental, or psychosocial diagnoses did not differ between Healthy Steps-enrolled and non-Healthy Steps-enrolled children at the Healthy Steps for Young Children site but were significantly different between the Healthy Steps and the non-Healthy Steps for Young Children sites; the effect was driven wholly by differences in psychosocial diagnoses. *Conclusions:* Multiple indices that measure health service outcomes suggest benefits of incorporating Healthy Steps for Young Children into pediatric residency training. Most important, continuity of care in residents' practices significantly improved, as did the residents' documentation of psychosocial issues in children. Reproduced with permission from *Pediatrics*, 120(3):e596–603. Copyright 2007 by the AAP.