

Article

Sexual Abuse and Diagnosis of Borderline Pathology in Adolescence: A Systematic Review

Xavier Costa^{1,2} , Marta Cabré²  & Noemí Pereda¹ 

¹ Universitat de Barcelona, Spain

² Fundació Orienta, Barcelona, Spain

ARTICLE INFO

Received: December 2, 2024
Accepted: August 20, 2025

Keywords

Borderline personality disorder
Child sexual abuse
Adolescence
Review

ABSTRACT

Sexual violence affects approximately one in five adolescents in Spain, with higher prevalence in girls than boys, reflecting trends similar to those in other European countries. This experience can severely impact mental health and development, with borderline personality disorder (BPD) emerging as a prominent consequence. In this study, we conducted a systematic review following PRISMA methodology, aiming to analyze findings from studies published in the last decade (2013-2023) regarding the relationship between childhood sexual abuse (CSA) and BPD diagnosis. The goal of this review is to provide Spanish-speaking professionals with an updated understanding of this relationship to enhance clinical knowledge and practice. Out of 439 articles, 27 met the inclusion criteria. Key findings indicate that CSA is significantly associated with BPD development in adolescence, although polyvictimization appears to be the most reliable predictor. Regarding prevalence, CSA is notably more frequent in clinical and forensic samples, particularly among females. This review concludes that childhood sexual violence is a relevant factor in BPD development, underscoring the importance of evaluating this experience in initial clinical consultations due to its impact on mental health.

Abuso Sexual y Diagnóstico de Patología Límite en la Adolescencia: una Revisión Sistemática

RESUMEN

Palabras clave

Trastorno límite de la personalidad
Abuso sexual infantil
Adolescencia
Revisión

La violencia sexual afecta a cerca de uno de cada cinco adolescentes en España, con una prevalencia mayor en chicas que en chicos, similar a otros países europeos. Esta experiencia puede impactar gravemente en la salud mental y el desarrollo, siendo el Trastorno Límite de la Personalidad (TLP) una consecuencia destacada. En el presente estudio se ha llevado a cabo una revisión sistemática siguiendo la metodología PRISMA, con el objetivo de analizar los resultados de aquellos trabajos publicados en la última década (2013-2023) sobre la relación entre el abuso sexual en la infancia y el diagnóstico de TLP. La finalidad de esta revisión es proporcionar a los profesionales hispanoparlantes una actualización sobre esta relación para mejorar su conocimiento y práctica clínica. De un total de 439 artículos, 27 cumplieron los criterios de inclusión. De las conclusiones destacamos que el abuso sexual en la infancia es un factor asociado significativamente con el desarrollo del TLP en la adolescencia, aunque la polivictimización parece su predictor más fiable. En cuanto a la prevalencia, el abuso sexual es más frecuente en muestras clínicas y judiciales, especialmente en mujeres. La revisión concluye que la violencia sexual en la infancia es un factor relevante en el desarrollo del TLP, siendo fundamental evaluarlo en las consultas clínicas iniciales debido a su impacto en la salud mental.

Introduction

Sexual violence is a serious public health problem that affected 17.8% of adolescents in Spain in the last year, 11.2% of boys and 24.0% of girls (Pereira et al., 2024), similar to rates observed in other European countries (see Bentivegna & Patalay, 2022 in the United Kingdom, and Hébert et al., 2021 in France).

The experience of sexual violence can have a serious impact on the development and mental health of children and adolescents (Sánchez-Meca et al., 2011), with borderline personality disorder (BPD) being one of its most studied consequences. BPD is a serious mental disorder characterized by persistent patterns of emotional instability, disturbances in self-image, instability in interpersonal relationships, impulsivity, and suicidal behavior (Lieb et al., 2004). Symptoms usually begin in early adolescence and can be diagnosed from the age of 12 (Gupta et al., 2023). This disorder is often accompanied by other comorbid diagnoses and also entails significant social costs, beyond the negative effects it causes in its victims (Leichsenring et al., 2011).

A recent meta-analysis review (Guilé et al., 2018) indicates that the prevalence of BPD in the general adolescent population is approximately 3%. According to this review, the clinical prevalence of BPD ranges from 11% in adolescents seen in outpatient clinical settings to 78% in suicidal adolescents presenting to emergency departments. As such, this is a relatively common disorder with a significantly high risk of suicide (Pompili et al., 2005), which underscores the importance of understanding its potential predictors for clinical relevance.

According to the recent systematic review by Senberg et al. (2023), dysfunctional parenting, maltreatment, and adverse events in childhood may contribute to the development of BPD. Along the same lines, other previous reviews have also found that dysfunctional parenting is an important psychosocial risk factor for the development of borderline personality disorder (Steele et al., 2019), as are adverse experiences and maltreatment during childhood (Porter et al., 2020; Stepp et al., 2016). The fact that individuals diagnosed with BPD are more likely to have experienced childhood victimization than the non-clinical population indicates the importance of exploring the history of adverse experiences in the diagnostic assessment (Solmi et al., 2021).

According to the review by Bozzatello et al. (2021), early trauma acts as a trigger for the development of several characteristics of BPD, such as affective instability, emotional dysregulation, and self-destructive behaviors. The study shows that adolescents with BPD have a history of sexual trauma more frequently than both adolescents without mental health problems and psychiatric patients diagnosed with disorders other than BPD.

However, no causal relationship has been established between the experience of sexual violence and the diagnosis of BPD, given that genetic-environmental interaction plays a key role (Wilson et al., 2021). The etiology of BPD is based on a multifactorial model in which biological vulnerability, psychological factors, and social influences, along with their interactions, must be considered, with sexual abuse being a relevant variable (Leichsenring et al., 2023). Accordingly, Winsper et al. (2016), through a meta-analytic review of the etiology of BPD, conclude that sexual abuse is associated with an approximately 5-fold increased likelihood of receiving a diagnosis of BPD.

Other systematic reviews have confirmed the existence of a positive relationship between childhood sexual abuse and a diagnosis of BPD. De Aquino Ferreira et al. (2018) found that sexual abuse is an important risk factor in the diagnosis of BPD, especially in women. In turn, sexual abuse predicts a more severe clinical presentation and a worse prognosis for BPD, especially in relation to suicidal behavior. The systematic review by Gupta et al. (2023) on specific psychosocial and social risks associated with a diagnosis of BPD in adolescence concludes that childhood sexual abuse is one of the strongest predictors of the development of this pathology.

Study Objective

Although international reviews on the association between the experience of sexual abuse and borderline pathology have been published in recent years (e.g., de Aquino Ferreira et al., 2018; Gupta et al., 2023), as well as national publications on the association between sexual abuse and the diagnosis of personality disorders in general (Pereira et al., 2011), there is currently no systematic review in Spanish that allows healthcare professionals to specifically understand the relationship between experiences of childhood sexual violence and the development of borderline personality disorder. The aim of this study is to provide Spanish-speaking professionals with an update on the main findings regarding the relationship between childhood sexual abuse and BPD, with the expectation that this will contribute to a better understanding of both phenomena.

Method

Type of Study

A systematic review was conducted following the PRISMA (Preferred Reporting Items for Systematic Review) methodology (Page et al., 2021).

Search Strategy and Terms

A search strategy for articles was conducted in multiple phases: (a) a search of international clinical reference electronic databases (Scopus, PsycInfo, Medline), using the following English terms: ["child" OR "children" OR "adolescent" OR "adolescence"] AND "sexual abuse" OR "sexual victimization" AND "borderline" AND ["disorder" OR "pathology" OR "diagnosis"]; (b) a search in the Google Scholar metasearch engine; (c) a review of prior systematic reviews on the relationship between borderline personality disorder in adolescents and the experience of sexual violence (González Marin et al., 2023; Leichsenring et al., 2023; Senberg et al., 2023); and (d) a review of the reference lists of the selected articles.

Inclusion Criteria

The search included articles in English and Spanish between January 2013 and December 2023, in order to capture works published in the last decade. Studies were included if their sample consisted of individuals aged 24 or younger, diagnosed with

borderline personality disorder and/or borderline personality traits, who reported experiences of sexual victimization before adulthood, and who experienced their first clinical symptoms during childhood or adolescence. It was decided to extend the concept of adolescence to age 24, following the proposal by [Sawyer et al. \(2018\)](#), who suggest that a definition covering ages 10 to 24 more closely corresponds to adolescent growth and popular perceptions of this stage of life. Cross-sectional, longitudinal, experimental, correlational, and exploratory studies published in peer-reviewed academic journals were included.

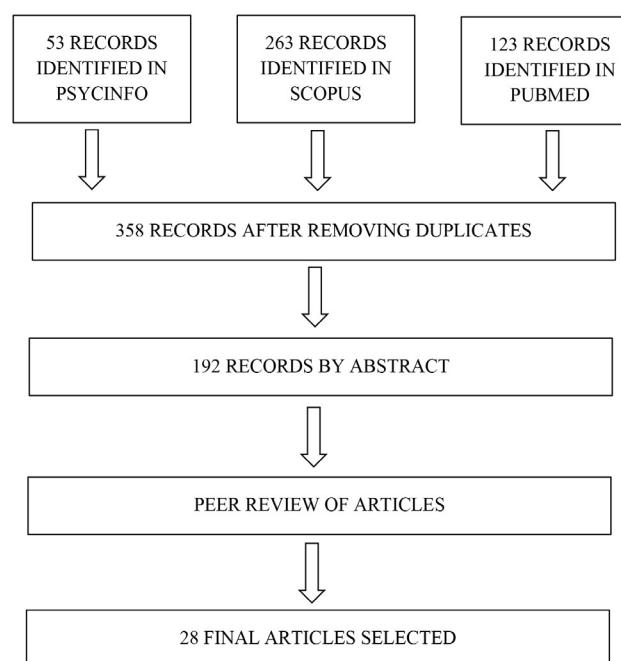
Exclusion Criteria

Book chapters, doctoral theses, conference papers, reports, and other non-peer-reviewed documents were excluded to avoid grey literature. Previous systematic review studies on the subject were considered for the development of the introduction but were not included in the reviewed articles. Studies on BPD that focused exclusively on adults, genetic and neurobiological factors, and treatment of the disorder were also excluded.

Study Selection and Data Extraction

As shown in [Figure 1](#), a total of 439 articles were identified, which, after removing duplicates, were reduced to 358. Of these, 192 were selected after reading the abstracts. These selected articles were independently reviewed by two of the authors of the manuscript, and the relevant information was extracted separately. Discrepancies were resolved through discussion. Interrater reliability was calculated to determine the range of agreement ($r = 0.76$). From this selection, 28 definitive articles remained.

Figure 1
PRISMA Flow Diagram ([Page et al., 2021](#))



Results

Description of Studies

The 28 articles included in this review were published mainly in North America ($n = 14$), followed by Europe ($n = 7$), Asia ($n = 6$), and Oceania ($n = 1$). Most were conducted with clinical samples (52%), community samples (18%), university students (19%), justice-involved samples (7%), and residential center samples (4%). The age ranges spanned from 11 to 24 years. With regard to gender, most studies included data from both males and females, although one study focused solely on a sample of females ([Moran et al., 2018](#)).

The instruments used to assess borderline pathology varied, with the structured interview for personality disorders in the DSM-IV (SCID-II; [First et al., 1997](#)) being the most frequently used ($n = 12$). The same is true for instruments to assess experiences of sexual violence, with the Childhood Trauma Questionnaire (CTQ) ([Bernstein & Fink, 1998](#)) being the most widely used questionnaire ($n = 9$).

[Table 1](#) shows a summary of the main descriptive statistics for each article regarding the sample and the assessment of borderline disorder and sexual violence.

Prevalence of Sexual Abuse

The prevalence of sexual abuse was very high in clinical samples, ranging from 7.7% to 50%, which differed significantly from the community population (ranging from 0.4% to 14%), and showed a slight difference from the judicial population (ranging from 5.9% in males to 50% in females). The high prevalence obtained in university students was striking, ranging from 11.8% in males to 59.1% in those diagnosed with BPD.

Only three studies (i.e., [Chaplo et al., 2016](#); [Kerig & Modrowski, 2018](#); [Kuo et al., 2015](#)) reported differential prevalence by gender, finding significantly higher rates of sexual abuse among females.

Relationship Between the Experience of Sexual Violence and Borderline Personality Disorder

[Table 2](#) shows the main results derived from the articles.

Discussion

The review found that childhood sexual abuse may be associated with a diagnosis of BPD in adolescence, consistent with the results of previous reviews ([González Marin et al., 2023](#); [Leichsenring et al., 2023](#); [Senberg et al., 2023](#)).

Of the studies included in this review, 25 found explicit associations between the experience of sexual abuse and BPD. Of these, six studies (i.e., [Bornovalova et al., 2013](#); [Jopling et al., 2018](#); [Moran et al., 2018](#); [Quek et al., 2017](#); [Robin et al., 2022](#); [Wang et al., 2022](#)) include childhood sexual abuse within the dimension of "child maltreatment" and conclude that the accumulation of experiences of violence or polyvictimization ([Finkelhor et al., 2007](#)) is the most powerful predictor of BPD, superior to the possible association with specific forms of violence. This idea is shared by more recent reviews, which find ample evidence that early adversity

Table 1
Summary of the Articles Reviewed

Authors and year	Sample				Type	Instruments		Prevalence CSA
	Country	n	Origin	Age		BPD assessment	Sexual violence assessment	
Bornovalova et al. (2013)	USA	1,382 pairs of twins	community	11-24	longitudinal	Minnesota Borderline Personality Disorder scale (MBPD)	Trauma Assessment for Adults (TAA) Childhood Experiences Questionnaire (CEQ)	7.3%
Chaplo et al. (2016)	USA	826	justice	12-19	cross-sectional	Difficulties in Emotion Regulation Scale (DERS)	UCLA PTSD Reaction Index-Adolescent Version (PTSD-RI)	9.2% of males and 51% of females
Charak et al. (2018)	Netherlands	178	clinical	12	cross-sectional	SCID-II Dimensions of Personality Pathology-Basic Questionnaire-Adolescents (DAPP-BQ-A)	CTQ	62% experienced both child maltreatment (including sexual abuse) and neglect, and 10% experienced child maltreatment (including sexual abuse) alone
Gajwani et al. (2022)	United Kingdom	48	clinical	15-25	cross-sectional	SCID-II, BPQ	ACE	28%
Infurna et al. (2016)	Germany	91	university students	M=15.6	cross-sectional	SCID-BPD ZAN-BPD	Childhood Experiences of Care and Abuse Questionnaire (CECA.Q)	59.1% of the BPD group and 12.8% of the control group
Jopling et al. (2018)	Canada	80	clinical	16-19	retrospective cross-sectional review	DSM-V criteria	Review of medical records, based on clinicians' reports and patients' self-reports	30.3%
Kaplan et al. (2016)	USA	58		13-21	observational cross-sectional	Structured Clinical Interview for DSM-IV Personality Disorders BPD Module (SCID-BPD) Zanarini Borderline Personality Disorder Rating Scale (ZAN-BPD)	CTQ Childhood Trauma Interview (CTI)	33.8%
Kerig & Modrowski (2018)	USA	782	justice	12-19	cross-sectional	BPFS	PTSD-RI	5.9% of males and 42.4% of females
Kors et al. (2020)	USA	41	clinical and community	M=15.6	cross-sectional	SCID2 PAI-BOR	Adult Attachment Interview (AAI) Maltreatment Classification System	Not reported
Kuo et al. (2015)	Canada	243	college students	M=20.1	cross-sectional observational	Borderline Symptom List-23 (BSL-23) Difficulties in Emotion Regulation Scale (DERS)	CTQ	11.8% males and 20% females
Kurdziel et al. (2018)	USA	56	community	14-18	cross-sectional	SCID-II Personality Assessment Inventory (PAI-BOR)	Maltreatment Classification System	14%
Ménard & Pincus (2014)	USA	1,694	college students	M=19	cross-sectional correlational	Inventory of Personality Organization (IPO)	Child Abuse and Trauma Scale (CAT)	Not reported
Moran et al. (2018)	USA	53 women	clinic	13-20	longitudinal	SCID-BPD ZAN-BPD	CTQ-SF	50%
Peters et al. (2019)	USA	119	clinical	M=15.3	longitudinal observational	K-SADS-PL	Childhood Interview for DSM-IV (CI-BPD)	26.7%
Quek et al. (2017)	Australia	51	clinical	12-18	cross-sectional observational	SCID-BPD Borderline Personality Features Scale for Children (BPFSC)	CTQ	10.2% of the BPD group and 5.0% of the control group (7.7% total)

Authors and year	Sample				Type	Instruments		Prevalence CSA
	Country	n	Origin	Age		BPD assessment	Sexual violence assessment	
Rajan et al. (2021)	Stockholm	5,439	community	12-17	longitudinal	ICD-10 codes in database		9.5%
Robin et al. (2022)	France, Belgium, and Switzerland	8	clinical	M=16.5	cross-sectional observational	Structured Interview for DSM-IV Personality Disorders (SIDP-IV)	CTQ	Not reported
Sar et al. (2014)	Turkey	1,301	university students	18-24	observational cross-sectional	Structured Clinical Interview for DSM-IV Dissociative Disorders (SCID-D-II)	Childhood Trauma Questionnaire (CTQ)	Not reported
Sar et al. (2017a, 2017b)	Turkey	1,301	university students	M=20.6	cross-sectional observational	SCID-BPD	CTQ	Not reported
Scheffers et al. (2019)	Quebec	182	residential center	M=19	longitudinal	Personality Diagnostic Questionnaire 4+ (PDQ-4+)	CTQ	8.1%
Sengutta et al. (2019)	Germany	200	clinical	M=18.7	cross-sectional correlational	BSL-23 SCID-II	Adverse Childhood Experience Questionnaire (ACE)	23.5%
Skaug et al. (2022)	Oslo	2808	community	M=19.1	cross-sectional	SIDP-IV	CTI	5%
Temes et al. (2020)	USA	104	clinical	13-17	cross-sectional comparative analysis	SCID-II DIB-R	Interviews	26%
Turniansky et al. (2019)	Israel	78	clinical	11-19	retrospective naturalistic cross-sectional	DSM-V criteria	Reports from patients, their families, social services, and previous therapists	50%
Wang et al. (2022)	Taiwan	51,725	community	< 18	retrospective cross-sectional cohort analysis	ICD-9-CM codes from Taiwan's National Health Insurance Research Database		0.4%
Xie et al. (2021)	China	4,034	clinical	M=20.4	cross-sectional	CTQ-SF	MSI-BPD	Not reported
Zanarini et al. (2023)	USA	89	clinical	13-17	cross-sectional	DIB-R Structured Clinical Interview for DSM-IV Childhood Diagnoses (KID-SCID) CI-BPD	Revised Childhood Experiences Questionnaire (CEQ-R)	Not reported

acts as a predisposing factor in the development of BPD. Specifically, elements such as inadequate parenting, abuse, and adverse events in childhood are closely related to this disorder (González Marín et al., 2023; Senberg et al., 2023). Likewise, situations of physical, emotional, or sexual abuse, as well as neglect, are significantly associated with BPD (Leichsenring et al., 2023).

Three studies (i.e., Kuo et al., 2015; Infurna et al., 2016; Scheffers et al., 2019) found no specific strong associations between sexual abuse and BPD. Some reviews, including those by Leichsenring et al. (2023) and Stepp et al. (2016), also refer to studies that identify various psychosocial factors associated with the development of BPD, but these factors are not exclusive to this disorder. As stated in the review by González Marín et al. (2023), it is not entirely clear how early adversity, in general terms, acts as a predisposing factor for BPD. We believe that this is related to the limitations also found in the reviews consulted, particularly with regard to the heterogeneity of the methodology and the fact that most of the studies consulted do not have as their main objective the investigation of the relationship between sexual abuse and the development of BPD in adolescence.

With regard to the prevalence of sexual abuse, the highest prevalence rates were found in clinical samples, followed by judicial samples. This aligns with previous studies conducted in Spain, where percentages in clinical samples (Pereda et al., 2015) and judicial samples (Pereda et al., 2017) doubled those found in the general adolescent population (Pereda et al., 2014). The relationship between sexual abuse and psychological problems in general is a finding highlighted in multiple studies and one that calls for this experience to be assessed in initial clinical interviews (Boxer & Terranova, 2008), so finding high rates of child sexual abuse when evaluating samples from the clinical setting is an expected result. Likewise, experiences of victimization in juvenile justice samples are also highly frequent, with violence being considered a predictor of criminal behavior (Cuevas et al., 2007). With regard to gender, the fact that the prevalence of sexual abuse is significantly higher in women has also been observed in previous meta-analysis studies with adolescent samples (Barth et al., 2013).

With regard to the diagnosis of BPD, of the four articles that study the severity of its symptoms, two found that sexual abuse is predictive of these symptoms (i.e., Turniansky et al., 2019; Zanarini

Table 2
Main Results of the Studies Reviewed

Authors and year	Results
Bornovalova et al. (2013)	The analysis showed that individuals who reported childhood abuse, including sexual abuse, had more BPD traits compared to those who did not report abuse.
Chaplo et al. (2016)	9.2% of boys and 51.0% of girls reported having suffered sexual abuse. There were no significant differences in BPD traits between boys and girls who reported sexual abuse; however, sexually abused boys reported higher rates of BPD traits compared to non-abused boys. Sexual abuse was found to be significantly associated with symptoms of emotional dysregulation and BPD characteristics in detained adolescents, especially boys.
Charak et al. (2018)	The study found a significant association between sexual abuse and behavioral and intimacy problems, representing cluster B characteristics (which include BPD).
Gajwani et al. (2022)	Twenty-eight percent of participants reported having experienced sexual abuse in childhood. Young people who had experienced sexual abuse showed greater difficulties in emotional regulation, which mediated the relationship between ACE and borderline traits, suggesting that sexual abuse is a relevant factor in the onset of BPD symptoms, mediated by difficulties in emotional regulation.
Infurna et al. (2016)	No significant direct associations were found between sexual abuse and the severity of BPD characteristics (standardized coefficient = 0.06, $p = 0.05$; 0.36). The study suggested that difficulties in emotional regulation significantly mediated the relationship between emotional abuse and BPD severity, but not between sexual abuse and BPD severity (37:1).
Jopling et al. (2018)	30.3% of patients diagnosed with BPD had experienced sexual abuse, compared to 6.9% in the control group. This difference was statistically significant ($p = 0.02$). Individuals who had experienced childhood maltreatment, including sexual abuse, were more than four times more likely to be diagnosed with a personality disorder.
Kaplan et al. (2016)	Participants who reported sexual abuse had higher ZAN-BPD scores for BPD compared to those who did not report abuse. However, differences in suicidality between the sexual abuse and non-abuse groups were not significant.
Kerig & Modrowski (2018)	Females report the highest rates of BPD traits, as well as the highest levels of polyvictimization, particularly related to experiences of sexual abuse. In contrast, boys report the highest levels of community violence.
Kors et al. (2020)	Total borderline characteristics and each individual characteristic were significantly associated with sexual abuse and neglect.
Kuo et al. (2015)	Regression analyses indicated that only childhood emotional abuse significantly predicted the severity of BPD traits ($\beta = 0.36$, $t(239) = 6.35$, $p < 0.001$). No significant relationship was found between childhood sexual abuse ($\beta = -0.02$, $t(239) = -0.35$, $p = 0.73$) and the severity of BPD traits. Emotional abuse and difficulties in emotional regulation were mediating factors in the development of BPD.
Kurdziel et al. (2018)	Although sexual abuse did not show a significant difference between groups, adolescents who experienced sexual abuse were found to have greater BPD characteristics compared to those who were not abused.
Ménard & Pincus (2014)	For men, a significant relationship was found between childhood sexual abuse and stalking victimization, as well as between borderline characteristics and stalking victimization. The final model explained 10% of the variability in stalking victimization. For women, sexual abuse and borderline characteristics were also significantly related to stalking victimization. The final model explained 13% of the variability in stalking victimization. A significant relationship was found in women between childhood sexual abuse and borderline characteristics, indicating greater vulnerability to stalking victimization.
Moran et al. (2018)	Adolescents with BPD who had experienced childhood abuse (sexual, physical, or both) had more severe symptoms compared to those without a history of abuse. Adolescents with multiple types of abuse (sexual and physical) showed the highest levels of BPD symptoms, depression, and anxiety and were less likely to achieve clinically significant symptom reduction.
Peters et al. (2019)	26.7% of participants reported having experienced sexual abuse. The intensity of suicidal ideation was significantly associated with BPD criteria and a history of childhood sexual abuse.
Quek et al. (2017)	Child maltreatment in general was significantly associated with BPD characteristics in adolescents. All forms of child maltreatment were significantly associated with BPD characteristics, with emotional abuse and emotional neglect having the strongest associations.
Rajan et al. (2021)	Adolescent girls with a recorded experience of childhood sexual abuse showed greater healthcare utilization and a higher prevalence of severe psychiatric diagnoses, such as BPD both 1 (OR 2.42) and 2 years (OR 6.09) after the first recorded experience of sexual abuse compared to controls.
Robin et al. (2022)	Sexual abuse was included in the dimension of a "controlling environment," which also encompassed emotional and physical abuse, as well as a high level of parental control. Adolescents with BPD showed a higher frequency of having experienced a "controlling environment" (2.7, SD = 1.4) compared to healthy controls (0.9, SD = 1.0), suggesting an association between experiences of abuse and the onset of BPD symptoms.
Sar et al. (2014)	Sexual abuse correlated significantly with the number of BPD criteria met ($r = 0.28$). A significant correlation was also observed between sexual abuse and total scores on the SCID-D ($r = 0.21$) and SDAQ ($r = 0.22$).
Sar et al. (2017a)	Forty-two percent of participants with BPD reported having experienced childhood sexual abuse. Individuals with BPD reported significantly more experiences of childhood sexual abuse compared to those without BPD.
Sar et al. (2017b)	Participants who met the criteria for BPD reported significantly more experiences of sexual abuse compared to those without BPD. In the linear regression analysis, childhood emotional abuse ($B = 3.71$, $p = 0.001$), sexual abuse ($B = 1.35$, $p = 0.002$), and physical neglect ($B = 1.09$, $p = 0.006$) predicted identity disturbance. Self-reported identity disturbance (SIAQ) was significantly correlated with all types of childhood trauma ($r = 0.28$, $p = 0.001$), while clinically assessed identity disturbance (SCID-D) was only correlated with sexual abuse ($r = 0.15$, $p = 0.05$).
Scheffers et al. (2019)	Stepwise regression analysis revealed that emotional neglect was significantly associated with BPD symptoms ($\beta = .32$, $p < 0.001$). Although emotional abuse showed more associations with other personality disorders, no specific strong associations between sexual abuse and BPD were found in this study.
Sengutta et al. (2019)	Sexual abuse was significantly associated with the prevalence and severity of BPD traits in nonpsychotic adolescents and young adults seeking help. The total ACE score, especially emotional abuse ($r = 0.298$, $p < 0.001$) and sexual abuse ($r = 0.264$, $p < 0.001$), correlated significantly with psychotic experiences. BPD traits fully mediated the relationship between childhood trauma and psychotic experiences ($\beta = 0.12$, 95% CI: -0.019-0.370).
Skaug et al. (2022)	Five percent of the sample reported having experienced sexual abuse. A positive correlation was found between sexual abuse and BPD traits ($r = 0.44$). The study found significant associations between sexual abuse and BPD traits at the phenotypic level and in regression analyses. However, discordant twin analyses and genetic decompositions suggest that this relationship is significantly influenced by shared genetic factors, and there is no robust evidence for a direct causal effect of sexual abuse on the development of BPD traits.

Authors and year	Results
Temes et al. (2020)	The study revealed that adults with BPD reported a higher prevalence and greater severity of sexual abuse compared to adolescents with BPD. In addition, adults with BPD were more likely to experience abuse at multiple stages of development, with greater frequency and duration, and perpetrated by a paternal figure. Although adults and adolescents differed in the severity of sexual abuse, no differences were observed in the severity of their borderline symptoms. A history of sexual abuse in adolescents with BPD was found to predict the stability of BPD from adolescence to adulthood.
Turniansky et al. (2019)	The group of adolescents with BPD and a history of prolonged sexual abuse had a longer duration of first psychiatric hospitalization (median of 114.5 days) compared to the group without prolonged abuse (median of 27 days). The study showed that adolescents with BPD who experienced prolonged sexual abuse had greater clinical severity, including longer and more frequent hospitalizations, more suicide attempts, and higher rates of severe self-harming behaviors, smoking, alcohol use, and impulsive sexual behaviors.
Wang et al. (2022)	Child maltreatment was associated with an increased risk of personality disorders (adjusted hazard ratio, 2.12; $p < 0.001$). Kaplan-Meier analysis revealed a significantly higher 15-year cumulative incidence of personality disorders among victims of child maltreatment compared with controls (log-rank test, $p < 0.001$). Children who were victims of maltreatment, including sexual abuse, had a significantly higher risk of developing personality disorders, including BPD, in the general population of Taiwan.
Xie et al. (2021)	Although emotional ($r = 0.28, p < 0.001$), physical ($r = 0.19, p < 0.001$), and sexual abuse ($r = 0.14, p < 0.001$) were all found to be associated with BPD traits, only emotional abuse showed a significant relationship with BPD traits when controlling for other types of abuse. Self-esteem and resilience acted as significant mediators in this relationship, highlighting the importance of these protective factors in the prevention and treatment of BPD traits in individuals with a history of childhood abuse.
Zanarini et al. (2023)	The severity of childhood sexual abuse and concurrent PTSD were significantly predictive of the severity of dissociative symptoms in adults with BPD: Coefficient: 2.39 for sexual abuse ($p < 0.001$); Coefficient: 10.38 for PTSD ($p < 0.001$). Neither childhood adversity (including sexual abuse) nor temperament were significant predictors of the severity of dissociative symptoms in adolescents with BPD: Coefficient for sexual abuse: 0.13 ($p = 0.967$). While the severity of childhood sexual abuse showed a significant relationship with the severity of dissociative symptoms in adults with BPD, the same relationship was not observed in adolescents. Instead, in adolescents, co-occurring eating disorders were the significant predictor.

et al., 2023), while the other two associated the severity of BPD symptoms with emotional abuse (i.e., Infurna et al., 2016; Kuo et al., 2015), not with childhood sexual abuse. Turniansky et al. (2019) concluded that the longer the sexual abuse, the greater the severity of BPD symptoms and hospitalization, while Zanarini et al. (2023) found that the severity of childhood sexual abuse is associated with the severity of dissociative symptoms of BPD.

In conclusion, this review corroborates our initial hypothesis that the experience of sexual violence during childhood has a serious impact on development and mental health, and it is a powerful predictor of a diagnosis of BPD during adolescence. Although the etiology of BPD is based on a multifactorial model, childhood sexual abuse is a fundamental variable to explore in the clinical setting, as has been confirmed in previous studies (de Aquino Ferreira et al., 2018; Gupta et al., 2023; Leichsenring et al., 2023; Winsper et al., 2016).

Limitations

This review has several limitations that must be taken into account when drawing conclusions from the results obtained. The study includes a small number of studies, limited to the last decade, although its results are similar to previous reviews, allowing for robust conclusions to be drawn about the relationship between the experience of sexual abuse and the diagnosis of BPD. The studies included present a wide methodological diversity, with samples varying in origin and size, and mostly lacking control groups. There is also great diversity in the use of psychometric instruments, with no consensus on the assessment of experiences of sexual abuse or BPD. Many studies did not assess the possible coexistence of different types of abuse at the same time, or polyvictimization, which may magnify the association of BPD with childhood sexual abuse. Another limitation to consider is the scarcity of studies with adolescent samples diagnosed with BPD. Despite broad consensus on the usefulness and reliability of diagnosing BPD in adolescence (Chanen et al., 2008; Leichsenring et al., 2023; Miller et al., 2008), some clinicians remain hesitant to assign this diagnosis (Costa, 2023).

Conflict of Interest

The authors declare that there is no potential conflict of interest related to the article.

References

Articles included in the review have been marked with an asterisk (*).

Barth, J., Bermetz, L., Heim, E., Trelle, S., & Tonia, T. (2013). The current prevalence of child sexual abuse worldwide: A systematic review and meta-analysis. *International Journal of Public Health*, 58(3), 469-483. <https://doi.org/10.1007/s00038-012-0426-1>

Bentivegna, F., & Patalay, P. (2022). The impact of sexual violence in mid-adolescence on mental health: A UK population-based longitudinal study. *The Lancet Psychiatry*, 9(11), 874-883. [https://doi.org/10.1016/S2215-0366\(22\)00271-1](https://doi.org/10.1016/S2215-0366(22)00271-1)

Bernstein, D. P., & Fink, L. (1998). *Childhood Trauma Questionnaire: A retrospective self-report manual*. The Psychological Corporation.

* Bornovalova, M. A., Huibregts, B. M., Hicks, B. M., Keyes, M., McGue, M., & Iacono, W. (2013). Tests of a direct effect of childhood abuse on adult borderline personality disorder traits: A longitudinal discordant twin design. *Journal of Abnormal Psychology* (1), 180-194. <https://doi.org/10.1037/a0028328>

Boxer, P., & Terranova, A. M. (2008). Effects of multiple maltreatment experiences among psychiatrically hospitalized youth. *Child Abuse & Neglect*, 32, 637-647. <https://doi.org/10.1016/j.chab.2008.02.003>

Bozzatello, P., Rocca, P., Baldassarri, L., Bosia, M., & Bellino, S. (2021). The role of trauma in early onset borderline personality disorder: A biopsychosocial perspective. *Frontiers in Psychiatry*, 12. <https://doi.org/10.3389/FPSY.2021.721361>

Chanen, A. M., Jackson, H. J., McCutcheon, L. K., Jovev, M., Dudgeon, P., Yuen, H. P., Germano, D., Nistico, H., McDougall, E., Weinstein, C., Clarkson, V., & McGorry, P. D. (2008). Early intervention for adolescents with borderline personality disorder using cognitive analytic therapy: Randomised controlled trial. *British Journal of Psychiatry*, 193(6), 477-84. <https://doi.org/10.1192/bjp.bp.107.048934>

* Chaplo, S. D., Kerig, P. K., Modrowski, C. A., & Bennett, D. C. (2016). Gender differences in the associations among sexual abuse, posttraumatic stress symptoms, and delinquent behaviors in a sample of detained adolescents. *Journal of Child & Adolescent Trauma, 10*(1), 29-39. <https://doi.org/10.1007/s40653-016-0122-z>

* Charak, R., Tromp, N. B., & Koot, H. M. (2018). Associations of specific and multiple types of childhood abuse and neglect with personality pathology among adolescents referred for mental health services. *Psychiatry Research, 270*, 906-914. <https://doi.org/10.1016/j.psychres.2018.11.016>

Costa, X. (2023). Organizaciones límite en la infancia. Estudio de caso desde la psicoterapia focalizada en la transferencia [Borderline organizations in childhood. Case study from transfer-focused psychotherapy]. *Revista de Psicopatología y Salud Mental del Niño y del Adolescente, 41*, 31-39.

Cuevas, C. A., Finkelhor, D., Turner, H. A., & Ormrod, R. K. (2007). Juvenile delinquency and victimization: A theoretical typology. *Journal of Interpersonal Violence, 22*, 1581-1602. <https://doi.org/10.1177/0886260507306498>

De Aquino Ferreira, L. F., Queiroz Pereira, F. H., Neri Benevides, A. M. L., & Aguiar Melo, M. C. (2018). Borderline personality disorder and sexual abuse: A systematic review. *Psychiatry Research, 262*, 70-77. <https://doi.org/10.1016/j.psychres.2018.01.043>

Finkelhor, D., Ormrod, R., & Turner, H. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse & Neglect, 31*, 7-26. <https://doi.org/10.1016/j.chabu.2006.06.008>

First, M. B., Gibbon, M., Spitzer, R. L., Williams, J. B. W., & Benjamin, L. S. (1997). *Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II)*. American Psychiatric Press, Inc.

* Gajwani, R., Wilson, N., Nelson, R., Gumley, A., Smith, M., & Minnis, H. (2022). Recruiting and exploring vulnerabilities among young people at risk, or in the early stages of serious mental illness (borderline personality disorder and first episode psychosis). *Frontiers in Psychiatry, 13*. <https://doi.org/10.3389/fpsy.2022.943509>

González Marín, E. M., Otálvaro, J. A. M., Cadavid Buitrago, M. A., Gaviria Gómez, A. M., Vilella, E., & Gutiérrez-Zotes, A. (2023). Trastorno límite de la personalidad (TLP), experiencias adversas tempranas y sesgos cognitivos: Una revisión sistemática [Borderline personality disorder (BPD), early adverse experiences, and cognitive biases: A systematic review]. *Revista de Investigación e Innovación en Ciencias de la Salud, 5*(1), 273-293. <https://doi.org/10.46634/riics.174>

Guilé, J. M., Boissel, L., Alaux-Cantin, S., & de La Rivière, S. G. (2018). Borderline personality disorder in adolescents: Prevalence, diagnosis, and treatment strategies. *Adolescent Health, Medicine and Therapeutics, 23*(9), 199-210. <https://doi.org/10.2147/AHMT.S156565>

Gupta, N., Gupta, M., Madabushi, J. S., & Zubiar, F. (2023). Integrating psychosocial risks with emerging evidence for borderline personality disorders in adolescence: An update for clinicians. *Cureus, 15*(6). <https://doi.org/10.7759/cureus.40295>

Hébert, M., Smith, K., Caouette, J., Cénat, J. M., Karray, A., Cartier, N., ... & Derivois, D. (2021). Prevalence and associated mental health outcomes of child sexual abuse in youth in France: Observations from a convenience sample. *Journal of Affective Disorders, 282*, 820-828. <https://doi.org/10.1016/j.jad.2020.12.100>

* Infurna, M. R., Brunner, R., Holz, B., Parzer, P., Giannone, F., Reichl, C., Fischer, G., Resch, F., & Kaess, M. (2016). The specific role of childhood abuse, parental bonding, and family functioning in female adolescents with borderline personality disorder. *Journal of Personality Disorders, 30*, 177-192. https://doi.org/10.1521/pedi_2015_29_186

* Jopling, E. N., Khalid-Khan, S., Chandrakumar, S. F., & Segal, S. C. (2018). A retrospective chart review: Adolescents with borderline personality disorder, borderline personality traits, and controls. *International Journal of Adolescent Medicine and Health, 30*(2). <https://doi.org/10.1515/ijamh-2016-0036>

* Kaplan, C., Tarlow, N., Stewart, J. G., Aguirre, B., Galen, G., & Auerbach, R. P. (2016). Borderline personality disorder in youth: The prospective impact of child abuse on non-suicidal self-injury and suicidality. *Comprehensive Psychiatry, 71*, 86-94. <https://doi.org/10.1016/j.compsych.2016.08.016>

* Kerig, P. K., & Modrowski, C. A. (2018). Testing gender-differentiated models of the mechanisms linking polyvictimization and youth offending: Numbing and callousness versus dissociation and borderline traits. *Journal of Trauma and Dissociation, 19*(3), 347-361. <https://doi.org/10.1080/15299732.2018.1441355>

* Kors, S., Macfie, J., Mahan, R., & Kurdziel-Adams, G. (2020). The borderline feature of negative relationships and the intergenerational transmission of child maltreatment between mothers and adolescents. *Personality Disorders: Theory, Research, and Treatment, 11*(5), 321-327. <https://doi.org/10.1037/per0000397>

* Kurdziel, G., Kors, S., & Macfie, J. (2018). Effect of maternal borderline personality disorder on adolescents' experience of maltreatment and adolescent borderline features. *Personality Disorders: Theory, Research, and Treatment, 9*(4), 385-389. <https://doi.org/10.1037/per0000265>

* Kuo, J. R., Khoury, J. E., Metcalfe, R., Fitzpatrick, S., & Goodwill, A. (2015). An examination of the relationship between childhood emotional abuse and borderline personality disorder features: The role of difficulties with emotion regulation. *Child Abuse & Neglect, 39*, 147-155. <https://doi.org/10.1016/j.chabu.2014.08.008>

Leichsenring, F., Heim, N., Leweke, F., Spitzer, C., Steinert, C., & Kernberg, O. F. (2023). Borderline personality disorder: A review. *JAMA, 329*(8), 670-679. <https://doi.org/10.1002/wps.21156>

Leichsenring, F., Leibing, E., Kruse, J., New, A. S., & Leweke, F. (2011). Borderline personality disorder. *The Lancet, 377*(9759), 74-84. [https://doi.org/10.1016/s0140-6736\(10\)61422-5](https://doi.org/10.1016/s0140-6736(10)61422-5)

Lieb, K., Zanarini, M. C., Schmahl, C., Linehan, M. M., & Bohus, M. (2004). Borderline personality disorder. *The Lancet, 364*(9432), 453-461. [https://doi.org/10.1016/s0140-6736\(04\)16770-6](https://doi.org/10.1016/s0140-6736(04)16770-6)

* Ménard, K. S., & Pincus, A. L. (2014). Child maltreatment, personality pathology, and stalking victimization among male and female college students. *Violence and Victims, 29*(2), 300-316. <https://doi.org/10.1891/0886-6708.VV-D-12-00098R1>

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>

* Moran, L. R., Kaplan, C., Aguirre, B., Galen, G., Stewart, J. G., Tarlow, N., & Auerbach, R. P. (2018). Treatment effects following residential dialectical behavior therapy for adolescents with borderline personality disorder. *Evidence-Based Practice in Child and Adolescent Mental Health, 3*(2), 117-128. <https://doi.org/10.1080/23794925.2018.1476075>

Page, M. J., Moher, D., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., Stewart, L. A., Thomas, J., Tricco, A. C., Welch, V. A., Whiting, P., & McKenzie, J. E. (2021). Prisma 2020 explanation and elaboration: Updated guidance and exemplars for reporting systematic reviews. *BMJ, 372*, n160. <https://doi.org/10.1136/bmj.n160>

Pereda, N., Abad, J., & Guilera, G. (2015). Victimization and polyvictimization among Spanish adolescent outpatients. *Journal of Aggression, Maltreatment & Trauma*, 24(9), 1044-1066. <https://doi.org/10.1080/10926771.2015.1072121>

Pereda, N., Abad, J., & Guilera, G. (2017). Victimization and polyvictimization of Spanish youth involved in juvenile justice. *Journal of Interpersonal Violence*, 32(21), 3272-3300. <https://doi.org/10.1177/0886260515597440>

Pereda, N., Gallardo-Pujol, D., & Padilla, R. J. (2011). Trastornos de personalidad en víctimas de abuso sexual infantil [Personality disorders in victims of child sexual abuse]. *Actas Españolas de Psiquiatría*, 39(2), 131-139.

Pereda, N., Guilera, G., & Abad, J. (2014). Victimization and polyvictimization of Spanish children and youth: Results from a community sample. *Child Abuse & Neglect*, 38, 640-649. <https://doi.org/10.1016/j.chabu.2014.01.019>

Pereda, N., Guilera, G., Águila-Otero, A., Andreu, L., Codina, M., & Díaz-Faes, D. A. (2024). *La victimización sexual en la adolescencia: un estudio nacional desde la perspectiva de la juventud española [Sexual victimization in adolescence: a national study from the perspective of Spanish youth]*. Universitat de Barcelona.

* Peters, J. R., Mereish, E. H., Solomon, J. B., Spirito, A. S., & Yen, S. (2019). Suicide ideation in adolescents following inpatient hospitalization: Examination of intensity and lability over 6 months. *Suicide and Life-Threatening Behavior*, 49(2), 572-585. <https://doi.org/10.1111/sltb.12448>

Pompili, M., Girardi, P., Ruberto, A., & Tatarelli, R. (2005). Suicide in borderline personality disorder: A meta-analysis. *Nordic Journal of Psychiatry*, 59(5), 319-324. <https://doi.org/10.1080/08039480500320025>

Porter, C., Palmier-Claus, J., Branitsky, A., Mansell, W., Warwick, H., & Varese, F. (2020). Childhood adversity and borderline personality disorder: A meta-analysis. *Acta Psychiatrica Scandinavica*, 141(1), 6-20. <https://doi.org/10.1111/acps.13118>

* Quek, J., Newman, L. K., Bennett, C., Gordon, M. S., Saeedi, N., & Melvin, G. A. (2017). Reflective function mediates the relationship between emotional maltreatment and borderline pathology in adolescents: A preliminary investigation. *Child Abuse & Neglect*, 72, 215-226. <https://doi.org/10.1016/j.chabu.2017.08.008>

* Rajan, G., Syding, S., Ljunggren, G., Wändell, P., Wahlström, L., Philips, B., Svedin, C. G., & Carlsson, A. C. (2021). Health care consumption and psychiatric diagnoses among adolescent girls 1 and 2 years after a first-time registered child sexual abuse experience: A cohort study in the Stockholm Region. *European Child and Adolescent Psychiatry*, 30(11), 1803-1811. <https://doi.org/10.1007/s00787-020-01670-w>

* Robin, M., Belbèze, J., Pham-Scottez, A., Speranza, M., Shadili, G., Silva, J., & Corcos, M. (2022). Adversity, attachment and emotion recognition in BPD adolescents: The distinct roles of disengaged and controlling environment. *BMC Psychology*, 10(1), 89. <https://doi.org/10.1186/s40359-022-00788-7>

Sánchez-Meca, J., Rosa-Alcázar, A. I., & López-Soler, C. (2011). The psychological treatment of sexual abuse in children and adolescents: A meta-analysis. *International Journal of Clinical and Health Psychology*, 11(1), 67-93.

* Sar, V., Alioğlu, F., & Akyuz, G. (2017a). Depersonalization and derealization in self-report and clinical interview: The spectrum of borderline personality disorder, dissociative disorders, and healthy controls. *Journal of Trauma & Dissociation*, 18(4), 490-506. <https://doi.org/10.1080/15299732.2016.1240737>

* Sar, V., Alioğlu, F., Akyuz, G., Tayakısı, E., Öğülmüş, E. F., & Sönmez, D. (2017b). Awareness of identity alteration and diagnostic preference between borderline personality disorder and dissociative disorders. *Journal of Trauma & Dissociation*, 18(5), 693-709. <https://doi.org/10.1080/15299732.2016.1267684>

* Sar, V., Alioğlu, F., Akyuz, G., & Karabulut, S. (2014). Dissociative amnesia in dissociative disorders and borderline personality disorder: Self-rating assessment in a college population. *Journal of Trauma & Dissociation*, 15(4), 477-493. <https://doi.org/10.1080/15299732.2014.902415>

Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *Lancet Child & Adolescent Health*, 2(3), 223-228. [https://doi.org/10.1016/S2352-4642\(18\)30022-1](https://doi.org/10.1016/S2352-4642(18)30022-1)

* Scheffers, F., van Vugt, E., Lanctôt, N., & Lemieux, A. (2019). Experiences of (young) women after out of home placement: An examination of personality disorder symptoms through the lens of child maltreatment. *Child Abuse & Neglect*, 92, 116-125. <https://doi.org/10.1016/j.chabu.2019.03.022>

Senberg, A., Schmucker, M., Oster, A., & Zumbach, J. (2023). Parental personality disorder and child maltreatment: A systematic review and meta-analysis. *Child Abuse and Neglect*, 140. <https://doi.org/10.1016/j.chabu.2023.106148>

* Senguta, M., Gawęda, Ł., Moritz, S., & Karow, A. (2019). The mediating role of borderline personality features in the relationship between childhood trauma and psychotic-like experiences in a sample of help-seeking non-psychotic adolescents and young adults. *European Psychiatry*, 56, 84-90. <https://doi.org/10.1016/j.eurpsy.2018.11.009>

* Skaga, E., Czajkowski, N. O., Waaktaar, T., & Torgersen, S. (2022). Childhood trauma and borderline personality disorder traits: A discordant twin study. *Journal of Psychopathology and Clinical Science*, 131(4), 365-374. <https://doi.org/10.1037/abn0000755>

Solmi, M., Dragioti, E., Croatto, G., Radua, J., Borgwardt, S., Carvalho, A. F., Demurtas, J., Mosina, A., Kurotschka, P., Thompson, T., Cortese, S., Shin, J. Il, & Fusar-Poli, P. (2021). Risk and protective factors for personality disorders: An umbrella review of published meta-analyses of case-control and cohort studies. *Frontiers in Psychiatry*, 12. <https://doi.org/10.3389/fpsyg.2021.679379>

Steele, K. R., Townsend, M. L., & Grenyer, B. F. S. (2019). Parenting and personality disorder: An overview and meta-synthesis of systematic reviews. *PLOS ONE*, 14(10). <https://doi.org/10.1371/journal.pone.0223038>

Stepp, S. D., Lazarus, S. A., & Byrd, A. L. (2016). A systematic review of risk factors prospectively associated with borderline personality disorder: Taking stock and moving forward. *Personality disorders*, 7(4), 316-323. <https://doi.org/10.1037/per0000186>

* Temes, C. M., Magni, L. R., Aguirre, B. A., Goodman, M., Ridolfi, M. E., & Zanarini, M. C. (2020). Parameters of reported childhood sexual abuse and assault in adolescents and adults with borderline personality disorder. *Personality and Mental Health*, 14(3), 254-262. <https://doi.org/10.1002/pmh.1475>

* Turniansky, H., Ben-Dor, D., Krivoy, A., Weizman, A., & Shoval, G. (2019). A history of prolonged childhood sexual abuse is associated with more severe clinical presentation of borderline personality disorder in adolescent female inpatients - A naturalistic study. *Child Abuse & Neglect*, 98, 104222. <https://doi.org/10.1016/j.chabu.2019.104222>

* Wang, W.-L., Hung, H.-Y., Chung, C.-H., Hsu, J.-W., Huang, K.-L., Chan, Y.-Y., Chien, W.-C., & Chen, M.-H. (2022). Risk of personality disorders among childhood maltreatment victims: A nation-wide population-based study in Taiwan. *Journal of Affective Disorders*, 305, 28-36. <https://doi.org/10.1016/j.jad.2021.12.109>

Wilson, N., Robb, E., Gajwani, R., & Minnis, H. (2021). Nature and nurture? A review of the literature on childhood maltreatment and genetic factors in the pathogenesis of borderline personality disorder. *Journal of Psychiatric Research*, 137, 131-146. <https://doi.org/10.1016/j.jpsychires.2020.12.025>

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>

* Xie, G. D., Chang, J. J., Yuan, M. Y., Wang, G. F., He, Y., Chen, S. S., & Su, P. Y. (2021). Childhood abuse and borderline personality disorder features in Chinese undergraduates: The role of self-esteem and resilience. *BMC Psychiatry*, 21(1). <https://doi.org/10.1186/S12888-021-03332-W>

* Zanarini, M. C., Martinho, E., Temes, C. M., Glass, I. V., Aguirre, B. A., Goodman, M., & Fitzmaurice, G. M. (2023). Dissociative experiences of adolescents with borderline personality disorder: description and prediction. *Borderline Personality Disorder and Emotion Dysregulation*, 10(1). <https://doi.org/10.1186/s40479-023-00217-0>