

Effectiveness of psychotherapies in co-occurring substance-related disorder and borderline personality disorder: a systematic review

Efectividad de las intervenciones psicoterapéuticas en pacientes con trastornos adictivos y trastorno límite de la personalidad: una revisión sistemática

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Abstract

Although Borderline Personality Disorder (BPD) prevalence rates are estimated around 2%, in drug-dependent population it could reach up to 60%. This subgroup of patients has higher substance abuse, more relapses, poorer adherence to treatment, more self-harm and greater comorbidity. A systematic review was conducted to evaluate the effectiveness of psychotherapies in co-occurring substance-related disorder (SUD) and BPD. PubMed, PsycINFO and Cochrane Library databases were used for this purpose. Finally, 16 studies were included (randomized clinical trial and quasi-experimental designs). The effectiveness of eight psychotherapies was evaluated: Dialectical Behavioral Therapy (DBT), Dual Focus Schema Therapy (DFST), Dynamic Deconstructive Psychotherapy (DDP), Integrative BPD-oriented Adolescent Family Therapy (I-BAFT), Acceptance and Commitment Therapy (ACT), Good Psychiatric Management (GPM), Mentalization-Based Therapy (MBT) and *System Training for Emotional Predictability and Problem Solving* (STEPPS). Of these, DBT and DDP are the most supported by literature. Other interventions provide encouraging results but need to be evaluated by further research. It can be affirmed that there are effective interventions that should move professionals away from therapeutic nihilism that often prevails in treating dual patients.

Keywords

Borderline personality disorder, substance-related disorder, substance abuse, addiction, comorbidity, psychotherapy.

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Resumen

Aunque la prevalencia del trastorno límite de personalidad (TLP) se estima en torno al 2%, en población drogodependiente alcanzaría hasta el 60%. Este subgrupo de pacientes presenta mayor consumo de sustancias, más recaídas en el consumo, peor adherencia al tratamiento, más autolesiones y mayor comorbilidad. Se realizó una revisión sistemática de la literatura para evaluar la efectividad de las intervenciones psicoterapéuticas en pacientes con trastorno por uso de sustancias (TUS) y TLP comórbido. Para ello, se emplearon las bases de datos PubMed, PsycINFO y Biblioteca Cochrane. Se incluyeron un total de 16 estudios con diseños de ensayo clínico aleatorizado y cuasiexperimental. En ellos se evaluó la efectividad de ocho intervenciones psicoterapéuticas: Terapia Dialéctico-Conductual (TDC), Terapia de Esquemas de Enfoque Dual (DFST), Psicoterapia Deconstructiva Dinámica (DDP), Terapia de Familia Integradora orientada a TLP para Adolescentes (I-BAFT), Terapia de Aceptación y Compromiso (ACT), terapia basada en *Good Psychiatric Management* (GPM), Terapia basada en la Mentalización (MBT) y *System Training for Emotional Predictability and Problem Solving* (STEPPS). De todas ellas, la TDC y la DDP son las que tienen mayor respaldo por parte de la literatura; el resto, aunque aportan resultados esperanzadores, la evidencia es aún escasa. Se puede afirmar que existen intervenciones efectivas que deberían apartar a los profesionales del nihilismo terapéutico que muchas veces predomina en el tratamiento de los pacientes duales.

Palabras clave

Trastorno límite de personalidad, abuso de sustancias, trastorno por uso de sustancias, adicción, psicoterapia, comorbilidad.

BACKGROUND

The effectiveness of substance use disorder (SUD) treatment is determined by the severity profile of the addiction at the time of admission to treatment, but primarily by the quality and quantity of multidisciplinary interventions (McLellan et al., 1993). While it is well-documented that comorbid psychopathology is one of the predictors of poor treatment response (Torrens et al., 2012), the prognostic role of personality disorders remains less extensively studied (Verheul & van den Brink, 2004). Estimates of personality disorder prevalence among drug-dependent patients range from 44% among those with alcohol use disorder to 79% among individu-

als with opioid addiction (Verheul et al., 1995; Tomko et al., 2014; Köck & Walter, 2018).

Among individual who use any type of substance, the most prevalent personality disorders are those classified within cluster B (particularly antisocial personality disorder and borderline personality disorder), as well as paranoid personality disorder (Skodol et al., 1999; Kenneth et al., 2002). While approximately 2% of the general population would meet the diagnostic criteria for borderline personality disorder (BPD), this prevalence may increase to 60% in drug-dependent patients undergoing treatment (Verheul et al., 1995; Trull et al., 2000). Conversely, between 30-50% of individuals

diagnosed with BPD also meet the criteria for SUD (Trull et al., 2000).

The psychopathological mechanisms underlying the comorbidity between SUD and BPD has been explored from various perspectives, with the “primary personality disorder” model receiving the most empirical support to date (Verheul & van den Brink, 2004). In this framework, specific traits of BPD contribute to both the onset and maintenance of addictive behavior (Littlefield et al., 2016), with emotional dysregulation (Sloan et al., 2017), low stress tolerance (Mattingley et al., 2022), and high impulsivity (Reynolds et al., 2021; Trull et al., 2018) playing particularly significant roles. However, attachment theory has introduced further complexity to this relationship, offering additional insights into its etiology (Schindler & Sack, 2015).

The bidirectional nature of this comorbidity complicates prognosis, with outcomes often more severe than those observed in BPD comorbid with post-traumatic stress disorder, mood disorders, or anxiety disorders (Zanarini et al., 2004). Individuals with BPD-SUD comorbidity exhibits lower treatment adherence (Zanarini et al., 2004), higher rates of self-harm and suicide attempts associated with impulsivity (Links et al., 1995; Van den Bosch, 2001; Wilson et al., 2006; Gunderson et al., 2018), increased substance use and relapse rates, and greater psychiatric comorbidity (Drake et al., 2005; Center for Substance Abuse Treatment, 2005). Consequently, these factors contribute to poorer overall functioning and reduced quality of life (Leichsenring et al., 2011).

Given the complexity of this comorbidity, an integrated, multidisciplinary therapeutic approach is essential, incorporating interven-

tions alongside carefully managed psychopharmacological treatments (Gartlehner, 2021; Leichsenring et al., 2024). Psychotherapy has been shown to significantly improve patients' quality of life (Martínez-González et al., 2020). Among the most extensively evaluated interventions is dialectical behavior therapy (DBT) (Storebø et al., 2020). Although various psychotherapeutic models have been applied, discrepancies in study outcomes (partly attributed to methodological inconsistencies) have led to contradictory findings (Pennay et al., 2011). While some researchers argue that BPD-SUD comorbidity impedes symptom remission (Zanarini et al., 2004), others present evidence that challenges a nihilistic therapeutic Outlook (Penzstadler et al., 2018). Accordingly, the present study aims to conduct a systematic review of the literature to evaluate the effectiveness of psychotherapeutic interventions in individuals diagnosed with SUD and comorbid BPD.

METHOD

A systematic review was performed following PRISMA methodological guidelines (Page et al., 2020). The following research question was established: *Are psychotherapeutic interventions in reducing consumption and severity of BPD-related behaviours in co-occurring SUD and BPD?*

Search terms related to borderline personality disorder (“Borderline Personality Disorder [MeSH]”, “Personality Disorder [MeSH]”, “Cluster B personality disorders”, “Borderline Personality Symptoms”), substance-related disorder (“Substance-related disorder [MeSH]”, “Drug addiction [MeSH]”, “Drug abuse”, “Substance abuse”) and psychotherapeutic interventions (“Thera-



peutics [MeSH], "Psychotherapy [MeSH]", "Treatment", "Psychological treatment") were used. Search terms were combined by means of boolean operators to establish a search strategy, which was entered in PsycINFO, PubMed and Cochrane Library: [(Borderline Personality Disorder) OR (Personality Disorder) OR (Cluster B personality disorders) OR (Borderline personality symptoms)] AND [(Substance-related Disorder) OR (Drug addiction) OR (Drug abuse) OR (Substance abuse)] AND [(Therapeutics) OR (Psychotherapy) OR (Treatment) OR (Psychological treatment)]. Filters related to the type of article ('Clinical Trial' and 'Randomised Controlled Trial') and language were established. These databases were selected for their breadth and relevance to the subject.

The following inclusion criteria were established: a) articles evaluating patients diagnosed with SUD and BPD, using DSM or ICD criteria and standardized assessment tools, b) studies with randomized clinical trial and quasi-experimental designs, c) studies whose objective was to assess the efficacy and effectiveness of a defined psychotherapeutic intervention. Those that included pharmacological treatment as the main intervention, were written in a language other than English or Spanish or were opinion letters or narrative reviews were excluded. Selected studies underwent quality assessment using JADAD and JBI *Critical Appraisal Checklist For Quasi-Experimental Studies*.

RESULTS

The search date was from database inception to July 2024. 626 studies were identified (PubMed: 309, Cochrane Library: 229, PsycINFO: 86, other: 2). Figure 1 outlines the

different filtering and elimination criteria for articles, after which a total of 16 articles were finally selected. As shown in Table 1, most of these studies were of U.S. origin (69%). The randomized clinical trial design was the one employed in 14 of them, while the remaining two used a quasi-experimental design.

Regarding the sociodemographic characteristics of the samples, most of the studies involved a predominantly female population, with ages ranging from 15 to 45 years. The diagnostic criteria used in all the studies were DSM criteria, although it is important to note that the edition varied due to the broad time range covered by this systematic review. The Structured Clinical Interview (SCID) was generally used to establish the diagnosis, with SCID-I used for Axis I mental disorders and SCID-II for personality disorders.

In terms of the psychotherapeutic interventions assessed in this review, Dialectical Behavior Therapy (DBT) garnered the most support. Other psychotherapies evaluated were Dual Focused Schema Therapy (DFST), Dynamic Deconstructive Psychotherapy (DDP), Integrative Family Therapy for Adolescents with BPD (I-BAFT), Acceptance and Commitment Therapy (ACT), Good Psychiatric Management (GPM) therapy, Mentalization-Based Therapy (MBT), and System Training for Emotional Predictability and Problem Solving (STEPPS). In most studies, these interventions were compared with usual treatment for the comorbidity of BPD and SUDs.

Table 2 presents, for each selected article, three outcome indicators: a) impact on symptoms and behaviors of BPD, b) impact on substance use, and c) impact on treatment adherence and retention.

Figure 1. Flow diagram according to PRISMA 2020

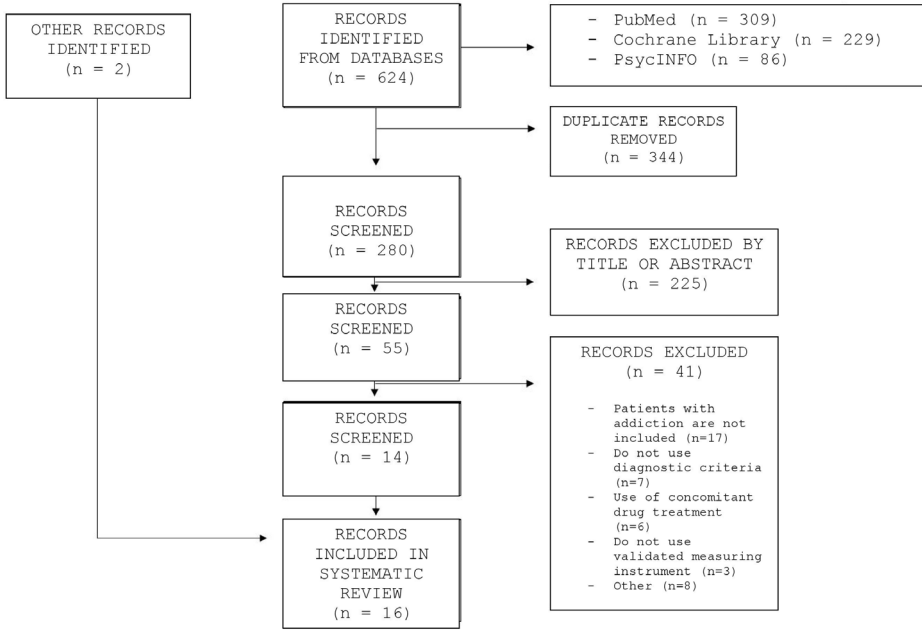


Table 1. Descriptive characteristics of the studies included in systematic review

Author (year of publication)	Country	Study design	Sample size	Sample Characteristics: Gender and Average Age	Diagnosis: Diagnostic Criteria and Instruments	Intervention	Comparison	Outcome Measurement Instruments	Follow-up
Linehan et al. (1999)	USA	RCT	n=28	Men: n=0 Women: n=28 Average age: 30,4 years	BPD:DSM-III-R (SCID-II y IPDE) TUS:DSM-III-R(SCID-I)	DBT	Standard treatment	Urinalysis TLFB PHI STAI SHI THI	12 months
Linehan et al. (2002)	USA	RCT	n=23	Men: n=0 Women: n=23 Average age: 36,1 years	BPD:DSM-IV (SCID-II y IPDE) TUS:DSM-IV (SCID-I)	DBT	CVT+12SFT	Urinalysis TLFB PHI SHI THI BSI	16 months
van den Bosch et al. (2002)	Netherlands	RCT	n=58	Men: n=0 Women: n=58 Average age: 37,5 years	BPD:DSM-IV (SCID-II) TUS:DSM-IV (ASI)	DBT	Standard treatment not defined	AS Other unspecified instruments	12 months
Ballet et al. (2005)	USA	RCT	n=52	Men: n=49 Women: n=3 Average age: 38,3 years	BPD:DSM-IV (PDQ-4R) TUS:DSM-IV (SCID-I)	DFST	SAC	ASI BSI IIP EMSQ-R	24 weeks
Ball (2007)	USA	RCT	n=30	Men: n=15 Women: n=15 Average age: 37 years	BPD:DSM-IV (SCID-II) TUS:DSM-IV (Substance Use Timeline Calendar)	DFST	12SFT	Substance Use Timeline Calendar ASI BSI MAACL-R WAI	24 weeks
Harned et al. (2008)	USA	RCT	n=101	Men: n=0 Women: n=101 Average age: 29 years	BPD:DSM-III (SCID-II y IPDE) TUS:DSM-III (SCID-I)	DBT	CTBE	TLFB THI	12 months



Author (year of publication)	Country	Study design	Sample size	Sample Characteristics: Gender and Average Age	Diagnosis: Diagnostic Criteria and Instruments	Intervention	Comparison	Outcome Measurement Instruments	Follow-up
Gregory et al. (2008)	USA	RCT	n=30	Men: n=6 Women: n=24 Average age: 28,7 years	BPD:DSM-IV (SCID-II) TUS:DSM-IV (SCID-I)	DDP	Standard treatment	WAIS LPC ASI THI BDI DES SPS BEST	12-18 months
Gregory et al. (2009)	USA	RCT	n=30	Men: n=6 Women: n=24 Average age: 28,7 years	BPD:DSM-IV TUS:DSM-IV	DDP	Standard treatment	Unspecified instruments	3-6 months
Gregory et al. (2010)	USA	RCT	n=30	Men: n=6 Women: n=24 Average age: 28,3 years	BPD:DSM-IV (SCID-II) TUS:DSM-IV (SCID-I)	DDP	OCC	BEST BDI LPC ASI SPS	30 months
Ball et al. (2011)	USA	RCT	n=105	Men: n=83 Women: n=22 Average age: 26,5 years	BPD: DSM-IV (PDQ-4R) TUS: DSM-IV (SCID-I)	DFST	IDC	BSI MAACL-R IIP D-CPT	6 months
Santisteban et al. (2015)	USA	RCT	n=40	Men: n=25 Women: n=15 Average age: 15,8 years	BPD: DSM-IV (DIB-R) TUS: DSM-IV	I-BAFT	IDC	WAI MACI DPS TLFB Urinalysis	12 months
Hall et al. (2018)	Australia	Quasi-experimental	n=45	Men: n=16 Women: n=29 Average age: 35,8 years	BPD: DSM-IV TUS: DSM-IV	ACT	Standard treatment not defined	SAF ATOP BEST DERS AAQ-II TCU ENG	12 weeks
Penzenstadler et al. (2018)	Switzerland	RCT	n=99	Men: n=31 Women: n=68 Average age: 32,2 years	BPD: DSM-IV (SCID-II) TUS: DSM-IV	GPM	GPM+MOTR	OQ-45 BSL-23 WAI	10 weeks
Philipset al. (2018)	Sweden	RCT	n=46	Men: n=9 Women: n=37 Average age: 36,7 years	BPD: DSM-IV (SCID-II) TUS: DSM-IV (SCID-I)	MBT + Standard treatment	Standard treatment	WAIS III AQ PCL: SV BPDSI-IV TLFB DSHI-9 SCL-90-R GSI IIP RFS	18 months
Flynn et al. (2019)	Ireland	Quasi-experimental	n=63	Men: n=24 Women: n=39 Average age: 35-44 years	BPD:DSM-IV TUS:DSM-IV (alcohol abuse and WHO definition of low/high-risk drinking)	DBT	Standard treatment not defined	DERS FFMQ DBT-WCCLCISMS	12 months
Black et al. (2022)	USA	RCT	n=164	Men: n=25 Women: n=139 Average age: 30,95 years	BPD:DSM-IV (SCID-II) TUS:DSM-IV (SCID-I)	STEPPS + Standard treatment	Standard treatment	ZAN-BPD BEST GAS SCL-90-R SAS BIS BDI MOS	12 months

I2SFT: 12 Step Facilitation Therapy, AAQ- II: Acceptance and Action Questionnaire version 2, ACT: Acceptance and commitment therapy, AQ: Autistic-Spectrum Quotient, ASI: Addiction Severity Index, ATOP: Australian Treatment Outcomes Profile, BPD: Borderline Personality Disorder, BEST: Borderline Evaluation of Severity over Time, BDI: Beck Depression Inventory, BPDSI-IV: Borderline Personality Disorder Severity Index - IV, BIS: Barratt Impulsiveness Scale, BSI: Brief Symptom Inventory, BSL-23: Borderline Symptom List, CISMS: Cork Impact of Substance Misuse Scale, CTBE: Community Treatment by Experts, CVT: Comprehensive validation therapy, DBT-WCCL: Dialectical Behaviour Therapy Ways of Coping Checklist, D-CPT: Adherence/Competence Rating Scale, DDP: Dynamic Deconstructive Psychotherapy, DERS: Difficulties in Emotional Regulation Scale, DES: Dissociative Experiences Scale, DFST: Dual Focus Schema Therapy, DPS: Diagnostic Interview Schedule for Children-Predictive Scale, DSHI-9: Deliberate Self-Harm Inventory, DSM: Diagnostic and Statistical Manual of Mental Disorders, EMSQ: Early Maladaptive Schema Questionnaire-Research, FFMQ: Five Facet Mindfulness Questionnaire, GAS: Global Assessment Scale, GPM: Good Psychiatric Management, GSI: Global Severity Index, I-BAFT: Integrative BPD-oriented Adolescent Family Therapy, IDC: Individual Drug Counseling, IIP: Inventory of Interpersonal Problems, IPDE: International Personality Disorder Examination, LPC: Lifetime Parasuicide Count, MACI: Millon Adolescent Clinical Inventory, MAACL: Multiple-Affect Adjective Checklist-Revised, MBT: Mentalization- Based Therapy, MOS: Medical Outcome Survey, MOTR: Motive-Oriented Therapeutic Relationship, OCC: Optimized Community Care, OMS: Organización Mundial de la Salud, OQ-45: Outcome Questionnaire-45.2, PCL-SV: Psychopathy Checklist: Screening Version, PHI: Parasuicide History Interview, PDQ-4R: Personality Diagnostic Questionnaire - Fourth Edition Revised, RCT: Randomized Control Trial, RFS: Reflective Functioning Scale, SAF: Specialist Assessment Form, SAS: Social Adjustment Scale, SAC: Substance Abuse Counseling, SCID: Structured Clinical Interview for DSM, SCL-90-R: Symptom Checklist-90-Revised, SHI: Social History Interview, SPS: Social Provisions Scale, STAI: State-Trait Anger Expression Inventory, STEPPS: System Training for Emotional Predictability and Problem Solving, TCU-ENG: Treatment Engagement Form, DBT: Dialectical-behavior therapy, THI: Treatment History Interview, TLFB: Timeline Follow-Back, SUD: Substance-Related Abuse, WAI: Working Alliance Inventory, WAIS: Weschler Adult Intelligence Scale, ZAN-BPD: Zanarini Rating Scale for Borderline Personality Disorder.

Table 2. Summary of the results of the studies included in systematic review

Author (year of publication)	Results Related to BPD	Results Related to SUD	Treatment Adherence
Linehan et al. (1999)	Although no differences were observed between the groups in terms of reduction in parasuicidal behavior and anger at the 12-month follow-up, global functioning and social skills improved at the 16-month follow-up ($p < 0.05$).	DBT reduced the intensity of SUD more than the usual treatment ($p < 0.05$). The number of days of abstinence increased, and fewer urine analyses tested positive for drugs.	Regarding individual psychotherapy sessions, no differences were observed between the groups. Overall, 36% of patients dropped out of DBT, while 73% dropped out of usual treatment ($p: 0.1$).
Linehan et al. (2002)	Although both interventions improved BSI ($p < 0.002$) and GAS scores ($p < 0.001$), no significant differences were observed between the groups. No differences were found between groups in terms of global functioning or parasuicidal behavior.	Both groups showed reductions in opioid use up to the eighth month ($p < 0.0001$); however, after that point, the control group increased drug consumption ($p < 0.001$), while the DBT group maintained improvement. At 4 months post-treatment, both groups showed reductions in opioid use (27% in DBT, 33% in the control group).	CVT showed better treatment adherence than DBT, where 36% of patients dropped out ($p < 0.04$).
van den Bosch et al. (2002)	DBT showed a reduction in impulsive self-harming behaviors, particularly in those who engaged in these behaviors more frequently before treatment, though this was not statistically significant.	No differences between groups were observed in terms of reduction in days of alcohol use ($p = 0.89$), cannabis ($p = 0.73$), or drugs ($p = 0.54$), nor in the improvement of SUD severity ($p = 0.47$).	DBT proved to be more effective in terms of adherence. 27% of patients dropped out of DBT, while 77% dropped out of usual treatment.
Ball et al. (2005)	These results could not be evaluated due to the high dropout rate. 60% of participants dropped out of the study.	These results could not be evaluated due to the high dropout rate. 60% of participants dropped out of the study.	DFST showed better adherence than the comparison intervention ($p < 0.004$).
Ball (2007)	Patients treated with the control intervention reduced dysphoria symptoms, whereas those treated with DFST did not ($p < 0.001$).	DFST reduced the frequency of use during treatment months more rapidly than the control intervention ($p < 0.03$). The reduction in ASI score was marginally significant ($p = 0.068$).	In both groups, patients reported good therapeutic alliance in the first month. After this point, patients treated with DFST continued to improve WAI scores ($p < 0.37$), whereas those treated with the comparison intervention did not show further improvement.
Harned et al. (2008)	These details are not provided in the study.	DBT was more effective in achieving complete remission of SUD compared to the comparison intervention ($p = 0.02$). Additionally, patients treated with DBT remained in partial remission for a longer time than those who did not respond ($p < 0.05$). DBT increased days of abstinence ($p = 0.001$).	These details are not provided in the study.
Gregory et al. (2008)	No differences were observed between groups on pre-treatment and treatment measures ($p > 0.13$); however, patients who received DDP showed statistically significant improvements, especially in self-harming behaviors ($p < 0.5$). Improved scores in BEST ($p < 0.01$), BDI ($p < 0.001$), and DES ($p < 0.05$).	No differences between groups on pre-treatment and treatment measures ($p > 0.13$); however, patients who received DDP showed statistically significant improvements in alcohol use ($p < 0.5$).	Treatment adherence was better with DDP (73%) compared to usual treatment (63%).



Author (year of publication)	Results Related to BPD	Results Related to SUD	Treatment Adherence
Gregory et al. (2009)	RR of parasuicidal behaviors decreased by 38% in the DDP group, while the RR increased by 35% in the usual treatment group; however, this difference was not statistically significant ($p = 0.071$). Additionally, in patients who maintained parasuicidal behavior, it decreased by 64%.	RR of intoxication episodes decreased by 31% in both groups. The number of days of alcohol consumption decreased by 53% in the DDP group and by 48% in the usual treatment group. The number of days of other drug consumption decreased by 54% in the DDP group and by 25% in the usual treatment group.	Adherence to both interventions was similar (27%). The difference was attributed to the therapist ($p < 0.015$).
Gregory et al. (2010)	Almost 100% of patients treated with DDP showed improvement in BPD-related symptoms, while only 38% of the control group improved ($p = 0.005$). Improvement with DDP was statistically significant over time regarding BPD symptoms ($p = 0.002$), depressive ($p = 0.004$), and dissociative symptoms. The OCC group showed minimal improvement in BPD symptoms, and depressive and dissociative symptoms did not change. BEST scores decreased by 25%, indicating significant clinical improvement. Global and social functioning improved more with DDP ($p = 0.021$).	Patients treated with DDP showed statistically significant improvement in the reduction of consumption days ($p = 0.008$). Illegal drug use remitted during DDP treatment and remained so over time ($p < 0.05$); those treated with OCC showed worsening drug use over time.	No differences between groups in treatment adherence.
Ball et al. (2011)	Both interventions reduced scores on BSI ($p < 0.001$), IIP ($p < 0.001$), and MAACL-dysphoria ($p < 0.001$) during the first three months of treatment; however, those treated with IDC continued to reduce scores during the remaining 3 months, while those treated with DFST did not show further improvement.	These results were not detailed in the study.	No differences between groups in treatment adherence.
Santisteban et al. (2015)	62% of patients treated with IDC improved, as did 76% of those treated with I-BAFT. In less severe cases, I-BAFT had a higher likelihood of improvement than IDC ($OR = 1.58$). Among patients with depression as a comorbidity, I-BAFT was superior to IDC ($OR = 5.72$) in those with more severe symptoms.	23% of adolescents improved with IDC, while 38% improved with I-BAFT. A statistically significant difference in improvement was found between patients with and without comorbid depression ($p = 0.018$). While in non-depressed patients, I-BAFT was inferior to IDC ($OR = 0.78$), in those with comorbid depression, I-BAFT was superior to IDC ($OR = 11.38$).	According to most adolescents ($p = 0.174$) and therapists ($p = 0.095$), there was a good therapeutic alliance in both groups.
Hall et al. (2018)	Scores on BEST, DERS, and AAQ-II significantly improved compared to baseline ($p < 0.001$). In fact, this reduction was gradual, with improvements as treatment progressed.	Drug consumption was significantly reduced compared to baseline ($p < 0.01$); however, no statistically significant reduction in alcohol consumption was observed ($p = 0.39$).	TCU-ENG scores above 30 indicated high participation, satisfaction, and a good therapeutic relationship.

Author (year of publication)	Results Related to BPD	Results Related to SUD	Treatment Adherence
Penzenstadler et al. (2018)	OQ-45 scores improved significantly ($p < 0.001$) both in the substance use group and the non- substance use group. The combination of GPM+MOTR was associated with improved OQ-45 outcomes maintained over time ($p = 0.035$). BSL-23 showed improvement in symptoms related to borderline behavior, with greater improvement in the substance use group ($p < 0.014$). In this case, the GPM+MOTR combination did not lead to lasting improvements over time ($p = 0.605$).	These results were not detailed in the study.	WAI scores (short version) showed that the therapeutic alliance improved, particularly in the group with comorbid SUD ($p = 0.036$). No statistically significant differences between GPM and GPM+MOTR were found ($p = 0.36$).
Philips et al. (2018)	The BPDSI-IV scale score improved significantly ($p < 0.001$) in both the MBT-treated group and the control group. The variation in the severity of BPD symptoms was not related to the therapist or the number of sessions received ($p > 0.05$). The control group had 4 suicide attempts, while no attempts were reported in the MBT-treated group ($p = 0.06$). Regarding self-harm, there were no statistically significant changes in DHSL-9 in either group ($p = 0.75$). GSI scores worsened over time ($p < 0.001$). Interpersonal problems significantly improved in both groups ($p < 0.001$), as indicated by IIP values. RFS scores remained unchanged, indicating no time effect ($p = 0.12$). In terms of hospitalization, 11 patients in the MBT group were hospitalized (mean stay: 16.2 days), and 7 patients in the control group were hospitalized (mean stay: 33.2 days). However, the difference in hospitalization time was not statistically significant ($p = 0.74$).	In both groups, alcohol consumption increased due to an increase in the number of days of consumption ($p = 0.01$). Furthermore, excessive alcohol consumption days also increased in both groups.	Adherence to MBT was poor (only 2 of the 9 therapists involved surpassed the threshold in the applied scale).
Flynn et al. (2019)	The intervention significantly improved post- intervention scores on DERS, DBT-WCCL, and FFMQ compared to pre-intervention scores ($p < 0.001$).	The intervention significantly reduced substance use ($p = 0.002$); however, no statistically significant differences were found between pre-treatment and 6- month follow-up ($p = 0.25$) or between the end of treatment and 6-month follow-up ($p = 0.06$).	Adherence to treatment was not evaluated in this study.
Black et al. (2022)	En un grupo de paciente con mayores tasas de inestabilidad afectiva y abuso de sustancias, el programa STEPPS redujo puntuaciones en ZAN-BPD ($p 0.017$) y BEST ($p 0,015$).	No se detallan en este estudio.	No se detallan en este estudio.

AAQ-II: Acceptance and Action Questionnaire version 2, BEST: Borderline Evaluation of Severity over Time, BDI: Beck Depression Inventory, BPDSI-IV: Borderline Personality Disorder Severity Index - IV, BSI: Brief Symptom Inventory, BSL-23: Borderline Symptom List, CVT: Terapia Integral de Validación, DBT-WCCL: Dialectical Behaviour Therapy Ways of Coping Checklist, DDP: Psicoterapia Deconstructiva Dinámica, DERS: Difficulties in Emotional Regulation Scale, DES: Dissociative Experiences Scale, DFST: Terapia de Esquemas de Enfoque Dual, DHSL-9: Deliberate Self-Harm Inventory, FFMQ: Five Facet Mindfulness Questionnaire, GAS: Global Assessment Scale, GPM: Good Psychiatric Management, IDC: Individual Drug Counseling, I-BAFT: Terapia de Familia Integradora orientada a TLP para Adolescentes, IIP: Inventory of Interpersonal Problems, MAACL: Multiple-Affect Adjective Checklist-Revised, MBT: Terapia Basada en la Mentalización, MOTR: Motive-Oriented Therapeutic Relationship, OCC: Optimized Community Care, OR: Odds Ratio, OQ-45: Outcome Questionnaire-45.2, RFS: Reflective Functioning Scale, RR: Riesgo relativo, TCU-ENG: Treatment Engagement Form, TDC: Terapia dialéctico-conductual, TLP: Trastorno límite de personalidad, TUS: Trastorno por Uso de Sustancias, WAI: Working Alliance Inventory, ZAN-BPD: Zanarini Rating Scale for Borderline Personality Disorder.



Dialectical Behaviour Therapy (DBT)

DBT is an intervention that combines strategies from cognitive-behavioral therapies with Zen-based acceptance practices. It was developed by Marsha Linehan specifically for the treatment of BPD (Linehan, 1993). It is a 12-month treatment that combines individual and group psychotherapy. It focuses on working with motivation while teaching self-regulation strategies and skills for change, as well as other strategies for self-acceptance and acceptance of others. Its goal is patient validation and acceptance, with the resulting behavioral changes leading to more functional behavior.

DBT showed improvements in emotional difficulties and maladaptive behaviors associated with BPD (Linehan et al., 1999; Linehan et al., 2002; Flynn et al., 2019). There was also a notable increase in social skills and global functioning (Linehan et al., 1999). DBT was also effective in reducing parasuicidal behaviors, especially in those patients whose frequency was higher at the start of the intervention (Van Den Bosch et al., 2002). Cognitive-behavioral strategies such as mindfulness, included in DBT, also reduced impulsivity and improved its consequences (Flynn et al., 2019).

DBT also led to an increase in the number of abstinence days (Linehan et al., 1999; Linehan et al., 2002; Harned et al., 2008), with this effect being maintained over time (Linehan et al., 2002). Additionally, patients with addiction spent more time in "partial remission" than in "non-response" (Harned et al., 2008). Again, mindfulness was an effective strategy in addiction control (Flynn et al., 2019).

Finally, DBT showed an increase in treatment adherence compared to control interventions (Linehan et al., 1999; Van Den Bosch et al., 2002). However, when compared to the Comprehensive Validation Therapy associated with the twelve-step program (CVT+12SFT), it did not show superiority in adherence (Linehan et al., 2002).

Dual Focus Schema Therapy (DFST)

DFST is a 24-week individual intervention. It is a structured and manualized program designed for the integrated treatment of substance abuse with personality issues. DFST assumes that maladaptive behaviors are the result of schemas that arise during childhood and adolescence from unmet basic emotional needs. It was proposed by Young as a model of personality traits, and its goal is to provide coping strategies and relapse prevention (Young, 1990).

In early studies, the impact of DFST on BPD behaviors could not be assessed due to the high dropout rate during follow-up (Ball et al., 2005). Subsequent studies showed a reduction in the scores of scales used to assess the severity of BPD, especially in the first three months of treatment (Ball et al., 2011). Although the effect of the intervention was maintained over time, after the first three months, this improvement did not increase (Ball et al., 2011). DFST rapidly reduced substance use. However, these patients showed a mild to moderate increase in dysphoria (Ball, 2007). Treatment adherence to the DFST program was higher than that observed in the control intervention (Ball et al., 2005; Ball, 2007), increasing over time (Ball, 2007).

Dynamic Deconstructive Psychotherapy (DDP)

DDP is a manualized intervention lasting between 12 and 28 months. It was developed by Robert J. Gregory for individuals diagnosed with severe BPD, especially those who also had substance abuse issues or antisocial personality traits (Gregory et al., 2008). DDP links the psychopathology of BPD to abnormal processing of emotional experiences. Its goal is to address existing neurocognitive deficits through strategies such as “Association,” “Attribution,” and “Alterity.”

DDP reduced the scores on BPD severity scales and decreased the frequency of self-harm and parasuicidal behaviors; similarly, depressive and dissociative symptoms also improved (Gregory et al., 2008). This improvement was maintained over time, leading to better global functioning and social skills (Gregory et al., 2010). In relation to addictive behaviors, the reviewed evidence showed a reduction in alcohol consumption (Gregory et al., 2008; Gregory et al., 2009; Gregory et al., 2010) and other substances of abuse (Gregory et al., 2009; Gregory et al., 2010). Gregory et al. (2010) demonstrated that this improvement was sustained over time (Gregory et al., 2010). Finally, treatment adherence was significantly higher than that of the control intervention (Gregory et al., 2008), though adherence was strongly influenced by the quality of the therapeutic alliance (Gregory et al., 2009).

Other psychotherapeutic interventions

This section includes interventions that, to date, have only one study evaluating their effectiveness.

Integrative borderline adolescent family therapy (I-BAFT)

I-BAFT emerged from an initiative to develop and improve treatment by the National Institute on Drug Abuse. It combines interventions from DBT and Family Systems Therapy to address issues such as emotional dysregulation and impulsivity, difficulty setting life goals, insecure attachment, and maladaptive family interactions (Santisteban et al., 2003). This intervention aims to reduce drug abuse and self-harming behaviors. The I-BAFT was shown to improve BPD symptoms as measured by scales and individual clinical assessments, both in adolescents with mild symptoms and in those with more severe cases and comorbid depressive symptoms. This intervention also reduced substance use, especially in the group with depressive symptoms. Adherence to the intervention was rated as adequate by the adolescent patients (Santisteban et al., 2015).

Acceptance and commitment therapy (ACT)

ACT seeks to improve the acceptance of harmful emotions and thoughts, while also teaching other emotional regulation skills. Developed by Wilson, ACT aims to improve emotional regulation and reduce hopelessness and core symptoms of BPD (Wilson et al., 2014). ACT led to a progressive and sustained reduction in global BPD severity scores. A reduction in illegal substance use was observed, although alcohol use remained unchanged. Nearly 50% of patients dropped out of the study; however, those who completed it were engaged, satisfied, and had a good relationship with their therapist (Hall et al., 2018).

Good Psychiatric Management (GPM),

developed by Gunderson, is based on establishing an appropriate psychiatric diagnosis, identifying problem areas, communicating



these to the patient, and setting short-term goals (Gunderson, 2014). The therapy focuses on addressing problems that could interfere with treatment and formulating issues related to attachment style. GPM led to a reduction in BPD severity scores. Additionally, motivation questionnaire results were higher in the addiction group, and treatment adherence was also better in this group. However, this study did not assess the impact of the intervention on substance use reduction (Penzenstadler et al., 2018).

Mentalization-based therapy (MBT) is a psychodynamic treatment, both individual and group-based, lasting 18 months. It is grounded in attachment theory and cognitive theories of Theory of Mind, developed by Bateman and Fonagy (Bateman & Fonagy, 2004; Bateman & Fonagy, 2016). MBT aims to help patients become aware of their mental states and those of others within an attachment context. The goal is to address emotional difficulties, impulse control deficits, and interpersonal functioning. MBT did not significantly improve BPD symptoms and worsened dysphoria. However, the MBT group did reduce interpersonal problems and hospitalization time, although these were not primary study objectives. No reduction in self-harm behaviors was observed, nor was there a reduction in substance use. In fact, the number of days of alcohol consumption and binge drinking increased. Adherence was poor, with high dropout rates (Philips et al., 2018).

Finally, Black et al. (2022) evaluated the effectiveness of the **System Training for Emotional Predictability and Problem Solving (STEPPS)** program, observing a reduction in the severity scales of borderline personality disorder (BPD) in patients with

more symptoms of emotional instability and substance abuse. This program, developed by Nancee Blum, consists of a 20-session group intervention focused on educating the patient and promoting disease awareness, as well as teaching skills for emotional and behavioral regulation (Blum et al., 2002).

DISCUSSION

Overall, the findings from the reviewed studies support the efficacy of various psychotherapeutic interventions for patients with comorbid substance use disorder (SUD) and borderline personality disorder (BPD). The evidence is particularly strong for Dialectical Behavior Therapy (DBT) and Dynamic Deconstructive Psychotherapy (DDP). These results highlight the need to implement integrated treatment approaches in clinical practice, counteracting the therapeutic nihilism that persists in many healthcare settings (Martínez-González & Verdejo, 2014).

From a pragmatic standpoint, the following discussion examines the reviewed studies by categorizing their findings based on the impact of interventions on the three established outcome indicators.

Impact of Psychotherapies on Outcome Indicators for BPD

Global functioning

Both Dialectical Behavior Therapy (DBT) and Dynamic Deconstructive Psychotherapy (DDP) have demonstrated effectiveness in enhancing global functioning and social skills in individuals with comorbid borderline personality disorder and Substance Use Disorder

(BPD-SUD), as reported by Linehan et al. (1999) and Gregory et al. (2010). Additionally, Ball et al. (2011) found that Dual-Focused Schema Therapy (DFST) contributed to a reduction in interpersonal problems, though this improvement was limited to the first three months of treatment. Mentalization-Based Therapy (MBT), as examined by Philips et al. (2018), also alleviated interpersonal difficulties but did not demonstrate superior efficacy compared to the control intervention. Notably, the study observed a reduction in hospitalizations; however, as this was not the study's primary focus, the authors recommended further investigation into this variable in future research.

Severity of BPD

Most of the psychotherapeutic interventions reviewed demonstrate efficacy in reducing the severity of borderline personality disorder (BPD). However, outcomes vary depending on whether global severity measures or specific symptom scales are used. Notably, Dialectical Behavior Therapy (DBT) has been shown to reduce overall BPD severity. While Linehan et al. (1999) did not observe greater improvement compared to the control intervention, more recent studies, such as Flynn et al. (2019), reported significant benefits. Similarly, Dual-Focused Schema Therapy (DFST) was found to reduce BPD severity; however, as previously noted, Ball et al. (2011) observed that these improvements did not persist beyond the first three months. Additionally, DFST showed limited effectiveness in alleviating BPD-related dysphoria (Ball, 2007). In line with this, Philips et al. (2019) reported increased distress in patients undergoing Mentalization-Based

Therapy (MBT). Conversely, Dynamic Deconstructive Psychotherapy (DDP) was found to improve BPD severity in two studies (Gregory et al., 2008; Gregory et al., 2010). A key finding from the latter study was its additional effectiveness in reducing concurrent depressive and dissociative symptoms—an effect not observed in the control intervention (Gregory et al., 2010). Regarding the impact of interventions on depressive symptoms, Santisteban et al. (2015) highlighted an important finding: among adolescents with severe BPD symptoms and substance abuse comorbid with depressive disorders, Integrative Behavioral Activation and Family Therapy (I-BAFT) emerged as a promising therapeutic approach. However, when comorbid depression was absent, its effectiveness was limited to treating mild personality disturbances.

Recent studies have further expanded the evidence base. Acceptance and Commitment Therapy (ACT), as evaluated by Hall et al. (2018), demonstrated progressive improvements in personality disorder severity over the course of treatment. General Psychiatric Management (GPM) also proved effective, with sustained benefits over time, particularly when combined with a motivational approach. Penzenstadler et al. (2018) found GPM to be more effective in individuals with concurrent substance use disorders. The most recently evaluated intervention, the STEPPS program, was shown by Black et al. (2022) to be effective in reducing BPD-related psychopathology. However, as each of these interventions has only been assessed in a single study, further research is necessary to strengthen the reliability of these findings.



Parasuicidal behaviors

The two most extensively studied intervention models, Dialectical Behavior Therapy (DBT) and Dynamic Deconstructive Psychotherapy (DDP), have demonstrated significant efficacy in reducing self-injurious and parasuicidal behaviors. The effectiveness of DDP has been supported by findings from Gregory et al. (2008) and Gregory et al. (2009). Similarly, DBT has been shown to reduce parasuicidal behaviors, with Flynn et al. (2019) attributing this effect to mindfulness training. Additionally, Van den Bosch et al. (2002) reported a decrease in the intensity of self-injurious behaviors among individuals with a higher baseline frequency of these behaviors; however, this reduction did not reach statistical significance. These findings suggest that interventions targeting emotional regulation and fostering reflective capacity may enhance individuals' awareness of the consequences of their actions, thereby indirectly mitigating impulsivity. Furthermore, given the established relationship between substance use and self-harm risk, interventions aimed at reducing substance use may also contribute to improvements in this domain.

Impact of Psychotherapies on Outcome Indicators for Substance Use Disorder

Impact on substance use

Comorbid substance use is widely recognized as a factor associated with poor prognosis. Overall, the interventions reviewed have not consistently demonstrated a lasting effect on substance use reduction. Although Linehan

et al. (2002) reported a positive impact, subsequent studies have not confirmed these findings. Similarly, Dual-Focused Schema Therapy (DFST) was found to rapidly decrease substance use (Ball, 2007); however, these improvements were not sustained over time. Despite this, Harned et al. (2005) identified Dialectical Behavior Therapy (DBT) as effective, with treated patients being more likely to achieve at least partial remission. Additionally, Hall et al. (2018) reported that Acceptance and Commitment Therapy (ACT) contributed to a reduction in substance use, though its effect on alcohol consumption was limited. Given these findings, further research is warranted to assess the long-term impact of interventions and their effects on different types of substance use.

In contrast, Dynamic Deconstructive Psychotherapy (DDP) has demonstrated sustained reductions in substance use, as reported by Gregory et al. (2008, 2009, 2010). Similarly, Santisteban et al. (2015) found Integrative Behavioral Activation and Family Therapy (I-BAFT) to be effective in reducing substance use, particularly among adolescents with comorbid depressive symptoms. Notably, Mentalization-Based Therapy (MBT) was the only intervention that, according to Philips et al. (2018), did not reduce substance use severity and, in some cases, even led to an increase.

Days of abstinence

DBT was the only intervention that, in addition to exerting some influence on substance use, significantly increased the number of abstinent days, as reported by Linehan et al. (1999) and Harned et al. (2005).

Impact of Psychotherapies on Treatment Adherence

Patients with comorbid borderline personality disorder (BPD) and Substance Use Disorder (SUD) have traditionally been considered less likely to adhere to treatment. However, Dialectical Behavior Therapy (DBT) has demonstrated superior adherence rates, as reported by Linehan et al. (1999) and Van den Bosch et al. (2002). Notably, in the study by Linehan et al. (2002), the control intervention (CBT + 12-Step Facilitation Therapy [12SFT]) yielded higher adherence rates, highlighting a factor that warrants further investigation when comparing these approaches and examining the role of the therapeutic alliance.

Regarding Dual-Focused Schema Therapy (DFST), Ball et al. (2005) reported a drop-out rate exceeding 50%, though Ball (2007) later suggested that adherence improved as treatment progressed. However, this finding was not confirmed by Ball et al. (2011). Similarly, while Gregory et al. (2008) reported positive adherence outcomes for Dynamic Deconstructive Psychotherapy (DDP), these results were not replicated in subsequent studies. Gregory et al. (2009) proposed that adherence to DDP was influenced more by therapist skill than by the intervention itself.

Among other evaluated interventions, Integrative Behavioral Activation and Family Therapy (I-BAFT), Acceptance and Commitment Therapy (ACT), and General Psychiatric Management (GPM) demonstrated favorable adherence rates. According to Penzenstadler et al. (2018), adherence was particularly higher among patients with comorbid SUD. In contrast, Mentalization-Based Therapy (MBT) exhibited poor adherence, which Philips et al. (2018) attributed to a lack of motivation among therapists.

Current Perspective and Future Research

The comorbidity between borderline personality disorder (BPD) and Substance Use Disorder (SUD) presents a complex clinical profile and is associated with a poorer prognosis, posing a significant challenge for mental health professionals. Furthermore, individuals with dual pathology often experience heightened stigma and negative attitudes from therapists (Heath et al., 2018).

Recent research underscores the importance of a transdiagnostic perspective. Emotional dysregulation and impulsivity have been identified as core constructs underlying both BPD and SUD (Sloan et al., 2017). Consequently, interventions targeting these traits—rather than focusing solely on symptom reduction—may equip patients with essential coping skills and enhance self-efficacy (Donald et al., 2019).

In this regard, third-wave cognitive-behavioral therapies, such as Dialectical Behavior Therapy (DBT) and Acceptance and Commitment Therapy (ACT), hold promise, as they explicitly address emotional processing difficulties. Similarly, Dynamic Deconstructive Psychotherapy (DDP) aims to improve BPD severity and reduce substance use by targeting maladaptive emotional processing mechanisms.

Additionally, the role of attachment patterns in the development and maintenance of mental disorders cannot be overlooked. According to Bartholomew and Horowitz's (1991) adult attachment model, individuals with BPD typically exhibit a "preoccupied" attachment style, whereas those with SUD tend to display an "avoidant" attachment



pattern. However, research suggests that patients with comorbid BPD-SUD present an attachment style more closely resembling that of individuals with SUD than those with BPD alone (Hiebler-Ragger et al., 2016). This distinction is clinically relevant, as it may contribute to the challenges these patients face in establishing therapeutic relationships (Schindler & Sack, 2015).

Attachment-based interventions, such as Mentalization-Based Therapy (MBT), require specialized training and long-term implementation. Bateman and Fonagy (2009) emphasize that therapist competence and treatment duration are critical factors in MBT's effectiveness. Notably, the only study evaluating MBT for BPD-SUD yielded poor outcomes, with only two therapists receiving adequate ratings, and treatment lasting 18 months. Future research should consider these methodological factors to avoid potential biases in outcome assessments.

Both attachment patterns and emotional regulation deficits play a crucial role in understanding BPD-SUD comorbidity. Insecure attachment styles contribute to heightened stress sensitivity and increase reliance on external regulatory mechanisms, such as substance use (Hiebler-Ragger et al., 2016). In this context, attachment difficulties may help explain the co-occurrence of emotional dysregulation and impulsivity in individuals with BPD and SUD (Cheetham et al., 2010).

This review has several limitations that must be acknowledged when interpreting its findings. As the included studies were conducted in developed countries,

their applicability to populations with different sociodemographic and cultural backgrounds remains uncertain. Additionally, the use of self-report measures introduces potential biases, including memory distortion and social desirability effects. The language restrictions applied in the review process may have limited the scope of available data, further contributing to potential bias. Lastly, the selection of studies from specific databases may have influenced the findings, underscoring the need for broader and more diverse research approaches in future investigations.

CONCLUSIONS

Psychotherapeutic interventions have proven effective in treating the comorbidity of borderline personality disorder (BPD) and Substance Use Disorder (SUD), highlighting the need to move away from the therapeutic nihilism often observed in healthcare settings. Among the evaluated approaches, Dialectical Behavior Therapy (DBT) and Dynamic Deconstructive Psychotherapy (DDP) currently have the strongest empirical support. However, while other interventions show potential efficacy, the existing evidence remains limited. Future research should prioritize the role of transdiagnostic factors and attachment patterns to develop interventions tailored to the specific characteristics of this complex comorbidity.

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REFERENCES

- Ball, S. A., Cobb-Richardson, P., Connolly, A. J., Bujosa, C. T., & O'neall, T. W. (2005). Substance abuse and personality disorders in homeless drop-in center clients: symptom severity and psychotherapy retention in a randomized clinical trial. *Comprehensive psychiatry*, 46(5), 371–379. <https://doi.org/10.1016/j.comppsy.2004.11.003>
- Ball S. A. (2007). Comparing individual therapies for personality disordered opioid dependent patients. *Journal of personality disorders*, 21(3), 305–321. <https://doi.org/10.1521/pedi.2007.21.3.305>
- Ball, S. A., Maccarelli, L. M., LaPaglia, D. M., & Ostrowski, M. J. (2011). Randomized trial of dual-focused vs. single-focused individual therapy for personality disorders and substance dependence. *The Journal of nervous and mental disease*, 199(5), 319–328. <https://doi.org/10.1097/NMD.0b013e3182174e6f>
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61(2), 226–244. <https://doi.org/10.1037/0022-3514.61.2.226>
- Bateman, A., & Fonagy, P. (2004). *Psychotherapy for Borderline Personality Disorder: Mentalization-based Treatment*. Oxford University Press, USA.
- Bateman, A., & Fonagy, P. (2009). Randomized controlled trial of outpatient mentalization-based treatment versus structured clinical management for borderline personality disorder. *The American journal of psychiatry*, 166(12), 1355–1364. <https://doi.org/10.1176/appi.ajp.2009.09040539>
- Bateman, A., & Fonagy, P. (2016). *Mentalization-Based Treatment For Personality Disorders. A Practical Guide*. Oxford University Press. Desclée De Brouwer, S.A.
- Black, D. W., Blum, N., & Allen, J. (2022). Factor structure of borderline personality disorder and response to Systems Training for Emotional Predictability and Problem Solving. *Personality and mental health*, 16(3), 263–275. <https://doi.org/10.1002/pmh.1538>
- Blum, N., Pfohl, B., John, D. S., Monahan, P., & Black, D. W. (2002). STEPPS: a cognitive-behavioral systems-based group treatment for outpatients with borderline personality disorder--a preliminary report. *Comprehensive psychiatry*, 43(4), 301–310. <https://doi.org/10.1053/comp.2002.33497>
- Center for Substance Abuse Treatment. (2005). *Substance Abuse Treatment for Persons With Co-Occurring Disorders*. Substance Abuse and Mental Health Services Administration (US).
- Cheetham, A., Allen, N. B., Yücel, M., & Lubman, D. I. (2010). The role of affective dysregulation in drug addiction. *Clinical psychology review*, 30(6), 621–634. <https://doi.org/10.1016/j.cpr.2010.04.005>
- Darke, S., Ross, J., Williamson, A., & Teesson, M. (2005). The impact of borderline personality disorder on 12-month outcomes for the treatment of heroin dependence. *Addiction (Abingdon, England)*, 100(8), 1121–1130. <https://doi.org/10.1111/j.1360-0443.2005.01123.x>



- Donald, F., Arunogiri, S., & Lubman, D. I. (2019). Substance use and borderline personality disorder: fostering hope in the face of complexity. *Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists*, 27(6), 569–572. <https://doi.org/10.1177/1039856219875061>
- Flynn, D., Joyce, M., Spillane, A., Wrigley, C., Corcoran, P., Hayes, A., Flynn, M., Wyse, D., Corkery, B., & Mooney, B. (2019). Does an adapted Dialectical Behaviour Therapy skills training programme result in positive outcomes for participants with a dual diagnosis? A mixed methods study. *Addiction science & clinical practice*, 14(1), 28. <https://doi.org/10.1186/s13722-019-0156-2>
- Gartlehner, G., Crotty, K., Kennedy, S., Edlund, M.J., Ali, R., Siddiqui, M., Fortman, R., Wines, R., Persad, E., Viswanathan, M. (2021). Pharmacological Treatments for Borderline Personality Disorder: A Systematic Review and Meta-Analysis. *CNS Drugs.*, 35(10):1053-1067. <https://doi.org/10.1007/s40263-021-00855-4>. PMID: 34495494; PMCID: PMC8478737.
- González, E., Arias, F., Szerman, N., Vega, P., Mesias, B., & Basurte, I. (2019). Coexistence between personality disorders and substance use disorder. Madrid study about prevalence of dual pathology. *Actas españolas de psiquiatria*, 47(6), 218–228.
- Gregory, R. J., & Remen, A. L. (2008). A manual-based psychodynamic therapy for treatment-resistant borderline personality disorder. *Psychotherapy (Chicago, Ill.)*, 45(1), 15–27. <https://doi.org/10.1037/0033-3204.45.1.15>
- Gregory, R. J., Chlebowsky, S., Kang, D., Remen, A. L., Soderberg, M. G., Stepkovich, J., & Virk, S. (2008). A controlled trial of psychodynamic psychotherapy for co-occurring borderline personality disorder and alcohol use disorder. *Psychotherapy (Chicago, Ill.)*, 45(1), 28–41. <https://doi.org/10.1037/0033-3204.45.1.28>
- Gregory, R. J., Remen, A. L., Soderberg, M., & Ploutz-Snyder, R. J. (2009). A controlled trial of psychodynamic psychotherapy for co-occurring borderline personality disorder and alcohol use disorder: six-month outcome. *Journal of the American Psychoanalytic Association*, 57(1), 199–205. <https://doi.org/10.1177/00030651090570011006>
- Gregory, R. J., DeLucia-Deranja, E., & Mogle, J. A. (2010). Dynamic deconstructive psychotherapy versus optimized community care for borderline personality disorder co-occurring with alcohol use disorders: a 30-month follow-up. *The Journal of nervous and mental disease*, 198(4), 292–298. <https://doi.org/10.1097/NMD.0b013e3181d6172d>
- Gunderson, J. G., MD. (2014). *Handbook of Good Psychiatric Management for Borderline Personality Disorder*. American Psychiatric Pub.
- Gunderson, J. G., Herpertz, S. C., Skodol, A. E., Torgersen, S., & Zanarini, M. C. (2018). Borderline personality disorder. *Nature reviews. Disease primers*, 4, 18029. <https://doi.org/10.1038/nrdp.2018.29>
- Hall, K., Simpson, A., O'donnell, R., Sloan, E., Staiger, P. K., Morton, J., ... Lubman, D. I. (2018). Emotional dysregulation as

- a target in the treatment of co-existing substance use and borderline personality disorders: A pilot study. *Clinical Psychologist*, 22(2), 112–125. <https://doi.org/10.1111/cp.12162>
- Harned, M. S., Chapman, A. L., Dexter-Mazza, E. T., Murray, A., Comtois, K. A., & Linehan, M. M. (2008). Treating co-occurring Axis I disorders in recurrently suicidal women with borderline personality disorder: a 2-year randomized trial of dialectical behavior therapy versus community treatment by experts. *Journal of consulting and clinical psychology*, 76(6), 1068–1075. <https://doi.org/10.1037/a0014044>
- Heath, L. M., Laporte, L., Paris, J., Hamdulahpur, K., & Gill, K. J. (2018). Substance Misuse Is Associated With Increased Psychiatric Severity Among Treatment-Seeking Individuals With Borderline Personality Disorder. *Journal of personality disorders*, 32(5), 694–708. <https://doi.org/10.1521/pedi.2017.31.307>
- Hiebler-Ragger, M., Unterrainer, H. F., Rinner, A., & Kapfhammer, H. P. (2016). Insecure Attachment Styles and Increased Borderline Personality Organization in Substance Use Disorders. *Psychopathology*, 49(5), 341–344. <https://doi.org/10.1159/000448177>
- Kienast, T., Stoffers, J., BERPpohl, F., & Lieb, K. (2014). Borderline personality disorder and comorbid addiction: epidemiology and treatment. *Deutsches Arzteblatt international*, 111(16), 280–286. <https://doi.org/10.3238/arztebl.2014.0280>
- Köck, P., & Walter, M. (2018b). Personality disorder and substance use disorder – An update. *Mental Health & Prevention*, 12, 82–89. <https://doi.org/10.1016/j.mhp.2018.10.003>
- Leichsenring, F., Leibing, E., Kruse, J., New, A. S., & Leweke, F. (2011). Borderline personality disorder. *Lancet (London, England)*, 377(9759), 74–84. [https://doi.org/10.1016/S0140-6736\(10\)61422-5](https://doi.org/10.1016/S0140-6736(10)61422-5)
- Leichsenring, F., Fonagy, P., Heim, N., Kernberg, O.F., Leweke, F., Luyten, P., Salzer, S., Spitzer, C., Steinert, C. (2024). Borderline personality disorder: a comprehensive review of diagnosis and clinical presentation, etiology, treatment, and current controversies. *World Psychiatry*, 23(1), 4–25. <https://doi.org/10.1002/wps.21156>. PMID: 38214629; PMCID: PMC10786009.
- Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. Guilford Press.
- Linehan, M. M., Schmidt, H., 3rd, Dimeff, L. A., Craft, J. C., Kanter, J., & Comtois, K. A. (1999). Dialectical behavior therapy for patients with borderline personality disorder and drug-dependence. *The American journal on addictions*, 8(4), 279–292. <https://doi.org/10.1080/105504999305686>
- Linehan, M. M., Dimeff, L. A., Reynolds, S. K., Comtois, K. A., Welch, S. S., Heagerty, P., & Kivlahan, D. R. (2002). Dialectical behavior therapy versus comprehensive validation therapy plus 12-step for the treatment of opioid dependent women meeting criteria for borderline personality disorder. *Drug and alcohol dependence*, 67(1), 13–26. [https://doi.org/10.1016/S0376-8716\(02\)00011-X](https://doi.org/10.1016/S0376-8716(02)00011-X)



- Links, P. S., Heslegrave, R. J., Mitton, J. E., van Reekum, R., & Patrick, J. (1995). Borderline personality disorder and substance abuse: consequences of comorbidity. *Canadian journal of psychiatry. Revue canadienne de psychiatrie*, 40(1), 9–14. <https://doi.org/10.1177/070674379504000105>
- Littlefield, A. K., & Sher, K. J. (2016). Personality and substance use disorders. In K. J. Sher (Ed.), *The Oxford handbook of substance use and substance use disorders* (pp. 351–374). Oxford University Press.
- Martínez-González, J. M., Caracul, A., Vilar-López, R., Becoña, E., & Verdejo-García, A. (2020). Evaluation of Motivation for the Treatment of Drug Addicts with Personality Disorders. *The Spanish journal of psychology*, 23, e15. <https://doi.org/10.1017/SJP.2020.13>
- Martínez-González, J.M., Verdejo A. (2014). *Drogodependientes con trastorno de la personalidad. Guía de intervenciones psicológicas*. Desclée de Brouwer.
- Mattingley, S., Youssef, G. J., Manning, V., Graeme, L., & Hall, K. (2022). Distress tolerance across substance use, eating, and borderline personality disorders: A meta-analysis. *Journal of affective disorders*, 300, 492–504. <https://doi.org/10.1016/j.jad.2021.12.126>
- McLellan, A. T., Arndt, I. O., Metzger, D. S., Woody, G. E., & O'Brien, C. P. (1993). The effects of psychosocial services in substance abuse treatment. *JAMA*, 269(15), 1953–1959.
- Page, M. J., McKenzie, J. E., 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., . . . Alonso-Fernández, S. (2021b). Declaración PRISMA 2020: una guía actualizada para la publicación de revisiones sistemáticas. *Revista Española de Cardiología*, 74(9), 790-799. <https://doi.org/10.1016/j.recsep.2021.06.016>
- Pennay, A., Cameron, J., Reichert, T., Strickland, H., Lee, N. K., Hall, K., & Lubman, D. I. (2011). A systematic review of interventions for co-occurring substance use disorder and borderline personality disorder. *Journal of substance abuse treatment*, 41(4), 363–373. <https://doi.org/10.1016/j.jsat.2011.05.004>
- Philips, B., Wennberg, P., Konradsson, P., & Franck, J. (2018). Mentalization-Based Treatment for Concurrent Borderline Personality Disorder and Substance Use Disorder: A Randomized Controlled Feasibility Study. *European addiction research*, 24(1), 1–8. <https://doi.org/10.1159/000485564>
- Penzenstadler, L., Kolly, S., Rothen, S., Khazaal, Y., & Kramer, U. (2018). Effects of substance use disorder on treatment process and outcome in a ten-session psychiatric treatment for borderline personality disorder. *Substance abuse treatment, prevention, and policy*, 13(1), 10. <https://doi.org/10.1186/s13011-018-0145-6>
- Reynolds, C. J., Vest, N., & Tragesser, S. L. (2021). Borderline Personality Disorder Features and Risk for Prescription Opioid Misuse in a Chronic Pain Sample: Roles for Identity Disturbances and Impulsiv-

- ity. *Journal of personality disorders*, 35(2), 270–287. <https://doi.org/10.1521/pedi.2019.33.440>
- Santisteban, D. A., Muir, J. A., Mena, M. P., & Mitrani, V. B. (2003). Integrative borderline adolescent family therapy: meeting the challenges of treating adolescents with borderline personality disorder. *Psychotherapy (Chicago, Ill.)*, 40(4), 251–264. <https://doi.org/10.1037/0033-3204.40.4.251>
- Santisteban, D. A., Mena, M. P., Muir, J., McCabe, B. E., Abalo, C., & Cummings, A. M. (2015). The efficacy of two adolescent substance abuse treatments and the impact of comorbid depression: results of a small randomized controlled trial. *Psychiatric rehabilitation journal*, 38(1), 55–64. <https://doi.org/10.1037/prj0000106>
- Schindler, A., & Sack, P. M. (2015). Exploring Attachment Patterns in Patients With Comorbid Borderline Personality and Substance Use Disorders. *The Journal of nervous and mental disease*, 203(11), 820–826. <https://doi.org/10.1097/NMD.0000000000000377>
- Sher, K. J., & Trull, T. J. (2002). Substance use disorder and personality disorder. *Current psychiatry reports*, 4(1), 25–29. <https://doi.org/10.1007/s11920-002-0008-7>
- Skodol, A. E., Oldham, J. M., & Gallaher, P. E. (1999). Axis II comorbidity of substance use disorders among patients referred for treatment of personality disorders. *The American journal of psychiatry*, 156(5), 733–738. <https://doi.org/10.1176/ajp.156.5.733>
- Sloan, E., Hall, K., Moulding, R., Bryce, S., Mildred, H., & Staiger, P. K. (2017). Emotion regulation as a transdiagnostic treatment construct across anxiety, depression, substance, eating and borderline personality disorders: A systematic review. *Clinical psychology review*, 57, 141–163. <https://doi.org/10.1016/j.cpr.2017.09.002>
- Stoffers, J. M., Völlm, B. A., Rücker, G., Timmer, A., Huband, N., & Lieb, K. (2012). Psychological therapies for people with borderline personality disorder. *The Cochrane database of systematic reviews*, 2012(8), CD005652. <https://doi.org/10.1002/14651858.CD005652.pub2>
- Storebø, O. J., Stoffers-Winterling, J. M., Völlm, B. A., Kongerslev, M. T., Mattivi, J. T., Jørgensen, M. S., Faltinsen, E., Todorovac, A., Sales, C. P., Callesen, H. E., Lieb, K., & Simonsen, E. (2020). Psychological therapies for people with borderline personality disorder. *The Cochrane database of systematic reviews*, 5(5), CD012955. <https://doi.org/10.1002/14651858.CD012955.pub2>
- Tomko, R. L., Trull, T. J., Wood, P. K., & Sher, K. J. (2014). Characteristics of borderline personality disorder in a community sample: comorbidity, treatment utilization, and general functioning. *Journal of personality disorders*, 28(5), 734–750. <https://doi.org/10.1521/pedi.2012.26.093>
- Torrens, M., Rossi, P. C., Martinez-Riera, R., Martinez-Sanvisens, D., & Bulbena, A. (2012). Psychiatric co-morbidity and substance use disorders: treatment in parallel systems or in one integrated system?. *Substance use & misuse*, 47(8-9), 1005–1014. <https://doi.org/10.3109/10826084.2012.663296>



- Trull, T. J., Sher, K. J., Minks-Brown, C., Durbin, J., & Burr, R. (2000). Borderline personality disorder and substance use disorders: a review and integration. *Clinical psychology review*, 20(2), 235–253. [https://doi.org/10.1016/S0272-7358\(99\)00028-8](https://doi.org/10.1016/S0272-7358(99)00028-8)
- Trull, T. J., Freeman, L. K., Vebares, T. J., Choate, A. M., Helle, A. C., & Wycoff, A. M. (2018). Borderline personality disorder and substance use disorders: an updated review. *Borderline personality disorder and emotion dysregulation*, 5, 15. <https://doi.org/10.1186/s40479-018-0093-9>
- van den Bosch, L. M., Verheul, R., & van den Brink, W. (2001). Substance abuse in borderline personality disorder: clinical and etiological correlates. *Journal of personality disorders*, 15(5), 416–424. <https://doi.org/10.1521/pedi.15.5.416.19201>
- van den Bosch, L. M., Verheul, R., Schippers, G. M., & van den Brink, W. (2002). Dialectical Behavior Therapy of borderline patients with and without substance use problems. Implementation and long-term effects. *Addictive behaviors*, 27(6), 911–923. [https://doi.org/10.1016/S0306-4603\(02\)00293-9](https://doi.org/10.1016/S0306-4603(02)00293-9)
- Verheul, R., Van Den Brink, W., & Hartgers, C. (1995). Prevalence of Personality Disorders among Alcoholics and Drug Addicts: An Overview. *European Addiction Research*, 1(4), 166–177. <https://doi.org/10.1159/000259080>
- Verheul, R., & van den Brink, W. (2004). Comorbidity of personality disorders and substance use disorders. En H. R. Kranzler y J. A. Tinsley (Eds.), *Dual diagnosis and psychiatric treatment* (2^a ed, pp. 261–316). CRC Press.
- Wilson, K. G., Hayes, S. C., & Strosahl, K. (2014). *Terapia de aceptación y compromiso: proceso y práctica del cambio consciente (mindfulness)*. Desclée De Brouwer.
- Wilson, S. T., Fertuck, E. A., Kwitel, A., Stanley, M. C., & Stanley, B. (2006). Impulsivity, suicidality and alcohol use disorders in adolescents and young adults with borderline personality disorder. *International Journal Of Adolescent Medicine And Health*, 18(1). <https://doi.org/10.1515/ijamh.2006.18.1.189>
- Young, J. E. (1990). *Cognitive therapy for personality disorders: A schema- focused approach*. Professional Resource Exchange, Inc.
- Zanarini, M. C., Frankenburg, F. R., Hennen, J., Reich, D. B., & Silk, K. R. (2004). Axis I comorbidity in patients with borderline personality disorder: 6-year follow-up and prediction of time to remission. *The American journal of psychiatry*, 161(11), 2108–2114. <https://doi.org/10.1176/appi.ajp.161.11.2108>