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Beyond Correlates: A Review of Risk and Protective Factors for Adolescent Dating Violence Perpetration

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Abstract

Dating violence is a serious public health problem. In recent years, the U.S. Centers for Disease Control and Prevention (CDC) and other entities have made funding available to community based agencies for dating violence prevention. Practitioners who are tasked with developing dating violence prevention strategies should pay particular attention to risk and protective factors for dating violence perpetration that have been established in longitudinal studies. This has been challenging to date because the scientific literature on the etiology of dating violence is somewhat limited, and because there have been no comprehensive reviews of the literature that clearly distinguish correlates of dating violence perpetration from risk or protective factors that have been established through longitudinal research. This is problematic because prevention programs may then target factors that are merely correlated with dating violence perpetration, and have no causal influence, which could potentially limit the effectiveness of the programs. In this article, we review the literature on risk and protective factors for adolescent dating violence perpetration and highlight those factors for which temporal precedence has been established by one or more studies. This review is intended as a guide for researchers and practitioners as they formulate prevention programs. We reviewed articles published between 2000–2010 that reported on adolescent dating violence perpetration using samples from the United States or Canada. In total, 53 risk factors and six protective factors were identified from 20 studies. Next steps for etiological research in adolescent dating violence are discussed, as well as future directions for prevention program developers.

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Introduction

Adolescent dating violence is a relatively new area of public health inquiry. The first published studies appeared in the 1980s (*e.g.*, Makepeace, 1981). In the early 2000s, national estimates of the prevalence of physical dating violence victimization among U.S. high school-attending youth were first made available; these ranged from 9–10% for both males and females. Given the potential for severe sequelae, including injury, death, and mental health problems, (Campbell, 2002; Ackard, Eisenberg, and Neumark-Sztainer, 2007; Johnson, Yanda, and de Vise, 2010; Wiklund, Malmgren-Olsson, Bengs, and Ohman, 2010), and an emerging focus on primary prevention, the issue of dating violence has moved to the forefront of public health injury control efforts. Over the past decade and through initiation of the CDC DELTA initiative (Domestic Violence Prevention Enhancement and Leadership Through Alliances; Martin, Coyne-Beasley, Hoehn, et al. 2009; CDC, 2012), there has been a surge of interest in the development of primary prevention strategies to curb it.

Unfortunately, progress in the area of dating violence prevention has been hampered in part because of confusion about the state of the science on factors that contribute to dating violence perpetration. In their 2001 review of correlates of dating violence, Lewis and Fremouw concluded that in the future “scientists will be more able to conduct prospective research and consider causal variables [for dating violence perpetration], reducing their reliance on correlational, cross-sectional methods of investigation. This will allow for more direct and cost-effective primary preventive strategies, resulting in more efficacious treatment” (Lewis and Fremouw, 2001, pg 124). At that time, no longitudinal studies of dating abuse had been published, and so the Lewis and Fremouw literature review was limited to cross-sectional studies. While the review identified several potentially causal factors for dating violence perpetration, such as witnessing interparental violence, experiencing child abuse, and attitudes about aggression, the authors correctly noted that no causal inferences could be made from the underlying studies that were available. The lack of longitudinal data about risk and protective factors for dating violence perpetration led to problems for practitioners who were tasked with designing prevention programs in the next decade. As Lewis and Fremouw predicted, practitioners had to design prevention programs to target *correlates* of dating violence, since superior information about potentially causal factors was unavailable. Today, we are fortunate to have the results of multiple longitudinal research studies about dating violence perpetration upon which to draw, although to date these results have not been reviewed. Therefore, our goal in undertaking the present review was to cull from the relatively large body of research about dating violence a comprehensive list of factors that have been found—by at least one study—to predict dating violence perpetration and to have preceded it temporally. We have been catholic and uncritical in our inclusion of factors, because our goal is to offer the field a base of information which can be used to shape future empirical investigations.

There are different schools of thought about what criteria must be met for an exposure to be considered a likely causal factor (Rothman, 2012). The most widely known list of criteria is Hill’s Criteria of Causation, which suggests that features such as the strength of an association, its consistency, specificity, plausibility, gradient (or dose-response relationship), coherence with existing evidence, and the temporal relationship with the outcome be considered. Of these, temporal order is arguably the most convincing of a potential causal relationship, yet there have been relatively few studies of adolescent dating violence that have established temporality. Although temporal order alone is insufficient to prove causality, those factors that are associated positively with dating violence perpetration and precede it represent the best available targets for prevention programs presently. For this reason, we have conducted a comprehensive review of the longitudinal etiological research on dating violence perpetration. For this review, we considered temporal precedence to be

established when the authors provided information about an exposure (or predictor variable) which took place at time point prior to the outcome (*i.e.*, dating abuse).

For the purposes of this review, we define adolescent dating violence as a form of intimate partner violence that occurs between people who are 10–24 years old (herein referred to as adolescents) who are current or former dating partners. Although youth ages 10–24 years old are diverse developmentally, this age range is appropriate to consider if our interest is in adolescent dating abuse, because it includes the periods of early, middle, and late adolescence (Gutgesell and Payne, 2004). Because modern adolescent relationships can be amorphous (Furman and Hand, 2006; Noonan and Charles, 2009), a myriad of relationship types can be considered dating relationships (*e.g.*, “hooking up,” “going with,” “friends with benefits”). Aggression in dating relationships also can take different forms: physical, emotional (sometimes referred to as psychological), or sexual. Physical violence includes acts such as intentionally scratching, hitting, shoving, choking, or kicking a partner; emotional or psychological violence involves threatening a partner or harming his or her sense of self-worth, name calling, shaming, embarrassing on purpose, or keeping him/her away from friends and family; and sexual violence includes coercing or forcing a partner to engage in a sex act when he or she does not or cannot consent (Saltzman, Fanslow, McMahon, and Shelley, 2002). Stalking behaviors towards a partner, whether in person or carried out through an electronic medium (*e.g.*, repeated texting, posting denigrating information or photos on social networking sites), are considered forms of dating violence as well. Thus, defining adolescent dating violence is complex because each component (adolescent, dating, and violence) is identified by a wide variety of characteristics.

Current Review

The goal of the current review was to produce a comprehensive list of risk and protective factors for adolescent dating violence perpetration, culled from studies that established temporal order, which can be used to inform prevention strategies. We defined risk factors as those variables: that were reported more frequently among individuals who perpetrated dating violence than those who did not (Gutman, Sameroff, and Eccles, 2002); and for which there was evidence that the exposure occurred prior to the outcome (*i.e.*, temporal order was established, meaning that the predictor variables were measured at Time 1 and the outcome (*i.e.*, adolescent dating violence) was measured at Time 2. Similarly, we defined protective factors as those that were both directly associated with less dating violence perpetration and for which there was evidence that the exposure (measured at Time 1) preceded the outcome (measured at Time 2). We accepted any definition of dating violence that underlying studies used, and also included two studies identified (Connolly, Friedlander, Pepler, Craig, and Laporte, 2010; Wolfe, Wekerle, Scott, Straatman, & Grasley, 2004) where the outcome dating violence reflected the presence of either perpetration or victimization or both (*i.e.*, bidirectional dating violence).

Method

Two electronic literature searches were conducted in early 2011 using PsycINFO (American Psychological Association, Washington DC) and PubMed (US National Library of Medicine, National Institutes of Health, Bethesda, Maryland). Studies were included in this review if they were published between 2000–2010, the mean age of the sample was between 10 and 24 years old at outcome, the outcome was dating violence perpetration, and the study identified risk or protective factors that preceded this outcome temporally. Studies published in languages other than English, or where the sample was not from the U.S. or Canada, were excluded. The rationale for limiting our search to publications printed between 2000–2010

was that there was an absence of research studies on longitudinally identified risk factors prior to the year 2000.

We used the following search terms in PsycINFO: *adolescent* or *teenage* or *teen* or *youth* or *college* or *young adult* AND *violence* or *abuse* or *aggression* or *perpetration* AND *dating* or *relationship* or *partner*. This search resulted in 810 articles. We also searched PubMed, using combinations of The National Library of Medicine's Medical Subject Headings (MeSH) (adolescent and violence) and general terms (teen, youth, dating, relationship, risk factors, protective factors, predictors, perpetration, aggression, and longitudinal). These searches resulted in 356 articles. Of the articles identified from the searches in PsycINFO and PubMed (of which there was overlap), 20 met the criteria for inclusion in this review. Common reasons for exclusion were that the study did not examine risk/protective factors of adolescent dating violence (*e.g.*, descriptive studies, reviews), were not longitudinal, and focused on victimization instead of perpetration. Studies were also excluded if the study sample was from outside the U.S. or Canada or if the dating violence occurred past college (when the mean age of the sample was greater than 24 years old). Two reviewers (authors KV and NL) independently reviewed the literature for relevant articles, and all authors came to consensus when discrepancies arose.

Once the 20 articles were identified, we extracted the study sample size, study sample description, age when the exposure was assessed, age when dating violence perpetration was assessed, the way that dating violence was defined in the underlying study, the type of analysis used, the crude and adjusted measures of association between any identified risk or protective factors and dating violence perpetration, any covariates (both significant and not) of the exposure that were included in the analyses, whether results applied to only a particular sex (*e.g.*, males only), and how baseline perpetration of adolescent dating violence was accounted for in the statistical models. Crude measures of effect are those that provide an estimate of the relationship between the exposure and outcome without controlling for any potential confounders. Adjusted effect measures are those that reflect the relationship between the exposure and outcome when additional variables which could confound that relationship have been included in the model. Wherever possible, we present results stratified by the biological sex of the respondent. This information is listed in Table 1. Table 2 presents each risk and protective factor that we identified and the citation for each study that found support for that factor. In Table 2, factors are arranged by levels of the social-ecological model (Bronfenbrenner, 1979; CDC, 2004) (see Table 2).

Results

Of the 20 articles included, 19 examined risk factors associated with perpetrating adolescent dating violence at either the individual or relationship levels of the social ecology (two of these articles identified both risk and protective factors). The 20th study (Schumacher and Smith Slep, 2004) identified protective factors rather than risk factors. A total of 53 risk factors were identified from the 19 articles that assessed perpetration (see Table 2). These 53 risk factors fit into the following general categories: mental health problems (*e.g.*, depression, anxiety), aggressive thoughts/cognitions (*e.g.*, acceptance of violence in dating relationships), youth violence (*e.g.*, fighting, general antisocial behavior), substance use (*e.g.*, alcohol use, marijuana use), risky sexual behaviors (*e.g.*, sexually active in 8th grade, high number of sex partners), poor relationship and friendship quality (*e.g.*, hostile couple interactions, involvement with antisocial peers, low friendship quality), poor family quality (*e.g.*, parental marital conflict, childhood physical abuse), demographics (*e.g.*, child's sex, race), and the use of aggressive media.

Risk factors for adolescent dating violence perpetration that appeared in multiple studies included depression (Cleveland, Herrera, and Steuwig, 2003; McCloskey and Lichter, 2003; Foshee, Reyes, and Ennett, 2010), general aggression (Kerr and Capaldi, 2010; O'Donnell, Stueve, Myint-U, Duran, Argonick, and Wilson-Simmons, 2006), having a history of sexual aggression (Gidycz, Warkentin, and Orchowski, 2007; Ozer, Tschann, Pasch, and Flores, 2004), prior dating violence (Tschann, Pasch, Flores, VanOss Marin, Baisch, and Wibbelsman, 2009; Wolfe et al., 2004), race/ethnicity (Connolly et al., 2010; Foshee, Linder, MacDougall, and Bangdiwala, 2001; Foshee et al., 2010), engagement in peer violence (Foshee, et al., 2010; Ozer et al., 2004), having friends who perpetrate adolescent dating violence (Arriaga and Foshee, 2004; Foshee, et al., 2010), and parental marital conflict (Stocker and Richmond, 2007; Tschann et al., 2009). Five of these risk factors (depression, general aggression, history of sexual aggression, prior dating violence, and race) are individual level risk factors. Three others (engagement in peer violence, friends perpetrating adolescent dating violence, and parental marital conflict) occur at the relationship level of the social ecology. It is important to note that determining within which level of the social ecological model a factor falls is not always straight-forward, such that a relationship-level variable is often measured at the individual level (e.g., friends who perpetrate adolescent dating violence).

There were very few protective factors identified. From the 20 articles reviewed, only three identified protective factors. The three studies identified six distinct protective factors. Four of these protective were identified at the individual level of the social ecology: high cognitive dissonance about perpetrating dating violence, which is when adolescents who perpetrated adolescent dating violence realized that what they were doing was wrong (Schumacher and Smith-Slep, 2004), high empathy (McCloskey and Lichter, 2003), better grade-point-average (Cleveland et al., 2003), and (higher) verbal IQ (Cleveland et al., 2003). Two additional protective factors were found at the relationship level of the social ecology: having a positive relationship with one's mother (Cleveland et al., 2003) and feeling a sense of attachment to your school (Cleveland et al., 2003).

Discussion

In an effort to compile the evidence about risk and protective factors for adolescent dating violence perpetration, we reviewed the literature for those factors that have been found to be both associated with dating violence perpetration and for which temporal order has been established. We categorized the risk and protective factors identified in the reviewed studies by levels of the social ecology. These factors should be investigated in future research studies that aim to elucidate the etiology of dating abuse perpetration, and used to inform the development, implementation, and evaluation of adolescent dating violence perpetration prevention strategies.

Across the 20 studies reviewed, there were a total of 53 risk factors identified. Many of these factors cluster together in several key dimensions. For example, a range of mental health problems were found to predict dating violence perpetration. Attitudes, such as acceptance of violence in dating relationships, were also found to predict adolescent dating violence perpetration. Certain behaviors also were longitudinal predictors of subsequent adolescent dating violence perpetration, and these included the use of aggressive media, aggressive behavior towards peers or others, substance use, precocious sexual behavior, and having antisocial peers. Additionally, having a hostile relationship with one's partner or friends also predicted dating violence perpetration. Finally, demographic factors, including age, child's sex, and race, were found to be longitudinal predictors of dating violence perpetration. Only behaving in a manner towards one's dating partner that is discrepant with one's attitudes about dating abuse (cognitive dissonance), empathy, good grades, verbal IQ,

having a positive relationship with one's mother, feeling a sense of school attachment, and were found to be protective. In short, the results of this review suggest that effective prevention programs may be those that target youth who have experienced maltreatment and other adverse childhood events, who have particular mental health problems, behave aggressively and have aggressive attitudes, use substances, and are in hostile or unhealthy dating relationships.

Many of the risk factors for adolescent dating violence that have been identified are also risk factors for other types of violence perpetration. For example, substance use, depression, and parenting practices are also risk factors for sexual violence and youth violence (DeGue et al., in press; Hong, Espelage, Grogan-Kaylor, and Allen-Meares, 2012; Tolan, Gorman-Smith, and Henry, 2003). Therefore, there is the potential that prevention programs targeting these behaviors may affect multiple forms of violence. Given the time and resource burdens on schools, prevention programs that demonstrate effectiveness in multiple areas of adolescent risk and violence have the potential to increase efficiency of school-based prevention and enable schools to implement comprehensive evidence-based prevention programs even with limited time and resources. Although many adolescent dating violence prevention programs are not evaluated for multiple outcomes, a few notable exceptions exist, such as Fourth R which reduced physical dating violence and increased condom use among boys (Wolfe et al., 2009).

The results of this review are consistent with the background-situational model of dating violence (Riggs and O'Leary, 1989). The model suggests that background risk factors for violence (such as childhood physical abuse, mental health problems, and attitudes accepting of violence) are useful in identifying *who* is at risk for perpetrating violence, whereas situational risk factors (such as drinking alcohol or having a conflict with a dating partner) are useful in identifying *when* violence is likely to occur. The results of the present literature review provide support for the background-situational model, and extend it by (1) introducing the six protective factors (i.e., cognitive dissonance related to dating violence, empathy, good grades, verbal IQ, having a positive relationship with one's mother, and school attachment); and (2) suggesting that there is evidence that particular exposures precede dating abuse perpetration temporally, strengthening the plausibility that the background-situational model describes a causal framework. In other words, the background-situational model appears to be a good model to continue to use to explain why some youth perpetrate dating abuse.

Notably, no studies that focused solely on assessing sexual violence perpetration in teen dating relationships met the criteria for inclusion in the present review. Two common methodological reasons for these exclusions are worth noting. Studies examining sexual violence perpetration within the context of adolescent (*e.g.*, Sears, Byers and Price, 2007) or college dating relationships (*e.g.*, Abbey, McAuslan, Zawacki, Clinton, and Buck, 2001; Christopher, Madura, and Weaver, 1998; Forbes, Adams-Curtis, Pakalka, and White, 2006; Simons, Burt, and Simons, 2008) were either cross-sectional, or were longitudinal but did not specify whether the sexual violence occurred in the context of a dating relationship (*e.g.*, Abbey and McAuslan, 2004; Borowsky, Hogan, and Ireland, 1997; Hilton, Harris, and Rice, 2003; Maxwell, Robinson, and Post, 2003; McWhorter, Stander, Merrill, Thompson, and Milner, 2009; Pepler, Craig, Connolly, and Henderson, 2002; Teten, Ball, Valle, Noonan, and Rosenbluth, 2009; White and Smith, 2004). Future studies that examine sexual violence should specify the relationship between perpetrator and victim in order to contribute to the evidence base about dating violence as well.

Our findings suggest that practitioners who are designing programs to prevent dating violence perpetration should target multiple factors, and address both background risk

factors and situational ones. In addition, because many of the identified risk and protective factors for dating violence perpetration are also relevant to other youth risk behaviors (*e.g.*, gang violence perpetration, substance use, self-harm and suicide), dating violence prevention programmers could benefit from allying themselves with prevention programmers from other, related fields. Some practitioners may fear that programs that target multiple factors may “water down” (*i.e.*, detract from) education about the dynamics of dating abuse. Research has yet to establish whether programs that target multiple factors that underlie dating abuse and other youth health issues are any more or less effective than those that focus solely on dating abuse. However, to prevent dating violence effectively, it may be possible to address a factor such as adolescent depression or trauma, without ever overtly teaching the basic facts about dating violence such as the prevalence of dating abuse or what counts as dating abuse (commonly referred to as “DV 101” by practitioners). By way of example, teaching people in communities the prevalence of lung cancer or what counts as lung cancer is not as important a method of reducing lung cancer as helping people to quit smoking or to reduce their use of tobacco. Therefore, in the case of dating violence, prevention programs that do not overtly discuss dating violence perpetration at all, but instead focus on one of the salient risk factors (such as emotional distress), may be effective at reducing risk for dating violence perpetration. For example, healthy emotional development is linked to academic success and the prevention of a wide range of problem behaviors and mental health concerns (*e.g.*, anxiety, general aggression) that are linked to teen dating violence perpetration and victimization (*e.g.*, Catalano, Berglund, Ryan, Lonczak, and Hawkins, 2004; Greenberg, Domitrovich, and Bumbarger, 2001). The results from this review suggest the need to evaluate the effects of such strategies on dating violence perpetration.

Through the process of conducting this review, we identified several important gaps in the existing literature on this topic. First, little research has been conducted to assess factors at the outer levels of the social ecology (*i.e.*, the community and social levels). Neighborhood-level factors, in particular, may be important determinants of dating violence perpetration, given that cross-sectional studies suggest effects at the neighborhood level (Banyard and Modecki, 2006; Champion, Foley, Sigmon-Smith, Sutfin, and DuRant, 2008; Jain, Buka, Subramanian, and Molnar, 2010; Rothman, Johnson, Young, Weinberg, Azrael, and Molnar, 2011). Furthermore, as noted above, very few protective factors have been identified. Greater attention needs to be paid to protective factors that act as buffers between specific risk factors and adolescent dating violence.

The results of this review are limited in several ways. First, even evidence from longitudinal studies may not be conclusive about whether a relationship between an exposure and outcome is causal. In other words, although we now have strong evidence that mental health problems predict future dating violence perpetration, both the mental health problems and dating aggression may be the result of a third factor, such as child maltreatment. Second, almost all dating violence perpetration studies rely on self-reports of the exposures and outcome. Participants may minimize their own aggressive behavior (*i.e.*, underreport), or they may report exposures inaccurately due to poor recall (*i.e.*, recall bias). Third, the goal of this article was to compile a list of all risk and protective factors for dating abuse perpetration for which there was evidence of a positive association and temporal order could be discerned utilizing at least two time points. However, it should be noted that we did not censor factors which were found to be significantly related to dating violence perpetration in one article but nonsignificant in another. In other words, if there was conflicting evidence about a factor, the factor remained in our list. The implication is that this list is a *starting point* for conceiving of future investigations and prevention program design, but should not be interpreted as definitive. Fourth, some of the underlying studies failed to control for potentially confounding factors, including individuals’ baseline dating violence perpetration

score, which may have biased results away from the null (*i.e.*, made certain predictors look more important than they might be in actuality). Future longitudinal studies that assess dating violence perpetration should include both Time 1 and Time 2 assessments. Finally, for this review we chose to only include studies that had at least two time points, where the exposure was measured at Time 1 and the outcome (*i.e.*, adolescent dating violence) was measured at Time 2. An argument can be made, however, that valuable information can also be ascertained from studies that assess exposure and outcome at the same time point, as long as the exposure was measured retrospectively. This may be especially true for risk and protective factors that deal with early childhood issues, such as child maltreatment and trauma.

In conclusion, this review of a decade of research on dating violence perpetration found that there have been numerous studies that have established temporal order between no fewer than 64 different exposures and subsequent dating violence perpetration. Now that we are amassing evidence about what may be contributing causes of dating violence perpetration, both researchers and practitioners will be able to refine their approaches. Importantly, entities that fund dating violence prevention programming will now be able to consider more easily whether proposed strategies address one or more of the factors for which there is at least some degree of evidence that a causal relationship may exist.

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Table 1
Longitudinal risk (N=53) and protective (N=6) factors for dating abuse perpetration, by study

First author, Year	Sample size	Sample description	Age at exposure, age at outcome	How DV was defined	Type of analysis	Crude effect	Adjusted effect	Covariates (not significant)	Covariates (significant)
Andrews, 2000 ^e	N=254	High school sample from western Oregon	Mean 16.8 yrs (Females) Mean 23.1 yrs (Males)	Physical Violence	Hierarchical Multiple Linear Regression, Logistic Regression	Adolescent Antisocial Behavior (B) $r = .08$, N/S Aversive Family Communication (B) $r = .22$, $p < .001$	Adolescent Antisocial Behavior (B) $\beta = 0.25$, $p < .05$ Aversive Family Communication (B) $\beta = 2.19$, $p < .001$	Gender, Marital Status X Gender, Parent-Adolescent Conflict, Parent-Rated Depression, Depression, Partner Antisocial Behavior, Gender X Partner Antisocial Behavior, Marital Status X Partner Antisocial Behavior	Marital Status, Family Aversive Communication, Adolescent Antisocial Behavior, Partner Antisocial Behavior X Parent-Rated Depression, Gender X Marital Status X Partner Antisocial Behavior
Arriaga, 2004 ^d	N=226	8th and 9th grade sample from North Carolina	Median 13 yrs, Median 13.5 yrs	Physical Violence, Sexual Violence	Chi-Square, Logistic Regression	Friends Perpetrating Adolescent Dating Violence (B) $\chi^2 (2, N = 517) = 29.51$, $p < .001$	Friends Perpetrating Adolescent Dating Violence (B) OR = 1.85, $p < .039$	N/A	Time 1 Violence
Cleveland, 2003 ^e	N=603	National Longitudinal Study of Adolescent Health (Add Health)	Mean 16.0 yrs (Females) Mean 16.5 yrs (Males) Mean 17.0 yrs (Females) Mean 17.5 yrs (Males)	Physical Violence	Logistic Regression	Depression N/A Drinking – Frequency N/A Drinking – Volume N/A Fighting N/A Grade Point Average N/A Having Sex Before Love – Telling N/A Positive Relationship w/Mother N/A School Attachment N/A Sex Desirability N/A Higher Number of Sex Partners N/A Total Drinking N/A Verbal IQ N/A	Depression (F) $\beta = .19$, $p < .05$ Drinking – Frequency (F) $\beta = .12$, $p < .05$ Drinking – Volume (F) $\beta = .17$, $p < .05$ Fighting (M) $\beta = .17$, $p < .05$ Grade Point Average (F) $\beta = -.25$, $p < .05$ (M) $\beta = -.26$, $p < .05$ Having Sex Before (M) $\beta = .16$, $p < .05$ Love – Telling (M) $\beta = .16$, $p < .05$ Positive Relationship w/Mother (F) $\beta = -.14$, $p < .05$ School Attachment (F) $\beta = -.22$, $p < .05$ Sex Desirability (M) $\beta = .23$, $p < .05$ Higher Number of Sex Partners (M) $\beta = .16$, $p < .05$ Total Drinking (F) $\beta = .15$, $p < .05$ Verbal IQ (M) $\beta = -.023$, $p < .05$	Mom Relationship (males only), Dad Relationship, School Attachment (males only), Verbal IQ (females only), Sex Desirability (females only), Relationship of Sex and Love (males only), Number of Sexual Partners (males only), Total Drinking (males only), Drinking – Frequency by Volume (males only), Fighting (females only), Non-Fighting Delinquency Depression (males only), Self-Esteem	Mom Relationship (females only), GPA, School Attachment (males only), Verbal IQ (females only), Sex Desirability (females only), Relationship of Sex and Love (males only), Number of Sexual Partners (males only), Total Drinking (males only), Total Drinking – Frequency by Volume (females only), Fighting (males only), Non-Fighting Delinquency Depression (males only), Depression (females only)
Conolly, 2010 ^{f,e}	N=627	High school sample from NE Canada	14–19 years 15–20 years	Physical Violence	Multiple Regression, Structural Equation Modeling	Aggression-Tolerant Attitudes (B) $r = .21$, $p < .001$ (acceptance of female aggression) (B) $r = .17$, $p < .001$ (acceptance of male aggression) (B) $r = .15$, $p < .01$ Hostile/Conflict Couple Relationship (B) $r = .17$, $p < .001$ (conflict and hostility) Race/Ethnicity (B) $r = .13$, $p < .01$ Use of Aggressive Media (B) $r = .08$, $p < .05$ (perceived aggression)	Aggression-Tolerant Attitudes (B) $\beta = .19$, $p < .01$ Hostile/Conflict Couple Relationship (B) $\beta = .17$, $p < .01$ Race/Ethnicity (B) $\beta = .15$, $p < .01$ Use of Aggressive Media (B) $\beta = .07$, N/S	T1 Media Influence to T1 Couple Relationship, T1 Media Influence to T2 Dating Aggression	T1 Media Influence to T1 Aggression-Tolerant Attitudes, T1 Aggression-Tolerant Attitudes to T2 Dating Aggression, T1 Couple Relationship to T2 Dating Aggression
Foshee, 2001 ^d	N=1,013	8th through 10th grade students in North Carolina	8th_9th grade 9th_10th grade	Physical Violence, Sexual Violence	Proportional Odds Model	Acceptance of Violence in Dating Relationships (M) OR = 1.92, $p < .05$ (F) OR = 1.77, $p < .05$ (B) OR = 1.20, $p < .05$ Friends Victims of Adolescent Dating Violence (F) OR = 1.65, $p < .05$	Acceptance of Violence in Dating Relationships (M) OR = 1.77, $p < .053$ (F) OR = 1.19, $p < .05$ (B) OR = 1.19, $p < .05$ Friends Victims of Adolescent Dating Violence (F) OR = 1.65, $p < .05$	Friends Who Are Perpetrators (males only), Supervision by Mother (males only), Perceived Normality (males only), Destructive Responses to Anger (males only), Friends Who Report to School (males only), Race (males only)	Friends Who Are Victims (females only), Alcohol Use (females only), Race (females only), Acceptance of Prescribed Norms (males only)

First author, Year	Sample size	Sample description	Age at exposure, age at outcome	How DV was defined	Type of analysis	Crude effect	Adjusted effect	Covariates (not significant)	Covariates (significant)
Foshee, 2010 ^d	N=1,666	8th through 10th grade students in North Carolina	8th-10th grade 8th-10th grade	Physical Violence	Logistic Regression	Race (F) OR = 0.59, p<.05 Anxiety (B) OR = 1.05, p<.001 Depression (B) OR = 1.12, p<.001 Engagement in Peer Violence (B) OR = 1.12, p<.001 Friends Perpetrating Adolescent Dating Violence (B) OR = 1.49, p<.01 Marital Use (B) OR = 1.41, p<.10 Race (B) OR = 1.50, p<.001	Race (F) OR = 0.56, p<.05 Anxiety (B) OR = 1.05, p<.05 Depression (F) OR = 0.89, p<.01 Engagement in Peer Violence (F) OR = 0.87, p<.05 Friends Perpetrating Adolescent Dating Violence (B) OR = 1.39, p<.05 Marital Use (F) OR = 0.88, p<.05 Race (B) OR = 4.49, p<.001	Sex, Anger, Depression (males only), Social Bonding, Tobacco Use, Alcohol Use, Marijuana Use (males only), Aggression Against Peers (males only), No. of Friends Using Dating Violence, Sex X Depression, Sex X Marijuana Use, Sex X Aggression Against Peers, Race X Sex, Race X Anxiety, Race X Anger	Race, Depression (females only), Marijuana Use (females only), Aggression Against Peers (females only), No. of Friends Using Dating Violence, Sex X Depression, Sex X Marijuana Use, Sex X Aggression Against Peers, Race X Sex, Race X Anxiety, Race X Anger
Gidycz, 2007 ^b	N=425	Undergraduate men at a Mid-Western University	18-19 years 18-19 years (3-month follow-up)	Physical Violence, Sexual Violence, Verbal Violence	Hierarchical Multivariate Logistic Regression	History of Physical Aggression to current physical aggression) (M) r = .49, p<.002 History of Sexual Aggression to current sexual aggression) (M) r = .52, p<.002 History of Verbal Aggression to current verbal aggression) (M) r = .49, p<.002	History of Physical Aggression to current physical aggression) (M) OR = 13.70, p<.001 History of Sexual Aggression to current sexual aggression) (M) OR = 2.98, p<.001 History of Verbal Aggression to current verbal aggression) (M) OR = 3.51, p<.001	Average Daily Alcohol Use, Problem Drinking, Age of First Sexual Intercourse, Athletic Membership, Fraternity Membership, History of Verbal Aggression (Physical Violence only), History of Physical Aggression (Sexual and Verbal Violence only), History of Physical Victimization	History of Sexual Aggression (Sexual Violence only), History of Verbal Aggression (Sexual and Verbal Violence only), History of Physical Aggression (Physical Violence only)
Herrenkohl, 2007 ^e	N=644	Elementary school sample from high-crime Seattle neighborhoods	13-18 years Mean 24 yrs	Physical Violence	Logistic Regression	Chronic Offenders of Violence Throughout Adolescence (B) OR = 2.06, p<.05 Late Increasing Pattern of Violence in Adolescence (B) OR = 1.98, p<.05	Chronic Offenders of Violence Throughout Adolescence (B) OR = 2.36, p<.05 Late Increasing Pattern of Violence in Adolescence (B) OR = 2.43, p<.05	Gender, Desist Vs. Non-Violent Trajectory Group	Chronic Vs. Non-Violent Trajectory Group, Late Trajectory Group
Kerr, 2011 ^e	N=153	Males from the Oregon Youth Study (OYS)	10-17 years 17-25 years	Physical Violence, Psych. Violence	Linear Regression	General Aggression (M) r = .42, p<.001 Suicide Attempt (M) r = .31, p<.001 Unskilled Parenting (M) r = .32, p<.001	General Aggression (M) r = .16, p<.05 Suicide Attempt (M) r = .17, p<.05 Unskilled Parenting (M) r = .20, p<.01	N/A	Suicide Attempt, Aggression, Relationship Satisfaction
Lavoie, 2002 ^c	N=717	Elementary, middle, and high school sample from Montreal, Canada	10-15 years 16-17 years	Physical Violence, Psych. Violence	Multiple Regression	General Antisocial Behavior (M) r = .72, p<.001 Harsh Parenting Practices (M) r = .09, p<.05 (Low) Parental Monitoring (through antisocial behavior) (M) r = -.02, N/S	General Antisocial Behavior (M) r = .23, p<.001 Harsh Parenting Practices (M) r = .08, p<.05 Monitoring (through antisocial behavior) (M) r = -.24, p<.001	Witnessing Interparental Conflict	General Antisocial Behavior, Harsh Parenting Practices, Parental Monitoring
Linder, 2005 ^c	N=121	Minnesota Longitudinal Study of Parents and Children	13 years (parent-child risk) 16 years (friendship risk) 21 & 23 years	Physical Violence	Hierarchical Multiple Regression	Childhood Physical Abuse (B) r = .17, N/S (age 21 perpetration) (B) r = .28, p<.01 (age 23 perpetration) Quality of Friendship (B) r = -.32, p<.01 (age 21 perpetration) (B) r = -.14, N/S (age 23 perpetration) Negative Parent-Child Interactions (B) r = .26, p<.05 (age 21 perpetration) (B) r = .03, N/S (age 23 perpetration)	Childhood Physical Abuse (B) r = .16, N/S (age 21 perpetration) (B) r = .25, p<.05 (age 23 perpetration) Quality of Friendship (B) r = -.27, p<.05 (age 21 perpetration) (B) r = -.06, N/S (age 23 perpetration) Negative Parent-Child Interactions (B) r = .13, N/S (age 21 perpetration) (B) r = -.22, p<.05 (age 23 perpetration)	Gender, Childhood Physical Abuse (age 21 only), Witnessing of Partner Violence, Negative Parent-Child Interactions (age 21 only), Friendship Quality (age 23 only)	Childhood Physical Abuse (age 23 only), Negative Parent-Child Interactions (age 23 only), Parent-Child Boundary Violations, Friendship Quality (age 21 only)

First author, Year	Sample size	Sample description	Age at exposure, age at outcome	How DV was defined	Type of analysis	Crude effect	Adjusted effect	Covariates (not significant)	Covariates (significant)
McCloskey, 2003 ^C	N=296	Sample of mother-child pairs from a southwestern mid-size city	Mean 14.7 yrs (females) Mean 16.4 yrs (males)	Physical Violence	Logistic Regression	Parent-Child Boundary Violations (B) $r = .42$, $p < .001$ (age 21 perpetration) (B) $r = .28$, $p < .01$ (age 23 perpetration) Child's Sex N/A Depression N/A (Higher) Empathy N/A Older than Age 18 N/A	Parent-Child Boundary Violations (B) $\beta = .37$, $p < .01$ (age 21 perpetration) (B) $\beta = .37$, $p < .01$ (age 23 perpetration) Child's Sex (model containing empathy) (B) OR = 3.26, $p < .01$ Depression (F) OR = 5.7, $p < .05$ (Higher) Empathy (B) OR = .59, $p < .01$ Older than Age 18 (B) OR = 3.86, $p < .001$ (model containing depression) (B) OR = 3.92, $p < .001$ (model containing empathy)	Marital Violence, Child's Sex (model containing depression only), Depression	Child's Sex (model containing empathy only), Older than Age 18, Empathy, Depression X Sex
O'Donnell, 2006 ^E	N=977	Reach For Health Study involving a middle and high school sample from New York	Mean 13.8 yrs (females) Mean 13.7 yrs. (males) Mean 19.7 yrs (females) Mean 19.8 yrs. (males)	Physical Violence	Logistic Regression	8th Grade Sexual Initiation N/A General Aggression (F) OR = 1.43, $p < .001$ (M) OR = 1.43, $p < .001$ Substance Use N/A	8th Grade Sexual Initiation (M) OR = 1.90, $p < .05$ General Aggression (F) OR = 1.30, $p < .01$ (M) OR = 1.22, $p < .05$ Substance Use (F) OR = 1.22, $p < .05$ (M) OR = 1.27, $p < .10$	Race, Age at 8th Grade Survey, Two Parent Household, 8th Grade Church Attendance, 8th Grade Academics, 8th grade Sexual Initiation (Females only)	8th Grade Aggression, Substance Use, 8th Grade Sexual Initiation (Males only), Violence in Childhood, Victim of Aggression in Childhood Home
O'Leary, 2003 ^B	N=206	High school sample from New York	Mean 16.5 yrs Mean 16.8 yrs	Physical Violence, Psych Violence, Verbal Violence	Structural Equation Modeling	Partner's Use of Physical Aggression ⁺ N/A	Partner's Use of Physical Aggression (F) $\beta = .57$, $p < .001$ (M) $\beta = .77$, $p < .001$	T1 Own Physical Aggression to T2 Own Physical Aggression, T1 Partner's Physical Aggression to T2 Partner's Physical Aggression	T1 Own Psychological Aggression to T1 Partner's Psychological Aggression, T1 Own Psychological Aggression to T2 Own Psychological Aggression, T1 Partner's Psychological Aggression to T1 Own Psychological Aggression, T1 Partner's Physical Aggression to T1 Own Physical Aggression, T2 Partner's Physical Aggression to T2 Own Physical Aggression, T1 Partner's Physical Aggression
Ozer, 2004 ^E	N=247	Middle and High School Sample from California of European and Mexican Descent	Mean 17.8 yrs Mean 18.8 yrs	Physical Violence	Tetrachoric Correlations	Engagement in Peer Violence N/A History of Sexual Aggression (M) $r = .51$, $p < .01$	Engagement in Peer Violence N/A History of Sexual Aggression N/A	N/A	N/A
Schurr, 2008 ^C	N=765	Wellfare Children, and Families-A Three-City Study from Boston, Chicago, and San Antonio	Mean 11.9 yrs Mean 17.8 yrs	Physical Violence, Sexual Violence	Ordinary Least Squares (OLS), Hierarchical Multiple Regression	Drug and Alcohol Use N/A Early Involvement with Antisocial Peers N/A (Low) Father-Child Hostility N/A Increased Involvement with Antisocial Peers N/A	Drug and Alcohol Use (F) $\beta = .18$, $p < .05$ Early Involvement with Antisocial Peers (F) $\beta = .22$, $p < .01$ (M) $\beta = .19$, $p < .01$ (Low) Father-Child Hostility (F) $\beta = -.24$, $p < .01$ Increased Involvement with Antisocial Peers (F) $\beta = .37$, $p < .001$ (M) $\beta = .22$, $p < .01$	Domestic Violence, Ethnicity, Adolescent (Wave 3), Mother Age (Wave 2), Maternal Education (Wave 2), Family Income, Stable Single, Stably Separated (except for African-American Females), Into a Union, Out of a Union, Drug and Alcohol Use (except for Females and Hispanic Males), Depressive Symptoms, Anxiety, Sexual Abuse, Externalizing Behaviors, Poor Mother-Child trust and Communication, Mother-Child Hostility (except for Hispanic Females), Poor Father-Child Trust and Communication, Father-Child Hostility (except for Females), Father Punishment (except for Hispanic Females), Parental Monitoring, Academic Difficulties, School Involvement, Antisocial Peer Involvement (African-American Males and Hispanic Females Only), Change in Antisocial Peer Involvement	Stably Separated (African-American Females only), Drug and Alcohol Use (Females and Hispanic Males only), Mother-Child Hostility (Hispanic Females only), Father-Child Hostility (Females only), Harsh Physical Punishment (Hispanic Females only), Antisocial Peer Involvement (except for African-American Males and Hispanic Females), Change in Antisocial Peer Involvement (except for African-American Males and Hispanic Females)

First author, Year	Sample size	Sample description	Age at exposure, age at outcome	How DV was defined	Type of analysis	Crude effect	Adjusted effect	Covariates (not significant)	Covariates (significant)
Schumacher, 2004 ^b	N=398	High School Sample from Long Island, New York	Mean 16.5 yrs Mean 16.8 yrs	Jealous Tactics, Verbal Violence	Hierarchical Regression	Discrepancy Between Dating Abuse Related Attitudes and Behaviors (Cognitive Dissonance) N/A	Discrepancy Between Dating Abuse Related Attitudes and Behaviors (Cognitive Dissonance) Betas range from -.13 to -.37 and p-values range from .05 to .001	(African- American Males and Hispanic Females only), Lack of School Safety	T1 Behavior (Insulted/Sworn at, Sulked/Refused to Talk, Stomped Out, Done/Said Something to Spite, Jealous of Partner's Friends, Jealous of Other Boys/Girls, Checking up on Partner), Attitude (Insulted/ Sworn At, Stomped Out, Done/Said Something to Spite, Jealous of Partner's Friends, Jealous of Other Boys/Girls, Checked up on Partner), Accused Partner of Cheating), Dissonance (Insulted/Sworn At, Sulked/Refused to Talk, Stomped Out, Done/Said Something to Spite, Jealous of Partner's Friends, Jealous of Other Boys/Girls)
Stocker, 2007 ^e	N=110	Longitudinal Study of Relationships between Adolescents and their Families	Mean 16.1 yrs Mean 19.3 yrs	Psych Violence	Hierarchical Linear Modeling	Hostile Friendships (B) $r = .20$, $p < .05$ Parental Marital Conflict (B) $r = .21$, $p < .05$	Hostile Friendships (B) $\beta = .18$, $p = .02$ Parental Marital Conflict (B) $\beta = .10$, $p = .04$	Parent-Child Hostility, Adolescents' Aggression, Gender	Marital Hostility, Friendship Hostility
Tschann, 2009 ^e	N=150	Longitudinal Study of Adolescents and Their Parents' Marital Conflict and Adolescent Risk Behaviors	Mean 18.2 yrs Mean 18.8 yrs (6-month follow-up) Mean 19.2 yrs (12-month follow-up)	Physical Violence, Verbal Violence	Multiple Regression	Emotional Distress 6-month follow-up: (B) $r = .23$, $p < .01$ 12-month follow-up: (B) $r = .17$, $p < .05$ Exposure to Father-to-Mother Violence 6-month follow-up: (B) $r = .27$, $p < .001$ (B) $r = .29$, $p < .001$ Exposure to Interparental Violence 6-month follow-up: (B) $r = .37$, $p < .001$ 12-month follow-up: (B) $r = .38$, $p < .001$ Exposure to Mother-to-Father Violence 6-month follow-up: (B) $r = .38$, $p < .001$ 12-month follow-up: (B) $r = .39$, $p < .001$ Parental Marital Conflict (frequency) 6-month follow-up: (B) $r = .24$, $p < .01$ 12-month-follow-up: $R = .17$, $p < .05$ Prior Dating Violence 12-month follow-up: (B) $r = .72$, $p < .001$	Emotional Distress 6-month follow-up: (B) $\beta = .22$, $p < .05$ 12-month follow-up: (B) $\beta = .05$, N/S Exposure to Father-to-Mother Violence N/A Exposure to Mother-to-Father Violence N/A Parental Marital Conflict (frequency) N/A Prior Dating Violence 12-month follow-up: (B) $\beta = .73$, $p < .001$	Gender, Ethnicity, SES, Nonviolent Parental Marital Conflict, Adolescent Dating Violence (12-month only), Mutual Verbal Aggression at 6 months (12-month only), Dating Violence Victimization at 6 months (12-month only)	Interparental Violence, Emotional Distress (6-month only), Dating Violence Perpetration at 6 months (12-month only)
Wolke, 2004 ^{b,d,f}	N=1,317	High School Sample from Canada	Mean 16.1 yrs Mean 17.1 yrs	Psychological Violence, Psych Violence	Cross-Lagged Structural Equation Model	Prior Dating Violence [†] (F) $\beta = .09$, $p < .001$ Trauma Symptoms [†] (M) $\beta = .36$, $p < .001$ Psych V (M) $\beta = .21$, $p < .01$ Trauma-Related Anger [†] (F) $\beta = .14$, $p < .01$	Prior Dating Violence (F) $\beta = .09$, $p < .001$ Trauma Symptoms (M) $\beta = .36$, $p < .001$ Psych V (M) $\beta = .21$, $p < .01$ Trauma-Related Anger (F) $\beta = .14$, $p < .01$	T1 Child Maltreatment to T1 Empathy/Self-Efficacy (males only), T1 Trauma Symptoms to T1 Dating Violence, T1 Dating Violence to T1 Empathy/Self-Efficacy (males only), T1 Dating Violence to T1 DV Attitudes, T2 Trauma Symptoms to T2 Dating Violence (Emotional Abuse) (boys only), T2 Dating Violence to T2 DV Attitudes (females only), T2 Dating Violence to T2 Empathy/Self-Efficacy (females only), T1 Trauma Symptoms to T1 Dating Violence (Emotional Abuse) (males only), T1 Trauma-	T1 Child Maltreatment to T1 Trauma Symptoms, T1 Child Maltreatment to T1 Dating Violence, T1 Child Maltreatment to T1 DV Attitudes, T1 Child Maltreatment to T1 DV Trauma Symptoms to T2 Dating Violence (Emotional Abuse) (boys only), T2 Dating Violence to T2 DV Attitudes (females only), T2 Dating Violence to T2 Empathy/Self-Efficacy (females only)

First author, Year	Sample size	Sample description	Age at exposure, age at outcome	How DV was defined	Type of analysis	Crude effect	Adjusted effect	Covariates (not significant)	Covariates (significant)
									Related Anger to T1 Dating Violence (females only), T1 Dating Violence to T1 DV Attitudes (males only), T1 Trauma Symptoms to T2 Trauma Symptoms, T1 Trauma Symptoms to T2 Dating Violence (Emotional Abuse) (males only), T1 Trauma-Related Anger to T2 Dating Violence (females only), T1 Dating Violence to T2 Dating Violence, T1 DV Attitudes to T2 Attitudes, T2 Empathy/Self-Efficacy, T2 Trauma Symptoms to T2 Dating Violence, T2 Trauma-Related Anger to T2 Dating Violence (females only), T2 Dating Violence to T2 DV Attitudes (males only), T2 Dating Violence to T2 Efficacy/Self-Efficacy (males only)

Note: F = Females; M = Males; B = Both

^aStudy did not differentiate between adolescent dating violence perpetration and victimization

^bThe authors used a type of modeling that did not allow the pathway between this variable and dating violence to be measured directly

^cBaseline perpetrators excluded from analyses

^dBaseline perpetration statistically controlled for

^ePredictor variables measured in childhood at an age before dating typically begins

^fPredictor variables measured retrospectively

^gBaseline perpetration was not measured

Table 2

Longitudinal risk (N=53) and protective (N=6) factors for dating abuse perpetration, by number of studies providing evidence

Factor	Number of studies	Author name, date
INDIVIDUAL LEVEL RISK FACTORS		
Acceptance of Violence in Dating Relationships	1	Foshee, 2001
Adolescent Antisocial Behavior	1	Andrews, 2000
Age (Older than Age 18)	1	McCloskey, 2003
Aggression-Tolerant Attitudes	1	Connolly, 2010
Alcohol Use	1	Foshee, 2001
Anxiety	1	Foshee, 2010
Child's Sex	1	McCloskey, 2003
Chronic Offenders of Violence Throughout Adolescence	1	Herrenkohl, 2007
Depression	3	Cleveland, 2003 Foshee, 2010 McCloskey, 2003
Drinking – Frequency by Volume	1	Cleveland, 2003
Drug and Alcohol Use	1	Schmurr, 2008
8 th Grade Sexual Initiation	1	O'Donnell, 2006
Emotional Distress	1	Tschann, 2009
Fighting	1	Cleveland, 2003
General Aggression	2	Kerr, 2011 O'Donnell, 2006
General Antisocial Behavior	1	Lavoie, 2002
Having Sex Before Love-Telling	1	Cleveland, 2003
RELATIONSHIP LEVEL RISK FACTORS		
Aversive Family Communication	1	Andrews, 2000
Childhood Physical Abuse	1	Linder, 2005
Early Involvement with Antisocial Peers	1	Schmurr, 2008
Engagement in Peer Violence	2	Foshee, 2010 Ozer, 2004
Exposure to Father-to-Mother Violence	1	Tschann, 2009
Exposure to Interparental Violence	1	Tschann, 2009
Exposure to Mother-to-Father Violence	1	Tschann, 2009

Factor	Number of studies	Author name, date
(Low) Father-Child Hostility	1	Schnurr, 2008
Friends Perpetrating Adolescent Dating Violence	2	Arriaga, 2004 Foshee, 2010
Friends Victims of Adolescent Dating Violence	1	Foshee, 2010
(Low) Friendship Quality	1	Linder, 2005
Harsh Parenting Practices	1	Lavoie, 2002
Hostile/Conflict Couple Relationship	1	Connolly, 2010
Hostile Friendships	1	Stocker, 2007
Increased Involvement with Antisocial Peers	1	Schnurr, 2008
Negative Parent-Child Interactions	1	Linder, 2005
Parental Marital Conflict	2	Stocker, 2007 Tschann, 2009
Higher Number of Sex Partners	1	Cleveland, 2003
History of Physical Aggression	1	Gidycz, 2007
History of Sexual Aggression	2	Gidycz, 2007 Ozer, 2004
History of Verbal Aggression	1	Gidycz, 2007
Late Increasing Pattern of Violence in Adolescence	1	Herrenkohl, 2007
Marijuana Use	1	Foshee, 2010
Prior Dating Violence	2	Tschann, 2009 Wolfe, 2004
Race/Ethnicity	3	Connolly, 2010 Foshee, 2001 Foshee, 2010
Sex Desirability	1	Cleveland, 2003
Substance Use	1	O'Donnell, 2006
Suicide Attempt	1	Kerr, 2011
Total Drinking	1	Cleveland, 2003
Trauma Symptoms	1	Wolfe, 2004
Trauma-Related Anger	1	Wolfe, 2004
Use of Aggressive Media	1	Connolly, 2010
(Low) Parental Monitoring	1	Lavoie, 2002
Parent-Child Boundary Violations	1	Linder, 2005
Partner's Use of Physical Aggression	1	O'Leary, 2003

Factor	Number of studies	Author name, date
Unskilled Parenting	1	Kerr, 2011
INDIVIDUAL LEVEL PROTECTIVE FACTORS		
Discrepancy between Dating Abuse Related Attitudes and Behaviors (Cognitive Dissonance)	1	Schumacher, 2004
(Higher) Empathy	1	McCloskey, 2003
Grade Point Average	1	Cleveland, 2003
Verbal IQ	1	Cleveland, 2003
RELATIONSHIP LEVEL PROTECTIVE FACTORS		
Positive Relationship with Mother	1	Cleveland, 2003
School Attachment	1	Cleveland, 2003