



# Romantic Relationships and Dating Violence in Adolescents: A Narrative Review

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## Abstract

This narrative review briefly summarizes research from the last five years on adolescent romantic relationships and dating violence. Although romantic relationships have occurred for approximately 50% of adolescents, only 13 recent studies could be found on that topic. Those included studies on the continuity of the quality of relationships with parents, friends and romantic partners as well as both positive and negative outcomes of romantic relationships including sexual satisfaction but also anxiety and hypomania. Dating violence, as a negative outcome, has received more attention in this recent literature (66 papers) including a highly variable prevalence that has averaged 50% across different types of violence including emotional, physical and sexual as well as cyber dating violence. The most extensive literature has addressed risk factors/predictor variables for dating violence including mixed results on gender differences and negative effects of exposure to violence in the family, violent pornography and violent social media. Other predictor variables have involved sports, substance use, casual sex and bullying. Buffers or protective factors for dating violence have been de-escalating verbal conflict and social support. Effective interventions have been parent, internet and school programs. Potential underlying mechanisms are believing in romantic myths about dating violence, infidelity, jealousy, peer rejection, depression and elevated cortisol. Methodological limitations of this literature include self-selection problems related to parents not allowing their adolescents to participate in this research, cultural differences, surveys that are variable on violence measures and the need for more underlying mechanism research. Nonetheless, this recent literature highlights the prevalence and severity of dating violence in adolescents and the need for preventive interventions.

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## Introduction

This paper was intended to be a review of recent research on romantic breakup distress in adolescents following on literature suggesting significant distress after romantic breakups in adults [1]. Anecdotally, adolescents would also be expected to experience breakup distress following the dissolution of romantic relationships. Upon entering the terms romantic breakup distress in adolescents on PubMed and PsycINFO, 412 papers appeared. Surprisingly, however, none of the studies were focused on

breakup distress. Instead, the search revealed some studies on romantic relationships in adolescents, but the majority of the papers were unexpectedly on dating violence in adolescents. After exclusionary criteria of non-English papers, case reports, commentaries, and publications before 2017, 79 papers were included in this review. Only 13 studies were focused on romantic relationships but as many as 66 reported research on dating violence.



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The papers reviewed here on dating violence are focused on prevalence (11 papers), risks or predictor variables for the majority of the papers (24), and a surprisingly small number of papers on the effects of dating violence (2 papers), on buffers (6 papers), and on interventions for dating violence (7 papers). In contrast, as many as 16 papers addressed potential underlying mechanisms for dating violence. Accordingly, this review is divided into sections on romantic relationships followed by subtopics on dating violence including prevalence, risk factors/predictor variables, effects, buffers, interventions and potential underlying mechanisms. In the concluding section, methodological limitations of this literature are reviewed along with suggestions for future research.

### Romantic Relationships in Adolescents

In a classic paper, romantic love has been described for its social, psychological, genetic, neurological and endocrine properties as well as its development across the human lifespan [2]. In addition, in that paper, the functions of love are given as costs and benefits related to mate choice, courtship, sex and pair bonding. Interestingly, dating violence is never mentioned in this entire treatise on romantic relationships.

### Prevalence of Adolescent Romantic Relationships and Age of Onset

The prevalence of adolescent romantic relationships has averaged 50% in studies that have focused on romantic relationships as well as those on dating violence (see table 1). In a recent study from Valencia, Spain, 492 of 919 adolescents (54%, M age=15 years) reported being in dating relationships during the last year [3]. The average durations reported were less than one month (18%), 1–6 months (51%), 6–12 months (14%) and greater than one year (17%). These dating relationships started as early as 12 years of age (3%), 13 years (16%), 14 (20%), 15 (20%), 16 (19%) 17 (15%) and 18 years (8%), suggesting that more than 50% started a dating relationship by age 15. Surprisingly, only one percent of adolescents' parents disallowed their participation in this study. This may relate to the focus being on dating rather than dating violence where the parental rejection rate has typically been closer to 30 to 50 % for their adolescents participating in research.

**Figure 1:** Romantic relationships in adolescents.

| Topic                          | First author                                |
|--------------------------------|---|
| Prevalence                     | Cava  |
| Online initiation              | Tienda                                      |
| Parents and friends            | River, Furman, Kochendorfer, Cook           |
| Adolescents' perspectives      | Moreira                                     |
| Positive and negative outcomes | Gomez-Lopez, Carcedo, Bojughli, Bode, Kolto |

### Initiating romantic relationships online

Adolescents who have had difficulty making friends and getting into romantic relationships at school have been more likely to initiate romantic relationships online according to a study on 531 adolescents who wrote biweekly diaries over the period of a year [4]. During this time period, as many as two-thirds of the sample initiated one or more romantic relationships and 15% of those were initiated online. As the authors suggested, mobile devices have increased the odds of both females and males initiating romantic relationships online. The COVID-19

pandemic lockdowns may have also contributed to the initiation of romantic relationships online. Surprisingly, no greater risk was noted in this study for initiating online relationships except for age asymmetry which might be more likely to happen when students meet students outside their classrooms.

### Associations between Romantic Relationships and Relationships with Parents and Friends

The quality of adolescent romantic relationships appears to be related to the parent-child relationship. In a systematic review on 40 studies, for example, parent-child attachment security and interaction quality had similarly strong associations with adolescent romantic relationship quality [5]. The strongest effects noted were on romantic relationship adjustment and observed interactions. Interestingly, the authors suggested that studies were needed on one partner's parent-child relationship quality effects on the other partner's romantic relationship adjustment. In an empirical study included in this review (N=1012), direct effects were noted for both parent-child attachment relationships and friendship relationships on adolescents' romantic relationships, suggesting continuity in the quality of different types of relationships across development [6]. And, in a longitudinal study entitled "The past is present: Representations of parents, friends or romantic partners predict subsequent romantic representations", 20010th graders were given questionnaires six times over 7.5 years [7]. A growth curve analysis to assess avoidant and anxious representations of relationships suggested that each uniquely predicted subsequent romantic representations.

Individual differences in adolescent emotional reactivity across relationships has also been suggested. For example, in a study on 416 adolescents, greater social anxiety led to a transfer of emotional reactivity from family to friends and, in turn, self-blame and depression led to transmission of emotional reactivity from friends to romantic relationships [8].

This continuity in the types of attachments and emotional reactivity from parent to friend to romantic partner are perhaps not surprising as parents and friends have been role models for adolescents' romantic relationships. And, adolescents' friends may become romantic partners. Unfortunately, these data are based on surveys rather than observations of interactions across the different relationships that might be more informative of the qualities that are consistent across relationships.

### Adolescents' Perspectives on Romantic Relationships

Adolescents have given their perspectives on romantic relationships in at least one study. In this qualitative study, 12 focus groups met to discuss the meaning of romantic relationships followed by a content analysis [9]. In this sample of 14–18-year-old adolescents (N=109) from Portugal, interesting terms were used for romantic relationships including crush, friend zone, friends with benefits, making out and dating. Despite the somewhat superficial sound of these labels for romantic relationships, the adolescents gave priority to more serious/mature qualities of their romantic relationships including respect, trust and love. Fear of loneliness, obsession and low self-esteem were reasons given for maintaining an unhealthy intimate relationship. Unfortunately, the relative significance of these somewhat disparate reasons was not clear in this study.

### Positive and Negative Outcomes for Romantic Relationships

Not surprisingly, both positive and negative outcomes have been noted for romantic relationships in adolescence. In a meta-analysis of 12 studies, for example, the data suggested that romantic relationships can be a source of both well-being and negative outcomes. On the positive side, greater sexual satisfaction in adolescent romantic relationships has been associated with less anxiety and depression in a sample of Spanish adolescents (N=1682) [10]. Examples of negative effects come from a study entitled “I love you forever (more or less): Stability and change in adolescents’ romantic love states and association with mood states” [11]. In this longitudinal study that occurred across eight months for 157 students, 64 were in love at the beginning and 45 were still in love 8 months later, suggesting an overall stability rate of 76%. Experiencing romantic love by these adolescents led to more anxiety and hypomania, suggesting an agitated state. Surprisingly, sleep problems and depression were not reported by those adolescents in romantic relationships. Sleep variations have been noted, however, in at least one study, although it’s not possible to determine whether the sleep variations were associated with romantic love as adaptations or byproducts of romantic love [12].

In a meta-analysis on 28 studies with large sample sizes ranging between 946 and 4,040, more negative quality was noted in romantic relationships versus friendships [13]. Although the findings were not easily interpreted given that friendship qualities were not related to romantic relationship qualities, the researchers nonetheless concluded that continuity was noted between friendships and romantic relationships.

Negative quality has also been notably greater in same gender and both gender romantic relationships versus relationships with the opposite gender or no romantic relationships in a sample from eight European countries (N=13,674 fifteen year-old adolescents) [14]. Those adolescents in same gender and both gender romantic relationships also had more health problems. In the same sample in an earlier publication, romantic attraction was assessed along with substance use [15]. In this data analysis, romantic attraction was related to smoking cigarettes, alcohol, getting drunk and cannabis use which could explain the greater health problems reported in the later publication. These data, however, were based on a survey conducted during 2014 which may not be generalizable to samples of 2022.

To summarize, romantic relationships seem to be occurring in about 50% of adolescents. And, approximately 15% of those are initiated online. Continuity between parent, friend and romantic relationships has been suggested for their quality. Both positive and negative outcomes have been recently reported for adolescent romantic relationships but more negative effects have been noted for romantic versus parent versus friend relationships including hypomania, anxiety and elevated activity. Adolescents have suggested that they have remained in negative relationships because of fear of loneliness, obsession and low self-esteem. Unfortunately, this literature is limited by its almost exclusive use of self-report surveys that are often outdated. Qualitative interview and observational studies may be needed to explore the course of romantic relationships and how they may turn negative and eventually lead to dating violence.

### Dating violence in adolescents

The negative qualities and effects of romantic relationships just reviewed may contribute to dating violence in adolescents, although the dating violence research appears to be a separate literature. Dating violence in adolescents has been typically

measured via surveys on scales like the “Conflict in Adolescent Dating Relationships Inventory”. This inventory includes several violent acts including “slapped or pulled the other’s hair”, “kicked, hit or punched the other”, and “pushed, shoved, shook or pinned down the other”. The violence has been typically referred to as Adolescent Dating Violence (ADV) or Teen Dating Violence (TDV). The person committing the violent act is called the perpetrator and the person receiving the violent act is referred to as being victimized. The violence is often specified as emotional, physical or sexual.

In a study entitled “Age of onset for physical and sexual teen dating violence”, a survey was conducted over the course of the years 2010 to 2016 in the southwest U.S. (N= 872) [16]. Physical violence was said to occur before the ages of 15-16 for females and less than 18 years for males. Sexual violence was said to occur for both females and males before age 18 but uniquely increased only for males. Not only has dating violence occurred early in adolescence but also with a surprisingly high prevalence.

### Prevalence of Dating Violence in Adolescents

As already mentioned, adolescent dating violence has been most frequently measured by the Conflict in Adolescent Dating Relationship Inventory and has averaged around 50% (see **table 2**) [17]. Five types of dating violence on that scale include threatening verbal and emotional, relational, physical and sexual. In this study on 1042 fifteen-year-old adolescents from the southwestern U.S., the forms of dating violence over a six-year period included physical (e.g. pushing/kicking), sexual (e.g. coerced or forced intercourse), threatening to harm a partner, verbal/emotional (e.g. insulting or ridiculing) and relational (e.g. spreading rumors). The prevalence ranged from 10 to 20% for physical, sexual or threatening to 50–80% for relational or verbal/emotional. The rates were similar across gender except that sexual violence was more prevalent in males. Measurement invariance was noted across time, sex and ethnicity. These results differ from studies on Hispanic samples, suggesting that invariance across cultures may not exist. Also, the data may not generalize to other regions of the U.S., to other countries or to high-risk adolescents. In addition, the parent approval rate in this study was only 62%, suggesting a self-selection problem with those parents approving of their adolescents participation in the research possibly being less protective of their adolescents.

In a recent meta-analysis on adolescent dating violence including psychological, physical, threatening and/or sexual abuse between adolescent romantic partners, the violence was called an “epidemic in the U.S.” [18]. The rates reported in this meta-analysis were highly variable ranging from 15-77% for perpetration and 14-73% for victimization. These data highlight the regional variability of adolescent dating violence just within the U.S.

The prevalence of adolescent dating violence has also been high in other countries that are similar to the U.S. For example, in a large survey sample from Canada entitled “Health behavior in a school survey 2017–18”, adolescents from grades nine and 10 (N = 3711, mean age=15) with dating experience during the past 12 months were surveyed [19]. Over one in three who had dated “experienced and/or used dating violence” in the past 12 months. Perpetration occurred in 7% of the sample for physical violence, 9% for psychological and 8% for cyber dating violence. Victimization occurred in 12% of the sample for physical aggression, 28% for psychological aggression and 18% for cyber aggression. Both perpetration and victimization occurred more

often among non-binary versus cisgender youth and youth experiencing social marginalization including poverty. In several similar studies, the victimization rates have been significantly higher than the perpetration rates which suggests that adolescents may be under-reporting their perpetration or over-reporting their victimization or both.

A significantly higher rate of physical dating violence has been reported for youth in a South African community [20]. In secondary schools in that sample, 50% of the males and females were involved in a physically violent dating relationship. This rate is reputedly high but may relate to the combining of different types of physical violence. In addition, it is not based on a direct comparison across countries as those comparisons have not been made. Comparisons would be difficult in any case because the surveys have included different scales which have yielded highly variable prevalence rates.

**Table 2:** Prevalence of dating violence.

| Prevalence   | First author  |
|--|---------------|
| 10-20% physical, 50-80% emotional                          | Shorey        |
| 15-77% perpetration, 14-73% victimization                  | Russell       |
| 7-9% perpetration, 12-28% psychological, 8-18% cyberdating | Exner-Curtens |
| 50% all types combined                                     | Swart         |

**Gender differences**

Gender differences have been reported by several research groups (see table 3). For example, in a paper entitled “Is all dating violence equal? Gender and severity differences in predictors of perpetration”, 407 of 829 (49%) 14- to 18-year-old adolescents reported dating relationships lasting 12 months [21]. When only the most severe violence was considered, males and females were almost equal and had lower prevalence rates than generally reported in the literature. However, when minor/moderate levels of violence such as pushing occurred, females had twice the rate as males. This is consistent with the previous study, although this sample was predominantly Hispanic high school students in Rio Grande valley Texas so the results may not generalize to other samples. And, in a study on dating violence among rural adolescents (N=131), males were noted to experience more physical violence and females more sexual violence [22]. These data again highlight regional differences and gender differences depending on the type of violence.

And gender differences have been identified for mutual dating violence in a larger sample study (N=3100, mean age =16) [23]. Based on a latent class analysis, four distinct patterns were noted including low violence at 40% for girls and 54% for boys, mutual psychological dating violence at 34% for females and 33% for males, mutual psychological and physical violence at 14% for females and 5% for males and mutual psychological violence and sexual victimization in females at 12% and multiple dating violence victimization for males at 8%. Not surprisingly, greater emotional dysregulation and attachment insecurities were noted for those adolescents who showed the more complex patterns of dating violence.

Age differences have also confounded gender differences. For example, age by gender interaction effects have been reported in a study on adolescents from Tanzania and Uganda (N=1402, 12–17-year-old) [24]. The authors suggested that their rate of 27% sexual violence was greater than the 20% global average.

The prevalence of sexual violence was greater for boys at 30% than girls at 25% and the prevalence was also greater for older adolescents versus younger at 30% versus 20%. Forty-eight per cent of the adolescents named their peers as the most frequent perpetrators. The noted risk factors in this study included being from a rural community, having external financial support and being in a romantic relationship.

Gender minorities have also experienced a greater prevalence of dating violence. For example, in a study on 3296 fourteen to fifteen-year-old adolescents, the prevalence was 36% in an exclusively cisgender sample but 41% in a cisgender sexual minorities sample [25]. More than 50% of those in a relationship had experienced relationship abuse victimization.

Sexual minority students have been more frequently victimized than heterosexual students in a study on 1622 10th grade students [26]. In this study, the prevalence of dating violence for sexual minority boys was 36% versus 25% for heterosexual boys and the prevalence for sexual minority girls was 58% versus 38% for heterosexual girls. The sexual minority girls also engaged more frequently in dual-role violence associated with substance use which may explain their significantly greater prevalence.

**Table 3:** Gender differences prevalence dating violence.

| Prevalence  | First author |
|---|--------------|
| Male and female rates equal for severe violence                     | Ontivero     |
| Female rates greater for moderate violence                          |              |
| Female rates greater for mutual psychological and physical violence | Theoret      |
| Sexual violence-30% male, 25% female                                | Goessmann    |
| Cisgender 36%, sexual minority 41%, gender minority 23%             | Stroem       |
| Heterosexual male 25%, minority male 36%                            |              |
| Heterosexual female 38%, minority female 58%                        |              |

**Cyberdating violence**

Cyberdating violence has occurred in most adolescent romantic relationships (see table 4). Higher rates have been reported for cyberdating versus in-person dating violence in adolescents in a study from Quebec on 190 adolescents who completed the Cyber dating Questionnaire [27]. Cyber dating violence perpetration occurred in 33% of adolescents and victimization in 36%. The co-occurrence of perpetration and victimization was reported at 27% during the last 12 months. Cyber dating violence was associated with low self-esteem and psychological distress.

In another study on cyber dating violence, 12 to 56% of adolescents experienced cyber dating violence victimization including control, harassment, threats, stalking and abuse [3]. Physical and relational off-line dating violence victimization were the primary predictors of cyber-dating violence victimization.

In still another study on cyber dating violence, the prevalence rates for seventh grade students (N=795) were 51% for cyber dating violence victimization and 32% for cyber dating violence perpetration [28]. Surprisingly, the males in the study had a greater prevalence of victimization than the females, although perpetration and victimization decreased from the beginning of the seventh to the end of the eighth grade for the boys but not for the girls. These gender differences are difficult to interpret.

Unfortunately, the rates of teen dating violence have remained stable across the last two decades according to a recent report released by the Centers for Disease Control and Prevention [29]. These data highlight the importance of identifying risk factors/predictor variables for adolescent dating violence.

**Table 4:** Cyberdating violence prevalence.

| Prevalence                          | First author |
|-------------------------------------|--------------|
| Perpetration 33%, victimization 36% | Smith        |
| Victimization 12-56%                | Cava         |
| Perpetration 32%, victimization 51% | Cutbush      |

**Risk Factors/Predictor Variables for Adolescent Dating Violence**

Risk factors/predictor variables for adolescent dating violence in this recent literature can be classified as exposure to violence including family violence, adverse childhood experiences, classroom violence, violent pornography, and violent social media (see table 5). Other risk factors could be categorized as personal characteristics including gender, attachment problems and emotional dysregulation. A third group of risk factors could be labeled engagement in risky/aggressive behavior including contact sports, substance abuse, casual sex and bullying.

In a meta-analysis on 50 studies entitled “Risk markers for physical teen dating violence in the U.S.”, three types of markers were given including ontogenetic, micro-system and exo-system [30]. The ontogenetic markers included substance use, risky sexual behavior, carrying a weapon, suicidal attempts and eating disorder. The microsystem markers included other forms of dating violence perpetration and victimization (physical, sexual, emotional). Surprisingly no gender differences were noted in this meta-analysis.

**Table 5:** Risk factors/predictor variables for dating violence.

| Factors   | First author                              |
|---|---|
| <b>Exposure to violence</b>                         |   |
| Family/ parental violence                           | Godbout, Ybarra, Cohen                    |
| Adverse Childhood Experiences                       | Goldberg, Martin-Storey, Stocker, Navarro |
| Violent pornography                                 | Ybarra, Rustad, Harbittee, Huntington     |
| Violent social media                                | Rodenhizer                                |
| <b>Personal characteristics</b>                     |   |
| Gender  | Baier, Kaltiala                           |
| Attachment insecurities and emotional dysregulation | Theoret                                   |
| <b>Engagement risky activities</b>                  |   |
| Sports  | Ingram, Nickodem                          |
| Substance use                                       | Mulla, Spencer                            |
| Casual sex  | Shulman                                   |
| Bullying  | Zych, Viejo, Pereda, Humphrey             |

**Exposure to Violence**

**Family violence**

Exposure to family or parental violence has been a risk factor for later dating violence in several studies. For example, in a longitudinal study on early exposure to violence, data were collected over a period

of three years (N=1252 at time 1 and 234 at time 2 three years later) [31]. Exposure to family violence was found to predict relationship violence in adolescents and this association was mediated by attachment anxiety. These data are limited, however, by the significant rate of attrition between time one and time two.

In another longitudinal study exploring sexual violence in adolescents, six waves of data were collected from 1586 youth between 10 and 20 years of age [32]. Sexual violence included sexual harassment, sexual assault, coercive sex, attempted rape and rape. The average age for the first perpetration of sexual violence was 15 to 16 years. Prior exposure to parental spouse abuse and current exposure to violent pornography were the most significant predictors of later sexual violence. These data might not generalize to the present time since they were collected between the years 2006 and 2012 and not published until years later in 2018.

Still another longitudinal study conducted over a six year period suggested several predictors of adolescent dating violence in addition to exposure to early family violence [33]. In this sample (N=1031), family violence including domestic violence exposure and maltreatment, deficits in conflict resolution, violence history and acceptance of teenage dating violence discriminated the perpetrators. Adolescents with positive test results on these algorithms were twice as likely to perpetrate over the next six years. These data from a high school in southeast Texas might not be generalizable, although they suggest a set of predictor variables that are more complex than exposure to family violence alone including the adverse childhood experience of maltreatment.

**Adverse Childhood Experiences (ACES)**

The ACES that have appeared in this literature are highly variable ranging from experiencing low quality maternal relationships to maltreatment. In a paper entitled “Adolescent relationship quality: Is there an intergenerational link?”, data from the Fragile Families and Child Well-being Cohort (N=3162) were collected when the youth were three, five, nine and fifteen years of age [34]. Exposure to low quality maternal relationships led to lower quality adolescent romantic relationships. This association was labeled an “observational learning process”. Exposure to any physical intimate partner violence victimization early in development was more likely to lead to intimate person violence perpetration during adolescence.

In another longitudinal study, observational measures of parent marital hostility and parent-child hostility when adolescents were 14 to -16 -years -old were related to adolescents reporting hostility in their romantic relationships at age 17-19 [35]. Significant variance was explained by the hostility in the adolescents’ family relationships in this sample of 110 adolescents from 72 families. This rare observation study highlights the intergenerational relationships between experiencing violence in family relationships and later adolescent dating relationships. Many of the samples in this review, however, included university students who are a different population than high school adolescents.

Sexual and gender minority youth (N=87,532 9th to 11th grade students) have experienced greater risk [36]. However, the differences between minority and non-minority youth were not significant when severe ACES were considered such as child maltreatment, peer victimization and discrimination.

In a scoping review of 32 articles on the association between ACES and adolescent dating violence, ACES coexisted with other personal, family and environmental problems. The authors concluded that ACES may not be a necessary or sufficient condition for dating violence [37].

**Violent pornography**

Violent pornography has been a risk factor for sexual violence including sexual harassment, sexual assault, coercive sex, attempted rape and rape in a few samples including one already mentioned [38]. Although this study was not focused on violent pornography, current

exposure to violent pornography contributed to the variance in sexual dating violence along with other risk factors.

In a study focused on violent pornography and dating violence, gender stratified logistic regression models were analyzed based on data from 10th grade students (N=1694) [39]. Odds ratios were generated after adjusting for substance use, history of suspension, gender equitable attitudes and tolerance of rape myths. Violent pornography exposure was associated with all types of dating violence. Boys were 2 to 3 times more likely to engage in sexual dating violence perpetration and victimization as well as physical dating violence victimization. Girls were 1.5 times more likely to perpetrate threatening teen dating violence.

In another study focused on violent pornography, sexual minority females were compared to cisgender females (N=1276) [40]. The sexual minority females had 2.54 greater odds of exposure to violent pornography and a 2.53 greater odds of teen dating violence exposure. Surprisingly, in this sample, pornography was not associated with teen dating violence.

Joint pornography viewing has also been reported as being related to relationship skills and violent behavior. In a study on 755 adolescents (mean age =16), joint pornography viewing was related to less relationship skills which contributed to greater dating violence victimization and perpetration [41]. Abusive behavior and verbal conflict also contributed to the variance in dating violence. Verbal conflict and the inability to resolve that conflict has rarely been reported in this literature, possibly because the data have typically derived from surveys. Observational studies could more effectively identify sources of conflict and limited conflict resolution skills that could then be incorporated into intervention programs.

#### **Violent social media**

Violent social media has been a contributing variable for many adolescent problems including sexting, cyberbullying, sleep problems and eating disorders as well as dating violence. In a review of 43 studies, exposure to sexually explicit media and sexually violent media were positively related to dating violence, sexual violence myths and greater acceptance of dating violence attitudes [42]. Sexual and violent media exposure were related to dating violence and sexual violence victimization, perpetration and bystander non-intervention. This exposure more strongly impacted male attitudes on dating and sexual violence. The pre-existing attitudes related to dating violence and sexual violence, and media preference moderated the relationship between the exposure to sexual and violent media and the violence. The authors concluded that media literacy programs should be included in dating violence and sexual violence prevention programs.

#### **Personal characteristics**

Personal characteristics have also been risk factors for adolescent dating violence. These have primarily included gender differences, attachment problems and emotional dysregulation. However, despite the frequent focus on a single personal characteristic, research often reveals multiple predictor variables. For example, in a three step latent class analysis to identify different patterns of teen dating violence, being female was one of the most significant risk factors [43]. However, others were also significant including being African American, greater acceptance of dating violence, exposure to parental violence and having less educated parents. In this sample of 918 students in grades nine and 10 in public high schools in Texas, multiple types of adolescent dating violence led to mental health problems, although associated mental health problems have rarely been the focus of recent studies on adolescent dating violence.

#### **Gender differences**

Gender differences in different types of violence have been reported in several studies. In a paper entitled "Who beats their partner and who beats their schoolmates," greater school violence was noted in males and greater teen dating violence was reported by females

[44]. Despite these gender differences in this sample (N=3800 German adolescents, mean age= 15 years), school violence and teen dating violence were significantly correlated. These data combined suggest that males may have been under-reporting dating violence or over-reporting school violence and the reverse for females. Although acquaintance with violent friends was more related to school violence and low self-control and violent media consumption were risk factors for both school and dating violence, gender differences were not reported for these variables.

Sexual violence has been more frequently reported by females and sexual and gender minority groups. For example, in a sample from Finland (N=71,960 fourteen- to-16-year-old adolescents), gender harassment, unwelcome sexual attention and sexual coercion was reported more frequently by females and by sexual and gender minority groups [45]. However, these data were collected in 2017, not unlike several other studies, suggesting that they may not be generalizable to adolescents in 2022.

#### **Attachment insecurities and emotional dysregulation**

Attachment insecurities and emotional dysregulation have been overlapping predictors in a couple studies including one already mentioned where these problems were related to the more complex patterns of dating violence [23]. And in a more recent study by the same research group entitled "Can emotion dysregulation explain the association between attachment insecurities and teen dating violence perpetration?", a path analysis with probit regression was conducted on a database from 3214 Canadian youth who averaged 16 years of age [46]. In this analysis, attachment anxiety and avoidance led to greater dysregulation and greater dysregulation led to greater physical dating violence in girls and psychological dating violence in both girls and boys. Attachment anxiety was directly related to all forms of teen dating violence. The typically greater association between attachment anxiety and dating violence may relate to dating relationships being more frequent in adolescents with anxious than avoidance attachment styles. Those adolescents with avoidant attachment styles may be less frequently involved in dating relationships and, in turn, be at less risk for experiencing dating violence.

#### **Engagement in risky/aggressive activities**

Not surprisingly, engagement in risky /aggressive activities has also been a risk factor for dating violence in adolescents. The risky activities that have been noted as risk factors in this recent literature include engaging in contact sports, substance use, casual sex and bullying.

The data on sports involvement have been mixed according to gender. In a study at a middle school on 1561 students followed to high school, for example, no or low sports for females led to greater sexual violence perpetration [47]. In contrast, high involvement in sports for males led to sexual violence perpetration. These data are consistent with the stereotype of sexually active high school females not being involved in extracurricular activities at school and high school male "jocks" being sexually active.

Data from a sample of adolescents who were high school athletes has yielded more complex results [48]. A latent class analysis on these survey data on the association between sports participation and dating violence (N= 665) suggested that for females being in any sport was related to sexual violence harassment perpetration. And the use of cigarettes, marijuana, alcohol and Vape products were also predictor variables. In contrast, for the males, high contact sports were related to harassment and unwanted sexual contact. And the same substance use risk factors including cigarettes, marijuana, alcohol and Vape products along with acceptance of violence attitudes were predictor variables.

Sports participation was again uniquely associated with sexual harassment but not sexual contact in a study on 20 high schools [49]. Surprisingly, a greater percent of friends who played low contact sports was associated with forced sexual contact whereas a greater percent of friends who played high contact sports was associated with sexual

harassment. However, dismissiveness of sexual violence, intentions to use substances and prior perpetration were more significant predictor variables.

The involvement of sports has been associated with substance use in these studies and substance use in itself has been a significant predictor of sexual and physical dating violence. In addition to the study already mentioned, another high school sample (N=1752) was seen in a longitudinal follow-up that was focused on the mediating role of school connectedness for dating violence [50]. Survey data from baseline and at a two-month follow-up suggested that dating violence and sexual violence were associated with heavy drinking at time one and marijuana use at both time one and time two which, in turn, were negatively associated with school connectedness.

But heavy alcohol use was only one of several risk factors for physical dating violence perpetration in a review of 37 studies [51]. The other risk factors included externalizing behavior, approval of violence, risky sexual behavior, depression and delinquency. Depression was more predictive for females and controlling behavior for males. Conflict resolution skills and responsibility were protective factors. Unfortunately, without a meta-analysis, it's difficult to determine the relative variance of these factors contributing to dating violence perpetration and to protection against dating violence.

Engaging in casual sex has also been a significant predictor of dating violence in at least one study. In that sample from Israel on 144 adolescents (16 -years-old), casual sex led to negative affect and harmful behavior in relationships four years later [52]. In contrast, stable romantic relationships led to future romantic support.

Bullying is probably the most violent behavior that has contributed to dating violence and has been noted as a risk factor in several studies. In a review of 23 studies on the relationship between school bullying and dating violence in adolescents, bullying perpetration was related to dating violence perpetration and bullying victimization was related to dating victimization [53]. Not surprisingly, the authors suggested that bullying and dating violence have the same underlying antisocial or violent dispositions.

Bullying in early childhood has also been a predictor variable. For example, in a study on early childhood predictors of teen dating violence at age 17, physical punishment or bullying at seven years were the strongest predictors of teen violence at age 17 [54]. In a sample from Valencia (N=3144 adolescents), bullying was noted in 46% of adolescents and dating aggression in 31% [55]. A multinomial logistic regression showed that aggressive bullying predicted psychological aggression during dating and bullying victimization predicted dating victimization especially in boys. In a longitudinal study on Canadian youth (N=608) in grades 5 to age 19, bullying continued across the years and predicted sexual harassment, homophobic taunting and dating violence [56]. Surprisingly, no gender differences were noted.

#### Adverse outcomes of dating violence

Adverse outcomes of dating violence have rarely been addressed in this recent literature. Typically, the risks for mental health problems are merely suggested but are not documented [43]. In a recent meta-analysis, dating violence rates that ranged from 15 to 77% for perpetration and from 14 to 73% for victimization were associated with serious problems including bullying, substance use, depression and suicidal ideation [18].

#### Buffers or protective factors

Buffers or protective factors are also rarely mentioned in this recent literature on dating violence. These have included sexual satisfaction, empathy, de-escalating verbal conflict, social support, school social support and seeking help (see table 6). In a study on Spanish adolescents, greater sexual satisfaction led to less anxiety and depression [10]. In a study entitled "Teen dating violence perpetration: Protective factor trajectories," empathy, social support, parental monitoring and school belonging buffered verbal, relational, physical and sexual dating

violence [57]. In this sample of 1668 adolescents, those who did not perpetrate showed more protective factors. The focus on protective factors, as in this study, is very rare.

In a similar study entitled "Understanding the buffering effects of protective factors," 1611 adolescents completed surveys six times during middle and high school with a prevalence of 7% for dating violence and 21% for physical and verbal violence [58]. In this study, ACEs and witnessing family conflict as well as community violence were seen in as many as 30% of the adolescents. The protective factors included social support, empathy, school belonging and parental monitoring. These data, however, are tenuous given that they were collected between 2008 and 2013 and may not generalize to adolescents in 2022.

School social support has also been an important buffer. In a study on the role of school social support for 993 13-16-year-old students from Spain, Italy, Romania, Portugal, Poland and UK, greater school social support was associated with less physical and sexual dating violence [59]. In addition, a better school climate was associated with less fear.

A more specific protective factor may be de-escalating verbal conflict during interactions with the romantic partner. De-escalation of verbal conflict would seemingly reduce the threat of violent interaction. In a paper entitled "Adolescents' interpersonal negotiation strategies", de-escalating conflict was effective. However, in this sample of 212 Canadian adolescents, negotiating conflict was more effective with friends than it was with parents and more effective with parents than it was with romantic partners. Females were better at negotiating conflict but only with friends.

Seeking help might also be considered a protective factor. In a longitudinal study on patterns of adolescent seeking help for dating violence, six types of seeking help were identified [60]. These types included multi-help seekers (19%), reluctant (15%), selective (16%), parent confidants (11%), friend confidants (22%) and moderate help-seeking (17%). In this sample of 1580 adolescents (mean age = 13), surveys were conducted across 4 years. Notably, stability of the different types of help-seeking occurred from middle school to high school.

In a similar study by the same investigator but taken from a sample of 493 youth from rural areas, the types of help-seeking were distributed differently with multi-help seekers being 21%, reluctant help-seekers 21%, informal both parents and friends 29%, selective being 8% and any particular person being 30% [61]. This was a smaller sample and would be expected to be culturally different for being rural versus urban.

**Table 6:** Buffers or protective factors.

| Buffer                        | First author    |
|-------------------------------|-----------------|
| Sexual satisfaction           | Carcedo         |
| Empathy                       | Espelage, Davis |
| De-escalating verbal conflict | Baker           |
| Social support                | Espelage, Davis |
| School social support         | Jankowiak       |
| Seeking help                  | Sianko          |

#### Interventions

Interventions for preventing or treating dating violence in adolescents have included parent interventions, digital interventions and school-based interventions (see table 7). Interventions involving parents have been reportedly effective based on a meta-analysis of 18 trials (N=22,781) [62]. These interventions, however, decreased physical violence but not sexual violence.

In a review of 15 digital interventions from 11 different countries, small effects were noted on romantic relationship

communication skills [63]. Although this review did not include dating violence prevention studies, programs for improving romantic relationship communication skills would presumably be expected to reduce dating violence.

Most of the intervention research found in this recent review has focused on a school-based program called “Dating Matters” which was developed by the Center for Disease Control and Prevention [29]. In a study on the results of a Dating Matters program that was focused on physical violence, bullying and cyberbullying, a cluster-randomized controlled trial was conducted [64]. In this sample of 3301 students from 46 middle schools in four high-risk urban communities across the U.S., 6th to 8th grade students showed a decrease of 11% in bullying and 11% in physical violence. And the females showed a 9% decrease of cyberbullying victimization and a 10% decrease in cyberbullying perpetration.

In a more controlled study on the Dating Matters program as compared to an evidence-based intervention, 22 middle schools were included in each group (N=1662 students in each group) [65]. The Dating Matters program students as compared to those of the evidence-based intervention had a 6% lower rate of sexual violence and perpetration, a 3% lower rate of sexual victimization, a 4% lower rate of sexual-harassment perpetration and an 8% lower rate of sexual-harassment victimization.

In a systematic review of 29 intervention studies (26,212 participants), increased romantic relationship knowledge was reported but mixed findings were noted on changing relationship attitudes and limited evidence for changing behavior [66]. In contrast, in a meta-analysis, adolescent dating violence prevention programs were shown to reduce the risk of emotional, physical and sexual perpetration as well as emotional and physical victimization [18]. The contrasting data from these two programs may relate to the first study being a review of intervention programs while the second study involved prevention programs.

**Table 7:** Interventions.

| Intervention            | First author                 |
|-------------------------|------------------------------|
| Parents                 | Piolanti                     |
| Digital                 | Emerson                      |
| “Dating Matters” school | Debnam, Vivolo-Kantor, DeGue |
| School                  | Hielscher, Russell           |

### Potential underlying mechanisms

Although some research groups have alluded to potential underlying mechanisms for adolescent dating violence, very few studies have focused on mechanisms. Some suggested mechanisms have included romantic myths, legitimizing dating violence, power imbalance, infidelity, self-silencing, ineffective conflict management, jealousy, peer rejection and elevated cortisol.

In a study on romantic myths, the authors suggested that those are “beliefs about the power of love to cope with all kinds of difficulties, perceiving love as suffering, considering jealousy to be a sign of love, the need to have romantic love to be happy and existence of our soulmate who is our only one true love” [3]. In that study, these romantic myths were noted to contribute to dating violence in adolescents.

In a study that surveyed 190 16 to 19-year-old adolescents’

responses to the Romantic Love Myths Scale, love myths were more associated with idealization than with abuse. Hostile sexism was associated with myths that relate to love and abuse. The data from this sample of exclusively Spanish adolescents may not generalize to other samples.

In a paper entitled “Myth acceptance regarding male to female intimate partner violence”, 1580 fifteen-year-old adolescents were surveyed [67]. The male adolescents expressed a greater level of myth acceptance at four times that of females. The greatest difference was in romantic love. Increasing stability was noted across adolescence until the adolescents were in their 20s. In another study on myths, 448 Spanish students (mean age = 13) were surveyed [68]. For males, myths regarding possession, dedication and exclusivity were negatively associated with abusive behavior. Myths for females led to greater perception of the severity of abusive behavior.

Legitimizing intimate partner violence has been noted in some studies. For example, in a study on 235 French participants, structural equation models suggested that greater adherence to romantic love led to greater blame on the victim and exoneration of the perpetrator of intimate partner violence [69]. In a similar study, The Attitudes Toward Dating Violence Scale as well as the Conflict in Adolescent Dating Relationship Inventory were given to 1014 adolescents 18-years-old [70]. Relational and sexual perpetration were more prevalent in males and physical and emotional perpetration were more frequent in females as well as sexual victimization. The males and younger adolescents had greater tolerance for dating violence. And, in a study on 1042 15-to-18-year old adolescents, decreased perception of peer dating violence led to less perpetration [33]. Still another study on violence acceptance involved two waves of data collection of the Quebec Youth Romantic Relationship project (N= 2564) [71]. Of those who were in dating relationships during the last six months, general exposure to interparental violence was linked to acceptance of girl-perpetrated violence and to victimization in both genders. These findings support the intergenerational transmission of violence as well as the acceptance of dating violence. Acceptance of physical violence was referred to as “boys sometimes deserve to be hit by their girlfriend or the reverse”. In this paper, approval was noted by the school director and the participants but was not apparent for the parents.

Infidelity has also been a proposed underlying mechanism for teen dating violence. In a study entitled “The relationship between the motivation to commit infidelity and negative affect and self-esteem: How cheating in romance might signal positive well-being in adolescents”, 345 Spanish adolescents between 13 and 19 years old were surveyed [72]. Infidelity due to sexual or emotional dissatisfaction (versus neglect and anger) led to psychological well-being by decreasing negative affect and increasing self-esteem. The authors suggested that infidelity could favor adolescent personal growth because of the need to explore new sensations and feelings. This was a surprising interpretation of unexpected results.

Infidelity might be expected to lead to jealousy in the more faithful partner. In a study entitled “Jealousy, violence and sexual ambivalence”, Spanish adolescents completed an ad hoc interview and several scales including the jealousy subscale of the Love Addiction Scale [73]. In this sample of 234 adolescents (mean age=17), 41% were noted to have high emotional dependency and 15% extremely high emotional dependency. Extreme emotional dependency led to greater violence (sexual,



relational and physical) and high jealousy scores. In a regression model, jealousy scores were the most significant predictor of emotional dependence, sexual and relational violence.

Self-silencing and the inhibition of meeting one's own needs as well as the inability to set limits on sexual activity were significant variables in a path analysis on dating violence in adolescents between 14 and 18 years of age (N=739) [74]. The meaning and the relative significance of these variables was not clear.

Male dominance has appeared as a significant variable in a few studies and review papers. For example, in a scoping review of 16 studies conducted in the U.S., Spain, South Africa and Italy, three mechanisms were noted by the authors [75]. These included entitlement or attitudes and beliefs aligning with violence, hierarchical and marginalizing masculine norms, traditional gender roles and male superiority. Secondly, they involved ACES including whether adolescents experienced, observed or initiated abuse and ineffective conflict management strategies including alcohol and emotional dysregulation. This wide range of potential underlying mechanisms may reflect cultural variability of adolescent experiences among these very different countries, although male dominance was a significant variable in all of them. Social dominance orientation was an underlying mechanism for sexual and dating violence in another review of 107 papers [76].

Social power imbalances were also noted in a study on Canadian adolescents in grades 9 and 10 who had dated for the past two months (N=3779) [77]. The power imbalances were given as bullying and the risk of social marginalization related to gender, race, immigration status, family structure, food insecurity and family affluence. In that study, 29% of students had experienced psychological and cyber victimization and the rate of mutual violence was 5%.

Peer rejection has been seen as a precursor of romantic dysfunction in adolescents in a longitudinal study that tracked students from middle school to the 11th grade (N=1987) [78]. In this study, peer rejection at middle school age predicted greater aggression toward romantic partners in 11th grade. This relationship was moderated by friendship quality at ninth grade. Surprisingly, peer rejection has been only noted in this one study in the recent literature, although it might be expected to account for dating violence.

Adolescents have been directly asked why they stayed in violent relationships in at least one study [9]. In this sample of 14-18-year-old adolescents, fear of loneliness, obsession and low self-esteem were reasons given for maintaining an unhealthy intimate relationship. Although these data from Portugal are unique in addressing that question directly, the three reasons given seem disparate and the data might not generalize to samples from other countries.

Cortisol levels as related to depression have also been implicated as a potential underlying mechanism for violence in adolescent dating relationships. In a study on the cortisol levels of 358 15-year-old Dutch adolescents who were followed for three years, the rate of perpetration was 24% [79]. An elevated cortisol under the curve awakening response moderated the effects of depression on dating violence, but low cortisol levels had no effect. Although depression has been implicated in dating violence, and elevated cortisol is associated with depression, it is unusual to think of elevated cortisol having a positive effect. However, in this case, elevated cortisol lessened the ef-

fects of depression on violence. Elevated cortisol has also been associated with inhibitory behavior which may have occurred here as well. The exhausting effects of depression may also lessen aggressive behavior.

**Table 8:** Potential underlying mechanisms.

| Mechanism                       | First author                                   |
|---------------------------------|--|
| Romantic Myths                  | Cava, Martin-Salvador, DelMoral, Ruiz-Palomino |
| Legitimizing                    | Lelaurain, Courtain, Shorey, Ruel              |
| Self-silencing                  | Vaillancourt-Morel                             |
| Infidelity                      | Beltran-Morillas                               |
| Power imbalance                 | Exner-Cortens, Malhi, Espelage                 |
| Ineffective conflict management | Malhi  |
| Peer rejection                  | Schacter                                       |
| Jealousy                        | Arbinaga                                       |
| Cortisol                        | Yu   |

### Methodological Limitations

Several methodological limitations of this literature suggest the need for further research. Starting with the recruitment of adolescents, a very large range of 1 to 76% of parents have not allowed their adolescents to participate in this research, suggesting significant variability in the protectiveness of parents and a potential self-selection problem.

Several cultural differences have also been suggested with some Spanish student groups and southwestern Texas adolescents showing more dating violence and the greatest prevalence being noted in South African students. Other demographic factors that have exacerbated dating violence are living in rural areas, being of low socioeconomic status and being from non-binary groups of adolescents. This cultural dependence seems to be a confounding factor and is rarely statistically controlled in these studies.

The studies have been predominantly surveys as opposed to interviews or observational studies and although they are anonymous, the adolescents may be exaggerating in their reporting or under-reporting. The surveys may be a vehicle for their venting their dissatisfaction with romantic relationships or they may be denying these problems. In addition, many of the surveys were conducted several years ago, suggesting that their data may not be generalizable to adolescents in 2022.

The studies are extremely variable on their measures of violence. Although the primary measure has been the comprehensive Conflict in Adolescent Dating Relationships Inventory, some surveys have included mild dating violence behaviors like pushing while others have included very severe forms of dating violence like dating rape.

Despite the prevalence and in some cases the severity of adolescent dating violence, reports from hospitals or police could not be found regarding real injuries resulting from dating violence. The Center for Disease Control and Prevention has been actively trying to prevent violence by promoting their Dating Matters programs, suggesting that they have data on injuries that are not being reported in this recent literature.

Finally, there is a paucity of potential underlying mechanism research on dating violence in adolescents. More multiple variable studies using regression and structural equation mod-

els are needed to determine the relative variance of variables predicting adolescent dating violence. And, more qualitative interview and observational studies are needed to capture adolescents' views on their relationships and the nature of their conflicts and behaviors that result in dating violence.

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