

The Link Between Adversity and Dating Violence Among Adolescents Hospitalized for Psychiatric Treatment: Parental Emotion Validation as a Candidate Protective Factor

Nicole M. Froidevaux, MA¹ , Stacy Metcalf, MA¹, Corey Pettit, BA¹, Francesca Penner, MEd², Carla Sharp, PhD² and Jessica L. Borelli, PhD¹

Abstract

Adolescents are at risk for becoming victims or perpetrators for a variety of forms of dating violence, including cyber violence, physical violence, psychological abuse, and sexual abuse. Interestingly, a robust predictor of dating violence is adverse experiences during childhood; however, factors that could mitigate the risk of dating violence for those exposed to adversity have seldom been examined. Using the cumulative stress hypothesis as a lens, the current study examined adverse experiences as a predictor of dating violence within a sample at risk for both victimization and perpetration of dating violence: An adolescent (12–17 years old; $N = 137$) sample

¹University of California, Irvine, USA

²University of Houston, TX, USA

Corresponding Author:

Nicole M. Froidevaux, Department of Psychological Science, University of California, Irvine, 4201 Social and Behavioral Sciences Gateway, Irvine, CA 92697, USA.

Email: nfroidev@uci.edu

who were receiving inpatient psychiatric treatment. First, the current study aimed to replicate previous findings to determine whether adversity predicted dating violence and whether this varied by gender. Then, the current study examined one factor that could mitigate the relation between adversity and dating violence—parental emotion validation. High rates of maternal emotion validation resulted in no relation between adversity and dating violence perpetration and victimization; however, the relation was present at average and low levels of maternal emotion validation. Next, by adding gender as an additional moderator to the model, we found that high rates of paternal emotion validation extinguished the relation between adversity and dating violence perpetration, but only for adolescent boys. This pattern was not found for maternal emotion validation. Interestingly, the relation between adversity and dating violence victimization did not vary as a function of maternal or paternal validation of emotion for either child gender. These findings are discussed in terms of their meaning within this sample, possible future directions, and their implications for the prevention of dating violence.

Keywords

dating violence, domestic violence, intervention/treatment, predicting domestic violence

Adolescent dating violence has been slow to receive attention as a public health concern despite its high prevalence and the prognostic significance that it holds for future relationships. Violence at a young age may be an age-expected, normative lack of behavioral regulation rather than disturbance in behavior that merits remedying; however, studies have documented a host of short- and long-term negative outcomes linked to violence from a romantic partner (Choi et al., 2017; Foshee et al., 2013; Harned & Vict, 2001; Silverman et al., 2001), with some factors such as the severity of adversity experienced and gender being associated with greater reports of dating violence perpetration and victimization (Higgins et al., 2018; Reyes et al., 2016). Therefore, it is imperative to better understand the factors that may both create risk and foster resilience to dating violence in adolescence. To do so, we examined adversity's association with adolescent dating violence and whether a well-documented emotion regulation factor, parental validation of their child's emotions, influenced the strength or direction of said association. We also tested the parent-to-child gender match to

determine whether the association was further influenced by gender match modeling.

The exact prevalence of dating violence remains unknown in part due to underreporting tendencies, inconsistency in the definition of dating violence, and variability in populations sampled (Offenhauer & Buchalter, 2011); however, current estimates suggest a large portion of adolescents—between 9% to 46%—are involved as perpetrators or victims of dating violence (Alleyne-Green et al., 2012; Wincentak et al., 2017). Dating violence can take several forms, including cyber violence, physical violence, psychological abuse, and sexual abuse; each places adolescents at increased risk for physical and mental health problems (Foshee et al., 2013). Dating violence perpetration and victimization are associated with a wide range of adverse outcomes, including depressive symptomatology, suicidal ideation, substance abuse, unhealthy weight control behaviors, and sexual risk taking (Choi et al., 2017; Harned & Vict, 2001; Silverman et al., 2001). The adverse outcomes associated with dating violence extend into adulthood, with increased risky violent behavior within relationships between current or former intimate partners—referred to as intimate partner violence (IPV; Manchikanti Gómez, 2011; O’Leary et al., 1989), which itself is linked with serious physical injury and even death (Centers for Disease Control and Prevention [CDC], 2019). Adolescent dating violence differs from adult intimate partner violence in multiple ways: First, traditional gender power dynamics are less likely to be present (e.g., girls, compared with adult women, are less likely to be dependent on their partners for financial support and are less likely to be supporting a child; Mulford & Giordano, 2008; Wekerle & Wolfe, 1999); second, adolescents lack prior experience navigating romantic relationships and may therefore be prone to the use of less adaptive coping strategies (Connolly et al., 2010; Fredland et al., 2005; Laursen & Collins, 1994; Roscoe & Kelsey, 1986; Wekerle & Wolfe, 1999); finally, because they exert greater influence on adolescents than on adults, peers’ attitudes about dating violence likely have a larger impact on adolescents’ behavior (Adelman & Kil, 2007; Mumford et al., 2020; Noonan & Charles, 2009).

Risk Factors for Adolescent Dating Violence

Numerous factors place adolescents at greater risk for dating violence perpetration and victimization. In the service of being succinct, we review those relevant to the present study here. These include

environmental factors that normalize violence, the cumulation of negative life events, and gender-related differences.

Normalizing Violence

A variety of theoretical frameworks have been offered to explain the environmental factors that render some individuals more susceptible to the perpetration and victimization of interpersonal violence (Doumas et al., 1994; Stith et al., 2000). One of the most prominent of these is the social learning perspective (Bandura, 1962), which suggests that through modeling, adolescents learn how to treat others based on how they are treated by the adults caring for them. Following this argument, adolescents exposed to violent or aggressive behavior in the home environment through direct experience, such as abuse, or through witnessing violence or aggression, such as domestic violence between parents, may be more likely to become perpetrators or victims of violence. The research literature is moderately supportive of this theoretical perspective (Faulkner et al., 2014; Stith et al., 2004), with meta-analytic findings suggesting that growing up in a violent home confers a weak-to-moderate risk for violent interactions with one's future spouse. In fact, although the majority of investigations have focused on adolescent's home lives, the social learning perspective may be profitably applied more broadly to adolescent's development, linking their exposure to violence and aggression encountered in the home and the broader community to subsequent aggressive acts. This perspective is consistent with Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1992), which holds that adolescent's developmental outcomes are a product of nested ecological contexts. Furthermore, it may not only be exposure to violence and aggression that confers risk for interpersonal violence; we now know that adversity of all kinds can exert impacts on developing stress response systems. In support of this argument, myriad studies have identified a pathway between childhood adversity and both dating violence perpetration (see Vagi et al., 2013, for a review) and victimization (Paat & Markham, 2019; see Glass et al., 2003, for a review).

Negative Life Events

A variety of individual, physiological, and socioemotional risk factors have been linked to adolescent dating violence perpetration and victimization. While most studies have focused on adversity during childhood, adolescence may be an important time to examine negative life events.

Adolescence is marked by increasingly complex social environments that may expand risk for a widening array of stressors. A developing literature suggests links between negative life events during adolescence and subsequent mental health symptoms (Ge et al., 2006; Low et al., 2012). With a few exceptions (Higgins et al., 2018; Miller et al., 2011), the majority of studies that tested the risk for dating violence focused on one particular type of stressor at a time. However, the sensitization-to-stress theory posits that adversity may create psychological and physiological hyperreactivity to stress, suggesting that the cumulation of stress may create risk for violent relationships (Mason & Smith, 2012; Roberts et al., 2011). In addition, certain individual differences may relate to a greater likelihood of dating violence perpetration or victimization.

Individuals with severe psychopathology have higher rates of adversity exposure than others (Schalinski et al., 2019; see Kessler et al., 2010, for a review), allowing for them to be an ideal population within which to study the pathway from adverse experiences to dating violence. For example, adolescents with severe psychopathology show greater susceptibility to perpetration and victimization of dating violence (Boivin et al., 2012 see Kessler et al., 2010, for a review). Consequently, examining dating violence within an inpatient psychiatric population enables the examination of dating violence in a higher portion of our sample. This, in turn, could enable the examination of risk factors not typically possible in community samples with lower base rates.

Gender Differences

Evidence also suggests that there may be gender-based differences in dating violence risk. Prior studies have reported certain risk factors specific to girls (e.g., victimization of friends, alcohol use, depression; Foshee et al., 2001) or boys (e.g., history of fighting, number of sexual partners; Cleveland et al., 2003), though many factors seem to impact both girls and boys (e.g., history of aggression, antisocial behavior, childhood physical abuse; Gidycz, Warkentin & Orchowski, 2007; Hébert et al., 2019; Lavoie et al. 2002; Linder & Collins, 2005). However, some studies suggest inconsistent patterns of results, with some reporting higher dating violence victimization in girls compared with boys (Marquart et al., 2007; Wolitzky-Taylor et al., 2008), others reporting higher rates in boys compared with girls (Breiding et al., 2014, Wincentak et al., 2017), and yet others reporting comparable rates between genders for in person (O'Leary et al., 2008) and online dating

aggression (Reed et al., 2017). Hamby and Turner (2013) attribute these discrepant results to inconsistent definitions of dating violence; that is, some researchers use broad definitions of dating violence whereas others use narrower definitions.

While clarity on this question is needed, certain gender differences in adolescent dating violence have been well documented—compared with boys, girls in high school tend to cite greater physical injury and emotional trauma related to dating violence victimization (Coker et al., 2014; Hamby & Turner, 2013), and report that dating violence has a larger impact on their relationship satisfaction (Katz et al., 2002; Williams & Frieze, 2005). Therefore, predictors of dating violence may also vary across gender (Foshee et al., 2001; Reyes et al., 2016).

Protective Factors for Adolescent Dating Violence

Holding in mind the argument posited by social learning theory—that adolescent's propensity to engage in dating violence is a product of their learning history—it is also important to consider the role of factors that could mitigate the impact of adverse experiences on social learning. Attachment theory (Bowlby, 1973) holds that when attachment figures provide adolescents with sensitive responsiveness, adolescents are better able to regulate their emotional states, and thus, their behavior. Sensitive responsiveness entails responding to the adolescent's behavior by recognizing and responding to the underlying emotional need. As such, sensitive responsiveness is closely linked to and often strongly associated with other psychological constructs such as parental reflective functioning or mentalizing (Suchman et al., 2010) and empathy (Davidov & Grusec, 2006; Shaver et al., 2016). When parents respond to adolescent's behavior with sensitive responsiveness, this enables adolescents to regulate their emotions and their behavior (Sroufe, 2005), and ultimately is predictive of a host of positive psychosocial outcomes across development, including more direct and adaptive communication of emotional needs. Accordingly, we would anticipate that adolescents who experience positive relationships with their caregivers, particularly those characterized by sensitive responsiveness or emotion validation, would be more protected from the negative impact of adversity on developmental outcomes.

A review of the literature on adolescent dating violence perpetration conducted by Vagi et al. (2013) revealed only three articles examining protective factors. Most of these factors pertained to intrapersonal difference-level factors such as grade point average and attitudes

about sex (Cleveland et al., 2003), and attitudes about dating violence (Schumacher & Slep, 2004). However, one study identified a relational protective factor—attenuated levels of dating violence perpetration when girls reported a positive relationship with their mothers, characterized by high levels of closeness, warmth, and open communication (Cleveland et al., 2003). A more recent meta-analysis also suggests benefits of parental monitoring in the prevention of dating violence perpetration (Hébert et al., 2019). To date, no studies have examined parent–teen relationship aspects as a protective factor specifically between adversity and violence. Encouragingly, parenting behavior offers a tangible target for change and thus could be particularly important in preventive efforts. However, the current literature is lacking regarding parental influences, gender differences, and potential differential effects of parenting on perpetration versus victimization. Thus, a more nuanced examination of the role of parenting, such as responses to a child’s emotional expression, on dating violence perpetration and victimization is a necessary precursor to intervention efforts.

Parental Emotion Validation

The development of emotion regulation may be particularly important in preventing both perpetration and victimization of dating violence in adolescence. Adolescents are likely navigating romantic relationships for the first time and may therefore be prone to strong emotional responses in the face of conflict or interactions that undermine the security of the relationship (Fredland et al., 2005). Parental emotion socialization, which can vary along the dimension of emotion validation and invalidation, is one aspect of emotion regulation tied to the development of adolescent’s emotional and social competence (Eisenberg et al., 1998) that may be a strong protective factor.

Parental invalidation of emotions, or responding to emotional expression erratically or inappropriately such that the emotional expression is punished or trivialized (Linehan, 1993), has been associated with maladaptive emotion regulation strategies (e.g., escaping rather than expressing emotions when angered) in adults (Krause et al., 2003) and behavioral problems (e.g., internalizing and externalizing), emotion dysregulation, and relationship dissatisfaction in adolescents (Buckholdt et al., 2014; Lunkenhimer et al., 2007; Shenk & Fruzzetti, 2014). Studies have also shown that emotion invalidation during childhood may be a risk factor for later relationship

disturbances in individuals with borderline personality disorder (Selby et al., 2008).

However, when parents respond to emotions with validation (e.g., comforting, empathizing, problem solving), this may help adolescents better understand their emotions (Warren & Stifter, 2008) and develop strategies for tolerating emotional distress (Eisenberg et al., 1998; Lambie & Lindberg, 2016). Research suggests that a validating response to emotion from a parent might encourage adolescents to use verbal methods to cope with emotional distress (Eisenberg & Fabes, 1994), potentially equipping adolescents with the tools to de-escalate interpersonal conflict rather than react aggressively or passively.

More specifically, each parent may play a specific role when validating a child's emotions. Research suggests that mothers and fathers may have unique influences on adolescent development (Lamb, 2010). Past research on the link between parenting behavior and child violence that distinguishes between mothers compared with fathers has yielded somewhat contradictory findings. Some researchers suggest stronger maternal compared with paternal effects on violence development in adolescents (e.g., Brook et al., 2001; Hart et al., 1998; Leadbeater et al., 2008), whereas others suggest a particularly strong association between matching dyads (e.g., paternal parenting and violence among sons (Chang et al., 2003), or maternal parenting and violence among daughters (Lovas, 2005).

Thus, parental emotion validation (EV) may be an important protective factor in the link between adversity and dating violence and the specific gender of the parent and child may be further elucidating.

Current Investigation

The current study sought to build upon previous research by examining whether parental EV (specific to each parent) buffered the association between adversity and adolescent dating violence, and whether that effect varied as a function of the match between parent and child gender, within a clinical sample of adolescents hospitalized for mild psychiatric diagnoses.

Preliminary Analyses

We aimed to replicate findings that rates of dating violence perpetration and victimization differ by gender, and that experiencing adversity in adolescence was positively associated with adolescent dating violence

perpetration and victimization. In addition, we examined whether the association between adversity and dating violence varied as a function of gender.

Hypothesis Testing

Our first hypotheses involved testing EV of each parent separately, as a single moderator of the relation between adversity and our outcomes of interest (dating violence perpetration or victimization). Next, we tested whether the matching or nonmatching of parent to child gender influenced the effect of parental EV on the relation between adversity and our outcomes of interest by adding child gender to the models as a second moderator.

Maternal emotion validation as a moderator. (1a) We predicted that maternal EV would significantly moderate the association of adversity with dating violence perpetration, such that high maternal EV would result in a weaker association of adversity and dating violence perpetration. (1b) Similarly, we predicted that maternal EV would significantly moderate the association of adversity with dating violence victimization, such that high maternal EV would result in a weaker association of adversity and dating violence victimization. Moreover, we expected that child gender would further moderate the previous effect; specifically, we anticipated that, for girls more than for boys, high maternal EV would result in a weaker association of adversity and (1c) dating violence perpetration and (1d) dating violence victimization.

Paternal emotion validation as a moderator. (2a) We predicted that paternal EV would significantly moderate the association of adversity with dating violence perpetration, such that high paternal EV would result in a weaker association of adversity and dating violence perpetration. (2b) Next, we predicted that paternal EV would significantly moderate the association of adversity with dating violence victimization, such that high paternal EV would result in a weaker association of adversity and dating violence victimization. Moreover, we expected that, for boys more than girls, high paternal EV would result in a weaker association of adversity and (2c) dating violence perpetration and (2d) dating violence victimization.

Method

The current study was conducted as part of a larger study of adolescent psychiatric inpatients at a private psychiatric hospital in a large metropolitan area in the Southwestern United States. The original research study had two main research aims: (a) assess clinical outcomes of treatment on the adolescent inpatient unit at that hospital, and (b) better understand risk and protective factors for adolescent psychopathology, particularly risk and protective factors related to social cognition and interpersonal functioning. The recruitment and sampling procedure in this study was to invite all adolescents who met inclusion criteria and were admitted for inpatient treatment on this unit to participate in the study. Adolescents were informed they could opt out at any time. The design of the original research study was repeated measures, including a comprehensive battery of assessments and questionnaires at admission to the unit, interviews and questionnaires at discharge from the unit, and surveys completed at 6-, 12-, and 18-month time points postdischarge. Not all measures were assessed at all time points. This design was used because it allowed for the testing of cross-sectional relationships between risk and protective factors and adolescent symptomatic outcomes measured at admission, as well as for the testing of symptomatic change over time, and predictors of symptomatic change over time. The inpatient adolescent unit focused on assessment and stabilization for adolescents with severe emotional and behavioral disorders that had not responded to previous treatment. All adolescents received milieu-based care focused on short-term stabilization of the symptoms that led to hospitalization using a mentalization-based treatment approach (i.e., a treatment approach that promotes the development of mentalizing, or the ability to identify and understand mental states [thoughts, feelings, desires] in the self and others and their link with behavior; see Bateman & Fonagy, 1999; Rossouw & Fonagy, 2012), including psychoeducational mentalizing groups and individual, family, and group interventions with a mentalizing focus, to promote the teen's and family's ability to mentalize, and increase trust, attachment security, emotion regulation, communication, and problem solving (for more information on the larger study, see Sharp et al., 2009).

The current study utilized measures taken from cross-sectional data completed by adolescents at admission to the unit, as the outcomes tested here were not measured at discharge or follow-up time points. To contextualize this study in the overall research design, the current study contributes to answering the second research question of the

larger study: identifying risk and protective factors for adolescent psychopathology related to social cognition and interpersonal functioning. Access to this data was possible because the last author is one of the principal investigators of the larger study.

Participants

Consecutive admits from the inpatient psychiatric hospital were approached to participate in the study. All participants were English-speaking inpatients on the adolescent unit, and were between the ages of 12 to 17 years old. Exclusion criteria were a diagnosis of autism spectrum disorder, schizophrenia, or other psychotic disorders, an IQ below 70, or a clinician determination of ineligibility. Data collection for the larger study spanned a 7-year period; therefore, some participants received a slightly different battery of measures. For this reason, participants in the current study included individuals who participated in the study when the three main study measures for the present analyses were included in the battery. During this period, 287 adolescents (consecutive admissions) were approached for the study. Of these 287, 219 (76.3%) consented and met inclusion/exclusion criteria, and of these 219, 137 (62.6%) completed all three study measures. Therefore, the final sample was 137. Participants had an average age of 15.20 years ($SD = 1.38$), were 66.4% female, and their parent-reported ethnic/racial backgrounds were the following: 82.5% White/Caucasian, 7.3% Hispanic/Latinx, 5.1% Multiracial or other, 2.2% Asian, 0.7% Black or African American, 0.7% American Indian or Alaska Native, and 8.8% did not identify. Parents' were asked to report their annual household income ranging from 0 (decline to answer) to 15 (200,000 or more), with at least one parent endorsing each of these response options and 14 parents who declined to answer. The median option for household income endorsed was the option ranging from US\$175,000 to US \$199,000. Participants reported a range of 1 to 2 stays on the unit ($M = 1.1$ stays, $SD = 0.29$), with the current stay averaging 39.97 days ($SD = 13.55$). Regarding the diagnostic characteristics of the sample, 67.9% of the sample met clinician-administered *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 1994) criteria for a mood disorder, 60.6% for an anxiety disorder, 38.0% for an externalizing disorder, and 10.9% for an eating disorder. Upon discharge, 49.6% of the sample went home, 28.5% went to a different residential treatment center, 10.2% went to a wilderness program, 5.1% went to a therapeutic boarding school, 3.6%

went to outpatient treatment, 2.2% started a partial hospitalization program, and 0.7% went to another inpatient facility.

Procedure

Upon adolescents' admission to the facility, parents were approached for informed consent, and if given, adolescents were approached for informed assent. If consent and assent were both received and the adolescent could participate according to inclusion and exclusion criteria, participants completed self-report study measures within 2 weeks of their admission to the unit. At discharge, participants reported where they were going following discharge from the unit. The measures of interest in the present study were assessed only at the admission time point (i.e., within 2 weeks of admission). All study procedures were approved by the appropriate institutional review boards.

Measures

Dating violence. The Conflict in Adolescent Dating Relationships Inventory (CADRI; Wolfe et al., 2001) is a measure with 25 paired items assessing adolescents' actions during an argument or conflict with an intimate partner in the last year. Items were presented in pairs, each containing one question about the participants' actions (i.e., perpetration, "I threw something at him or her") and one about someone else committing the act against the participant (i.e., victimization, "He or she threw something at me"). Items probed sexual, physical, psychological, and relational violence as well as threatening behaviors. In response to each item, participants were asked to endorse it as having occurred in their life (Yes) or not (No). Reliability and validity of this measure has been demonstrated among high school students (Wolfe et al., 2001). Both perpetration and victimization subscales were used in the present study. For the purposes of this study, we computed composite scores of perpetration and victimization with high internal reliability demonstrated in this sample ($\alpha_{\text{perpetration}} = .87$, $\alpha_{\text{victimization}} = .90$).

Adversity. The Adolescent Life Events Questionnaire (ALEQ) was used to measure adversity in this sample (Hankin & Abramson, 2002). The ALEQ is a self-report checklist of stressors for adolescents ages 13 to 18, and included items assessing different hassles and negative events that commonly occur during adolescence. Items assessed the extent to

which participants experienced negative life experiences in the previous three months, including events related to family (e.g., parents divorced), relationships (e.g., had a baby that you didn't plan or want), school (e.g., got a bad report card), and social life (e.g., don't have as many friends as you would like). Participants reported on the extent to which they had experienced 70 events on a scale from 0 (Never) to 4 (Always). Scores on all 70 items were summed for a total composite score. This measure has shown internal consistency of .94 and 2-week test-retest reliability of .65 in a sample of high school students (Hankin & Abramson, 2002). In the current sample, internal consistency reliability for all items was high ($\alpha = .92$).

Parental emotion validation. The Socialization of Emotion Scale (SES; Krause et al., 2003), modified from the Coping with Children's Negative Emotions Scale (CCNES; Fabes et al., 1990), was used to measure parental EV. The original CCNES measure is completed by the parent, while the SES was re-worded as an adolescent-report measure to assess adolescents' perceptions of their parents' responses to their emotional reactions. Adolescents were presented with six scenarios in which they may have experienced a negative emotion and were asked to indicate the likelihood that their parent would respond with problem-focused (e.g., "if I lost some prized possession and reacted with tears, my caretaker would... help me think of places I hadn't looked at yet"), emotion-focused (e.g., "... distract me by talking about happy things"), expressive encouragement (e.g., "... tell me it's ok to cry when you feel unhappy"), distress (e.g., "... get upset with me for being so careless and crying"), punitive (e.g., "... tell me that's what happens when you're not careful"), or minimization (e.g., "... tell me that I was overreacting") reactions. Response scales ranged from 1 (*very unlikely*) to 7 (*very likely*). For each of six scenarios, participants were asked to rate the likelihood of five to six types of parental reactions twice, once for each parent, for a total of 66 items. In the present study, maternal EV and paternal EV scales were used, which were previously identified as separate aggregate scales (Denham & Kochanoff, 2002). EV responses included expressive encouragement, emotion-focused, and problem-focused parental responses. Both maternal and paternal validation scales yielded high reliability in this sample ($\alpha_{mother} = .95$, $\alpha_{father} = .96$).

Data Analytic Plan

Preliminary analyses. First, analyses were conducted to assess and address underlying assumptions of the statistical tests we used (i.e., outliers, normality, and missing data). Next, to address our aims of replication, we conducted an independent samples *t* test to determine whether dating violence perpetration and victimization differed between girls and boys. Next, we used linear regression analyses to test whether adversity was related to experiences of dating violence perpetration and victimization, and whether gender moderated these associations.

Hypothesis testing. To evaluate hypotheses 1a-b and 2a-b regarding whether maternal and paternal EV moderated the association between adversity and dating violence perpetration and victimization, we used hierarchical linear regressions in which we tested whether the interaction term predicted dating violence perpetration/victimization over and above the individual predictors. Next, to evaluate hypotheses 1c-d and 2c-d, gender was added to each model as an additional moderator to determine whether Adversity × Parental EV × Gender interacted to predict dating violence perpetration or victimization. Regressions were computed using the PROCESS (Hayes, 2017) macro for SPSS. PROCESS decomposes simple slopes at -1 SD of the mean (low), mean, and $+1\text{ SD}$ of the mean (high) of the moderator. For categorical moderators (such as gender), PROCESS decomposes the interaction into simple slopes at each categorical value. In addition, PROCESS creates a bias-corrected 95% confidence interval using 1,000 bootstrapped samples. Parental income was originally examined as a covariate but did not change the pattern of results in any model, and therefore was not included in final analyses.

Results

Preliminary Analyses

Initial descriptive statistics of continuous variables identified a few outliers, defined as values three standard deviations above or below the mean. There were three outliers on the Adverse Life Events variable, one on the Victimization of Dating Violence, and four outliers on the Perpetration of Dating Violence variable. These outliers were Winsorized to the closest value that was not considered an outlier. All further analyses were conducted using the Winsorized data.

The variables of interest were mostly normally distributed based on their skewness (between $-.5$ and $.5$) and kurtosis (less than 3). Descriptive statistics of key study variables, after adjusting for outliers, are presented in Table 1. Scatter plots confirmed linear associations between key study variables.

To determine how best to approach analyses, we next tested whether data were missing completely at random. Given that a majority of missing data was due to a slightly different battery of measures being administered at different time periods in the study and not due to missing items, we did not expect to have an issue with missing data. Little's test for MCAR was not significant, showing that the sample data did not have a pattern of missing data, $\chi^2(26) = 37.55, p = .067$. For all regression analyses, we used PROCESS (Hayes, 2017) Model 1 for analyses involving a single moderator and Model 3 for analyses testing three-way interactions (i.e., those involving moderations by gender). PROCESS has a default setting of listwise deletion for missing values, which was deemed appropriate due to a lack of patterning in missing values. Therefore, no additional steps were taken to address missing data.

Prior to hypothesis testing, we examined the distribution of the experiences of dating violence within our sample and found that 51.8% ($n = 71$) of the sample experienced at least one incidence of perpetration of dating violence. We found the same percentage of the sample experienced at least one incidence of victimization of dating violence. For descriptive statistics, see Table 1. We also tested the gender differences on all key study variables and found there were no gender differences on reports of adversity, $t(135) = -.48, p = .63$ or reports of maternal EV, $t(135) = -1.69, p = .10$, but boys reported significantly greater paternal EV, $t(135) = -2.34, p = .02$. However, there were no gender differences between dating violence perpetration $t(135) = -.33, p = .74$ or victimization $t(135) = -1.30, p = .20$. Bivariate correlations were run to determine the association between each of the continuous variables (see Table 2).

To examine whether the relation between adversity and dating violence varied by gender, we ran two hierarchical regressions. First, results revealed that the interaction between adversity and gender ($b = .03, p = .14$) was not significant in predicting dating violence perpetration. In addition, main effects revealed that adversity ($b = .03, p < .01$) but not gender ($b = -2.28, p = .15$) was associated with dating violence perpetration.

The same pattern followed when predicting dating violence victimization: The interaction term was not significant ($b = -.01, p = .61$), the

Table I. Descriptive statistics for main study variables.

		DV Victimization (# of victimization items endorsed as yes)	DV Perpetration (# perpetration items endorsed as yes)	Adversity 0 (Never) – 4 (Always)	Maternal EV 1 (Very Unlikely) – 7 (Very Likely)	Paternal EV 1 (Very Unlikely) – 7 (Very Likely)
N	137	137	137	137	137	128
M	15.20	3.39	2.18	77.66	84.5	73.71
SD	1.38	4.62	2.88	34.33	27.94	28.49
Range	12-17	0-17	0-10	17-164	18-126	18-126
Skewness	-.22	1.32	1.3	.52	-.39	.11
Kurtosis	-.95	.79	.72	-.18	-.74	-.84

Note. DV = dating violence; EV = emotion validation.

Table 2. Correlations among main study variables.

Variable	1	2	3	4	5	6
1. Age	1					
2. DV Victimization	.13	1				
3. DV Perpetration	.14	.78**	1			
4. Adversity	-.004	.35**	.29**	1		
5. Maternal EV	-.04	-.19*	-.18*	-.23**	1	
6. Paternal EV	-.09	-.16	-.20*	-.15	-.59**	1

Note. DV = dating violence; EV = emotion validation.

**Correlation significant at 0.01 level (2-tailed). *Correlation significant at 0.05 level (2-tailed).

main effect of adversity ($b = .06$, $p = .00$) significantly related to dating violence, and gender ($b = .03$, $p = .99$) did not.

Hypothesis Testing

Does maternal EV moderate the association between adversity and dating violence perpetration or victimization? We tested whether maternal EV (see Table 3, Panel A) moderated the relation between adversity and dating violence perpetration or victimization.

The results of a hierarchical linear regression revealed that the Adversity \times Maternal EV interaction predicted dating violence perpetration over and above the individual predictors ($\Delta R^2 = 0.04$, $b = -.0007$, $p = .01$). Upon further examination of simple slopes (see Figure 1), the relation between adversity and dating violence perpetration was not significant at high maternal EV ($b = .01$, $p = .59$), while it was significant at average ($b = .03$, $p < .01$), and low maternal EV ($b = .04$, $p < .001$).

Similarly, a hierarchical linear regression revealed that the Adversity \times Maternal EV interaction predicted dating violence victimization over and above the individual predictors ($\Delta R^2 = 0.11$, $b = -.001$, $p < .001$). Decomposition of the simple slopes (see Figure 1) found that the relation between adversity and dating violence victimization was no longer present at high levels of maternal EV ($b = -.003$, $p = .83$); however, at average ($b = .04$, $p < .001$) and low maternal EV ($b = .08$, $p < .001$), the relation between adversity and dating violence victimization was still significant.

When gender was added to the models as an additional moderator, the Adversity \times Maternal EV \times Gender interaction was not significant in predicting dating violence perpetration ($\Delta R^2 = 0.002$, $b = .0001$, $p =$

Table 3. Moderation analyses predicting dating violence from adversity and EV. Gender is added to the model for the 3-way interactions.

Step		Perpetration			Victimization		
		b	SE	95% CI	b	SE	95% CI
Maternal EV 2-way Interaction (Panel A)	Step 1 R ²				0.28***		
	Constant	0.17***			-7.44***	2.46	-12.31, -2.58
	Adversity	-2.99	1.94	-6.84, 0.85	0.16***	0.03	0.11, 0.21
	EV	0.08***	0.02	0.04, 0.12	0.09***	0.03	0.04, 0.14
3-way Interaction	Step 2 ΔR ²	0.04			0.11		
	Adversity × EV	-0.00***	0.00	-0.001, -0.000	-0.001***	0.00	-0.002, -0.000
	Step 1 R ²	0.15***			0.24***		
	Constant	-0.82	2.71	-6.19, 4.55	-6.84	4.13	-15.00, 1.33
	Adversity	0.06*	0.03	0.01, 0.11	0.16***	0.04	0.08, 0.24
	EV	0.02	0.03	-0.03, 0.08	0.09*	0.04	0.00, 0.17
	Adversity × EV	-0.00+	0.00	-0.00, 0.00	-0.00***	0.00	-0.00, -0.00
	Gender	-1.96	4.32	-10.51, 6.59	2.55	6.57	-10.45, 15.54
	Adversity × Gender	0.01	0.06	-0.10, 0.12	-0.07	0.09	-0.24, 0.10
	EV × Gender	0.00	0.05	-0.10, 0.10	-0.04	0.08	-0.19, 0.11
	Step 2 ΔR ²	0.00			0.00		
	Adversity × EV × Gender	0.00			0.00		

(continued)

Table 3. Continued.

	Step	Perpetration			Victimization		
		b	SE	95% CI	b	SE	95% CI
Paternal EV (Panel B)	2-way Interaction	Step 1 R^2	0.11**		0.11**		
		Constant	-0.16	2.10	-4.30, 3.99	-1.29	2.75 -6.73, 4.14
		Adversity	0.05*	0.02	0.00, 0.10	0.08*	0.03 0.01, 0.14
		EV	0.01	0.02	-0.04, 0.05	0.02	0.03 -0.04, 0.09
		Step 2 ΔR^2	0.01			0.01	
		Adversity \times EV	0.00	0.00	-0.000, 0.000	0.00	0.00 -0.001, 0.000
3-way Interaction	Step 1 R^2	0.17**		0.13*			
		Constant	3.28	2.50	-1.67, 8.23	-0.11	4.02 -8.07, 7.85
		Adversity	0.01	0.03	-0.04, 0.06	0.06	0.04 -0.02, 0.14
		EV	-0.02	0.03	-0.08, 0.03	0.02	0.04 -0.07, 0.10
		Adversity \times EV	0.00	0.00	0.00, 0.00	0.00	0.00 -0.00, 0.00
		Gender	-7.68†	3.98	-15.56, 0.20	-3.95	6.40 -16.62, 8.72
		Adversity \times Gender	0.12*	0.05	0.02, 0.22	0.07	0.08 -0.09, 0.23
		EV \times Gender	0.06	0.05	-0.04, 0.17	0.03	0.08 -0.14, 0.19
		Step 2 ΔR^2	0.02			0.00	
		Adversity \times EV \times Gender	-0.00†	0.00	-0.00, 0.00	0.00	0.00 -0.00, 0.00

† $p < .07$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Note. DV = dating violence; EV = emotion validation; CI = confidence interval.

.87) nor victimization ($\Delta R^2 = 0.004$, $b = .0008$, $p = .43$) over and above the individual predictors.

Does paternal EV moderate the association between adversity and dating violence perpetration or victimization? We tested whether paternal EV (see Table 3, Panel B) moderated the relation between adversity and dating violence perpetration or victimization.

Results revealed that the adversity and paternal EV model significantly predicted variation in dating violence perpetration ($R^2 = .11$, $F(3, 124) = 5.05$, $p < .01$). However, the interaction term did not predict dating violence perpetration over and above the individual predictors ($\Delta R^2 = 0.01$, $b = -.0003$, $p = .24$).

Furthermore, while the overall adversity and paternal EV model was significant ($R^2 = .11$, $F(3, 124) = 5.11$, $p < .01$) in predicting dating violence victimization, paternal EV did not emerge as a significant moderator ($\Delta R^2 = 0.01$, $b = -.0005$, $p = .17$).

When gender was added as an additional moderator, the Adversity \times Paternal EV \times Gender interaction significantly predicted dating violence perpetration over and above the individual predictors ($\Delta R^2 = .02$, $b = -.001$, $p = .07$). Conditional effects revealed that only for boys was paternal EV a significant moderator of the relation between adversity and dating violence perpetration ($b = -.002$, $p < .01$; see Figure 2). Decomposition of the simple slopes found that high paternal EV eliminated the relation between adversity and dating violence perpetration ($b = .01$, $p = .79$), while the relation was still present with average ($b = .06$, $p < .001$) and low paternal EV ($b = .11$, $p < .001$). For girls, the relation between adversity and dating violence perpetration was not moderated by paternal EV ($b = .0001$, $p = .79$). However, the model predicting dating violence victimization from Adversity \times Paternal EV did not vary as a function of gender ($\Delta R^2 = 0.005$, $b = -.0008$, $p = .42$).

Discussion

The current study provides new insight on the relation between adversity and dating violence in adolescence—to our knowledge, it is the first to examine parental EV and child gender as potential moderating factors and to examine these factors within an adolescent psychiatric sample. In doing so, we were able to examine factors among a sample that is generally a harder population to access, thus continuing to diversify the knowledge regarding this population and dating violence as a

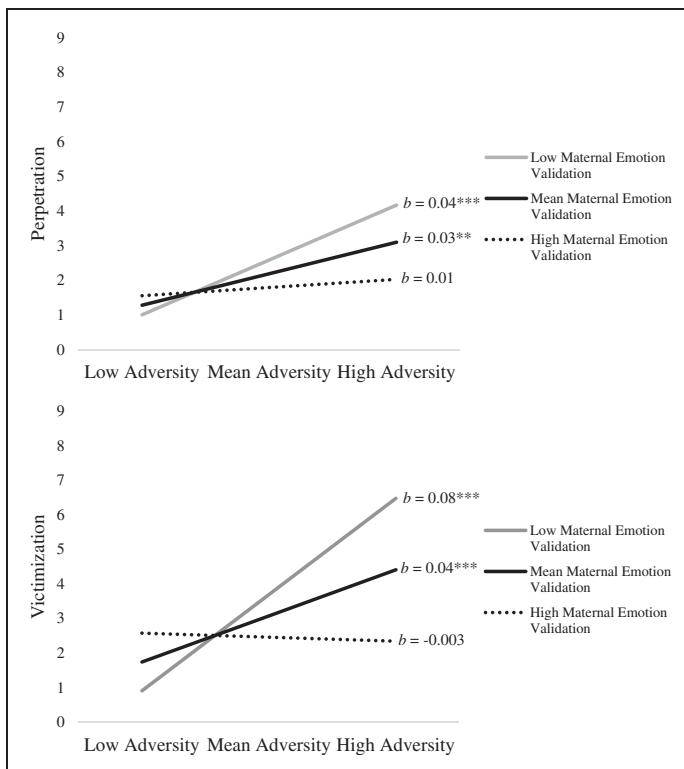


Figure 1. The association between adversity and dating violence victimization and perpetration moderated by maternal emotion validation.

Note. The dating violence scale has a possible range of 0-25. This figure is on a scale of 0-9 for visualization purposes.

* $p < .05$. ** $p < .01$. *** $p < .001$.

prevalent societal risk factor. Results of the present study build upon this work in important ways, finding that, at times, the association between adversity and dating violence perpetration and victimization depends on parents' EV, which further depends on the match between parent and child gender.

Preliminary analyses revealed no gender differences in average rates of either dating violence perpetration or victimization. Our findings support prior research indicating that boys and girls perpetrate violence at similar rates (O'Leary et al., 2008) even though social stereotypes portray adolescent girls as victims and boys as perpetrators. It is

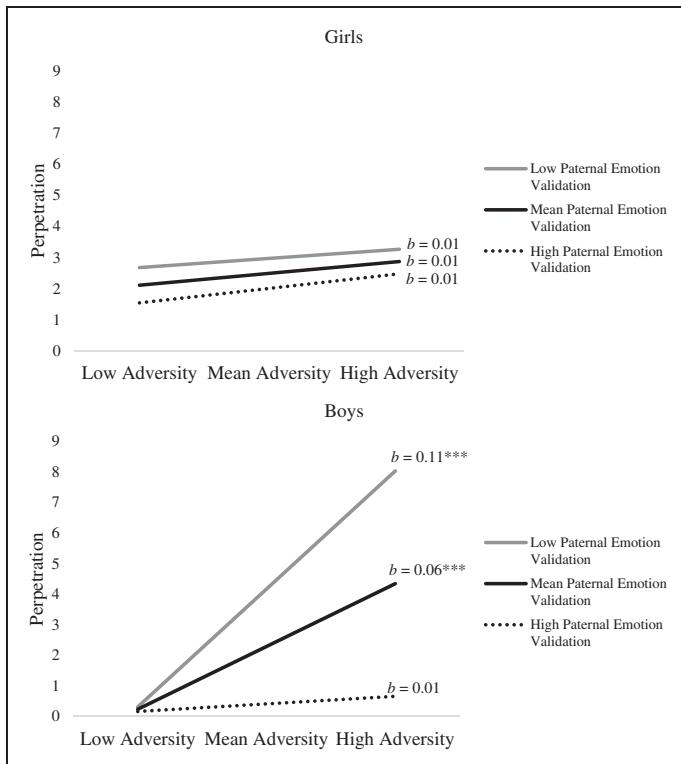


Figure 2. The association between adversity and dating violence victimization moderated by maternal validation of emotion moderated by gender.

Note. The dating violence scale has a possible range of 0-25. This figure is on a scale of 0-9 for visualization purposes.

* $p < .05$. ** $p < .01$. *** $p < .001$.

important to note the bidirectional nature of dating violence perpetration and victimization such that some victims of violence are also perpetrators of violence against others. For instance, Palmetto et al. (2013) found that experiencing both dating violence perpetration and victimization within a single year was more prevalent than experiencing either perpetration or victimization uniquely. Illuminating more comprehensively how the rates of dating violence vary between genders will not only improve our understanding, but also direct the development and implementation of more targeted interventions.

We also found that the extent of adversity positively related to dating violence perpetration and victimization among the sample overall. While these results replicate previous literature linking adversity and dating violence in adolescents (Glass et al., 2003; Vagi et al., 2013), the present study expands on this work by considering the frequency of a broad range of adverse life events that typically occur during adolescence in combination, rather than considering certain types of adversity separately. In other words, this study was unique in that we were not examining adolescents affected exclusively by one type of adversity (e.g., childhood sexual abuse) but rather were examining the impact of all of their adverse experiences in aggregate. In addition, results from the sample overall revealed the absence of a significant interaction between adversity and gender in predicting dating violence perpetration or victimization suggesting that adversity is related to dating violence similarly between female and male adolescents. It could be that different types of adversity are more predictive of dating violence by gender but that when considering these events overall, gender does not interact. However, we were particularly interested in how parental EV and adversity interacted to predict dating violence, and whether adolescents' gender influenced this relation.

Maternal EV

First, maternal EV moderated the relation between adversity and dating violence perpetration and victimization. More specifically, as the level of maternal EV increased, the strength of the association between adversity and dating violence perpetration and victimization decreased. In fact, when maternal EV was high, the relation was no longer significant when predicting dating violence perpetration nor victimization. This suggests that mothers may be important in teaching their adolescents emotion understanding as well as appropriate expression and regulation of emotions, such as the ability to express and communicate emotions rather than respond with violence. Perhaps when adolescents experience EV from their mothers, this facilitates a greater cognizance that others are aware of and understand one's emotions. Thus, when these adolescents experience adversity-related distress, they may be less inclined to act out their emotions through aggressive means. Alternatively, these adolescents may learn that their emotions are valid and through more frequent expression of their feelings may develop regulated means of communicating emotions, such as through verbal expression.

In addition, when predicting both dating violence perpetration and victimization, the interaction between adversity and maternal EV did

not further vary as a function of adolescents' gender. In other words, maternal EV was similarly related to dating violence perpetration and victimization in both girls and boys, which may mean that mothers play a similar role in the development of relationship competence for boys and girls. This is perhaps unsurprising, given the vast amount of literature showing that mothers are important in their child's development, regardless of gender (Sharp & Fonagy, 2008; Sharp et al., 2006).

Paternal EV

Paternal validation of emotion did not moderate the association between adversity and dating violence perpetration or victimization. However, there was a significant three-way interaction when adolescent gender was added to the model when predicting perpetration. Among boys, when paternal EV was high, the relation between adversity and perpetration was no longer significant. Previous work has shown that adolescents tend to model behavior of the same-sex parent (Laible & Carlo, 2004), suggesting that adolescent boys may imitate and learn adaptive communication and expression of emotion through their father's modeling of EV. This is in line with the societal belief that attentive fathers raise boys who are sensitive relationship partners. Girls, on the other hand, may not as clearly recognize the direct application of their fathers' behavior to their own relationships. Alternatively, in the context of adversity, girls could be more strongly influenced by other factors, such as their mothers or peers, when deciding to engage in dating violence perpetration. Finally, it is possible that, regardless of paternal EV, adverse experiences are so salient for girls that they relate to dating violence regardless of paternal EV.

Implications

Keeping in mind that these findings were obtained from a cross-sectional study and are in need not only of replication but also of extension through longitudinal designs, we argue that our findings have practical implications. Specifically, our findings may suggest that in the context of higher levels of adversity, maternal validation of adolescent's emotions may have an important role in preventing negative developmental sequelae. As stated before, our measure of adversity did not distinguish between different types of negative experiences, but we can imagine a scenario wherein adolescents experience adverse events within their broader community contexts (for instance, adolescents who are bullied or encounter racial discrimination) and are able to discuss

their experiences and have their emotions validated by their parents at home. These adolescents may have the opportunity to experience, express, and process their emotional experiences in the comfort of their closest relationships and in so doing, may gain insight on the impact of these experiences and be spared the negative impact on their subsequent interpersonal behavior. This argument is consistent with the core tenets of attachment theory, which states that the safety and security of intimate relationships can provide a refuge in which to work through the challenges experienced in the outside world, enabling one to be stronger and more resilient in confronting stressors. In this way, these experiences within attachment relationships may buffer against negative social learning experiences engendered by adversity and thus should be examined further by clinicians, school counselors, family counselors, or other figures educating parents around the important role they play for their child's development.

Limitations and Future Directions

While the current study contributes to the literature in providing insight on the role parenting plays in the relation between adversity and dating violence, some limitations are worth noting. First, the sample did not have much variability in family socioeconomic status or racial/ethnic background; therefore, we were not able to examine these variables as factors influencing the results, nor can we say these results can be generalized beyond the homogeneous sample. In addition, the sample included families that reported high household income, meaning that these results cannot be generalized beyond an upper middle-class sample. Second, the use of self-report introduces the possibility of potential bias and the threat of social desirability. Exclusive reliance on self-report measures creates the possibility that the associations we observed herein are partially driven by shared method variance. This is particularly problematic in terms of the assessment of adolescents' adverse experiences, which were measured retrospectively, over the previous 3 months. Furthermore, it is possible that adolescents were not truthful regarding their rates of dating violence perpetration or victimization. Future studies can improve upon our work through the use of alternative approaches to measuring these constructs—for instance, by using multiinformant designs. Third, by examining an inpatient population, we are able to further understand how adversity relates to dating violence within a population already being treated for psychiatric symptoms. Nonetheless, the current study cannot be generalized beyond the

psychiatric population; future studies should replicate these results within other samples. Fourth, while we considered our aggregate measure of adversity to be a strength of the investigation, it can also limit our ability to differentiate between different types of experiences. In future investigations in which multiple assessments are administered, it could be interesting to assess whether aggregate measures (e.g., total number of adverse life events) or categorical measures of adversity (e.g., child abuse—yes or no; domestic violence witness—yes or no) yield stronger predictions.

Future studies should continue to examine whether parental EV can relate to a reduction of future dating violence perpetration or victimization by way of a longitudinal study. The cross-sectional nature of our design precludes the ability to make causal inferences about adversity or parental EV and dating violence. In addition, a longitudinal design would allow for a better understanding of *when* parental EV is most relevant for these associations. Parental EV early in development may be most influential for future close relationships, or EV may be important throughout development to remind adolescents of the validity of their emotions and to help prevent dating violence perpetration or victimization. Future studies should be done to examine whether being hospitalized and experiencing dating violence results in compounding risk factors, or whether one precedes the other. The current results will be further elucidated through the inclusion of a community sample of adolescents, as well as considering how other influential figures relate to the potential buffering effects found in the current study. For instance, how does the EV from teachers, extracurricular mentors, or religious figures, relate to the association between adversity and dating violence? It is possible that any type of EV will allow for the development of a child into someone who can respond appropriately to intimate partner disagreement, or it could be that parents play a uniquely important role in the development of healthy relationship patterns. If this study were extended using longitudinal designs, it could also inform interventions. Emotion validation may be a teachable skill. Multiple intervention programs have demonstrated impressive results teaching parents skills that are closely aligned with emotion validation, such as reflective functioning (Suchman et al., 2017) or empathy (Hoffman et al., 2006). Furthermore, enhancing emotion validation in parents may be an easier skill to target than modifying broader environmental characteristics, such as adolescent's exposure to community violence. However, effective violence prevention programs ought to target both

contributors to dating violence—seeking to reduce the macro-level factors and enhance the micro-level protective factors.

Conclusion

The results of the current study provide an optimistic perspective on the nature of dating violence in an at-risk sample of adolescents. Within the general population, it is commonly understood that adolescents who must overcome a great degree of adversity are likely to carry “baggage” into their romantic relationships, including destructive responses to conflict. However, the current study results suggest that, with a parent who is able to validate emotional experiences, adolescents may be able to develop healthy patterns within their romantic relationships, regardless of the adversity they experience. The interaction between parent EV and adolescent gender suggests that all three constructs—parent EV, adolescent gender, and adversity—should simultaneously be examined when determining an adolescent’s risk for dating violence. Furthermore, because this study focused on a population at particular risk for adverse life experiences, and poor parental and intimate relationships, this buffering effect may be exponentially impactful when studied in a nonclinical sample.

This study furthers our understanding of parent–teen relationships and supports the idea that *parenting matters*. With this knowledge, future programs targeting adolescents who have experienced adversity could train important caregiving figures on improving EV and, in turn, potentially reduce dating violence in adolescents. These findings suggest that all three factors should simultaneously be examined when determining a child’s risk for interpersonal violence and that preventive approaches should be tailored based on the gender of the child. In addition, parental responses to emotion may be key factors in the development of healthy intimate relationship patterns for adolescents.

Authors’ Note

A portion of the data presented here was presented at the 2019 Western Psychological Association Annual Convention in Pasadena, California.

Acknowledgments

We thank the adolescents for their participation in this study and the Menninger ATP research team for their work with the data collection.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was funded by the McNair Family Foundation, awarded to Dr. Carla Sharp.

ORCID iD

Nicole M. Froidevaux  <https://orcid.org/0000-0003-4909-1380>

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.).
- Adelman, M., & Kil, S. H. (2007). Dating conflicts: Rethinking dating violence and youth conflict. *Violence Against Women, 13*(12), 1296–1318. <https://doi.org/10.1177/1077801207310800>
- Alleyne-Green, B., Coleman-Cowger, V. H., & Henry, D. B. (2012). Dating violence perpetration and/or victimization and associated sexual risk behaviors among a sample of inner-city African American and Hispanic adolescent females. *Journal of Interpersonal Violence, 27*(8), 1457–1473. <https://doi.org/10.1177/0886260511425788>
- Bandura, A. (1962). Social Learning Through Imitation. In M. R. Jones (Ed.), *Nebraska Symposium on Motivation* (pp. 211–274). Nebraska Press.
- Bateman, A. W., & Fonagy, P. (1999). The effectiveness of partial hospitalization in the treatment of borderline personality disorder: A randomized controlled trial. *American Journal of Psychiatry, 156*, 1563–1569. <https://doi.org/10.1176/ajp.156.10.1563>
- Boivin, S., Lavoie, F., Hebert, M., & Gagne, M.-H. (2012). Past victimizations and dating violence perpetration in adolescence: The mediating role of emotional distress and hostility. *Journal of Interpersonal Violence, 27*, 662–684. <https://doi.org/10.1177/0886260511423245>
- Bronfenbrenner, U. (1992). *Ecological systems theory*. Jessica Kingsley.
- Brook, J. S., Zheng, L., Whiteman, M., & Brook, D. W. (2001). Aggression in toddlers: Associations with parenting and marital relations. *The Journal of Genetic Psychology, 162*(2), 228–241. <https://doi.org/10.1080/00221320109597963>
- Bowlby, J. (1973). Attachment and loss: Volume II: Separation, anxiety and anger. In *Attachment and Loss: Volume II: Separation, Anxiety and Anger* (pp. 1–429). The Hogarth Press and the Institute of Psycho-Analysis.

- Breiding, M.J., Chen J., & Black, M.C. (2014). Intimate Partner Violence in the United States –2010. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Buckholdt, K. E., Parra, G. R., & Jobe-Shields, L. (2014). Intergenerational transmission of emotion dysregulation through parental invalidation of emotions: Implications for adolescent internalizing and externalizing behaviors. *Journal of Child and Family Studies*, 23(2), 324–332. <https://doi.org/10.1007/s10826-013-9768-4>
- Centers for Disease Control and Prevention. (2019). Violence prevention. <https://www.cdc.gov/violenceprevention/index.html>
- Chang, L., Schwartz, D., Dodge, K. A., & McBride-Chang, C. (2003). Harsh parenting in relation to child emotion regulation and aggression. *Journal of Family Psychology*, 17(4), 598–606. <https://doi.org/10.1037/0893-3200.17.4.598>
- Choi, H. J., Weston, R., & Temple, J. R. (2017). A three-step latent class analysis to identify how different patterns of teen dating violence and psychosocial factors influence mental health. *Journal of Youth and Adolescence*, 46(4), 854–866. <https://doi.org/10.1007/s10964-016-0570-7>
- Cleveland, H. H., Herrera, V. M., & Stuewig, J. (2003). Abusive males and abused females in adolescent relationships: Risk factor similarity and dissimilarity and the role of relationship seriousness. *Journal of Family Violence*, 18(6), 325–339. <https://doi.org/10.1023/A:1026297515314>
- Coker, A. L., Clear, E. R., Garcia, L. S., Asaolu, I. O., Cook-Craig, P. G., Brancato, C. J., . . . Fisher, B. S. (2014). Dating violence victimization and perpetration rates among high school students. *Violence Against Women*, 20(10), 1220–1238. <https://doi.org/10.1177/1077801214551289>
- Connolly, J., Friedlander, L., Pepler, D., Craig, W., & Laporte, L. (2010). The ecology of adolescent dating aggression: Attitudes, relationships, media use, and socio-demographic risk factors. *Journal of Aggression, Maltreatment & Trauma*, 19(5), 469–491. <https://doi.org/10.1080/10926771.2010.495028>
- Davidov, M., & Grusec, J. E. (2006). Untangling the links of parental responsiveness to distress and warmth to child outcomes. *Child Development*, 77(1), 44–58. <https://doi.org/10.1111/j.1467-8624.2006.00855.x>
- Denham, S., & Kochanoff, A. T. (2002). Parental contributions to preschoolers' understanding of emotion. *Marriage & Family Review*, 34(3–4), 311–343. https://doi.org/10.1300/J002v34n03_06
- Doumas, D., Margolin, G., & John, R. S. (1994). The intergenerational transmission of aggression across three generations. *Journal of Family Violence*, 9(2), 157–175. <https://doi.org/10.1007/BF01531961>
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, 9(4), 241–273. https://doi.org/10.1207/s15327965pli0904_1

- Eisenberg, N., & Fabes, R. A. (1994). Mothers' reactions to children's negative emotions: Relations to children's temperament and anger behavior. *Merrill-palmer Quarterly*, 40, 138–156. <https://doi.org/10.1353/mpq.2002.0007>
- Fabes, R. A., Eisenberg, N., & Bernzweig, J. (1990). *The coping with children's negative emotions scale: Procedures and scoring*. Arizona State University.
- Faulkner, B., Goldstein, A. L., & Wekerle, C. (2014). Pathways from childhood maltreatment to emerging adulthood: Investigating trauma-mediated substance use and dating violence outcomes among child protective services-involved youth. *Child Maltreatment*, 19(3–4), 219–232. <https://doi.org/10.1177/1077559514551944>
- Foshee, V. A., Linder, F., MacDougall, J. E., & Bangdiwala, S. (2001). Gender differences in the longitudinal predictors of adolescent dating violence. *Preventive Medicine*, 32(2), 128–141. <https://doi.org/10.1006/pmed.2000.0793>
- Foshee, V. A., Reyes, H. L. M., Gottfredson, N. C., Chang, L. Y., & Ennett, S. T. (2013). A longitudinal examination of psychological, behavioral, academic, and relationship consequences of dating abuse victimization among a primarily rural sample of adolescents. *Journal of Adolescent Health*, 53(6), 723–729. <https://doi.org/10.1016/j.jadohealth.2013.06.016>
- Fredland, N. M., Ricardo, I. B., Campbell, J. C., Sharps, P. W., Kub, J. K., & Yonas, M. (2005). The meaning of dating violence in the lives of middle school adolescents: A report of a focus group study. *Journal of School Violence*, 4(2), 95–114. https://doi.org/10.1300/J202v04n02_06
- Ge, X., Natsuaki, M. N., & Conger, R. D. (2006). Trajectories of depressive symptoms and stressful life events among male and female adolescents in divorced and nondivorced families. *Development and Psychopathology*, 18(1), 253–273. <https://doi.org/10.1017/S0954579406060147>
- Gidycz, C. A., Warkentin, J. B., & Orchowski, L. M. (2007). Predictors of perpetration of verbal, physical, and sexual violence: A prospective analysis of college men. *Psychology of Men & Masculinity*, 8(2), 79–94. <https://doi.org/10.1037/1524-9220.8.2.79>
- Glass, N., Fredland, N., Campbell, J., Yonas, M., Sharps, P., & Kub, J. (2003). Adolescent dating violence: Prevalence, risk factors, health outcomes, and implications for clinical practice. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 32(2), 227–238. <https://doi.org/10.1177/0884217503252033>
- Hamby, S., & Turner, H. (2013). Measuring teen dating violence in males and females: Insights from the national survey of children's exposure to violence. *Psychology of Violence*, 3, 323–339. <http://dx.doi.org/10.1037/a0029706>
- Hankin, B. L., & Abramson, L. Y. (2002). Measuring cognitive vulnerability to depression in adolescence: Reliability, validity, and gender differences. *Journal of Clinical Child & Adolescent Psychology*, 31(4), 491–504. https://doi.org/10.1207/S15374424JCCP3104_8
- Harned, M. S., & Vict, V. (2001). Abused women or abused men? An examination of the context and outcomes of dating violence. *Violence and Victims*, 16(3), 269–285. <https://doi.org/10.1891/0886-6708.16.3.269>

- Hart, C. H., Nelson, D. A., Robinson, C. C., Olsen, S. F., & McNeilly-Choque, M. K. (1998). Overt and relational aggression in Russian nursery-school-age children: Parenting style and marital linkages. *Developmental Psychology, 34*(4), 687–697. <https://doi.org/10.1037/0012-1649.34.4.687>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis. A regression-based approach* (2nd ed.). Guilford Press.
- Hébert, M., Daspe, M. È., Lapierre, A., Godbout, N., Blais, M., Fernet, M., & Lavoie, F. (2019). A meta-analysis of risk and protective factors for dating violence victimization: The role of family and peer interpersonal context. *Trauma, Violence, & Abuse, 20*, 574–590. <https://doi.org/10.1177/1524838017725336>
- Higgins, G. E., Marcum, C. D., Nicholson, J., & Weiner, P. (2018). Predictors of physical and dating violence in middle and high school students in the United States. *Crime & Delinquency, 64*(5), 625–649. <https://doi.org/10.1177/0011128717719428>
- Hoffman, K. T., Marvin, R. S., Cooper, G., & Powell, B. (2006). Changing toddlers' and preschoolers' attachment classifications: The circle of security intervention. *Journal of Consulting and Clinical Psychology, 74*, 1017–1026. <https://doi.org/10.1037/0022-006X.74.6.1017>
- Katz, J., Kuffel, S. W., & Coblenz, A. (2002). Are there gender differences in sustaining dating violence? An examination of frequency, severity, and relationship satisfaction. *Journal of Family Violence, 17*(3), 247–271. <https://doi.org/10.1023/A:1016005312091>
- Kessler, R. C., McLaughlin, K. A., Green, J. G., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M.,... Williams, D. R. (2010). Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys. *The British Journal of Psychiatry, 197*(5), 378–385. <https://doi.org/10.1192/bjp.bp.110.080499>
- Krause, E. D., Mendelson, T., & Lynch, T. R. (2003). Childhood emotional invalidation and adult psychological distress: The mediating role of emotional inhibition. *Child Abuse & Neglect, 27*(2), 199–213. [https://doi.org/10.1016/S0145-2134\(02\)00536-7](https://doi.org/10.1016/S0145-2134(02)00536-7)
- Laible, D. J., & Carlo, G. (2004). The differential relations of maternal and paternal support and control to adolescent social competence, self-worth, and sympathy. *Journal of Adolescent Research, 19*(6), 759–782. <https://doi.org/10.1177/0743558403260094>
- Lamb, M. E. (Ed.). (2010). *The role of the father in child development* (5th ed.). John Wiley.
- Lambie, J. A., & Lindberg, A. (2016). The role of maternal emotional validation and invalidation on children's emotional awareness. *Merrill-Palmer Quarterly, 62*(2), 129–157. <https://doi.org/10.13110/merrpalmarquar1982.62.2.0129>

- Laursen, B., & Collins, W. A. (1994). Interpersonal conflict during adolescence. *Psychological Bulletin, 115*(2), 197–209. <https://doi.org/10.1037/0033-2909.115.2.197>
- Lavoie, F., Hébert, M., Tremblay, R., Vitaro, F., Vézina, L., & McDuff, P. (2002). History of family dysfunction and perpetration of dating violence by adolescent boys: A longitudinal study. *Journal of Adolescent Health, 30*(5), 375–383. [https://doi.org/10.1016/S1054-139X\(02\)00347-6](https://doi.org/10.1016/S1054-139X(02)00347-6)
- Leadbeater, B. J., Banister, E. M., Ellis, W. E., & Yeung, R. (2008). Victimization and relational aggression in adolescent romantic relationships: The influence of parental and peer behaviors, and individual adjustment. *Journal of Youth and Adolescence, 37*(3), 359–372. <https://doi.org/10.1007/s10964-007-9269-0>
- Low, N. C., Dugas, E., O'Loughlin, E., Rodriguez, D., Contreras, G., Chaiton, M., & O'Loughlin, J. (2012). Common stressful life events and difficulties are associated with mental health symptoms and substance use in young adolescents. *BMC Psychiatry, 12*, Article 116. <https://doi.org/10.1186/1471-244X-12-116>
- Linder, J. R., & Collins, W. A. (2005). Parent and peer predictors of physical aggression and conflict management in romantic relationships in early adulthood. *Journal of Family Psychology, 19*(2), 252–262. <https://doi.org/10.1037/0893-3200.19.2.252>
- Linehan, M. (1993). *Skills training manual for treating borderline personality disorder* (Vol. 29). Guilford Press.
- Lovas, G. S. (2005). Gender and patterns of emotional availability in mother-toddler and father-toddler dyads. *Infant Mental Health Journal: Official Publication of the World Association for Infant Mental Health, 26*(4), 327–353. <https://doi.org/10.1002/imhj.20056>
- Lunkenheimer, E. S., Shields, A. M., & Cortina, K. S. (2007). Parental emotion coaching and dismissing in family interaction. *Social Development, 16*(2), 232–248. <https://doi.org/10.1111/j.1467-9507.2007.00382.x>
- Manchikanti Gómez, A. (2011). Testing the cycle of violence hypothesis: Child abuse and adolescent dating violence as predictors of intimate partner violence in young adulthood. *Youth & Society, 43*(1), 171–192. <https://doi.org/10.1177/0044118X09358313>
- Mason, B., & Smithey, M. (2012). The effects of academic and interpersonal stress on dating violence among college students: A test of classical strain theory. *Journal of Interpersonal Violence, 27*(5), 974–986. <https://doi.org/10.1177/0886260511423257>
- Marquart, B. S., Nannini, D. K., Edwards, R. W., Stanley, L. R., & Wayman, J. C. (2007). Prevalence of dating violence and victimization: Regional and gender differences. *Adolescence, 42*(168), 645–657.
- Miller, E., Breslau, J., Chung, W. J., Green, J. G., McLaughlin, K. A., & Kessler, R. C. (2011). Adverse childhood experiences and risk of physical

- violence in adolescent dating relationships. *Journal of Epidemiology & Community Health*, 65(11). <https://doi.org/10.1136/jech.2009.105429>
- Mulford, C., & Giordano, P. C. (2008). Teen dating violence: A closer look at adolescent romantic relationships. *National Institute of Justice Journal*, 261(1), 31–40.
- Mumford, E. A., Taylor, B. G., & Giordano, P. C. (2020). Perpetration of adolescent dating relationship abuse: The role of conditional tolerance for violence and friendship factors. *Journal of Interpersonal Violence*, 35(5–6), 1206–1228. <https://doi.org/10.1177/0886260517693002>
- Noonan, R. K., & Charles, D. (2009). Developing teen dating violence prevention strategies: Formative research with middle school youth. *Violence Against Women*, 15(9), 1087–1105. <https://doi.org/10.1177/1077801209340761>
- Offenhauer, P., & Buchalter, A. (2011). *Teen dating violence: A literature review and annotated bibliography*. Library of Congress.
- O'Leary, K. D., Barling, J., Arias, I., Rosenbaum, A., Malone, J., & Tyree, A. (1989). Prevalence and stability of physical aggression between spouses: A longitudinal analysis. *Journal of Consulting and Clinical Psychology*, 57(2), 263–268. <https://doi.org/10.1037/0022-006X.57.2.263>
- O'Leary, K. D., Slep, A. M. S., Avery-Leaf, S., & Cascardi, M. (2008). Gender differences in dating aggression among multiethnic high school students. *Journal of Adolescent Health*, 42(5), 473–479. <https://doi.org/10.1016/j.jadohealth.2007.09.012>
- Paat, Y. F., & Markham, C. (2019). The roles of family factors and relationship dynamics on dating violence victimization and perpetration among college men and women in emerging adulthood. *Journal of Interpersonal Violence*, 34(1), 81–114. <https://doi.org/10.1177/0886260516640544>
- Palmetto, N., Davidson, L. L., & Rickert, V. I. (2013). Predictors of physical intimate partner violence in the lives of young women: Victimization, perpetration, and bidirectional violence. *Violence and Victims*, 28(1), 103–121. <https://doi.org/10.1891/0886-6708.28.1.103>
- Reed, L. A., Tolman, R. M., & Ward, L. M. (2017). Gender matters: Experiences and consequences of digital dating abuse victimization in adolescent dating relationships. *Journal of Adolescence*, 59, 79–89. <https://doi.org/10.1016/j.adolescence.2017.05.015>
- Reyes, H. L. M., Foshee, V. A., Niolon, P. H., Reidy, D. E., & Hall, J. E. (2016). Gender role attitudes and male adolescent dating violence perpetration: Normative beliefs as moderators. *Journal of Youth and Adolescence*, 45(2), 350–360. <https://doi.org/10.1007/s10964-015-0278-0>
- Roberts, A. L., McLaughlin, K. A., Conron, K. J., & Koenen, K. C. (2011). Adulthood stressors, history of childhood adversity, and risk of perpetration of intimate partner violence. *American Journal of Preventive Medicine*, 40(2), 128–138. <https://doi.org/10.1016/j.amepre.2010.10.016>
- Roscoe, B., & Kelsey, T. (1986). Dating violence among high school students. *Psychology, A Quarterly Journal of Human Behavior*, 23, 198–202.

- Rossouw, T. I., & Fonagy, P. (2012). Mentalization-based treatment for self-harm in adolescents: A randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(12), 1304–1313. <https://doi.org/10.1016/j.jaac.2012.09.018>
- Schalinski, I., Breinlinger, S., Hirt, V., Teicher, M. H., Odenwald, M., & Rockstroh, B. (2019). Environmental adversities and psychotic symptoms: The impact of timing of trauma, abuse, and neglect. *Schizophrenia Research*, 205, 4–9. <https://doi.org/10.1016/j.schres.2017.10.034>
- Schumacher, J. A., & Slep, A. M. S. (2004). Attitudes and dating aggression: A cognitive dissonance approach. *Prevention Science*, 5(4), 231–243. <https://doi.org/10.1023/B:PREV.0000045357.19100.77>
- Selby, E. A., Braithwaite, S. R., Joiner, T. E., & Fincham, F. D. (2008). Features of borderline personality disorder, perceived childhood emotional invalidation, and dysfunction within current romantic relationships. *Journal of Family Psychology*, 22, 885–893. <https://doi.org/10.1037/a0013673>
- Sharp, C., & Fonagy, P. (2008). The parent's capacity to treat the child as a psychological agent: Constructs, measures and implications for developmental psychopathology. *Social Development*, 17(3), 737–754. <https://doi.org/10.1111/j.1467-9507.2007.00457.x>
- Sharp, C., Fonagy, P., & Goodyer, I. M. (2006). Imagining your child's mind: Psychosocial adjustment and mothers' ability to predict their children's attributional response styles. *British Journal of Developmental Psychology*, 24, 197–214. <https://doi.org/10.1348/02151005X82569>
- Sharp, C., Williams, L. L., Ha, C., Baumgardner, J., Michonski, J., Seals, R., . . . Fonagy, P. (2009). The development of a mentalization-based outcomes and research protocol for an adolescent inpatient unit. *Bulletin of the Menninger Clinic*, 73(4), 311–338. <https://doi.org/10.1521/bumc.2009.73.4.311>
- Shaver, P. R., Mikulincer, M., Gross, J. T., Stern, J. A., & Cassidy, J. A. (2016). A lifespan perspective on attachment and care for others: Empathy, altruism, and prosocial behavior. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (3rd ed., pp. 878–916). Guilford Press.
- Shenk, C. E., & Fruzzetti, A. E. (2014). Parental validating and invalidating responses and adolescent psychological functioning: An observational study. *The Family Journal*, 22(1), 43–48. <https://doi.org/10.1177/1066480713490900>
- Silverman, J. G., Raj, A., Mucci, L. A., & Hathaway, J. E. (2001). Dating violence against adolescent girls and associated substance use, unhealthy weight control, sexual risk behavior, pregnancy, and suicidality. *Journal of the American Medical Association*, 286(5), 572–579. <https://doi.org/10.1001/jama.286.5.572>
- Sroufe, L. A. (2005). Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment & Human Development*, 7(4), 349–367. <https://doi.org/10.1080/14616730500365928>

- Stith, S. M., Smith, D. B., Penn, C. E., Ward, D. B., & Tritt, D. (2004). Intimate partner physical abuse perpetration and victimization risk factors: A meta-analytic review. *Aggression and Violent Behavior, 10*(1), 65–98. <https://doi.org/10.1016/j.avb.2003.09.001>
- Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L., Lundeberg, K., & Carlton, R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and Family, 62*(3), 640–654. <https://doi.org/10.1111/j.1741-3737.2000.00640.x>
- Suchman, N. E., DeCoste, C. L., Leigh, D., & Borelli, J. (2010). Reflective functioning in mothers with drug use disorders: Implications for dyadic interactions with infants and toddlers. *Attachment & Human Development, 12*(6), 567–585. <https://doi.org/10.1080/14616734.2010.501988>
- Suchman, N. E., DeCoste, C. L., McMahon, T. J., Dalton, R., Mayes, L. C., & Borelli, J. L. (2017). Mothering from the inside out: Results of a second randomized clinical trial testing a mentalization-based intervention for mothers in addiction treatment. *Development & Psychopathology, 29*, 617–636. <https://doi.org/10.1017/S0954579417000220>
- Vagi, K. J., Rothman, E. F., Latzman, N. E., Tharp, A. T., Hall, D. M., & Breiding, M. J. (2013). Beyond correlates: A review of risk and protective factors for adolescent dating violence perpetration. *Journal of Youth and Adolescence, 42*(4), 633–649. <https://doi.org/10.1007/s10964-013-9907-7>
- Warren, H. K., & Stifter, C. A. (2008). Maternal emotion-related socialization and preschoolers' developing emotion self-awareness. *Social Development, 17*(2), 239–258. <https://doi.org/10.1111/j.1467-9507.2007.00423.x>
- Wekerle, C., & Wolfe, D. A. (1999). Dating violence in mid-adolescence: Theory, significance, and emerging prevention initiatives. *Clinical Psychology Review, 19*(4), 435–456. [https://doi.org/10.1016/S0272-7358\(98\)00091-9](https://doi.org/10.1016/S0272-7358(98)00091-9)
- Williams, S., & Frieze, I. (2005). Patterns of violent relationships, psychological distress, and marital satisfaction in a national sample of men and women. *Sex Roles, 52*, 771–784. <https://doi.org/10.1007/s11199-005-4198-4>
- Wincentak, K., Connolly, J., & Card, N. (2017). Teen dating violence: A meta-analytic review of prevalence rates. *Psychology of Violence, 7*(2), 224–241. <https://doi.org/10.1037/a0040194>
- Wolfe, D. A., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C., & Straatman, A. L. (2001). Development and validation of the conflict in adolescent dating relationships inventory. *Psychological Assessment, 13*(2), 277–293. <https://doi.org/10.1037//1040-3590.13.2.277>
- Wolitzky-Taylor, K. B., Ruggiero, K. J., Danielson, C. K., Resnick, H. S., Hanson, R. F., Smith, D. W., ... & Kilpatrick, D. G. (2008). Prevalence and correlates of dating violence in a national sample of adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 47*(7), 755–762. <https://doi.org/10.1097/CHI.0b013e318172ef5f>

Author Biographies

Nicole M. Froidevaux, MA, is a social psychology graduate student in the department of Psychological Science at the University of California, Irvine. She studies intimate relationships to better understand what factors may contribute to healthier, more stable relationships among at-risk populations or couples in challenging circumstances.

Stacy Metcalf, MA, is a doctoral student in the department of Psychological Science at the University of California, Irvine. Her research focuses on the impact of adversity and trauma on socioemotional development in children and adolescents, with a focus on underserved populations.

Corey Pettit, BA, is a graduate student in clinical psychology at the University of Virginia. She is interested in the multimethod exploration of the ways communication during adolescent romantic relationships may create risk or promote resilience for long-term mental, physical, and relationship functioning.

Francesca Penner, MEd, is a doctoral student in clinical child psychology at the University of Houston, advised by Dr. Carla Sharp. Her research interests focus on parenting and social cognition as risk and resilience processes in the development of psychopathology during adolescence.

Carla Sharp, PhD, is a professor at the University of Houston where she directs the Developmental Psychopathology Lab. She also holds an adjunct position at the University of the Free State in South Africa. Her main research focus is on social cognition as it relates to disorders of interpersonal relatedness in children and adolescents, with a special interest in borderline personality disorder.

Jessica L. Borelli, PhD, is an associate professor of psychological science at the University of California, Irvine, where she is also the program's director of graduate student admissions. She is a clinical psychologist specializing in the field of developmental psychopathology; her research focuses on the links between close relationships, emotions, health, and development, with a particular focus on risk for anxiety and depression.