Journal of Abnormal Child Psychology (2019) 47:1995–2005
https://doi.org/10.1007/s10802-019-00570-1

Too Much Too Soon?: Borderline Personality Disorder Symptoms and Romantic Relationships in Adolescent Girls

Sophie A. Lazarus[1] · Sophia Choukas-Bradley[2] · Joseph E. Beeney[3] · Amy L. Byrd[3] · Vera Vine[3] · Stephanie D. Stepp[3]

Published online: 26 June 2019

Abstract

Despite the centrality of adult romantic relationships to the conceptualization of borderline personality disorder (BPD), little is known about the earlier development of this interdependency during adolescence. Thus, we examined the co-development of romantic relationships and BPD symptoms from ages 15 to 19 in a large urban sample of girls ($N = 2310$) in the Pittsburgh Girls Study. We had two major aims. First, we sought to examine associations between BPD symptoms and romantic relationship involvement (number of partners, importance of relationship) and relational insecurity (concerns about infidelity and tactics to maintain relationship) during adolescence. Second, we investigated mutual influences and temporal precedence of BPD symptoms and four specific romantic relationship characteristics (perceived support and antagonism, verbal and physical aggression) during adolescence using latent growth curve models (LGCMs). Results indicated that BPD symptoms were associated with increased involvement in romantic relationships and heightened relational insecurity across adolescence. Furthermore, higher BPD symptoms at age 15 predicted increases in antagonism, verbal aggression, and physical aggression across ages 15 to 19. Conversely, perceptions of higher levels of relationship support at age 15 predicted steeper increases in BPD symptoms across ages 15 to 19, suggesting a potential negative influence of early involvement in close romantic relationships. These findings demonstrate the reciprocal nature of romantic relationship functioning and BPD symptoms during adolescence and suggest novel prevention targets for youth at risk for BPD.

Keywords Borderline personality disorder · Romantic relationships · Adolescence · Dating · Inter-partner violence

Borderline personality disorder (BPD) is a serious mental illness linked to increased mortality risk and severe impairments in occupational, academic, and social functioning (American Psychiatric Association 2013; Bagge et al. 2004; Stepp 2012; Zweig-Frank and Paris 2002). BPD is characterized by unique interpersonal sensitivities and heightened vulnerability to interpersonal stressors (Jeung and Herpertz 2014; Lazarus et al. 2014). Core symptoms that comprise the disorder are often explicitly interpersonal in nature (e.g., tumultuous romantic relationships and frantic efforts to avoid abandonment) or are expressed in reaction to interpersonal stressors (e.g., affective instability, paranoid ideation, suicidal behavior; American Psychiatric Association 2013). Given the importance of romantic relationships for the symptoms and course of BPD (Kuhlken et al. 2014; Links and Heslegrave 2000), it is critical to examine BPD symptoms within the context of romantic relationships during the period when both of these phenomena usually develop: adolescence. Better understanding the co-development of these phenomena in the early course of BPD could ultimately inform prevention and intervention efforts.

The current study sought to improve our understanding of 1) associations between early BPD symptoms and BPD-related romantic relationship vulnerabilities (i.e., level of romantic relationship involvement and relational insecurity) and 2) prospective, bi-directional influences between trajectories of BPD symptoms and the romantic relationship characteristics of support, antagonism, verbal aggression, and physical aggression over time. We begin by briefly

Sophie A. Lazarus and Sophia Choukas-Bradley should be considered joint first authors.

✉ Sophie A. Lazarus
sophie.lazarus@osumc.edu

[1] Department of Psychiatry and Behavioral Health, The Ohio State University Wexner Medical Center, 1670 Upham Drive, Columbus, OH 43210, USA

[2] Department of Psychology, University of Pittsburgh, 3413 Sennott Square, 210 S. Bouquet Street, Pittsburgh, PA 15260, USA

[3] Department of Psychiatry, University of Pittsburgh, 210 N. Craig Street, Pittsburgh, PA 15213, USA

reviewing the centrality of romantic relationships to BPD and the importance of the adolescent period for the development of both phenomena.

BPD and Romantic Relationships

A substantial body of research has documented associations between BPD symptoms and romantic relationship dysfunction (Navarro-Gómez et al. 2017). However, the majority of these studies have relied on adult samples. Within adult romantic relationships, BPD symptoms are associated with maladaptive patterns of emotional responding in interactions with romantic partners, including heightened hostility in response to perceptions of rejection (Lazarus et al. 2018) and more unstable perceptions of trustworthiness in threatening interactions (Miano et al. 2017). Furthermore, BPD is associated with lower levels of relationship satisfaction (Lavner et al. 2015) and couples with a partner diagnosed with BPD report higher levels of distress, conflict, and violence, compared with control couples (Bouchard et al. 2009; Hill et al. 2011). This elevated conflict and instability in romantic relationships likely contributes to those with BPD having a greater number of romantic relationships that are also of shorter duration compared to others (Navarro-Gómez et al. 2017). Indeed, there is evidence that adults with BPD are married at lower rates than the general population (e.g., Paris and Zweig-Frank 2001), and decreases in BPD symptomatology over time are related to an increased probability of being married or living with a partner (Zanarini et al. 2010).

In contrast to this research on the relationships of adults with BPD, little is known about BPD symptoms and romantic relationship functioning during adolescence. Three prior studies have directly examined romantic relationship functioning in adolescents with BPD pathology. Overall, these studies suggest that romantic relationship difficulties emerge early among those with higher BPD symptoms. Among high school seniors, Daley and colleagues (Daley et al. 2000) found BPD symptoms predicted elevated relationship stress and lower partner satisfaction, more conflict and aggressive behavior, and a greater number of romantic relationships over 4 years. In another sample of high school students, Reuter and colleagues (Reuter et al. 2015) found that even after controlling for gender, alcohol use, and exposure to domestic violence, BPD symptoms predicted teen dating violence, an association that was stronger among girls than boys. Finally, in a subsample of participants from the Children in the Community Study (Cohen 1996), BPD and narcissistic personality disorder symptoms during adolescence were associated with sustained partner conflict during the transition to adulthood (Chen et al. 2004). While not focused on romantic relationships specifically, in the same sample reported on in this study, Wright and colleagues (Wright et al. 2016) found a strong association between trajectories of BPD symptoms and sexual activity across adolescence, indicating that as BPD symptoms increase, so does sexual activity, an association that remained even when controlling for both internalizing and externalizing pathology.

Together, these findings highlight the strong relevance of romantic relationships—especially relationship dimensions such as conflict, aggressive behavior, and perceived support—to BPD symptoms. Yet, the directionality or temporal ordering of these effects remain unclear. It is possible that BPD symptomatology precedes relationship difficulties by causing interpersonal stress and conflict during early romantic relationships. It is also possible that maladaptive adolescent relationships exacerbate the course of BPD—or that supportive relationships may attenuate symptoms. Thus, there is a need for research that can shed light on the co-development of BPD symptoms and romantic relationship functioning over the course of adolescence, a sensitive developmental period characterized by emotional and social change (Steinberg and Morris 2001). BPD and romantic relationships may have impactful reciprocal influences over the course of adolescence.

Adolescence as a Critical Developmental Window

Although there was traditionally reluctance to diagnose BPD in adolescence (Laurenssen et al. 2013), there is now agreement about the validity of the disorder during this time (Miller et al. 2008). Furthermore, adolescence is increasingly recognized as a key period in the development of BPD (Stepp et al. 2014; Winsper et al. 2016) because BPD symptoms typically emerge and peak during this time (Bornovalova et al. 2009; Miller et al. 2008; Stepp et al. 2014). Notably, BPD symptoms during adolescence are related to negative social and clinical outcomes commensurate with those found in adults with BPD (Winsper et al. 2016). Even at subclinical levels, BPD symptoms during adolescence are associated with impairment in academic, social, and emotional outcomes (Chanen et al. 2007). Focusing on this developmental period is necessary to identify early romantic relationship characteristics that may contribute to a more chronic course of BPD from adolescence to adulthood.

Adolescence is also a critical window for the initiation and development of important interpersonal relationships, specifically the expansion of one's attachment system to include romantic relationships (Collins 2003). Although parents often remain an important source of support throughout the teenage years, adolescents typically develop greater independence from parents in favor of greater dependence on peers and romantic partners (Shomaker and Furman 2009). Nationally representative data indicate that the majority of youth form romantic relationships during their teen years: Approximately a quarter of

12-year-olds, roughly half of 15-year-olds, and more than 70% of 18-year-olds report a romantic relationship in the prior 18 months (Carver et al. 2003). Furthermore, dating and romantic relationships play a pivotal role in adolescents' emotional, interpersonal, and sexual lives. For instance, they contribute to the development of key competencies, such as the ability to express intimacy and navigate conflict (Collins 2003).

In spite of their role in normative development, however, some aspects of adolescent romantic relationships have also been linked to psychological distress (see Zimmer-Gembeck 2002). For example, greater romantic relationship involvement in early adolescence has been linked to depressive symptoms over time (e.g., Davila et al. 2009). Relatedly, many of the same factors that put adolescents at risk for negative outcomes in romantic relationships also underlie BPD symptomatology (i.e., interpersonal sensitivity, attachment difficulties). For example, the association between early dating and depression appears to be stronger among adolescents with a high need for connection with others and elevated fears their partner will be unavailable (Davila et al. 2004; Margolese et al. 2005), a persistent personality style which is common among those with BPD features (Gunderson and Lyons-Ruth 2008). More generally, attachment concerns—also common in BPD (Agrawal et al. 2004; Beeney et al. 2015)—are associated with psychological and physical violence and difficulty managing conflict with romantic partners in adolescence (e.g., Bonache et al. 2017; Creasey and Hesson-McInnis 2001). Thus, those with elevated BPD features may be more likely to experience poor interpersonal outcomes in relationships and may be more vulnerable to their negative impact.

Current Study

The overarching goal of this study was to improve our understanding of the interconnected nature of the development of BPD and romantic relationships in adolescence. Specifically, we had two aims. Given the paucity of literature on BPD and romantic relationship qualities during adolescence, we first aimed to further characterize associations among romantic relationship involvement, relationship insecurity, and BPD symptoms (Aim 1). We expected to find higher BPD symptoms correlated with higher numbers of dating partners and importance placed on the relationship. In addition, we hypothesized links between BPD symptoms and relational insecurity, including greater willingness to do anything to keep a current relationship, and heightened worries that one's partner may cheat and be interested in others. Second, we examined the co-development of BPD symptoms and romantic relationship characteristics (Aim 2). Specifically, we used latent growth curve models (LGCMs) to examine bidirectional longitudinal associations between latent trajectories of BPD symptoms and both negative (i.e., antagonism, verbal aggression, physical aggression) and positive (i.e., support) romantic relationship characteristics from ages 15 to 19. In order to examine unique associations between BPD symptoms and romantic relationship characteristics, we controlled for the effects of demographic factors (race, public assistance), pubertal development, and internalizing and externalizing symptoms (depression and conduct disorder).

Overall, we expected adolescents' trajectories of BPD symptoms and negative romantic relationship characteristics to show a pattern of mutual exacerbation over the 4 years of the study. Based on previous research indicating that youth with BPD symptoms are involved in a greater number of romantic relationships that are characterized by high levels of stress, conflict, and violence (Chen et al. 2004; Daley et al. 2000), we also expected that youth with higher BPD symptoms would form early romantic relationships characterized by high levels of intensity— including not only amplified negative features related to conflict (antagonism, verbal and physical aggression), but also amplified perceptions of support (i.e., intimacy, affection, reliable alliance).

In considering the directions of influence between BPD and relationship difficulties, we expected that age 15 BPD symptoms would predict increases in antagonism and aggression over time, based on evidence that individuals with elevated BPD symptoms have relationships characterized by higher levels of conflict and dating violence (Daley et al. 2000; Lavner et al. 2015). Additionally, we expected the reverse prospective association to hold—i.e., age 15 negative relationship characteristics would predict increases in BPD symptoms over time, given that conflictual romantic relationships may interact with emotional sensitivity to contribute to the development of the disorder (Crowell et al. 2009). We did not make specific hypotheses regarding longitudinal associations between BPD and positive romantic relationship functioning, in the form of support. On the one hand, findings from adult samples suggest romantic relationship support may attenuate core symptoms of BPD (e.g., Kuhlken et al. 2014). On the other hand, there is evidence that early involvement in romantic relationships may have negative consequences for adolescents' psychological outcomes (Zimmer-Gembeck 2002); thus, support within these early romantic relationships may reflect precocious romantic involvement and predict increasing BPD symptom trajectories.

Method

Sample Description

The Pittsburgh Girls Study (PGS) involves an urban community sample of four cohorts of girls ($N = 2450$), ages 5–8 at the first assessment (Wave 1), who have been followed

annually. To identify the study sample, low-income neighborhoods were oversampled, such that neighborhoods in which at least 25% of families were living at or below the poverty level were fully enumerated. Additionally, a random selection of 50% of households in all other neighborhoods was enumerated. The PGS was designed to oversample girls living in poverty, a robust risk factor for adverse health outcomes (Evans and Kim 2007), so that developmental trajectories of conduct disorder and other psychiatric disorders could be examined (see Hipwell et al. 2002, and Keenan et al. 2010, for details on study design and recruitment). Approval for all study procedures was obtained from the University of Pittsburgh Institutional Review Board. Written informed consent from the caregiver and verbal assent from the child were obtained prior to data collection.

The current analyses focused on data collected when girls were ages 15 to 19, as this age range allowed an analysis of complete data for the primary study variables. Participants who provided data on romantic involvement were included in the descriptive analyses if they provided data on their dating relationships (specifically, "do you currently have a romantic partner?") at one or more time-points from ages 15 to 19. Of the 2450 participants included in the PGS, 140 (5.7%) had missing data on this dating variable at every age between 15 and 19, yielding a final sample of 2310 participants for descriptive study analyses. Compared to the participants with complete data on the dating variables, those with incomplete data were more likely to be White ($\chi^2(1) = 18.38$, $p < 0.001$). No differences were found in receipt of public assistance between completers and non-completers. The majority of the sample was Black and/or multiracial (59.8%) and 40.2% of the sample was White. Approximately one-third of families (33.2%) reported receiving public assistance at study initiation (i.e., age 15).

Measures

All study variables were self-reported by girls, with the exception of minority race and family receipt of public assistance, which were assessed by primary caregiver report.

BPD Symptoms Girls self-reported on their BPD symptoms annually using the screening questionnaire of the International Personality Disorder Examination (IPDE-BOR; Loranger et al. 1994). The measure is based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association 1994) criteria for BPD and consists of nine items (e.g., "I get into very intense relationships that don't last") scored either true or false. Adequate concurrent validity, and sensitivity and specificity of BPD symptoms scores to clinician-diagnosed BPD have been demonstrated for the IPDE-BOR in a sample of youth (Smith et al. 2005). Convergent validity of the IPDE-BOR scores with BPD symptom severity from a semi-structured clinical interview (SIDP-IV) was examined in a subset of the PGS participants. In a sub-sample of the PGS ($n = 65$), self-report and interviewer-assessed BPD symptoms were significantly correlated ($r = 0.70$, $p < 0.001$), supporting the use of the IPDE-BOR as a measure of BPD symptoms. A score of 4.0 or greater may be considered in the clinically significant range and associated with distress and/or impairment (Smith et al. 2005). To demonstrate level of severity in this sample, the upper quartile had an average score of 4.0 at ages 15 and 16 and 3.0 at ages 17–19. BPD symptoms demonstrated adequate internal consistency, with alphas at each age ranging from 0.68–0.70.

Romantic Relationship Involvement Participants reported the number of romantic partners they had in the past year and their current (at the time of the assessment) relationship status. For participants in a current romantic relationship, they indicated the importance of their relationship ("How important is this relationship to you?") on a 4-point scale from 1 (*not very important*) to 4 (*very important*).

Relational Insecurity To measure relationship concerns, we administered three items from the *Relational Insecurity Questionnaire* (RIQ; Purdie and Downey 2000). Respondents indicate how true statements are for them on a scale from 1 (*never*) to 4 (*almost always*). Two items include concerns about partner fidelity ("I worry my partner will cheat on me or betray me"; "I worry my partner is interested in someone else") and one item concerns tactics used to prevent partner rejection ("I would do anything to keep my partner with me, even things I know are wrong"). We examined associations between individual items and BPD symptoms.

Perceptions of Romantic Partner Support and Antagonism We used the *Network of Relationships Inventory* (NRI; Furman and Buhrmester 1992) to measure perceptions of support and antagonism, the two broadband dimensions that emerged from previous factor analytic work (Adler and Furman 1988). Items were scored on a five-point scale from 1 (*little or none)* to 5 *(the most)*. Support consisted of 9 items from three subscales of the NRI: intimacy (e.g., "How often do you tell this person things that you don't want others to know?"), affection (e.g., "How much does this person like or love you?"), and reliable alliance (e.g., "How sure are you that this relationship will last no matter what?"). Antagonism was assessed using 3 items from the negative interaction subscale (e.g., "How much do you hassle or nag each other?"). Furman and Buhrmester (1992) reported satisfactory internal consistency of subscales, with mean alphas = 0.80. In this sample, support and antagonism scales demonstrated good internal consistency, with alphas at each age ranging from 0.92–0.93 and 0.89–0.90, respectively.

Verbal and Physical Aggression during Conflict with Romantic Partner We used the *Conflict Tactics Scale, 2nd edition* (CTS-2; Straus et al. 1996) to measure verbal and physical aggression in participants' current romantic relationship. The CTS-2 has shown adequate to good reliability and there is evidence of construct validity (Straus et al. 1996). The tactics were assessed in pairs of items: The first asks the respondent to rate the frequency of her own behavior within the past year (perpetration), while the second item asks the respondent to report the frequency of her partner's behavior (victimization). Items are rated on a seven-point scale ranging from 0 (*never*) to 6 (*more than 20 times*). We utilized the indices of overall verbal aggression (12 items; e.g., "I insulted or swore at my partner") and overall physical aggression (6 items; e.g., "My partner threw something at me"), which combine perpetration and victimization items. As has been discussed in prior work, the combination of these scores more accurately reflects common patterns of dating violence in adolescence, in which aggression is often mutual and bidirectional; examining perpetration scores alone may fail to capture this bidirectionality and may also conflate perpetration and acts of self-defense (e.g., see Makin-Byrd, Bierman, and Conduct Problems Prevention Research Group 2013). Verbal and physical aggression demonstrated good internal consistency, with alphas at each age ranging from 0.90–0.92 and 0.82–0.86, respectively.

Covariates *Minority race* was assessed by parent report at Wave 1 (0 = Caucasian, 1 = minority race). *Family receipt of public assistance* was assessed by parent report at age 15 (0 = no, 1 = yes). *Pubertal development* was assessed based on participants' self-reported age of Tanner Stage 2 (breast development stage; Morris and Udry 1980). Age 15 DSM-IV symptoms of depression and conduct disorder were measured using participants' self-reports from the Adolescent Symptom Inventory – Fourth Edition (ASI; Gadow and Sprafkin 1997). The conduct disorder and depression subscales of the ASI have demonstrated reliability and validity (Gadow and Sprafkin 1997).

Data Analytic Plan

Bivariate associations between all study variables were conducted. Following these preliminary analyses, we used a latent growth curve model to examine trajectories of BPD symptoms and relationship characteristic variables (support, antagonism, verbal aggression, and physical aggression) simultaneously. To examine the co-development of BPD symptoms and romantic relationship functioning during adolescence, we examined associations between the BPD symptom intercept and slope latent variables and all relationship characteristic intercept (mean level, centered at age 15) and slope (change from age 15 to 19) latent variables (each relationship characteristic construct had an intercept and a slope variable for a total of 8 latent relationship characteristic variables). Our primary interest was with the following results: (1) BPD symptoms intercept and each relationship factor intercept and slope; (2) BPD symptoms slope and each relationship factor intercept and slope.

We used Mplus 7.4 (Muthén and Muthén 1998-2017) to estimate the model using full information maximum likelihood. Model fit was evaluated using the $\chi 2$ goodness of fit test, comparative fit index (CFI), Tucker-Lewis index (TLI), and root-mean-square error of approximation (RMSEA). All models controlled for the effect of minority race, family receipt of public assistance, pubertal development, and symptoms of conduct disorder and depression.

Results

Descriptive Statistics

Table 1 provides means and standard deviations for primary study variables at each age. Generally, BPD symptoms and physical aggression in romantic relationships decreased from ages 15 to 19, whereas support, antagonism, and verbal aggression in romantic relationships increased from ages 15 to 19. Table 2 provides descriptive statistics and correlations for the study variables, averaged across the study. As predicted in Aim 1, BPD symptoms were positively associated with the number of romantic relationship partners per year ($r = 0.26$, $p < 0.001$) and with ratings of the importance of the relationship ($r = 0.06$, $p < 0.05$). BPD symptoms were also positively associated with indices of relational insecurity, including ratings of the greater willingness to do anything to keep the current relationship ($r = 0.26$, $p < 0.001$), increased worries that one's partner might cheat ($r = 0.36$, $p < 0.001$) and be interested in others ($r = 0.37$, $p < 0.001$).

Latent Growth Curve Models for BPD Symptoms and Romantic Relationship Variables

Table 3 shows the results of our LGCM, controlling for all covariates.[1] Model fit statistics indicated a good fit to the data (see Table 3). Below, we discuss the pattern of results between BPD and each of the four romantic relationship variables.

Support Higher support at age 15 predicted increases in BPD symptoms from ages 15 to 19, while higher BPD symptoms at age 15 were not associated with increases in support over time. Increases in BPD symptoms over time were associated with decreases in support over time.

[1] Minority race, age 15 public assistance, age 15 depressive symptoms, and age 15 conduct symptoms all had a significant positive effect on the intercept of BPD. Pubertal development did not have an effect on the BPD intercept.

Table 1 Means and standard deviations for main study variables at each age

	Age 15 M(SD)	Age 16 M(SD)	Age 17 M(SD)	Age 18 M(SD)	Age 19 M(SD)
BPD symptoms	2.49 (1.90)	2.36 (1.89)	2.17 (1.86)	1.97 (1.81)	1.97 (1.81)
Support	3.54 (0.95)	3.74 (0.93)	3.85 (0.93)	4.12 (0.85)	4.17 (0.87)
Antagonism	1.77 (0.92)	1.90 (0.98)	1.95 (1.03)	2.00 (1.05)	2.12 (1.14)
Verbal aggression	10.22 (10.96)	11.22 (11.71)	12.01 (12.44)	11.94 (12.21)	12.86 (13.49)
Physical aggression	1.92 (3.96)	1.80 (3.93)	1.81 (4.13)	1.71 (3.91)	1.69 (4.03)

BPD symptoms assessed for all girls at each year. Relationship characteristics only assessed if a current romantic relationship was endorsed

Antagonism Higher BPD symptoms at age 15 were associated with higher levels of antagonism at age 15 and increases in antagonism from ages 15 to 19. The reverse pattern was also found; antagonism at age 15 was associated with increases in BPD symptoms over time.

Verbal Aggression Higher BPD symptoms at age 15 were associated with higher levels of verbal aggression at age 15 and increases in verbal aggression over time. Additionally, increases in BPD symptoms over time were associated with increases in verbal aggression.

Physical Aggression Higher BPD symptoms at age 15 were associated with higher levels of physical aggression at age 15 and with increases in physical aggression over time.

Discussion

The present study contributes to our understanding of the co-development of BPD symptoms and characteristics of romantic relationships during adolescence. Although it is well known that romantic relationship dysfunction is a chronic and distressing problem in BPD during adulthood (Bouchard et al. 2009; Miano et al. 2017), the developmental course of these difficulties during adolescence is not well understood. Given the centrality of early caregiver relationships and emotional invalidation to theories of the development of BPD (Gunderson and Lyons-Ruth 2008; Linehan 1993), it is important to also consider the potential role of adolescent romantic relationships, which share many features of early attachment relationships and occur in the context of a developmentally sensitive period. The current study provides a much-needed, comprehensive examination of BPD symptoms and romantic relationship functioning by examining longitudinal associations between trajectories of BPD symptoms and relationship characteristics from ages 15 to 19, in a large community sample of adolescent girls.

The results from our analyses suggest many of the romantic relationship difficulties seen in adults with BPD appear to be present in adolescents with BPD symptoms. Consistent with our hypotheses, BPD symptoms were associated with a greater number of dating partners per year and an increased importance placed on romantic relationships. In addition, ratings indicated that elevated BPD symptoms were associated with several indices of relational insecurity, including worries about one's partner cheating or being interested in others, and willingness to do anything to keep the relationship. These associations may reflect the core features of BPD, such as unstable relationships and frantic efforts to avoid

Table 2 Correlations among main study variables

	M(SD)	1	2	3	4	5	6	7	8	9
1. BPD symptoms	2.21(1.50)	–								
2. Support	3.84(0.79)	0.02	–							
3. Antagonism	1.93(0.86)	0.31**	0.07**	–						
4. Verbal aggression	11.13(10.35)	0.42**	0.11**	0.54**	–					
5. Physical aggression	1.62(3.22)	0.33**	0.03	0.37**	0.70**	–				
6. Number of relationships per year	1.45(0.96)	0.26**	−0.10**	0.06**	0.12**	0.10**	–			
7. Importance of current relationship	3.30(0.65)	0.06*	0.54**	−0.01	0.07**	−0.01	−0.09**	–		
8. Worried partner might cheat	1.49(0.60)	0.36**	−0.13**	0.29**	0.32**	0.25**	0.11**	−0.02	–	
9. Worried partner interested in others	1.41(0.54)	0.37**	−0.14**	0.27**	0.29**	0.21**	0.12**	0.01	0.80**	–
10. Do anything to keep partner	1.32(0.55)	0.26**	0.13**	0.12**	0.13**	0.14**	0.07**	0.19**	0.16**	0.18**

*$p < .05$; **$p < .01$; Correlations among mean of each variable from ages 15–19

Table 3 Standardized coefficients from primary model

	BPD					
	Intercept (initial levels)			Slope (change over time)		
	β	SE	*p*	β	SE	*p*
BPD symptoms						
Intercept (initial levels)						
Slope (change over time)	**−0.50**	**0.04**	**< 0.001**			
Support						
Intercept (initial levels)	0.06	0.05	0.16	**0.14**	**0.07**	**0.03**
Slope (change over time)	−0.03	0.05	0.58	**−0.26**	**0.10**	**0.01**
Antagonism						
Intercept (initial levels)	**0.19**	**0.47**	**< 0.001**	**0.18**	**0.08**	**0.02**
Slope (change over time)	**0.31**	**0.07**	**< 0.001**	0.10	0.10	0.32
Verbal aggression						
Intercept (initial levels)	**0.29**	**0.04**	**< 0.001**	−0.15	0.12	0.21
Slope (change over time)	**0.33**	**0.06**	**< 0.001**	**0.22**	**0.09**	**0.02**
Physical aggression						
Intercept (initial levels)	**0.23**	**0.05**	**< 0.001**	0.18	0.10	0.08
Slope (change over time)	**0.26**	**0.06**	**< 0.001**	0.01	0.09	0.98

Standardized (β) coefficients for all intercepts and slopes were estimated within the same model. Overall model fit was good ($\chi 2$ (336) = 781.034, $p < 0.05$; RMSEA = 0.023; CFI = 0.961). Significant associations ($p < 0.05$) are bolded and represent effects after accounting for race, receipt of public assistance, pubertal status, age 15 conduct disorder symptoms, and age 15 depression symptoms. All associations between intercepts (e.g., BPD intercept and Support intercept) and all associations between slopes (e.g., BPD slope and Support slope) represent correlations. All associations between intercepts and slopes (e.g., BPD intercept with Support slope) represent regression paths

abandonment. Our findings are consistent with the three extant studies on BPD and romantic relationships in adolescence, which found that BPD is associated with having more romantic partners, higher levels of aggression and dating violence, and more relationship conflict during adolescence and across the transition to adulthood (Chen et al. 2004; Daley et al. 2000; Reuter et al. 2015).

These descriptive findings from the current study provide a clear snapshot of the presence of an early association between relational insecurity and BPD symptoms. However, only through the longitudinal modeling of trajectories can we begin to understand the developmental course and temporal ordering of BPD symptoms and romantic relationship characteristics. Several key findings emerged from our LGCMs. First, when examining concurrent associations between latent indicators of BPD and romantic relationship functioning at age 15, a pattern emerged in which higher BPD symptoms were associated with indices of poor romantic relationship quality (antagonism, verbal and physical aggression) but not with positive relationship quality (support). Additionally, early elevations in BPD symptoms predicted longitudinal increases in antagonism and aggression. Furthermore, longitudinal increases in BPD symptoms were associated with the co-development of increases in verbal aggression but decreases in support. These results suggest that symptoms of BPD may increase the likelihood of having relationships characterized by high levels of intensity, aggression and conflict throughout adolescence.

There are several characteristics of BPD that may explain the association between BPD and increasing difficulty within romantic relationships during adolescence. First, BPD symptoms may directly contribute to relationship conflict. For example, high levels of impulsivity, difficulty controlling anger, affective instability, and frantic efforts to avoid abandonment may set the stage for conflictual and high-emotion interactions. Additionally, the rejection sensitivity characteristic of BPD (American Psychiatric Association 2013) may increase the risk for relationship conflict and ultimate dissolution. Several studies have linked rejection sensitivity to greater relationship dysfunction in adolescence and young adulthood (e.g., Hafen et al. 2014; Young and Furman 2013). BPD symptoms also may be associated with interactional or attachment styles (see Stepp 2012) that predict romantic relationship dysfunction. An early theory on adolescent romantic relationships, the *behavioral systems theory*, proposed that during adolescence, romantic partners can become important attachment figures who address developmentally salient caregiving, affiliative, and sexual needs (Furman and Wehner 1997). Among adolescents with elevated BPD symptomatology, high

levels of attachment anxiety may increase the likelihood of romantic relationship dysfunction, and potentially the likelihood of becoming involved in a high-intensity romantic relationship. In prior work, attachment concerns have been linked to romantic relationship difficulties in adolescence, including psychological and physical violence (Bonache et al. 2017; Creasey and Hesson-McInnis 2001). Finally, it is important to consider the possibility that the partners of those with prominent features of BPD also have elevated levels of psychopathology, which may contribute to problematic interactions within the relationship, as has been observed in adult samples (Bouchard and Sabourin 2009; Beeney et al. 2018). Each of these speculations will need to be rigorously examined in adolescent samples.

While early BPD symptoms may confer risk for increasing relationship difficulties, early relationship intensity may also confer developmental risks for increases in BPD symptomatology. In the current study, higher levels of perceived support at age 15—suggesting greater reliance on the romantic relationship—were associated with increases in BPD symptoms over time. Furthermore, the trajectories of BPD and relationship support were related, such that as BPD symptoms increase over time, perceptions of relationship support decreased. These results have implications for understanding the reciprocal associations between BPD symptoms and romantic relationship functioning over time, and may contribute to our understanding of adolescent romantic relationship development more broadly. For example, they suggest that although high levels of support within romantic relationships are associated with positive outcomes for adults (Kuhlken et al. 2014), this may not be the case during adolescence. Criterion A of DSM-5's Alternative Model for Personality Disorders defines personality pathology as adaptive failures in the domains of self and interpersonal functioning (American Psychiatric Association 2013). These two related impairments may manifest within early romantic relationships as increased dependence on others for identity, self-esteem, and emotion regulation, which may affect appropriate boundaries (Pincus 2018). High levels of early intimacy (e.g., *How often do you tell this person things you don't want others to know?)*, affection (e.g., *How much does this person like or love you?*), and commitment (e.g., *How sure are you that this relationship will last no matter what?*) may not be normative. We suggest that high levels of intimacy within early romantic relationships may represent "too much too soon" for adolescents at risk for BPD.

Prior research indicates that early dating may pose psychological risks for adolescents in general, beyond those with elevated BPD symptomatology (Davila et al. 2009; Zimmer-Gembeck 2002). Additionally, the previously documented associations between early dating and depressive symptoms are stronger among adolescents with elevated relationship anxieties and heightened need for connection (Davila et al. 2004; Margolese et al. 2005), consistent with BPD (Agrawal et al. 2004; Westen et al. 2006). Thus, while early dating intensity may be developmentally risky for adolescents more broadly, the risks may be heightened for adolescents with elevated BPD symptoms – who may experience inconsistency in representations of the self and unstable relationships, characterized by alternating between idealizing and devaluing one's partner (American Psychiatric Association 2013). For adolescents with elevated BPD symptoms, early romantic relationship intimacy may heighten the vulnerability for interpersonal intensity, which may set the stage for worsening symptoms. From the perspective of the biosocial model (Crowell et al. 2009), one would expect negative relationship characteristics (e.g., antagonism) rather than positive relationship characteristics (i.e., support) to predict a worsening BPD symptom course. Specifically, Crowell and colleagues (Crowell et al. 2009) posit that broad emotion dysregulation is fostered and maintained within an invalidating developmental context, where biological vulnerability and environmental risk transact to potentiate emotional and behavioral dysregulation. In the current study, we found that both early support and early antagonism predicted increasing trajectories of BPD over time, suggesting that perhaps it is the overall intensity of early relationships, including both positive and negative features, that poses risk. This pattern is consistent with the pattern revealed in the descriptive analyses, wherein higher BPD symptoms were associated with cognitions that may reflect greater relationship intensity (e.g., willingness to do anything to keep the relationship). However, in light of the finding that early verbal and physical aggression in relationships did not predict increasing trajectories of BPD, future work will need to further investigate how early relationship intensity impacts BPD symptom development. It is possible that overdependence on a romantic partner at this stage may not be ideal for emotional development. For adolescents who are already vulnerable, intense romantic relationships may be a risk factor for even more severe psychopathology.

Limitations and Future Directions

This study has several notable strengths, including a large community sample of Caucasian and African American adolescent girls and the use of latent growth curve modeling to examine associations between BPD symptoms and relationship functioning over multiple years. The findings provide a much-needed portrait of how adolescent girls' BPD symptoms and romantic relationship characteristics reciprocally relate over time. Nevertheless, the findings from this study should be considered in light of its limitations. First, the study examined associations between BPD symptoms and romantic relationship characteristics in a large community sample, but it did not include a clinical sample of individuals with full diagnoses of BPD. Future work should examine the romantic

relationship functioning of girls who meet full criteria for the disorder. Second, because of the nature of the measures, we were unable to assess whether girls were reporting on the same or different romantic partners each year. Thus, our findings reflect the longitudinal associations among BPD and functioning within romantic relationships in general, rather than reflecting the trajectories of specific romantic relationships. One consequence of this design is that in years when girls were not in romantic relationships, they did not contribute data to our models. An additional limitation is the exclusive use of self-report measures. Furthermore, because our sample was wholly comprised of girls, it is unknown whether these same associations would generalize to male adolescents. Finally, it will be important for future studies to consider the possible mechanisms of the observed associations between BPD symptoms and romantic relationship difficulties—including exploring the partner characteristics, parent-adolescent relationship factors, and specific attachment and interactional processes that may underlie the associations.

Clinical Implications and Conclusion

Adolescence is a critical window for both the development of BPD (Stepp et al. 2014) and the initiation of romantic relationships (Collins 2003). The current findings reveal a complex set of associations, which suggest that BPD symptoms increase the risk for adolescent romantic relationship conflict over time, and also that early relationship intensity may increase vulnerability for worsening BPD symptoms. The early emergence of an association between BPD symptoms and romantic relationship functioning has implications for research into early interventions. The findings highlight the importance of attending to the relationship difficulties associated with BPD long before adulthood. More specifically, the predictive association between early BPD symptoms and increasing antagonism, verbal aggression, and physical aggression within romantic relationships – combined with the findings of Chen and colleagues (Chen et al. 2004) supporting an association between BPD symptoms and dating violence – underscores the need to assess for high levels of conflict among adolescents with elevated BPD symptomatology. Additionally, the findings regarding early relationship support suggest that adolescents who are at risk for BPD may especially benefit from psychoeducation about romantic relationships, including exploration of values around healthy communication and boundaries. For girls with elevated BPD symptoms, romantic relationships may not only be developmentally meaningful during adolescence, but clinically significant as well.

Funding This research was supported by grants from the National Institute of Mental Health (MH056630, MH08671 and MH018269) and the National Institute on Drug Abuse (DA012237).

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval Approval for all study procedures was obtained from the University of Pittsburgh Institutional Review Board.

Informed Consent Written informed consent from the caregiver and verbal assent from the child were obtained prior to data collection.

References

Adler, T. F., & Furman, W. (1988). A model for children's relationships and relationship dysfunctions. In S. W. Duck (Ed.), *Handbook of personal relationships* (pp. 211–232). New York: Wiley.

Agrawal, H. R., Gunderson, J., Holmes, B. M., & Lyons-Ruth, K. (2004). Attachment studies with borderline patients: a review. *Harvard Review of Psychiatry, 12*(2), 94–104.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Arlington: American Psychiatric Publishing.

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

Bagge, C., Nickell, A., Stepp, S., Durrett, C., Jackson, K., & Trull, T. J. (2004). Borderline personality disorder features predict negative outcomes 2 years later. *Journal of Abnormal Psychology, 113*(2), 279–288. https://doi.org/10.1037/0021-843X.113.2.279.

Beeney, J. E., Stepp, S. D., Hallquist, M. N., Scott, L. N., Wright, A. G., Ellison, W. D., et al. (2015). Attachment and social cognition in borderline personality disorder: specificity in relation to antisocial and avoidant personality disorders. *Personality Disorders, Theory, Research, and Treatment, 6*(3), 207–215. https://doi.org/10.1037/per0000110.

Beeney, J. E., Stepp, S. D., Hallquist, M. N., Ringwald, W. R., Wright, A. G. C., Lazarus, S. A., et al. (2018). *Opposites attract but don't necessarily get along: Personality functioning, attachment styles, observed behavior, and romantic functioning.* Manuscript submitted for publication.

Bonache, H., Gonzalez-Mendez, R., & Krahé, B. (2017). Romantic attachment, conflict resolution styles, and teen dating violence victimization. *Journal of Youth and Adolescence, 46*(9), 1905–1917. https://doi.org/10.1007/s10964-017-0635-2.

Bornovalova, M. A., Hicks, B. M., Iacono, W. G., & McGue, M. (2009). Stability, change, and heritability of borderline personality disorder traits from adolescence to adulthood: a longitudinal twin study. *Development and Psychopathology, 21*(4), 1335–1353. https://doi.org/10.1017/S0954579409990186.

Bouchard, S., & Sabourin, S. (2009). Borderline personality disorder and couple dysfunctions. *Current Psychiatry Reports, 11*(1), 55–62. https://doi.org/10.1007/s11920-009-0009-x.

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.

Carver, K., Joyner, K., & Udry, J. R. (2003). National estimates of adolescent romantic relationships. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 23–56). Mahwah: Lawrence Erlbaum Associates Publishers.

Chanen, A. M., Jovev, M., & Jackson, H. J. (2007). Adaptive functioning and psychiatric symptoms in adolescents with borderline personality disorder. *The Journal of Clinical Psychiatry, 68*(02), 297–306. https://doi.org/10.4088/JCP.v68n0217.

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. (1996). Childhood risks for young adult symptoms of personality disorder: method and substance. *Multivariate Behavioral Research, 31*(1), 121–148. https://doi.org/10.1207/s15327906mbr3101_7.

Collins, W. A. (2003). More than myth: The developmental significance of romantic relationships during adolescence. *Journal of Research on Adolescence, 13*(1), 1–24.

Creasey, G., & Hesson-McInnis, M. (2001). Affective responses, cognitive appraisals, and conflict tactics in late adolescent romantic relationships: associations with attachment orientations. *Journal of Counseling Psychology, 48*(1), 85–96. https://doi.org/10.1037//0022-O167.48.1.85.

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*(3), 495–510. https://doi.org/10.1037/a0015616.

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.

Davila, J., Steinberg, S. J., Kachadourian, L., Cobb, R., & Fincham, F. (2004). Romantic involvement and depressive symptoms in early and late adolescence: the role of a preoccupied relational style. *Personal Relationships, 11*, 161–178.

Davila, J., Stroud, C. B., Starr, L. R., Miller, M. R., Yoneda, A., & Hershenberg, R. (2009). Romantic and sexual activities, parent-adolescent stress, and depressive symptoms among early adolescent girls. *Journal of Adolescence, 32*(4), 909–924. https://doi.org/10.1016/j.adolescence.2008.10.004.

Evans, G. W., & Kim, P. (2007). Childhood poverty and health: cumulative risk exposure and stress dysregulation. *Psychological Science, 18*(11), 953–957. https://doi.org/10.1111/j.1467-9280.3007.02008.x.

Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development, 63*, 103–115.

Furman, W., & Wehner, E. A. (1997). Adolescent romantic relationships: a developmental perspective. *New Directions for Child Development, 1997*(78), 21–36.

Gadow, K. D., & Sprafkin, J. (1997). *Child/adolescent symptom inventories manual*. Stony Brook: Checkmate Plus.

Gunderson, J. G., & Lyons-Ruth, K. (2008). BPD's interpersonal hypersensitivity phenotype: a gene-environment-developmental model. *Journal of Personality Disorders, 22*(1), 22–41. https://doi.org/10.1521/pedi.2008.22.1.22.

Hafen, C. A., Spilker, A., Chango, J., Marston, E. S., & Allen, J. P. (2014). To accept or reject? The impact of adolescent rejection sensitivity on early adult romantic relationships. *Journal of Research on Adolescence, 24*(1), 55–64. https://doi.org/10.1111/jora.12081.

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.

Hipwell, A. E., Loeber, R., Stouthamer-Loeber, M., Keenan, K., White, H. R., & Kroneman, L. (2002). Characteristics of girls with early onset disruptive and antisocial behaviour. *Criminal Behaviour and Mental Health, 12*, 99–118.

Jeung, H., & Herpertz, S. C. (2014). Impairments of interpersonal functioning: empathy and intimacy in borderline personality disorder. *Psychopathology, 47*(4), 220–234. https://doi.org/10.1159/000357191.

Keenan, K., Hipwell, A., Chung, T., Stepp, S., Stouthamer-Loeber, M., Loeber, R., & McTigue, K. (2010). The Pittsburgh girls study: overview and initial findings. *Journal of Clinical Child and Adolescent Psychology, 39*(4), 506–521. https://doi.org/10.1080/15374416.2010.486320.

Kuhlken, K., Robertson, C., Benson, J., & Nelson-Gray, R. (2014). The interaction of borderline personality disorder symptoms and relationship satisfaction in predicting affect. *Personality Disorders, Theory, Research, and Treatment, 5*(1), 20–25. https://doi.org/10.1037/per0000013.

Laurenssen, E. M. P., Hutsebaut, J., Feenstra, D. J., Busschbach, J. J. V., & Luyten, P. (2013). Diagnosis of personality disorders in adolescents: a study among psychologists. *Child and Adolescent Psychiatry and Mental Health, 7*(3), 1–4.

Lavner, J. A., Lamkin, J., & Miller, J. D. (2015). Borderline personality disorder symptoms and newlyweds' observed communication, partner characteristics, and longitudinal marital outcomes. *Journal of Abnormal Psychology, 124*(4), 975–981. https://doi.org/10.1037/abn0000095.

Lazarus, S. A., Cheavens, J. S., Festa, F., & Rosenthal, M. Z. (2014). Interpersonal functioning in borderline personality disorder: a systematic review of behavioral and laboratory-based assessments. *Clinical Psychology Review, 34*(3), 193–205. https://doi.org/10.1016/j.cpr.2014.01.007.

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.

Linehan, M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.

Links, P. S., & Heslegrave, R. J. (2000). Prospective studies of outcome: Understanding mechanisms of change in patients with borderline personality disorder. *The Psychiatric Clinics of North America, 23*, 137–150. https://doi.org/10.1016/S0193-953X(05)70148-9.

Loranger, A. W., Sartorius, N., Andreoli, A., Berger, P., Buchheim, P., Channabasavanna, S. M., et al. (1994). The international personality disorder examination: The world health organization/alcohol, drug abuse, and mental health administration international pilot study of personality disorders. *Archives of General Psychiatry, 51*(3), 215–224. https://doi.org/10.1001/archpsyc.1994.03950030051005.

Makin-Byrd, K., Bierman, K. L., & Conduct Problems Prevention Research Group. (2013). Individual and family predictors of the perpetration of dating violence and victimization in late adolescence. *Journal of Youth and Adolescence, 42*(4), 536–550. https://doi.org/10.1007/s10964-012-9810-7.

Margolese, S. K., Markiewicz, D., & Doyle, A. B. (2005). Attachment to parents, best friend, and romantic partner: predicting different pathways to depression in adolescence. *Journal of Youth and Adolescence, 34*(6), 637–650. https://doi.org/10.1007/s10964-005-8952-2.

Miano, A., Grosselli, L., Roepke, S., & Dziobek, I. (2017). Emotional dysregulation in borderline personality disorder and its influence on communication behavior and feelings in romantic relationships. *Behaviour Research and Therapy, 95*, 148–157. https://doi.org/10.1016/j.brat.2017.06.002.

Miller, A. L., Muehlenkamp, J. J., & Jacobson, C. M. (2008). Fact or fiction: diagnosing borderline personality disorder in adolescents. *Clinical Psychology Review, 28*(6), 969–981. https://doi.org/10.1016/j.cpr.2008.02.004.

Morris, N. M., & Udry, J. R. (1980). Validation of a self-administered instrument to assess stage of adolescent development. *Journal of Youth and Adolescence, 9*(3), 271–280.

Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus user's guide*. Los Angeles: Muthén & Muthén.

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.

Paris, J., & Zweig-Frank, H. (2001). A 27-year follow-up of patients with borderline personality disorder. *Comprehensive Psychiatry, 42*(6), 482–487. https://doi.org/10.1053/comp.2001.26271.

Pincus, A. L. (2018). An interpersonal perspective on criterion a of the DSM-5 alternative model for personality disorders. *Current Opinion in Psychology, 21*, 11–17. https://doi.org/10.1016/j.copsyc.2017.08.035.

Purdie, V., & Downey, G. (2000). Rejection sensitivity and adolescent girls' vulnerability to relationship-centered difficulties. *Child Maltreatment, 5*(4), 338–349. https://doi.org/10.1177/1077559500005004005.

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.

Shomaker, L. B., & Furman, W. (2009). Parent-adolescent relationship qualities, internal working models, and styles as predictors of adolescents' observed interactions with friends. *Journal of Social and Personal Relationships, 26*(5), 579–603. https://doi.org/10.1177/0265407509354441.

Smith, D. J., Muir, W. J., & Blackwood, D. H. R. (2005). Borderline personality disorder characteristics in young adults with recurrent mood disorders: a comparison of bipolar and unipolar depression. *Journal of Affective Disorders, 87*(1), 17–23. https://doi.org/10.1016/j.jad.2005.02.019.

Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Annual Review of Psychology, 52*(1), 83–110. https://doi.org/10.1146/annurev.psych.52.1.83.

Stepp, S. D. (2012). Development of borderline personality disorder in adolescence and young adulthood: introduction to the special section. *Journal of Abnormal Child Psychology, 40*(1), 1–5. https://doi.org/10.1007/s10802-011-9594-3.

Stepp, S. D., Keenan, K., Hipwell, A. E., & Krueger, R. F. (2014). The impact of childhood temperament on the development of borderline personality disorder symptoms over the course of adolescence. *Borderline Personality Disorder and Emotion Dysregulation, 1*(1), 18–18. https://doi.org/10.1186/2051-6673-1-18.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS-2): development and preliminary psychometric data. *Journal of Family Issues, 17*(3), 283–316.

Westen, D., Nakash, O., Thomas, C., & Bradley, B. (2006). Clinical assessment of attachment patterns and personality disorder in adolescents and adults. *Journal of Consulting and Clinical Psychology, 74*(6), 1065–1085. https://doi.org/10.1037/0022-006X.74.6.1065.

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. https://doi.org/10.1016/j.cpr.2015.12.001.

Wright, A. G., Zalewski, M., Hallquist, M. N., Hipwell, A. E., & Stepp, S. D. (2016). Developmental trajectories of borderline personality disorder symptoms and psychosocial functioning in adolescence. *Journal of Personality Disorders, 30*(3), 351–372. https://doi.org/10.1521/pedi_2015_29_200.

Young, B. J., & Furman, W. (2013). Predicting commitment in young adults' physically aggressive and sexually coercive dating relationships. *Journal of Interpersonal Violence, 28*(17), 3245–3264. https://doi.org/10.1177/0886260513496897.

Zanarini, M. C., Frankenburg, F. R., Reich, D. B., & Fitzmaurice, G. (2010). The 10-year course of psychosocial functioning among patients with borderline personality disorder and Axis II comparison subjects. *Acta Psychiatrica Scandinavica, 122*(2), 103–109. https://doi.org/10.1111/j.1600-0447.2010.01543.x.

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.

Zweig-Frank, H., & Paris, J. (2002). Predictors of outcome in a 27-year follow-up of patients with borderline personality disorder. *Comprehensive Psychiatry, 43*(2), 103–107. https://doi.org/10.1053/comp.2002.30804.