# DATING VIOLENCE AND PEER CONFLICT IN ADOLESCENTS WITH AND WITHOUT BORDERLINE PERSONALITY DISORDER

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A Senior Honors Thesis

Presented to

the Faculty of the Department of Psychology

University of Houston

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In Partial Fulfillment

of the Requirements for the Degree

Bachelor of Arts

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By

Nabeeha Asim

October 2020

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Nabeeha Asim

APPROVED:

_____

Carla Sharp, Ph.D.

Department of Psychology

_____

Julia Babcock, Ph.D.

Department of Psychology

_____

Brenda J. Rhoden , Ph.D.

The Honors College

_____

Daniel P. O'Connor, Ph.D.

Dean, College of Liberal Arts and Social Sciences

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## ABSTRACT

*Background*: A hallmark feature of borderline personality disorder (BPD) is unstable interpersonal relationships. Adolescents with BPD may be more likely to experience teen dating violence (TDV) and peer conflict. Yet, there is little research studying TDV and peer conflict in the context of BPD. The overall aim of this study was to examine whether adolescents with BPD or BPD features report higher levels of TDV and peer conflict. *Method*: The sample included 235 inpatient adolescents with BPD, 417 non-BPD psychiatric inpatient adolescents, and 441 healthy adolescents. Self-report measures of BPD features, TDV, and peer conflict were completed by the three groups of adolescents. A semi-structured BPD interview was conducted across the two inpatient groups. *Results*: While controlling for relevant demographic variables, results revealed that TDV victimization, perpetration and all forms and functions of peer conflict had a significant association with borderline features. Furthermore, the BPD group had higher levels of TDV victimization and reactive overt aggression than the psychiatric controls and healthy controls, even after controlling for relevant demographic variables. There were no significant differences between BPD and control groups in TDV perpetration and other forms and functions of peer conflict. *Conclusions*: Findings suggest that TDV and peer conflict are important correlates for BPD pathology. TDV and peer conflict ought to be considered for early prevention and treatment of BPD.

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# Introduction

## Borderline Personality Disorder

Borderline personality disorder (BPD) is a psychiatric disorder defined by unstable interpersonal relationships, impulsive behaviors, and affective instability (American Psychiatric Association, 2013). For adults, BPD has an estimated prevalence rate of 1-2% in the general population and an estimated lifetime prevalence of 5.9% (Grant et al., 2008; Torgersen, Kringlen & Cramer, 2001). The prevalence of BPD is higher in treatment settings with BPD diagnoses accounting for 10% in outpatient samples, 10-15% in emergency room visits and 15-20% in psychiatric inpatient samples (Chaput & Lebel, 2007; Tomko et al., 2014; Zimmerman, Chelminski & Young 2008).

Although the validity of a BPD diagnosis in adolescents has been previously considered controversial, recent research has provided significant support for the validity of BPD among adolescents (Chanen, Sharp & Hoffman, 2017; Sharp & Fonagy, 2015). Studies consistently support that BPD onsets during adolescence (Cohen et al., 2005; Chanen & Thompson, 2019). The estimated prevalence in the general population is similar to adults (1-2%; Sharp & Fonagy, 2015). As BPD is more prevalent in a clinical context, the estimated prevalence rate of adolescents with BPD in outpatient psychiatric settings is 15-22% and 33-49% in inpatient settings (Chanen et al., 2004; Ha et al., 2014; Sharp & Fonagy, 2015). Like adults, adolescent BPD symptoms are associated with extremely high risk, and BPD features in adolescents have been shown to predict future self-harm and suicide attempts above and beyond other psychopathology (Sharp et al., 2012; Yen et al., 2013; Winsper et al. 2016). Borderline symptomatology in adolescents predict a low quality of life and significant problems in social, emotional and academic functioning, which underscores the importance of investigating BPD in

adolescents (Chanen, Jovey & Jackson, 2007; Feenstra et al., 2012). Additionally, adolescence presents a sensitive period for the development of BPD (Sharp, Vanwoerden & Wall, 2018) and examining BPD during this period is crucial for prevention and early intervention.

**Teen Dating Violence**

Teen Dating Violence (TDV) is highly prevalent and carries severe physical and psychological consequences (Center for Disease Control and Prevention, 2020). TDV occurs in intimate relationships and may involve emotional, physical, verbal abuse or psychological aggression (Mulford & Giordano, 2008). Twenty-six percent of women and fifteen percent of men that experience intimate partner violence experience it for the first time before the age of 18 (Smith et al., 2018). Previous findings have found that racial/ethnic minority groups are disproportionately affected by various types of teen dating violence. The most recent national Youth Risk Behavior Survey reports the experience of physical violence among high school students in the past year to be 10.2% among Black students, 7% among white students, and 7.6% among Hispanic students (Youth Risk Behavior Surveillance, 2017).

The prevalence of dating violence depends on how the term is defined. When the definition of TDV is limited to physical and sexual abuse, an estimated rate of 10-20% of adolescents reported experiencing TDV from an intimate partner (Eaton et al., 2007; Shorey, Cornelius, & Bell, 2008). When the definition of TDV is expanded to also include forms of non-physical abuse (e.g. psychological intimidation, verbal threats, ridicule) the prevalence rates of TDV significantly increase (Malik, Sorenson, & Aneshensel, 1997; Orpinas et al., 2012; Wolfe et al., 2001).

TDV victimization and perpetration is associated with severe physical health outcomes such as sexually transmitted diseases, physical injury and pregnancy (Malik, Sorenson, &

Aneshensel, 1997; Silverman et al., 2001). Mental health outcomes as a result of TDV victimization and perpetration have been linked with both internalizing (e.g. depression, suicidal symptoms, anxiety) and externalizing (e.g. risky sexual behaviors, substance abuse) problems (Exner-Cortens, Eckenrode, & Rothman, 2013; Foshee et al., 2013; Temple & Freeman, 2011). Additionally, TDV victimization and perpetration is associated with a higher risk of continuing dysfunctional patterns in future romantic relationships (Gidycz, Warkentin, & Orchowski, 2007; Gomez, 2011; Stith et al., 2004; White & Smith, 2009). Given the high prevalence rates and severe physical and psychological problems associated with TDV, it is critical to investigate potential correlates to inform prevention and treatment of TDV.

**Borderline Personality Disorder and Violence in Romantic Relationships**

Given that unstable and intense interpersonal relationships are a hallmark feature of BPD, it is not surprising that a considerable body of literature suggests individuals with BPD experience dysfunction in their intimate relationships (Navarro-Gómez, Frías & Palma, 2017). In adult intimate relationships, BPD symptoms are associated with maladaptive emotional responsiveness (Lazarus et al. 2018) as comparisons between couples with a partner diagnosed with BPD and control couples reveal higher reports of conflict, distress and violence (Bouchard et al., 2009; Hill et al. 2011).

Furthermore, there is an extensive amount of research supporting a strong association between BPD and intimate partner violence (IPV; e.g. Costa & Babcock, 2008; Ehrensaft, Cohen, & Johnson, 2006; Hines, 2008; Ross & Babcock, 2009). It is well-established that individuals with BPD experience volatile relationships in both romantic and peer related dimensions. Costa and Babcock (2008) examined violent and nonviolent men and found that men with borderline features were more likely to engage in IPV. Hines (2008) found an

association between borderline personality and IPV by examining the relationship in a nonclinical sample. Research shows that borderline symptoms are higher in male batterers when compared to non-batterers (Holtzworth-Munroe et al., 1997). In addition, Ehrensaft, Cohen, & Johnson (2006) found that men with borderline personality traits are more likely to perpetrate more severe and physical violence against their partner. The strong relationship between BPD and IPV remains after controlling for Axis I disorders such as depression and anxiety (Bouchard et al., 2009). Maneta et al., (2013) found that borderline personality traits were also related to IPV, with males associated with both IPV victimization and perpetration and females only associated with IPV victimization. Dutton (1994) found that even when using a broader concept of borderline personality organization (BPO), BPO features were related to IPV in men, suggesting that the relation between BPD and IPV is not limited to a BPD diagnosis but also remains when examining broader borderline personality pathology. There are several models that associate BPD symptoms to intimate relationship dysfunction (Navarro-Gómez, Frías & Palma, 2017) and more specifically IPV (Holtzworth-Munroe, 2000 etc.) but there is little research that has investigated this with adolescents.

Previous studies have found associations between BPD and relationship dysfunction in adolescents and that BPD predicts future relationship dysfunction. One study found that BPD features among high school seniors predicted a high level of aggressive behavior and conflict (Daley, Burge & Hammen, 2000). Another study showed an association between BPD traits and intimate partner conflict during adolescence to adulthood (Chen et al., 2004). Lazarus et al. (2019) found that high BPD symptoms at age 15 predicted elevated physical and verbal aggression in 15 to 19-year-old girls. Reuter et al. (2015) found that BPD symptoms predicted dating violence in high school students when controlling for alcohol usage, exposure to intimate

partner violence and gender. Furthermore, another study found that inpatient adolescents with high levels of borderline features, regardless of dating violence victimization showed rates of self-harm but inpatient adolescents with low levels of borderline features showed an association between victimization and increases in rates of self-harm (Hatkevich et al., 2017). Finally, recent work demonstrated a longitudinal association in high school students between BPD features and dating violence victimization (Vanwoerden et al., 2019). While previous studies have shown a relationship between BPD and dating violence, most studies have utilized community-based samples. The current research contributes to the small literature on dating violence and BPD in adolescents by examining TDV victimization and perpetration using a three-group comparison: community, psychiatric controls, and inpatients with BPD.

**Borderline Personality Disorder and Aggression in Peer Relationships**

Previous research has theorized that there is a possible association between aggression and borderline features (Gardner et al., 2012), but the literature examining the relationship between aggression and BPD pathology among adolescents is sparse. As the core features of BPD include anger, unstable relationships, affective instability and impulsivity, it is reasonable to hypothesize that individuals with BPD would have difficulty within peer domains. Individuals with BPD frequently experience negative emotions. Negative emotions evoke aggression as a means to manage the emotions. Aggressive behavior may be exhibited due to the perception of threats to interpersonal relationships or as a tactic to coerce and manipulate others.

Aggression can be categorized as overt and relational aggression. Overt or physical aggression is typically defined as aggressive behavior that is intended to physically harm the target (e.g. kicking, pushing or hitting). The relationship between borderline features and physical aggression has been demonstrated through prior research which has utilized diverse

methodologies to examine this relationship (e.g. Goodman & New, 2000; Trull, Stepp, & Durrett, 2003). Additionally, one study in a non-western Chinese sample that found peer related physical aggression is a risk factor for BPD pathology during adolescence (Kawabata, Youngblood, & Hamaguchi, 2014). Despite preliminary evidence, the research investigating the link between BPD pathology and relational aggression is sparse. Relational aggression describes aggressive behaviors that intends to harm the target through coercion and manipulation of the interpersonal relationship (e.g. emotive threatening, mocking, damaging reputations). Adolescents girls tend to engage in more relationally aggressive behaviors than adolescent boys who tend to engage in more physically aggressive behavior (Card, Stucky, Sawalani, & Little, 2008; Marsee et al., 2014). Since BPD is more frequently diagnosed in women (APA, 2013), relational aggression may be more commonly associated with BPD. Previous studies revealed that borderline personality features are associated with relational aggression during adolescence (Underwood et al., 2011), middle school (Crick et al., 2005; Stepp et al., 2010), middle childhood (Banny et al., 2014) and adulthood (Ostrov & Houston, 2008; Werner & Crick, 1999). Recent research has shown an association between BPD pathology and relational aggression in emerging adults while controlling for overt aggression (Ostrov & Houston, 2008; Schmeelk, Sylvers, & Lilienfeld, 2008).

Aggression can be further categorized in terms of function as proactive or reactive aggression. Proactive aggression refers to aggressive behavior aiming to accomplish particular goals. Reactive aggression is defined as aggressive behavior in response to perceived threats or danger. BPD features such as impulsivity, heightened vulnerability to threats, and inappropriate anger are consistent with reactive aggression. Individuals with BPD may engage in reactive aggressive behavior as a response to perceived threats to interpersonal relationships. Gardner and

colleagues (2012) found that BPD features were related to reactive overt aggression among adolescents and adults. Proactive aggressive behavior is also consistent with characteristics of BPD and may exhibit itself among individuals with borderline features through the manipulation of interpersonal relations to serve person interests. Research showed that borderline features were linked to proactive and reactive relational aggression in adults (Ostrov & Houston, 2008).

The present study measures both forms (overt and relational) and functions (proactive and reactive) of aggression. Previous research has not examined all forms and functions of aggression and BPD in peer relationships while utilizing group comparisons during adolescence. As peer relationships are an important facet of development in adolescence and BPD is characteristic of unstable interpersonal relationships, inappropriate anger, and impulsive behavior, it is crucial to examine the association between aggression and BPD in peer relationships among adolescents. TDV and peer aggression are important to study because BPD onsets during adolescence, which is the time in which individuals spend more time with peers and form romantic relationships for the first time.

**Current Study**

The present study aligns with the developmental theories of BPD (Fonagy & Bateman, 2008; Crowell, Beauchaine & Linehan, 2009), which emphasize early social environments as an important caveat for developing optimal personality function. Although research examining impairment in interpersonal functioning in the development of BPD has mostly examined the impact on familial relationships. There are other domains of interpersonal factors that should also be studied in the context of BPD during adolescence. Peer and romantic relationships have not been described by these models.

Our first aim was to examine whether adolescents with BPD or BPD features report higher levels of TDV. We first compared levels of TDV victimization and perpetration between three groups: inpatient adolescents with BPD, psychiatric controls, and healthy controls. We also examined relations between continuously scored BPD features and TDV across all three groups. The second aim was to examine whether adolescents with BPD or BPD features report higher levels of peer conflict. Given that our healthy control sample did not complete a measure of peer conflict, we compared levels of peer conflict between groups of adolescents with BPD and psychiatric controls. Relations between continuously scored BPD features and peer conflict were examined as continuous measures across both groups. Given the relevance of certain demographic variables to TDV and peer conflict, we examined relations between age, gender, and race with TDV and peer conflict and controlled for relevant covariates in our analyses.

Based on prior literature, we hypothesized that inpatient adolescents with BPD would report higher levels of TDV victimization and perpetration than psychiatric controls and healthy controls. Additionally, continuously scored BPD features would be associated with TDV victimization and perpetration across the three groups when controlling for relevant demographic variables. We also hypothesized that inpatient adolescents with BPD would report higher levels of peer conflict than psychiatric controls. Finally, continuously scored BPD features would be associated with peer conflict across the two groups when controlling for relevant demographic variables.

## Methods

### Participants

In this present study, participants consist of three groups of adolescents: inpatients with BPD (BPD group), psychiatric controls (PC) without BPD from an inpatient sample, and healthy

controls (HC) without psychopathology from a community sample. The inpatient groups were part of a larger dataset from a previous study about assessment and treatment outcomes (Sharp et al., 2009). The inclusion criteria for the larger study for the inpatient groups consisted of adolescents that were 12 to 17 years old and had sufficient fluency in English to complete all research materials. The exclusion criteria consisted of a diagnosis of a psychotic disorder or an autism spectrum disorder (ASD), an IQ below 70 or clinically determined inability to complete all assessments. There were 646 consecutive admissions and 46 adolescents were excluded due to the exclusion criteria, which resulted in the final sample size of 600 adolescents.

The BPD group for the present study consisted of 235 adolescents (age M= 15.16, SD= 1.55, 77.4% females and 22.6% males) that met BPD criteria as determined by the Childhood Interview for Borderline Personality Disorder (CIBPD; Zanarini, 2003). Regarding diagnostic composition of the BPD group, 60.4% met criteria for a DSM-IV anxiety or anxiety-related disorders, 62.1% for a mood disorder, 11.9% for a bipolar disorder, 11.9% for an eating disorder, and 48.5% for an externalizing disorder, based on the Computerized Diagnostic Interview Schedule for Children (Shaffer et al., 2000). The PC group included 417 adolescents (age M= 15.39, SD= 1.39, 55.2% females and 44.8 % males) from the same inpatient psychiatric clinic. The PC group did not meet BPD criteria as determined by the Childhood Interview for Borderline Personality Disorder (CIBPD; Zanarini, 2003) and was below the clinical cut-off of 66 on the Borderline Personality Features Scale for Children (BPFSC; Chang, Sharp, & Ha, 2011). Regarding diagnostic composition of the PC group, 47.7% met criteria for a DSM-IV anxiety or anxiety-related disorder, 46.3% for a mood disorder, 3.6% for a bipolar disorder, 5.3% for an eating disorder, and 31.4% for an externalizing disorder, based on the Computerized

Diagnostic Interview Schedule for Children (Shaffer et al., 2000). See Table 1 for more detailed participant characteristics for both inpatient groups in the present study.

The participants in the HC group were drawn from a larger dataset from a longitudinal study that investigated health behaviors in adolescents (Temple et al., 2013a). Adolescents were excluded from the HC group if they reported receiving treatment currently or in the past year, having received a psychiatric diagnosis (GAD, depression, PTSD, substance abuse disorders etc.), or if their BPFSC score was above the cut-off of 66 (Chang et al., 2011). The participants in the HC group were 441 adolescents (age M= 15.09, SD= 0.8, 51.7% females and 48.3% males) that were 13 to 17-years-old and recruited from schools in Houston area districts. See Table 1 for more detailed participant characteristics across the three groups (BPD, PC and HC group) in the present study.

Table 1. Participant Characteristics

| | BPD n = 235; 12-17 | | Psychiatric controls n = 417; 12-17 | | Healthy controls n = 441; 13-17 | |
|---|---|---|---|---|---|---|
| | n or M | % or SD | n or M | % or SD | n or M | % or SD |
| Age | 15.6 | 1.55 | 15.39 | 1.39 | 15.09 | 0.8 |
| Gender | | | | | | |
| Female | 182 | 77.4% | 230 | 55.2% | 228 | 51.7% |
| Male | 53 | 22.6% | 187 | 44.8% | | |
| Ethnicity/Race | | | | | | |
| Hispanic | 1 | 0.5% | 1 | 0.3% | 155 | 35.1% |
| Caucasian | 169 | 84.9% | 326 | 89.1% | 123 | 27.9% |
| African Americans | 5 | 2.5% | 7 | 1.9% | 121 | 27.4% |
| Asian/Pacific Islander | 5 | 2.5% | 14 | 3.8% | 12 | 2.7% |
| American Indian | 1 | 0.5% | 0 | 0% | 0 | 0% |
| Multiracial/ Other | 16 | 9% | 18 | 4.9% | 30 | 6.8% |
| Diagnosis | | | | | | |
| Mood Disorder | 146 | 62.1% | 193 | 46.3% | - | - |
| Anxiety Disorder | 142 | 60.4% | 199 | 47.7% | - | - |
| Bipolar Disorder | 28 | 11.9% | 15 | 3.6% | - | - |
| Externalizing Disorder | 114 | 48.5% | 131 | 31.4% | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| Eating Disorder | 28 | 11.9% | 22 | 5.3% | - | - |

## Procedures

The data used was obtained from two previous larger studies (Sharp et al., 2009; Temple et al., 2013) that were both approved by the appropriate institutional review boards. Participants in the BPD and PC groups were adolescents admitted to the adolescent unit of an inpatient psychiatric hospital in the Houston area. During each adolescent's admission to the unit, parents were approached regarding consent for the study and if consent was given then adolescents were approached for assent. Researchers administered the structured clinical interview for BPD and adolescents completed self-report measures including on dating violence, borderline personality features and conflict with peers. Participants were assigned to either the BPD or PC group based on cut-off scores on the CI-BPD and BPFSC. Participants in the HC group were adolescents recruited from seven schools in Houston school districts. The recruitment for the study occurred during school hours with attendance required in classes. Research staff provided students with information about the study and permission slips to take home. Parents provided written consent through the permission slips. Students provided assent. Assessment occurred during school hours and students were brought to a room to privately complete measures. Students that participated received a $10 gift card.

## Measures

### *Teen Dating Violence*

The Conflict in Adolescent Dating and Relationship Inventory (CADRI; Wolfe et al., 2001) is a 50-item self-report instrument that examines teen dating violence victimization and perpetration (e.g. physical, psychological, relational, sexual, emotional and verbal). In the present study, the CADRI was used to assess teen dating violence across the three groups of

adolescents (BPD group, PC group and HC group). Every question has two parts that indicate victimization ("He/She tried to turn my friends against me") and perpetration ("I tried to turn my friends against him/her"). Binary responses (yes/no) indicate whether participants perpetrated and/or were victimized by violence during a conflict or argument with boyfriends/girlfriends or ex-boyfriends/girlfriends in the past 12 months. The measure assesses five forms of abuse: physical ( e.g. "I kicked, hit, or punched him/her"/"He/She kicked, hit, or punched me."), emotional or verbal (e.g. "I deliberately tried to frighten him/her."/"He/She deliberately tried to frighten me."), threatening behavior (e.g. "I threatened to end the relationship."/"He/She threatened to end the relationship."), sexual (e.g. "I forced him/her to have sex when he/she didn't want to."/"He/She forced me to have sex when I didn't want to.") and relational (e.g. "I tried to turn his/her friends against him/her."/"He/She tried to turn my friends against me."). The original validation study reported good internal consistency with the Cronbach's alpha of the total abuse scale being .83 (Wolfe et al., 2001). The internal consistency in the present study is excellent with a Cronbach's alpha of .94 for the total abuse scale, .87 for the victimization scale and .91 for the perpetration scale.

***Borderline Personality Disorder Features***

The Borderline Personality Features Scale for Children (BPFSC; Crick et al, 2005) is a 24-item measure that assesses the development of borderline features in children and adolescents ages nine and older. In the present study, the BPFSC was used to assess borderline features across the three groups of adolescents (BPD group, PC group and HC group). The BPFS-C is an adapted version from the borderline features (BOR) scale of the Personality Assessment Inventory (PAI; Morey, 1991). The measure has four domains: affective instability (e.g. "I go back and forth between different feelings, like being mad or sad or happy."), identity problems

(e.g. “I feel that there is something important missing about me, but I don’t know what it is.”), negative relationships (e.g. “Lots of times, my friends and I are really mean to each other.”), and self-harm (e.g. “I do things that other people consider wild or out of control”).Each domain has four items. The participants rated on a Likert scale ranging from 1 (“not at all true”) to 5 (“always true”). The internal consistency for the BPFS-C was acceptable in the original validation study with a Cronbach’s alpha of .76 (Crick et al., 2005) while the internal consistency in the present study is good with a Cronbach’s alpha of .89.

***Borderline Personality Disorder***

The Childhood Interview for Borderline Personality Disorder (CI-BPD; Zanarini, 2003) is a semi-structured interview to assess BPD in children and adolescents. The CI-BPD has been specifically adapted for use in youth using borderline component of the adult Diagnostic Interview for Personality Disorder. The youth version was adapted to use simpler language for easier comprehension. The measure includes nine criteria that reflect borderline features for which symptoms are rated on a three-point scale (0 = “absent”, 1 = “probably present”, 2 = “definitely present”). At least five out of nine criteria need to be scored a 2 for there to be a BPD diagnosis. The nine criteria reflect the DSM-5 Section II BPD criteria: chronic feelings of emptiness, unstable relationships, distorted or unstable self-image, impulsive behaviors, affective instability, fear of abandonment, recurring suicidal behavior, self-harm, and inappropriate and intense anger. In the present study, the CI-BPD was used to assess BPD across the inpatient groups. The internal consistency for the CI-BPD is good with a Cronbach’s alpha of .81 (Zanarini, 2003) while the internal consistency in the present study is good with a Cronbach’s alpha of .80.

***Peer Conflict***

The Peer Conflict Scale (PCS; Marsee, M. A., Kimonis, E. R., & Frick, P. J., 2004) is a 40-item self-report instrument that assesses hostile behavior among adolescents and children. Overt aggression refers to physically harmful behavior towards others while relational aggression is aggressive behavior through damaging relationships and social status. Proactive aggression is engaging in aggression to achieve goals. There are 20 items that assess proactive aggression which includes proactive overt (e.g. When I hurt others, I feel like it makes me powerful and respected) and proactive relational (e.g. When I gossip about others, I feel like it makes me popular). Reactive aggression refers to defensively responding to a perceived threat. The other 20 items assess reactive aggression which includes reactive overt (e.g. I have gotten into fights, even over small insults from others) and reactive relational (e.g. I spread rumors and lies about others when they do something wrong to me). There are 10 items in each of the four aggression subscales. The items are each rated on a 4-point scale (0 = "not at all true", 1 = "somewhat true", 2 = "very true", and 3 = definitely true). In the present study, the PCS was used to assess peer conflict across the inpatient groups. This internal consistency in the present study is excellent with a Cronbach's alpha of .97

## Data Analytic Strategy

### *Preliminary analyses and bivariate relations*

The data analysis for the present study was conducted using IBM SPSS Version 25.0 (IBM Corp, 2016). We first examined bivariate relations among main study variables, as well as relations with demographic variables to identify possible covariates for subsequent analyses. Pearson's correlations were conducted to examine relations among continuous variables, t-tests were used to examine relations with gender, and one-way ANOVAs were used to examine differences between racial groups. Depending on bivariate relations between demographic

variables (age, gender, race) and dependent variables, relevant demographic variables were controlled for in subsequent analyses.

### *Aim 1 Analyses: Relations between BPD and TDV*

ANCOVAs with Bonferroni adjustment for multiple comparisons were conducted to compare the differences in reports of TDV victimization and perpetration between the BPD, psychiatric control, and healthy control groups. Demographic variables that were significantly related to dependent variables were included as covariates. We also examined relations between continuously scored BPD features and TDV victimization and perpetrations across all groups. Two hierarchical linear regressions were conducted with relevant demographics entered at step 1 and BPFSC scores at step two, with the dependent variables of TDV victimization and perpetration.

### *Aim 2 Analyses: Relations between BPD and Peer Conflict*

Only participants in the inpatient (BPD and psychiatric control) groups completed measures of peer conflict and were therefore included in the analyses. Depending on bivariate relations between demographic variables and peer conflict, we conducted either t-tests or ANCOVAs (controlling for demographic covariates) to compare levels of peer conflict between the BPD and psychiatric control groups. Hierarchical linear regressions were conducted with relevant demographics entered at step 1 and BPFSC scores at step two, with the measures of peer conflict as dependent variables.

## Results

### Bivariate relations

First, we first examined bivariate relations between main study variables and demographic variables. As shown in table 2, we found that continuously scored BPD features

exhibited significant, small, positive relations with TDV victimization and perpetration across all three groups. Within the BPD and psychiatric control groups, BPD features exhibited moderate, positive relations with all measures of peer conflict.

Regarding relations between demographic variables and TDV, Pearson's correlations revealed significant, small, positive correlations between age and both dating violence victimization and perpetration (See Table 2). Independent-samples t-test revealed that females reported significantly higher rates of dating violence victimization (M: 4.05 vs. 2.92, t (718.66) = 3.84, $p < .001$) and perpetration (M: 3.69 vs. 2.32, t(710.16) = 5.50, $p < .001$). A one-way ANOVA revealed statistically significant differences between racial groups on reports of dating violence perpetration [F(5, 704) = 3.70, $p < .01$] but not victimization [F(5, 704) = .21, $p = .96$].

Regarding relations between demographic variables and peer conflict, Pearson's correlations revealed no significant correlations between age and any measure of peer conflict (see table 2). Independent samples t-tests revealed that females reported significantly higher rates of proactive relational aggression (M: 3.43 vs. 2.45, t (396.49) = 2.50, $p < .005$) and reactive relational aggression (M: 4.70 vs. 2.66, t(401.55) = 4.41, $p < .001$) but no significant relations between gender and proactive overt aggression (M: 2.21 vs. 1.85, t (430) = 1.08, $p = .28$) or reactive overt aggression (M: 4.60 vs. 4.29, t (430) = .54, $p = .59$). One-way ANOVA's revealed no significant differences between racial groups on reports of proactive overt aggression [F(5, 388) = .39, $p = .85$], proactive relational aggression [F(5, 388) = .65, $p = .66$], reactive overt aggression [F(5, 388) = .35, $p = .88$], or reactive relational aggression [F(5, 388) = .86, $p = .51$].

**Table 2.** *Descriptive Statistics and Correlations Among Continuous Variables*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. Age | | | | | | | | |
| 2. BPD features (BPFS-C) | .005 | | | | | | | |
| **Teen dating violence (n = 726)** | | | | | | | | |
| 3. Victimization | .129*** | .254*** | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4. Perpetration | .114** | .181*** | .754*** | | | | | |
| **Peer conflict (n = 432)[a]** | | | | | | | | |
| 5. Proactive overt aggression | -.042 | .374*** | .145* | .119 | | | | |
| 6. Proactive relational aggression | -.050 | .406*** | .184** | .185** | .746*** | | | |
| 7. Reactive overt aggression | -.073 | .400*** | .179** | .160* | .748*** | .510*** | | |
| 8. Reactive relational aggression | -.054 | .432*** | .275*** | .287*** | .652*** | .835*** | .554*** | |
| Mean | 15.22 | 61.79 | 3.56 | 3.10 | 2.07 | 3.06 | 4.49 | 3.93 |
| SD | 1.23 | 16.60 | 4.08 | 3.46 | 3.38 | 4.16 | 5.72 | 5.03 |
| Skew | -.37 | .35 | 1.59 | 1.38 | 2.54 | 1.93 | 1.71 | 1.73 |
| Kurtosis | -.25 | -.40 | 3.11 | 2.01 | 8.09 | 3.73 | 3.06 | 3.02 |

*Note: *p<.05, **p<.01,*** p<.001*

[a] Peer conflict measures only within the two inpatient groups (BPD and psychiatric controls)

**Aim 1 Results: Relations between BPD and TDV Controlling for Demographic Variable**

Our first aim was to examine whether adolescents with BPD or BPD features report higher levels TDV. ANCOVAs (Table 3) were conducted to determine differences in dating violence victimization and perpetration between the BPD, PC, and HC groups, while controlling for relevant demographic variables. Given that dating violence victimization exhibited significant relations with age and gender at the bivariate level, we ran a one-way ANCOVA with sample entered as the fixed factor and age and gender as covariates. As shown in table 3, results revealed significant differences in reports of dating violence victimization between groups. Post hoc tests using the Bonferroni correction for multiple comparisons revealed that experiences of victimization were higher in the BPD group than the PC and the HC. There were no significant differences between psychiatric controls and healthy controls. Given that dating violence perpetration exhibited significant relations with age, gender, and race at the bivariate level, we ran a ANCOVA with sample and race entered as fixed factors and gender and age entered as covariates. Results revealed significant differences between groups with main effect of sample on reports of dating violence perpetration, but no effect of race (see table 3). However, post hoc

tests using the Bonferroni correction for multiple comparisons revealed no significant differences between groups.

Table 3. One-way ANCOVA results of groups on dating violence

| | BPD M(SEM) | PSYC M(SEM) | HC M(SEM) | F | *p* |
|---|---|---|---|---|---|
| Victimized violence | 4.81 (.38)[a] | 3.22 (.30)[b] | 3.39 (.19)[b] | 6.30 | <.01 |
| Perpetrated violence | 4.55 (.95)[a] | 2.47 (.59)[a] | 3.38 (.24)[a] | .614 | .072 |

*Notes:* BPD: inpatient adolescents with BPD; PSYC: inpatient adolescents without BPD; HC (healthy control): community sample of adolescents. Superscripts indicate statistically significant differences between groups based on post-hoc analyses

Toward our first aim, we also conducted hierarchical linear regressions (see table 4) to examine whether continuously scored BPD features were associated with TDV victimization and perpetration across all samples, above and beyond relevant demographic variables. As gender and age were significantly related to dating violence victimization at the bivariate level, age and gender were entered at step 1, BPD features were entered at step 2, and dating violence victimization was entered as the dependent variable in the first model. At step 1, the overall model was significant with both age and gender predicting victimization. At step 2, the overall model was significant with age, gender, and BPD features each predicting victimization. The change in adjusted $R^2$ values indicates a 5.4% change in the explained variance of TDV victimization due to the addition of BPD features to the model, and this change was significant ($F(1,722) = 43.25$, $p < .001$).

In the second model, age, gender and race were entered at step 1, BPD features were entered at step 2, and dating violence perpetration was entered as the dependent variable. At step 1, the overall model was significant with age, gender, and race each predicting perpetration. At step 2, the overall model was significant again with all variables predicting perpetration. The

change in adjusted $R^2$ values indicates a 1.9% change in the explained variance of TDV perpetration due to the addition of BPD features to the model, and this change was significant ($F(1, 705) = 14.32$, $p < .001$).

Table 4. Hierarchical regression models predicting dating violence victimization and perpetration

| | b | SE | β | t | p | Adj. $R^2$ | Δ Adj. $R^2$ |
|---|---|---|---|---|---|---|---|
| DV = Dating violence victimization | | | | | | | |
| Step 1 | | | | | | .035[a] | |
| Age | .51 | .134 | .14 | 3.77 | <.001 | | |
| Gender | -1.20 | .301 | -.15 | -3.99 | < .001 | | |
| Step 2 | | | | | | .088[b] | .054*** |
| Age | .51 | .13 | .14 | 3.90 | < .01 | | |
| Gender | -.84 | .30 | -.10 | -2.81 | < .001 | | |
| Borderline Features (BPFSC) | .06 | .01 | .24 | 6.58 | < .001 | | |
| DV = Dating violence perpetration | | | | | | | |
| Step 1 | | | | | | .058[c] | |
| Age | .35 | .11 | .11 | 3.09 | <.005 | | |
| Gender | -1.51 | .25 | -.22 | -6.04 | <.001 | | |
| Race | .16 | .10 | .06 | 1.63 | .104 | | |
| Step 2 | | | | | | .076[d] | .019*** |
| Age | .35 | .11 | .11 | 3.14 | <.005 | | |
| Gender | -1.33 | .25 | -.19 | -5.27 | <.001 | | |
| Race | .14 | .10 | .05 | 1.42 | .157 | | |
| Borderline Features (BPFSC) | .03 | .01 | .14 | 3.78 | <.001 | | |

*Note: *p<.05, **p<.01, ***p< .001*

DV = dependent variable.

[a] Model significant, F (2, 723) = 14.19, p < .001.

[b] Model significant, F (3, 722) = 24.43, p < .001.

[c] Model significant, F (3, 706) = 15.63, p < .001.

[d] Model significant, F (4, 705) = 15.53, p < .001.

**Aim 2 Results: Relations between BPD and Peer Conflict**

Our second aim was to examine whether adolescents with BPD experience greater peer conflict, through comparing groups with and without BPD and through examining relations with continuously scored BPD features. Given a lack of relations between demographic variables and

overt aggression at the bivariate level, we ran independent sample t-tests to compare reports of proactive overt aggression and reactive overt aggression between the BPD and psychiatric control groups. Analyses revealed that the BPD group reported significantly greater reactive overt aggression (M= 5.49 vs. 3.91, t (430) = 2.80, $p < .05$) but no differences in proactive overt aggression between groups (M= 2.49 vs. 1.83, t (430) = 1.95, $p > .05$ )

Given that we found significant bivariate relations between gender and relational aggression, an analysis of covariance (ANCOVA) (Table 5) was conducted to determine differences in proactive relational aggression and reactive relational aggression between the BPD and PC groups while controlling for gender. The one-way ANCOVA revealed no significant differences in reports of proactive relational aggression between groups with sample entered as the fixed factor and gender entered as a covariate. The one-way ANCOVA with sample entered as a fixed factor and gender entered as a covariate revealed no significant differences in reports of reactive relational aggression.

Table 5. One-way ANCOVA results of groups on peer conflict

| | BPD M(SEM) | PSYC M(SEM) | F | *p* |
|---|---|---|---|---|
| Proactive Relational | 3.47 (.33)[a] | 2.82 (.25)[a] | 2.39 | .12 |
| Reactive Relational | 4.53 (.40)[a] | 3.58 (.30)[a] | 3.63 | .06 |

*Notes:* BPD: inpatient adolescents with BPD; PSYC: inpatient adolescents without BPD.
Superscripts indicate statistically significant differences between groups

Given that we identified no relevant demographic covariates of overt aggression, no further analyses were conducted beyond the significant Pearson's correlations between BPD features and both measures of overt aggression. Toward our second aim, we also conducted hierarchical linear regressions (see table 6) to examine whether continuously scored BPD features were associated with proactive relational aggression and reactive relational aggression across both samples, above and beyond relevant demographic variables. As gender was

significantly related to proactive relational aggression at the bivariate level, gender was entered at step 1, BPD features were entered at step 2, and proactive relational aggression was entered as the dependent variable in the first model. At step 1, the overall model was not significant with gender predicting proactive relational aggression. At step 2, the overall model was significant with BPD features predicting proactive relational aggression. The change in adjusted $R^2$ values indicates a 15.8% change in the explained variance of proactive relational aggression due to the addition of BPD features to the model, and this change was significant ($F(2, 430) = 42.36$, $p < .001$).

In the second model, gender was entered at step 1, BPD features were entered at step 2, and reactive relational aggression was entered as the dependent variable. At step 1, the overall model was significant with gender predicting reactive relational aggression. At step 2, the overall model was significant again with all variables predicting reactive relational aggression. The change in adjusted $R^2$ values indicates a 16.8% change in the explained variance of reactive relational aggression due to the addition of BPD features to the model, and this change was significant ($F(2, 430) = 50.92$, $p < .001$).

Table 6. Hierarchical regression models predicting relational aggression

| | b | SE | β | t | p | Adj. $R^2$ | Δ Adj. $R^2$ |
|---|---|---|---|---|---|---|---|
| DV = Proactive Relational aggression | | | | | | | |
| Step 1 | | | | | | .004[a] | |
| Gender | -.67 | .393 | -.08 | -1.7 | .09 | | |
| Step 2 | | | | | | .161[b] | .158*** |
| Gender | .005 | .369 | .00 | .01 | .99 | | |
| Borderline Features (BPFSC) | .10 | .011 | .41 | 9.02 | < .001 | | |
| DV = Reactive Relational aggression | | | | | | | |
| Step 1 | | | | | | .021[c] | |
| Gender | -1.48 | .459 | -.15 | -3.22 | <.01 | | |
| Step 2 | | | | | | .188[d] | .168** |

| | | | | | |
|---|---|---|---|---|---|
| Gender | -.66 | .43 | -.07 | -1.55 | .12 |
| Borderline Features (BPFSC) | .12 | .013 | .42 | 9.45 | < .001 |

*Note: *p<.05, **p<.01, ***p< .001*
DV = dependent variable.
[a] Model not significant, F (1, 431) = 2.89, $p = .09$.
[b] Model significant, F (2, 430) = 42.36, $p < .001$.
[c] Model significant, F (1, 431) = 10.38, $p < .01$.
[d] Model significant, F (2, 430) = 50.92, $p < .001$.

## Discussion

Although intimate partner violence and aggressive behavior in general is a well-established issue among adults with BPD, there is a lack of research examining TDV and peer conflict in the context of BPD among adolescents. Previous research has focused more on examining the role of familial relationships when studying interpersonal functioning in the development of BPD. Familial relationships play a significant role in emerging BPD; however, it is also necessary to study other domains of interpersonal relations of BPD such as romantic relationships and peer relationships. The key characteristics of BPD such as unstable interpersonal relationships, affective instability and explosive anger suggest that adolescents with BPD may be more prone to experiencing teen dating violence (TDV) and peer conflict. The present research contributes to the small literature on dating violence and BPD in adolescents by comparing levels of TDV between three groups of adolescents (inpatients with BPD, inpatients without BPD, and healthy controls) and comparing levels of peer conflict between the two inpatient groups while also examining relevant demographic variables.

The first aim of this study was to examine whether adolescents with BPD or borderline features report higher levels of TDV. We compared levels of TDV victimization and perpetration between inpatient adolescents with BPD, psychiatric controls and healthy controls. Additionally, we examined relations between continuously scored borderline features and TDV victimization and perpetration across the three groups of adolescents. The second aim was to examine whether

adolescents with BPD or borderline features report higher levels of peer conflict. We compared levels of peer conflict between inpatient adolescents with BPD and psychiatric controls. Additionally, we examined relations between continuously scored borderline features and peer conflict across the two groups of adolescents.

Toward our first aim, results demonstrated that continuously scored borderline features were significantly related to dating violence victimization and perpetration, while controlling for relevant demographic variables. Previous research has demonstrated a relationship between BPD (features or diagnosis) and intimate partner violence in adults (e.g. Bouchard et al., 2009; Hines, 2008; Ross & Babcock, 2009). Additionally, few studies have demonstrated a link between borderline pathology and dating violence victimization and perpetration in adolescents (e.g. Chen et al., 2004; Hatkevich et al., 2017; Reuter et al., 2015; Vanwoerden et al., 2019). As a core characteristic of BPD is unstable and intense interpersonal relationships, it is not surprising that borderline features were associated with TDV victimization and perpetration even when controlling for relevant demographic variables. It may be possible that the presence of borderline pathology in an adolescent partner promotes conflict in romantic relationships which has the potential to escalate to dating violence within the relationship. The presence of BPD symptoms such as emotional instability and explosive anger may contribute to hostile and emotion driven interactions that instigate dating violence. An alternative possibility is that the presence of dating violence in romantic relationships promotes the development of borderline pathology among adolescents that are already at risk for developing BPD. Previous research shows that early involvement in romantic relationships poses psychological risk for even the general adolescent population (Zimmer-Gembeck, 2002). This allows us to speculate that if early involvement in romantic relationships may be unsafe for adolescents overall, then it may be even more unsafe

for adolescents at risk for developing BPD. Our findings suggested significant differences in reported dating violence victimization between the three groups of adolescents while controlling for age and gender. Inpatient adolescents with BPD reported significantly higher levels of dating violence victimization than psychiatric controls and healthy controls. There were no significant differences between non-BPD psychiatric controls and non-clinical healthy controls. Additionally, results revealed that there were no significant differences between groups in reports of dating violence perpetration while controlling for age, race and gender.

While this is the first study to compare dating violence between adolescents with BPD, psychiatric controls, and healthy controls, our finding that adolescents with BPD reported greater victimization than psychiatric and healthy controls are in line with previous studies that have found a connection between borderline pathology and dating violence victimization in adolescents (Hatkevich et al., 2017; Reuter et al., 2015; Vanwoerden et al., 2019). While borderline features were associated with dating violence perpetration, the relationship was weaker than with victimization as there were no significant differences between diagnostic groups. Though few studies have examined the association between TDV victimization and borderline pathology, there are even fewer studies that have investigated the relationship between borderline pathology and TDV perpetration. Future research should further examine this relationship as research in this area is extremely limited and additional investigation will contribute to our knowledge about TDV perpetration and BPD. This non-significant finding is inconsistent with what we hypothesized based on prior literature showing a relationship between borderline symptomology and dating violence perpetration in adolescents (Lazarus et al., 2019; Reuter et al., 2015). As evident through our results, the relationship between TDV victimization and BPD appears to be stronger than the relationship between TDV perpetration and BPD. A

possible explanation is that adolescents with BPD are more likely to engage in intense relationships with romantic partners that are predisposed to violent behaviors. In adults, borderline features are disproportionately prevalent among victims of IPV (Pico-Alfonso, Echeburúa, & Martinez, 2008). Maneta and colleagues (2013) suggested that borderline features in adults had a relation with perpetration of violence from their romantic partner. Another possibility is that individuals with borderline features such as emotional dysregulation and reactive behavior are more likely to evoke aggressive and violent behavior from their romantic partner than to be perpetrators of violence. Victims of violence are not to be blamed for their victimization, but it is necessary to understand the relationship between borderline pathology and TDV victimization. Our finding goes against the stigmatizing conception that individuals with psychopathology more specifically BPD are solely perpetrators of violence. Through our results it appears that TDV victimization has a stronger connection with BPD than TDV perpetration.

Toward our second aim, results demonstrated that continuously scored borderline features showed significant relations with proactive overt aggression and reactive overt aggression. Additionally, borderline features also showed significant relations with proactive relational aggression and reactive relational aggression above and beyond the influence of gender. The relation between continuously scored borderline features and all forms and functions of peer conflict (proactive overt aggression, reactive overt aggression, proactive relational aggression and reactive relational aggression) is not surprising. Previous research has examined the link borderline pathology has with forms and functions of peer conflict in adults (Ostrov & Houston, 2008; Werner & Crick, 1999) and adolescents (Banny et al., 2014; Underwood et al., 2011). Our findings are consistent with the evidence provided by prior research and through the inclusion of all forms and functions of peer conflict, these findings have also provided a more

comprehensive picture of the relationship between borderline pathology and peer conflict among adolescents. Results indicated that inpatient adolescents with BPD reported significantly higher levels of reactive overt aggression than non-BPD psychiatric controls but no significant difference in proactive overt aggression between groups. There were no significant differences between the two groups in reports of proactive relational aggression and reactive relational aggression while controlling for relevant demographic variables. The significant group comparison findings for reactive overt aggression further adds to the literature on the relationship between reactive overt aggression and BPD.

Although the present study is the first to examine the relationship between all forms and functions of peer conflict and BPD through group comparisons, our significant group comparison findings for reactive overt aggression are in line with previous research that has found an association between reactive aggression and BPD (Gardner et al., 2012). Non-significant group comparison findings for proactive overt aggression, proactive relational aggression and reactive relational aggression are surprising and demonstrate that these forms and functions have a weaker relationship with BPD. Another possibility is that comparisons using acute psychiatric controls and a lack of healthy controls resulted in inpatient groups that were indistinguishable in levels of peer conflict. These non-significant findings are in opposition to what we hypothesized based on previous research revealing that during adolescence relational aggression has an association with BPD (Banny et al., 2014; Crick et al., 2005; Stepp et al., 2010; Underwood et al., 2011) and overt aggression also has an association with BPD (e.g. Goodman & New, 2000; Trull, Stepp, & Durrett, 2003). As evident through our results, the relationship between reactive overt aggression and BPD appears to be stronger than the relationship proactive overt aggression, proactive relational aggression and reactive relational

aggression has with BPD. This association may be stronger for reactive overt aggression because in peer relationships adolescents may tend to have more of a retaliatory response to perceived provocation. This is consistent with individuals with borderline pathology viewing the motives of others through suspicion and paranoia (Sharp et al., 2011). It is possible that adolescents with BPD are more likely to behave aggressively through retaliation against perceived threats than to engage in goal oriented aggressive behavior. This relationship may be stronger for reactive overt aggression rather than both forms of reactive aggression due to the severity of the inpatient groups. The severity of the inpatient groups may make physically (overt) aggressive behavior more prevalent among this population. Future research should examine whether results extend to less severe adolescent groups, perhaps in an outpatient setting, to compare levels of peer conflict.

There are several limitations within this study that need to be addressed. The reliance on self-report data such as the BPFS-C and CADRI suggest the possibility that the findings were in part due to shared method variance. However, the use of a semi-structured clinical interview for BPD diagnosis provides additional support for the validity of these results. Additionally, we were unable to compare peer conflict with a healthy control group. Future research should include a healthy control group when examining peer conflict group comparisons as the variability between healthy adolescents and adolescents with BPD may yield important results. The generalizability of this study may also be limited as the inpatient groups are disproportionately Caucasian and of high socioeconomic status. The demographics of the healthy controls did not match the inpatient groups as the healthy controls consisted of a more racially and socioeconomically diverse sample. However, analyses comparing groups controlled for demographic variables when relevant. Future research should aim to compile groups of

participants that are diverse and more consistently similar in the breakdown of socioeconomic status and race/ethnicity.

The current study is the first to compare levels of TDV victimization and perpetration between three groups of inpatient adolescents with BPD, psychiatric controls and healthy controls. Additionally, this study is also the first to compare levels of peer conflict between two groups of inpatient adolescents with BPD and psychiatric controls. Findings suggest dating violence and peer conflict are important correlates of BPD pathology in adolescents. Dating violence and peer conflict may be considered potential targets for treatment for when working with adolescents who have BPD. From a clinical perspective, the association borderline features have with TDV is an important finding that will help in identification of adolescents that are most at risk for developing borderline pathology or becoming dating violence victims and perpetrators. When treating adolescents with BPD, clinicians should carefully assess for TDV, considering the host of maladaptive outcomes associated with TDV (Exner-Cortens, Eckenrode, & Rothman, 2013; Foshee et al., 2013; Silverman et al., 2001). Additionally, it may be important to assess for BPD when encountering victims and perpetrators of TDV to guide treatment goals and strategies. The development of interpersonal skills in peer and romantic relationships during adolescence could be helpful in improving borderline symptomology, dating violence and peer conflict. Future research should examine the potential underlying mechanisms in the relationships between BPD, TDV, and peer conflict and identify targets to support the development of interpersonal skills and reduce the risk for experiencing TDV in adolescents with BPD features.

References

American Psychiatric Association . (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

Banny, A. M., Tseng, W. L., Murray-Close, D., Pitula, C. E., & Crick, N. R. (2014). Borderline personality features as a predictor of forms and functions of aggression during middle childhood: Examining the roles of gender and physiological reactivity. *Development and Psychopathology*, *26*(3), 789–804.

Bouchard, S., Sabourin, S., Lussier, Y., & Villeneuve, E. (2009). Relationship quality and stability in couples when one partner suffers from borderline personality disorder. *Journal of Marital and Family Therapy*, *35*(4), 446–455. https://doi.org/10.1111/j.1752-0606.2009.00151.x.

Card, N. A., Stucky, B. D., Sawalani, G. M.,& Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, *79*, 1185–1229. doi:10.1111/j.1467-8624.2008.01184.x

Center for Disease Control and Prevention. (2020). *Preventing Teen Dating Violence*. Retrieved from https://www.cdc.gov/violenceprevention/intimatepartnerviolence/teendatingviolence/fastfact.html

Chanen, A., Sharp, C., Hoffman, P., and the Global Alliance for Prevention and Early Intervention for Borderline Personality Disorder (2017). Prevention and early intervention for borderline personality disorder: a public health priority. *World Psychiatry, 16*(2), 215-216.

Chanen, A. M., Jackson, H. J., McGory, P. D., Allot, K. A., Clarkson, V., & Yuen, H. P. (2004). Two-year stability of personality disorder in older adolescent outpatients. *Journal of Personality Disorders*, *18*, 526–541.

Chanen, A. M., Jovev, M., & Jackson, H. J. (2007). Adaptive functioning and psychiatric symptoms in adolescents with borderline personality disorder. *Journal of Clinical Psychiatry*, *68*, 297–306.

Chanen AM, Thompson KN: The age of onset of personality disorders. *In Age of Onset of Mental Disorders*. Edited by de Girolamo G, McGorry PD, Sartorius N. Springer; 2019

Chaput, Y. J., & Lebel, M. J. (2007). Demographic and clinical profiles of patients who make multiple visits to psychiatric emergency services. *Psychiatric Services, 58*, 335–341.

Chen, H., Cohen, P., Johnson, J., Kasen, S., Sneed, J. R., & Crawford, T. N. (2004). Adolescent personality disorders and conflict with romantic partners during the transition to adulthood. *Journal of Personality Disorders, 18*(6), 507–525.

Cohen, P., Crawford, T. N., Johnson, J. G., & Kasen, S. (2005). The Children in the Community Study of developmental course of personality disorder. *Journal of Personality Disorders*, *19*, 466 – 486

Costa, D. M., & Babcock, J. C. (2008). Articulated thoughts of intimate partner abusive men during anger arousal: Correlates with personality disorder features. *Journal of Family Violence*, *23*, 395– 402. doi: 10.1007/s10896-008-9163-x

Crick, N. R., Murray-Close, D., &Woods, K. (2005). Borderline personality features in childhood: A short-term longitudinal study. *Development and Psychopathology*, *17*, 1051–1070. doi:10.10170S0954579405050492

Crowell, S. E., Beauchaine, T. P., & Linehan, M. M. (2009). A biosocial developmental model of borderline personality: Elaborating and extending Linehan's theory. *Psychological Bulletin, 135*, 495–510.

Daley, S. E., Burge, D., & Hammen, C. (2000). Borderline personality disorder symptoms as predictors of 4-year romantic relationship dysfunction in young women: addressing issues of specificity. *Journal of Abnormal Psychology*, *109*(3), 451–460. https://doi.org/10.1037/0021-843X.109.3.451.

Dutton, D. G. (1994). Behavioral and affective correlates of Borderline Personality Organization in wife assaulters. *International Journal of Law and Psychiatry*, *17*, 265–277. doi:10.1016/0160-2527(94)90030-2

Eaton, D. K., Davis, K. S., Barrios, L., Brener, N. D., & Noonan, R. K. (2007). Associations of dating violence victimization with lifetime participation, co-occurrence, and early initiation of risk behaviors among U.S. high school students. *Journal of Interpersonal Violence*, *22*, 585−602.

Ehrensaft, M. K., Cohen, P., & Johnson, J. G. (2006). Development of personality disorder symptoms and the risk for partner violence. *Journal of Abnormal Psychology*, *115*, 474-483. doi:10.1037/0021-843x.115.3.474

Exner-Cortens, D., Eckenrode, J., & Rothman, E. (2013). Longitudinal associations between teen dating violence victimization and adverse health outcomes. *Pediatrics*, *71*, 71–78. doi:10.1542/peds.2012-1029.

Feenstra, D. J., Hutsebaut, J., Laurenssen, E. M. P., Verheul, R., Busschbach, J. J. V., & Soeteman, D. I. (2012). The burden of disease among adolescents with personality pathology: quality of life and societal costs. *Journal of Personality Disorders*, *26*, 593-604.

Fonagy, P., & Bateman, A. W. (2008). The development of borderline personality disorder—A mentalizing model. *Journal of Personality Disorders*, *22*, 4–21.

Foshee VA, McNaughton Reyes HL, Gottfredson NC, Chang LY, Ennett ST. (2013). A longitudinal examination of psychological, behavioral, academic, and relationship consequences of dating abuse victimization among a primarily rural sample of adolescents. *Journal of Adolescent Health*; *53*(6)*:*723-729.

Gardner, K. J., Archer, J., & Jackson, S. (2012). Does maladaptive coping mediate the relationship between borderline personality traits and reactive and proactive aggression? *Aggressive Behavior*, *38*, 403–413. doi:10.1002/ab.21437

Gidycz, C. A., Warkentin, J. B., & Orchowski, L. M. (2007). Predictors of perpetration of verbal, physical, and sexual violence: A prospective analysis of college men. *Psychology of Men & Masculinity*, *8*(2), 79

Gómez, A. M. (2011). Testing the cycle of violence hypothesis: Child abuse and adolescent dating violence as predictors of intimate partner violence in young adulthood. *Youth & Society*, *43*(1), 171-192.

Goodman, M.,& New, A. (2000). Impulsive aggression in borderline personality

disorder. *Current Psychiatry Reports*, *2*, 56–61.

Grant, B. F., Chou, S., Goldstein, R. B., Huang, B., Stinson, F. S., Saha, T. D., & ... Ruan, W. (2008). Prevalence, correlates, disability, and comorbidity of DSM-IV borderline personality disorder: Results from the Wave 2 National Epidemiologic Survey on Alcohol and Related Conditions. *Journal Of Clinical Psychiatry*, *69*(4), 533-545. doi:10.4088/JCP.v69n0404

Ha, C., Balderas, J.C., Zanarini, M.C., Oldham, J., & Sharp, C. (2014). Psychiatric comorbidity in hospitalized adolescents with borderline personality disorder. *Journal of Clinical Psychiatry*, *75*, e457–e464.

Hatkevich, C., Mellick, W., Reuter, T., Temple, J. R., & Sharp, C. (2017). Dating violence victimization, nonsuicidal self-injury, and the moderating effect of borderline personality disorder features in adolescent inpatients. *Journal of Interpersonal Violence.* http://dx.doi.org/10.1177/0886260517708402

Hill, J., Stepp, S. D., Wan, M. W., Hope, H., Morse, J. Q., Steele, M., et al. (2011). Attachment, borderline personality, and romantic relationship dysfunction. *Journal of Personality Disorders*, *25*(6), 789–805. https://doi.org/10.1521/pedi.2011.25.6.789.

Hines, D. A. (2008). Borderline personality traits and intimate partner aggression: An international multisite, cross-gender analysis. *Psychology of Women Quarterly*, *32*(3), 290–302.

Holtzworth-Munroe, A. (2000). A typology of men who are violent toward their female partners: Making sense of the heterogeneity in husband violence. *Current Directions in Psychological Science*, *9*, 140 –143. doi:10.1111/1467-8721.00079

Holtzworth-Munroe, A., Bates, L., Smutzler, N., & Sandin, E. (1997). A brief review of the research on husband violence Part I: Maritally Violent Versus Nonviolent Men. *Aggression and Violent Behavior*, *2*, 65–99. doi:10.1016/S1359-1789(96)00015-8

Kann L, McManus T, Harris WA, et al. Youth Risk Behavior Surveillance — United States, 2017. MMWR Surveill Summ 2018;67(No. SS-8):1–114. DOI: http://dx.doi.org/10.15585/mmwr.ss6708a1

Kawabata, Y., Youngblood, J., & Hamaguchi, Y. (2014). Preadolescents' borderline personality features in a non- Western urban context: Concurrent and longitudinal associations with physical and relational aggression, friendship exclusivity and peer victimization. *Asian Journal of Social Psychology*, *17*(3), 219–228. https://doi-org.ezproxy.lib.uh.edu/10.1111/ajsp.12067

Lazarus, S. A., Scott, L. N., Beeney, J. E., Wright, A. G. C., Stepp, S. D., & Pilkonis, P. A. (2018). Borderline personality disorder symptoms and affective responding to perceptions of rejection and acceptance from romantic versus nonromantic partners. *Personality Disorders, Theory, Research, and Treatment*, *9*(3), 197–206. https://doi.org/10.1037/per0000289.

Lazarus, S., Choukas-Bradley, S., Beeney, J., Byrd, A., Vine, V., & Stepp, S. (2019). Too much too soon?: Borderline personality disorder symptoms and romantic relationships in adolescent girls. *Journal of Abnormal Child Psychology : An Official Publication of the International Society for Research in Child and Adolescent Psychopathology*, *47*(12), 1995-2005. doi:10.1007/s10802-019-00570-1

Malik, S., Sorenson, S., & Aneshensel, C. (1997). Community and dating violence among adolescents: Perpetration and victimization. *Journal of Adolescent Health*, *21*, 291-302.

Maneta, E. K., Cohen, S., Schulz, M. S., & Waldinger, R. J. (2013). Two to tango: A dyadic analysis of links between borderline personality traits and intimate partner violence. *Journal of Personality Disorders*, *27*(2), 233–243. https://doi-org.ezproxy.lib.uh.edu/10.1521/pedi_2013_27_082

Marsee, M. A., Frick, P. J., Barry, C. T., Kimonis, E. R., Muñoz Centifanti, L. C., & Aucoin, K. J. (2014). Profiles of the forms and functions of self-reported aggression in three adolescent samples. *Development and Psychopathology*, *26*, 705–720.

Marsee, M. A., Kimonis, E. R., & Frick, P. J. (2004). *Peer conflict scale*. Unpublished rating scale, University of New Orleans.

Mulford, C., & Giordano, P. C. (2008). Teen dating violence: A closer look at adolescent romantic relationships. *NIJ Journal*, *261*, 34–40

Morey, L. C. (1991). *The Personality Assessment Inventory*. Odessa, FL: Psychological Assessment Resources.

Navarro-Gómez, S., Frías, Á., & Palma, C. (2017). Romantic relationships of people with borderline personality: A narrative review. *Psychopathology*, *50*(3), 175–187. https://doi.org/10.1159/000474950.

Orpinas, P., Nahapetyan, L., Song, X., McNicholas, C., & Reeves, P. M. (2012). Psychological dating violence perpetration and victimization: Trajectories from middle to high school. *Aggressive Behavior*, *38*(6), 510–520. doi:10.1002/ab.21441

Ostrov, J. M., & Houston, R. J. (2008). The utility of forms and functions of aggression in emerging adulthood: Association with personality disorder symptomatology. *Journal of Youth and Adolescence*, *37*, 1147–1158. doi:10.1007/s10964-008-9289-4

Picó-Alfonso, M. A., Echeburúa, E., & Martínez, M. (2008). Personality disorder symptoms in women as a result of chronic intimate male partner violence. *Journal of Family Violence*, *23*, 577-588

Reuter, T. R., Sharp, C., Temple, J. R., & Babcock, J. C. (2015). The relation between borderline personality disorder features and teen dating violence. *Psychology of Violence, 5*(2), 163–173. https://doi.org/10.1037/a0037891.

Roberts, A. L., McLaughlin, K. A., Conron, K. J., & Koenen, K. C. (2011). Adulthood stressors, history of childhood adversity, and risk of perpetration of intimate partner violence. *American Journal of Preventive Medicine*, *40*(2), 128-138.

Ross, J. M., & Babcock, J. C. (2009). Proactive and reactive violence among intimate partner violent men diagnosed with antisocial and borderline personality disorder. *Journal of Family Violence*, *24*(8), 607–617.

Schmeelk, K., Sylvers, P., & Lilienfeld, S. (2008). Trait correlates of relational aggression in a nonclinical sample: DSM-IV personality disorders and psychopathy. *Journal of Personality Disorders*, *22*, 269 –283. doi:10.1521/pedi.2008.22.3.269

Shaffer, D., Fisher, P., Lucas, C. P., Dulcan, M. K., & Schwab-Stone, M. E. (2000). NIMH Diagnostic Interview Schedule for Children Version IV (NIMH DISC–IV): Description, differences from previous versions, and reliability of some common diagnoses. *Journal of the American Academy of Child & Adolescent Psychiatry*, *39*, 28–38. doi:10.1097/ 00004583-200001000-00014

Sharp, C., & Fonagy, P. (2015). Practitioner review: Borderline personality disorder in adolescence—Recent conceptualization, intervention, and implications for clinical practice. *Journal of Child Psychology and Psychiatry*, *56*(12), 1266–1288. doi:10.1111/jcpp.12449

Sharp, C., Green, K. L., Yaroslavsky, I., Venta, A., Zanarini, M. C., & Pettit, J. (2012). The incremental validity of borderline personality disorder relative to major depressive disorder for suicidal ideation and deliberate self-harm in adolescents. *Journal of Personality Disorders*, *26*, 927–938.

Sharp, C., Pane, H., Ha, C., Venta, A., Patel, A. B., Sturek, J., & Fonagy, P. (2011). Theory of mind and emotion regulation difficulties in adolescents with borderline traits. *Journal of the American Academy of Child and Adolescent Psychiatry*, *50*, 563-573.

Sharp, C., Vanwoerden, S. & Wall, K. (2018). Adolescence as a sensitive period for the development of personality pathology. *Psychiatric Clinics of North America*, *41*(4), 669-683. doi: 10.1016/j.psc.2018.07.004

Sharp, C., Williams, L., Ha, C., Baumgardner, J., Michonski, J., Seals, R., et al. (2009). The development of a mentalization-based outcomes and research protocol for an adolescent in-patient unit. *Bulletin of the Menninger Clinic*, *73*, 311–338.

Shorey, R. C., Cornelius, T. L., & Bell, K. M. (2008). A critical review of theoretical frameworks for dating violence: Comparing the dating and marital fields. *Aggression and Violent Behavior*, *13*, 185–194. doi:10.1016/j.avb.2008.03.003

Silverman, J.G., Raj, A., Mucci, L., & Hathaway, J. (2001). Dating violence against adolescent girls and associated substance use, unhealthy weight control, sexual risk behavior, pregnancy, and suicidality. *Journal of the American Medical Association*, *286*, 572–579.

Smith, SG, Zhang, X, Basile, KC, Merrick, MT, Wang, J, Kresnow, M, Chen, J. (2018). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2015 Data Brief—Updated Release*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Stepp, S. D., Pilkonis, P. A., Hipwell, A. E., Loeber, R., & Stouthamer-Loeber, M. (2010). Stability of borderline personality disorder features in girls. Journal of Personality Disorders, 24, 460–472. doi:10.1521/pedi.2010.24.4.460

Stith, S. M., Smith, D. B., Penn, C. E., Ward, D. B., & Tritt, D. (2004). Intimate partner physical abuse perpetration and victimization risk factors: A meta-analytic review. *Aggression And Violent Behavior*, *10*(1), 65-98. doi:10.1016/j.avb.2003.09.001

Temple, J. R., & Freeman, D. H. (2011). Dating violence and substance use among ethnically diverse adolescents. *Journal of Interpersonal Violence*, *26*(4), 701-718.

Temple, J. R., Shorey, R. C., Tortolero, S. R., Wolfe, D. A., & Stuart, G. L. (2013). Importance of gender and attitudes about violence in the relationship between exposure to interparental violence and the perpetration of teen dating violence. *Child Abuse and Neglect*, *37*, 343–352.

Tomko, R. L., Trull, T. J., Wood, P. K., & Sher, K. J. (2014). Characteristics of borderline personality disorder in a community sample: Comorbidity, treatment utilization, and general functioning. *Journal of Personality Disorders*, *28*, 7 34–750. doi:10.1521/pedi_2012_26_093

Torgersen, S., Kringlen, E., & Cramer, V. (2001). The prevalence of personality disorders in a community sample. *Archives Of General Psychiatry*, *58*(6), 590-596. doi:10.1001/archpsyc.58.6.590

Trull, T. J., Stepp, S. D., & Durrett, C. A. (2003). Research on borderline personality

disorder: An update. *Current Opinion in Psychiatry*, *16*, 77–82.

Underwood, M. K., Beron, K. J., & Rosen, L. H. (2011). Joint trajectories for social and physical aggression as predictors of adolescent maladjustment: Internalizing symptoms, rule-breaking behaviors, and borderline and narcissistic personality features. *Development and Psychopathology*, *23*, 659–678. doi:10.1017/S095457941100023X

Vanwoerden, S., Leavitt, J., Gallagher, M. W., Temple, J. R., & Sharp, C. (2019). Dating violence victimization and borderline personality pathology: Temporal associations from late adolescence to early adulthood. *Personality Disorders: Theory, Research, and Treatment, 10*(2), 132–142. https://doi.org/10.1037/per0000324

Werner, N. E., & Crick, N. R. (1999). Relational aggression and social-psychological adjustment in a college sample. *Journal of Abnormal Psychology*, *108*, 615–623.

White, J. W., & Smith, P. (2009). Covariation in the use of physical and sexual intimate partner aggression among adolescent and college-age men: A longitudinal analysis. *Violence Against Women*, *15*(1), 24-43. doi:10.1177/1077801208328345

Winsper, C., Lereya, S. T., Marwaha, S., Thompson, A., Eyden, J., & Singh, S. P. (2016). The aetiological and psychopathological validity of borderline personality disorder in youth: a systematic review and meta-analysis. *Clinical Psychology Review, 44*, 13–24.

Wolfe, D. A., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C., & Straatman, A. (2001). Development and validation of the Conflict in Adolescent Dating Relationships Inventory. *Psychological Assessment*, *13*(2), 277-293.

Wolfe, D. A., Scott, K., Wekerle, C., & Pittman, A. L. (2001). Child maltreatment: Risk of adjustment problems and dating violence in adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry*, *40*(3), 282-289.

Yen S., Gagnon K., Spirito A. (2013). Borderline personality disorder in suicidal adolescents. *Personal Mental Health 7*(2):89–101

Zanarini, M. C., Vujanovic, A. A., Parachini, E. A., Boulanger, J. L., Frankenburg, F. R., & Hennen, J. (2003). A screening measure for BPD: The McLean screening instrument for borderline personality disorder (MSI-BPD). *Journal of Personality Disorders*, *17*(6), 568–573. doi:10.1521/pedi.17.6.568.25355

Zimmer-Gembeck, M. J. (2002). The development of romantic relationships and adaptions in the system of peer relationships. *Journal of Adolescent Health*, *31*, 216–225.

Zimmerman, M., Chelminski, I., & Young, D. (2008). The frequency of personality disorders in psychiatric patients. *Psychiatric Clinics of North America*, *31*, 405– 420.