

Systematic Review

Systematic Review on Emotion Regulation Difficulties in Personality Disorders

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ABSTRACT

This systematic review examines the relationship between emotion regulation and personality disorders, a link previously suggested by mental health experts. Its objective is to identify specific variables that influence this connection, differentiating common and divergent factors between different disorders. To do this, 58 studies were selected under strict inclusion and exclusion criteria, to guarantee the quality of the data. The results confirm a clear relationship between deficits in emotion regulation and personality disorders, especially borderline personality disorder. However, more research is required in broad clinical settings to strengthen these findings and develop effective therapeutic interventions to help patients cope.

Revisión Sistemática Sobre las Dificultades de Regulación Emocional en los Trastornos de la Personalidad

RESUMEN

Esta revisión sistemática analiza la relación entre la regulación emocional y los trastornos de personalidad, un vínculo previamente sugerido por expertos en salud mental. Su objetivo es identificar variables específicas que influyen en esta conexión, diferenciando factores comunes y divergentes entre distintos trastornos. Para ello, se seleccionaron 58 estudios bajo estrictos criterios de inclusión y exclusión, garantizando la calidad de los datos. Los resultados confirman una relación clara entre déficits en regulación emocional y los trastornos de personalidad, especialmente el Trastorno Límite de la Personalidad. No obstante, se requiere más investigación en contextos clínicos amplios para fortalecer estos hallazgos y desarrollar intervenciones terapéuticas eficaces que ayuden a los pacientes a manejar.

Palabras clave

Trastorno límite de la personalidad
Desregulación emocional
Psicopatología
Transdiagnóstico
Psicoterapia

Difficulty regulating emotions is a prevalent yet understudied problem that can affect all individuals on the emotion, physical, and psychological levels. Many individuals feel overwhelmed by their inability to control how they feel in the face of unexpected situations, which causes them significant distress.

In order to understand what emotion regulation entails, it is first necessary to explain what emotions are. There is no specific, universally accepted, and valid definition of emotion (Fernández-Abascal & Jiménez Sánchez, 2010). In fact, “almost everybody thinks he understands what it means, until he attempts to define it. Then practically no one claims to understand it” (Wenger et al., 1962).

Emotions are an adaptive human response to an internal or external stimulus that produces a change in mood along with a somatic reaction, helping us survive in our environment. In other words, they are deep-seated impulses that drive us to act (Goleman, 1995).

There are several types of emotions. First, there are primary emotions—more commonly known as basic emotions—which are innate and are experienced in response to a stimulus. These include anger, fear, sadness, disgust, happiness, and surprise (Ekman et al., 1972). Second, there are secondary emotions, which are learned and derived from the primary ones and include shame, guilt, and pride, among others.

Having the ability to control one's emotions is known as emotion regulation (ER) (Gross & Ford, 2024). More specifically, emotion regulation refers to “the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998).

Understanding emotion regulation involves recognizing the various strategies people use to manage negative emotions. There are adaptive strategies, such as cognitive reappraisal, which alters the emotion meaning of a situation; acceptance, which involves tolerating emotions without suppressing them; problem-solving, which addresses the cause of distress; and attentional deployment, which redirects focus toward less threatening aspects (Aldao et al., 2010; Gross & John, 2003). These strategies enable functional emotion management.

However, processes such as rumination, repetitive negative thinking, emotion suppression, and avoidance act counterproductively, intensifying and prolonging distress, especially for those who have chronic difficulties regulating their emotions (Aldao et al., 2010; Moulds & McEvoy, 2025). Differentiating between these adaptive and maladaptive strategies is essential for understanding personality disorders (Moulds & McEvoy, 2025).

Regarding gender differences in emotion regulation, the literature shows that women demonstrate greater emotion awareness and understanding, conceptualize their emotions more effectively, and tend to analyze and modify their emotion states more frequently. Furthermore, they attribute the causes of negative events to stable, internal factors and are more likely to communicate their feelings, although this makes them more vulnerable to rumination and the internalization of distress, increasing the risk of depression and anxiety (Nolen-Hoeksema, 2012).

On the other hand, men—despite experiencing similar emotions—demonstrate lower emotion awareness and more automatic regulation, attributing causes to situational and external factors. Suppression and avoidance strategies predominate, favoring the externalization of distress, which is associated with impulsive behaviors and substance use (Nolen-Hoeksema, 2012). These differences have significant clinical implications for the manifestation and treatment of personality disorders.

Therefore, emotion dysregulation can lead to contextually maladaptive behavior, as well as having negative consequences for the individual in all areas of their life (work, education, social, finances, etc.).

The symptoms of a person lacking emotion self-control are highly diverse; they may react impulsively, become defensive, become depressed in stressful situations, experience prolonged lack of concentration, or even show a deterioration in interpersonal relationships. Furthermore, this lack of control can also lead to negative emotion states such as anxiety or depression. A variety of therapeutic techniques can be utilized to maintain control and facilitate successful coping, such as mindfulness, muscle relaxation techniques, or dialectical behavior therapy (DBT) (Valenzuela, 2021).

Since difficulties with emotion regulation are often a characteristic found in individuals with personality disorders, it is of interest to study a potential relationship between the two (Fitzpatrick et al., 2023).

The Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5) (APA, 2014) states that a personality disorder is defined as a persistent pattern of internal experiences and behaviors that deviates significantly from the cultural norms accepted by the individual. This phenomenon, characterized by its inflexibility and stability over time, typically manifests in adolescence or early adulthood, leading to distress or impairment in psychosocial functioning (Fundación AMAI TLP, 2016).

The DSM-5 classifies 10 types of personality disorders into three clusters (A, B, and C) based on similarities in their characteristics. Cluster A is characterized by odd or eccentric behaviors and comprises paranoid, schizoid, and schizotypal personality disorders. Cluster B is distinguished by emotion, dramatic, or erratic behaviors, such as antisocial, borderline, histrionic, and narcissistic personality disorders. Finally, Cluster C is characterized by the presence of fear or anxiety, and includes avoidant, dependent, and obsessive-compulsive personality disorders.

Much of the research on difficulties with emotion regulation in personality disorders has focused on borderline personality disorder (BPD). This disorder has been one of the most difficult to treat from a psychotherapeutic perspective, although it has recently attracted significant interest and ongoing investigation into its distinctive features.

The National Institute of Mental Health (NIMH, 2022) defines this disorder as “a mental illness that severely affects a person's ability to regulate their emotions.” It is characterized by a general pattern of symptoms, including instability in interpersonal relationships, emotions, and self-image, as well as a tendency toward impulsivity (Nieto, 2006).

This systematic review aims to analyze multiple studies with the overall objective of determining whether, based on the scientific literature from the past 14 years, there is a relationship between difficulties in emotion regulation and personality disorders.

Method

Participants

The sample comprised individuals presenting with emotion regulation difficulties and personality disorders. No restrictions were placed on sex, culture, or ethnicity.

Procedure

A systematic search was conducted following the PRISMA method (Urrútia & Bonfill, 2010) through March 11, 2024, using only the PSYCINFO (EBSCO) database. To select the most appropriate studies, the following keywords were established: “emotion regulation” and “personality disorders,” using the Boolean operator “AND” to combine both categories. Initially, 1,118 articles were identified, which were screened using a set of inclusion criteria, resulting in a total of 373 articles for review.

Inclusion and exclusion criteria were established for selecting studies during the systematic review. Studies were included if they met the following criteria: (1) they must include the target keywords in either the title or abstract, (2) they must be academic publications, (3) they must be written in English or Spanish, (4) full-text access must be available, and (4) they must have been published between 2010 and 2024.

The following data were extracted to analyze the selected articles: (1) author and year of publication of the article, (2)

sample size and percentage of female participants, (3) age of participants (mean and standard deviation), (4) type of personality disorder, (5) comorbidity with other disorders, (6) instruments used, (7) criterion variables, (8) therapies employed, and (9) treatment effectiveness.

Instruments

The 58 selected studies used a total of 114 measurement instruments to assess the criterion variables (see Table 1 for complete details). Most of these instruments demonstrated adequate internal consistency (Frias-Navarro, 2022), with Cronbach's alpha values falling within acceptable ranges (0.7 to 0.90). Specifically, 39 instruments had an alpha of 0.7 or higher, reflecting acceptable reliability, while 7 instruments exceeded the expected maximum value of 0.90. However, 2 instruments (ERQ with $\alpha = 0.69$ and EES with $\alpha = 0.49$) showed reliability below the recommended minimum standards. The remaining 31 instruments did not provide information on their internal consistency.

Table 1
Characteristics of the instruments

Instrument	Author and year	What it measures	Reliability
Difficulties in Emotion Regulation Scale (DERS)	Gratz & Roemer, 2004	Emotion dysregulation	$\alpha = .95$
Latent Profile Analysis (LPA)	ND	Used to identify unobserved (latent) subgroups within a population based on observed variables	Between $\alpha = .79$ and $\alpha = .90$
Beck Depression Inventory (BDI)	Beck, 1961	Severity of depressive symptoms	$\alpha = .83$
RSFC analysis	ND	Functional connectivity analysis using functional magnetic resonance imaging (fMRI)	ND
BPD Severity Index (BPDSI)	ND	BPD severity	ND
Interview for Trauma Events in Childhood (ITEC)	Lobbestael et al., 2006	Child abuse	ND
Barratt Impulsiveness Scale (BIS-11)	Patton et al., 1995	Assessment of impulsivity	ND
Toronto Alexithymia Scale 20 (TAS-20)	Bagby et al., 1994	Alexithymia	$\alpha = .86$
Distress Tolerance Scale (DTS)	Simons & Gaher, 2005	Perceived ability to tolerate emotion distress	$\alpha = .88$
Inventory of Interpersonal Problems (IIP)	Horowitz et al., 1988	Assessing interpersonal difficulties	$\alpha = .95$
Sense of Self Scale (SOSS)	Flury & Ickes, 2007	Measuring identity disturbance in four areas: lack of self-understanding; the tendency to confuse one's own feelings and thoughts with those of others; the feeling that one's own existence is fragile or incomplete; and subtle and sudden changes in feelings, opinions, and values	$\alpha = .90$
Personality Assessment Inventory - Borderline Scale (PAI-BOR)	Morey, 1991	Unique characteristics of borderline personality disorder according to the DSM-IV-TR.	$\alpha = .84$
Center for Epidemiologic Studies Scale (CES-D)	Radloff, 1977	Designed to measure the severity of depressive symptoms in the general population	$\alpha = .94$
Functional Assessment of Self-Mutilation (FASM)	Lloyd, 2018	Assessment of NSSI in adolescents	$\alpha = .991$
Emotion Regulation Questionnaire for Children and Adolescents (ERQ-CA)	Gullone & Taffe, 2019	Cognitive reappraisal and expression suppression	$\alpha = .726$
Borderline Personality Features Scale for Children (BPFS-C)	Crick et al., 2005	Affective instability (impulsivity, difficulty regulating mood, more intense emotions), identity disturbance (inconsistency in self-assessment, identity problems), negative relationships (emotion distress, feelings of isolation, negative evaluation of friends, paranoia), and self-harm (excessive, uncontrollable behavior, lack of self-control)	$\alpha = .870$
General Emotion Dysregulation Measure (GEDM)	Newhill et al., 2010	Emotion dysregulation in patients with Cluster B personality disorders	$\alpha = .89$
DBT-WCCL	Neacsiu et al., 2010	Use of DBT skills in individuals	Between $\alpha = .92$ and $\alpha = .96$
Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II)	First et al., 1996	Presence of Axis II personality disorders according to the criteria of the Diagnostic and Statistical Manual of Mental Disorders DSM-IV)	Between $\alpha = .90$ and $\alpha = .98$
Beck Depression Inventory-II (BDI-II)	Beck et al., 1996	Severity of depressive symptoms	$\alpha = .98$
Positive and Negative Affect Schedule (PANAS)	Watson et al., 1988	Positive and negative affect	$\alpha = 0.88$
Emotion Regulation Questionnaire (ERQ)	Gross & John, 2003	Individual differences in the habitual use of two emotion regulation strategies: cognitive reappraisal and expressive suppression	$\alpha = .69$
General Self-Efficacy Scale (GSE)	Sherer et al., 1982	Self-efficacy	$\alpha = .87$

Instrument	Author and year	What it measures	Reliability
Structured Interview for DSM-IV Personality (SIDP-IV)	Pfohl et al., 1997	Diagnostic criteria for the 10 PDs listed in the DSM-IV	$\alpha=.94$
Global Assessment of Functioning (GAF)	ND	Subjectively assesses an individual's social, occupational, and psychological functioning	ND
Depression Subscale (DEP)	Derogatis, 1994	Depression	$\alpha=.89$
General Severity Index (GSI)	Derogatis, 1994	General psychological distress	$\alpha=.97$
Symptom Checklist-90-Revised (SCL-90-R)	Derogatis, 1994	Psychological problems and symptoms of psychopathology	Between $\alpha=0.81$ and $\alpha=0.90$
BPD subscale of the SCID-II questionnaire	First et al., 1996	Criteria for personality disorders	$\alpha=.84$
Anhedonic Depression and Anxious Arousal subscales of the Mood and Anxiety Symptoms Questionnaire Short Form (MASQ-SF)	Watson et al., 1995	The "Anhedonic Depression" subscale assesses specific symptoms of depression The "Anxious Arousal" subscale assesses specific symptoms of anxiety	Anhedonic Depression: $\alpha=.92$; Anxious Arousal: $\alpha=.87$
The Brief Fear of Negative Evaluation (BFNE)	Leary, 1983	Basic traits of social anxiety, specifically anxiety about how others evaluate oneself	$\alpha=.90$
The McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD)	Zanarini et al., 2003	Symptoms of borderline personality disorder	$\alpha=.79$
The Eating Disorders Attitude Test (EAT-26)	Garner et al., 1982	Problematic eating attitudes and behaviors	$\alpha=.87$
Personality Assessment Inventory-Borderline Features (PAI-AI)	Morey, 1991	Emotion intensity and variability	Between $\alpha=0.67$ and $\alpha=0.82$
Screen for Child Anxiety-Related emotion Disorders (SCARED)	Birmaher et al. 1997	Anxiety symptoms	$\alpha=.93$
Adolescent Symptom Inventory-4 (ASI-4R)	Gadow & Sprafkin, 1998	Symptoms of major depressive disorder	$\alpha=.86$
Borderline Symptom List-23 (BSL-23)	Bohus et al., 2009	Severity of borderline personality disorder traits experienced in the past week	$\alpha=.96$
Regulation of Emotions Questionnaire (REQ)	Phillips & Power, 2007	Frequency of use of internal dysfunctional, external dysfunctional, internal functional, and external functional emotion regulation strategies	Between $\alpha=0.76$ and $\alpha=0.84$
BIOPAC (BIOPAC Systems Inc., Model MP150, Goleta, CA)	ND	Psychophysiological indices of emotion response	ND
Dissociative State Scale (DSS)	Stiglmayr et al., 2001	Dissociative experiences in the present moment	Between $\alpha=0.92$ and $\alpha=0.93$
Emotion-inducing stimuli (imagery scripts)	ND	ND	ND
The Trauma History Questionnaire (THQ)	Green, 1996	An individual's experiences with potentially traumatic events that may meet the DSM-IV-TR A1 (stressor) criterion for PTSD	ND
Emotional Intelligence Scale (EIS)	Schutte et al., 1998	Emotional intelligence	$\alpha=.92$
UPPS Impulsive Behavior Scale	Whiteside & Lynam, 2001	Four facets of impulsive behavior: negative urgency, premeditation, persistence, and sensation seeking	$\alpha=.90$
Outcome Questionnaire-45.2 (OQ-45.2)	Doerfler et al., 2002	Changes in symptoms over time in therapy	$\alpha=.93$
Depression and Anxiety Stress Scale, 21 (DASS 21)	Yusoff et al. 2013	Depressive, anxiety, and stress symptoms	ND
MIT Fidelity Scale	Gordon-King et al., 2019	Therapist adherence to the MIT manualized intervention	$\alpha=.79$
Interview version of the Deliberate Self-Harm Inventory (DSHI)	Gratz, 2001	Various aspects of DSH (including frequency, duration, and type of DSH behavior)	$\alpha=.75$
Depression Anxiety Stress Scales (DASS)	Lovibond & Lovibond, 1995	Three emotion states (anxiety, depression, and stress)	Between $\alpha=0.87$ and $\alpha=0.93$
BPD-related composite of the Inventory of Interpersonal Problems (IIP-BPD)	Lejuez et al., 2003	Interpersonal problems relevant to BPD, including interpersonal sensitivity and aggression	$\alpha=.86$
Sheehan Disability Scale (SDS)	Sheehan, 1983	Social and occupational impairment due to psychological symptoms	$\alpha=.86$
Quality of Life Inventory (QOLI)	Frisch et al., 1992	16 areas of life in terms of degree of importance and level of satisfaction	$\alpha=.82$
Acceptance and Action Questionnaire (AAQ)	Hayes et al. 2004	Experience avoidance, or the tendency to avoid unwanted internal experiences (particularly emotions)	$\alpha=.75$
Emotion Expressivity Scale (EES)	ND	Individual differences in the degree to which people express their emotions outwardly, and it also rates the emotions someone displays outwardly on a severity scale	$\alpha=.49$
Emotion Regulation Strategies for Artistic Creative Activities Scale (ERS-ACA)	ND	Types of emotion regulation strategies (ERS) used when participating in artistic creative activities	$\alpha=.91$
Healthy-Unhealthy (Music) Scale (HUMS)	ND	Healthy and unhealthy dimensions of musical engagement	$\alpha=.74$
Self-Expression and Emotion Regulation in Art Therapy Scale (SERATS)	ND	Self-expression and emotion regulation in art therapy	$\alpha=.90$
Kentucky Inventory of Mindfulness Skills (KIMS)	Baer et al., 2004	Mindfulness on four scales: (a) observing, (b) describing, (c) acting mindfully, and (d) accepting without judgment	$\alpha=.86$
Structured Clinical Interview for DSM-IV, Axis I (SCID-I)	First et al., 1997	Presence of Axis I personality disorders according to the criteria in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)	Between $\alpha=0.60$ and $\alpha=0.83$

Instrument	Author and year	What it measures	Reliability
Cognitive Emotion Regulation Questionnaire (CERQ)	Garnefski et al., 2002	9 types of specific cognitive strategies for emotion regulation	$\alpha = .90$
Social Network Assessment (SNA)	Lazarus & Cheavens, 2017	Participants describe their relationship with the most important person in their life over the past year, the duration of the relationship in years, and the quality of the relationship across five dimensions: perceived support, satisfaction, criticism, conflict, and closeness	ND
Patient Health Questionnaire-9 (PHQ-9)	Morey, 1991	A 24-item self-report measure of borderline traits, such as mood instability, anger, relationship difficulties, and impulsivity	$\alpha = .91$
Experiences in Close Relationships Scale (ECR)	Brennan et al., 1998	Interpersonal attachment	Between $\alpha = 0.91$ and $\alpha = 0.94$
Defense Style Questionnaire (DSQ)	Bond, 1989	Derived from the most commonly used defense mechanisms	Between $\alpha = 0.58$ and $\alpha = 0.80$
The self-report Wisconsin Personality Inventory (WISPI)	Klein et al., 1993	Severity of the patient's symptoms associated with each DSM personality disorder	Between $\alpha = 0.88$ and $\alpha = 0.90$
Classification of Affective Meaning States (CAMS)	Pascual-Leone & Greenberg, 2005	10 affective meaning states: general distress, fear/shame, rejecting anger, negative evaluation, need, relief, pain/grief, assertive anger, self-compassion, and acceptance/agency	$\alpha = .88$
Coping Action Patterns Rating Scales (CAPRS)	Perry et al., 2005	Coping processes based on interview transcripts	ND
Personality Disorder Questionnaire - Fourth Edition (PDQ-4+)	Hyder et al., 1992	12 types of personality disorders according to DSM-IV criteria	$\alpha = .75$
Quality of Life Enjoyment and Satisfaction Questionnaire (Q-les-Q)	Endicott et al., 1993	Life satisfaction	$\alpha = .86$
Five Facets of Mindfulness Questionnaire (FFMQ)	Baer et al., 2006	A measure of mindfulness consisting of five facets: observing, describing, acting mindfully, non-judgment, and non-reactivity	$\alpha = .91$
Affective Control Scale (ACS)	Williams et al., 1997	A person's fear of being unable to control their emotions, including anger, depressed mood, anxiety, and positive emotions	$\alpha = .92$
Inventory of Interpersonal Problems-64 (IIP-64)	Alden et al., 1990	Interpersonal problems	$\alpha = .94$
Chinese version of the Modified Schedule of Affective Disorders and Schizophrenia—Lifetime (CMSADS-L)	Wu et al., 2016	Core symptoms of personality disorder (PD) to confirm a diagnosis of a psychiatric disorder	ND
Borderline Personality Disorder Features Scale (BPDFS)	Wu et al., 2016	Traits and behaviors of borderline personality	$\alpha = .70$
Ko's Depression Inventory (KDI)	Chien et al., 2007	Depressive symptoms	$\alpha = .87$
Adult Suicidal Ideation Questionnaire—Shortened Version (ASIQ-S)	Chou et al., 2013	Intensity, pervasiveness, and characteristics of an adult's suicidal ideation during the previous month	$\alpha = .96$
Cognitive Error Questionnaire—Shortened Version (CEQ-S)	Chang et al., 1996	Levels of cognitive errors	$\alpha = .90$
Emotion Regulation Scale (ERS)	ND	Antecedent-focused emotion regulation strategies, as well as suppression and acceptance, which were designed to assess response-focused emotion regulation strategies	ND
Spanish version, Trait Meta-Mood Scale (TMMS-24)	ND	The way people reflect on their mood	According to the subscales: Attention: $\alpha = .90$ Clarity: $\alpha = .90$ Reflection: $\alpha = .86$
Emotion regulation of others and self Interpersonal emotion management	Niven et al., 2011	Interpersonal emotion regulation	ND
Interpersonal emotion management	Little et al., 2012	Tendency to use certain strategies to help others manage their emotions	$\alpha = .95$
General emotion goals	Tamir & Ford, 2012	Preference for experiencing happiness or anger	According to the subscales: General happiness: $\alpha = .76$ General anger: $\alpha = .82$
Contextualized emotion goals	Tamir & Ford, 2012	Contextualized emotion goals	According to the subscales: Preference for happiness over collaboration: $\alpha = .81$ Preference for happiness over confrontation: $\alpha = .91$ Preference for anger in collaboration: $\alpha = .88$ Preference for anger in confrontation: $\alpha = .79$
Reflective Thinking Style (RTS) Questionnaire	Bohus et al., 2009	Presence of a reflective thinking style independent of the presence of depression	$\alpha = .92$

Instrument	Author and year	What it measures	Reliability
Westmead Severity Scale (WSS)	Clarkin et al., 1993	Severity of borderline personality disorder (BPD) symptoms	ND
Zung Depression Questionnaire	Zung, 1965	Typical depression	$\alpha=.79$
Mini International Neuropsychiatric Interview for DSM-IV Axis I Disorders (MINI)	Sheehan et al., 1998	Presence of Axis I personality disorders	ND
Partnership Questionnaire (PFB-K)	Kliem et al., 2012	Relationship quality	$\alpha=.79$
Questionnaire on Couples' Support Seeking and Providing (OQCSSP)	Miano et al., 2021	Seeking and providing support	ND
International Personality Disorder Examination	Loranger et al., 1998	Presence of personality disorders	ND
Zanarini Rating Scale for BPD (ZAN-BPD)	Zanarini et al., 2003	Severity of borderline personality disorder symptoms based on the DSM-IV and significant changes in symptoms over time	ND
Childhood Trauma Questionnaire (CTQ)	Bernstein et al., 2003	Five domains of childhood maltreatment experiences ("emotion abuse," "physical abuse," "sexual abuse," "emotion neglect," and "physical neglect")	$\alpha=.78$
Brief Symptom Inventory (BSI)	Franke & Derogatis, 2000	Severity of general symptoms	ND
Attachment Style Questionnaire (ASQ)	Feeney et al., 1994	Secure and insecure attachment styles	$\alpha=.89$
State-Trait Anxiety Inventory (STAI)	Spielberger, 1983	Anxiety in two dimensions: state and trait	$\alpha=.89$
Subjective Socio-Economic Status (SSES)	Adler & Ostrove, 1999	Subjective socioeconomic status	$\alpha=.72$
Tasks using the GE SIGNA 3Tesla MRI (GE Medical Systems, Milwaukee, WI, USA; Supplementary Methods)	ND	Brain activity	ND
TFP Adherence and Competence Rating Scale	Clarkin et al., 1999	Therapeutic competence	ND
Multidimensional Personality Questionnaire (MPQ)	Tellegen, 1982	Normal personality traits	ND
Affective Lability Scale (ALS)	Harvey et al., 1989	Affective lability	ND
Overt Aggression Scale-Modified (OAS-M)	Coccaro et al., 1991	Frequency and severity of aggressive episodes	ND
Columbia Suicide Severity Rating Scale (C-SSRS)	Posner et al., 2011	Suicide risk	ND
Self-Compassion Scale (SCS)	Neff, 2020	Capacity for self-compassion	According to the subscales: Self-judgment: $\alpha=.56$ Self-kindness: $\alpha=.84$
Five-Facet Mindfulness Questionnaire	Baer et al., 2006	The five main aspects of mindfulness	According to the subscales: Non-reactivity: $\alpha=.70$ Description: $\alpha=.88$
Avoidance and Fusion Questionnaire for Youth (AFQ-Y)	Greco et al., 2008	Psychological inflexibility in children and adolescents	$\alpha=.88$
Youth Self-Report (YSR)	Achenbach, 1995	Adolescent behavior, functioning, and adjustment	ND
Revised NEO Personality Inventory (NEO-PI-R)	Costa & McCrae, 1999	Personality, divided into 5 factors: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness	$\alpha=0.87$
Conflict Tactics Scale (CTS2)	Straus et al., 1996	Individual involvement in or experience of physical or psychological violence with an intimate partner	ND
World Health Organization (WHO) Composite International Diagnostic Interview (CIDI 3.0)	Kessler & Üstün, 2004	Mental disorders as defined by the Diagnostic Criteria for Research of the ICD-10 and the DSM-III-R	ND
International Personality Disorder Examination (IPDE) screening questionnaire	Loranger et al., 1994	Presence of a personality disorder	$\alpha=0.74$
World Health Organization Disability Assessment Schedule II (WHO-DAS II)	Chwastiak & Von Korff, 2003	Behavioral limitations and restrictions on participation experienced by an individual, regardless of a medical diagnosis	ND
Anxiety and Related Disorders Interview Schedule for DSM-5 (ADIS-5)	Brown and Barlow, 2014	Presence or absence of anxiety and related disorders using DSM-5 criteria	ND
Dialectical Behavior Therapy Ways of Coping Checklist (DBT-WCCL)	Neacsiu et al., 2010	Skills used in response to difficult situations during the past month	DSS: $\alpha=.95$ DCS $\alpha=.92$
Patient Health Questionnaire-9 (PHQ-9)	Kroenke et al., 2001	Severity of depression	$\alpha=.92$

Note. ND: No data available

Data Analysis

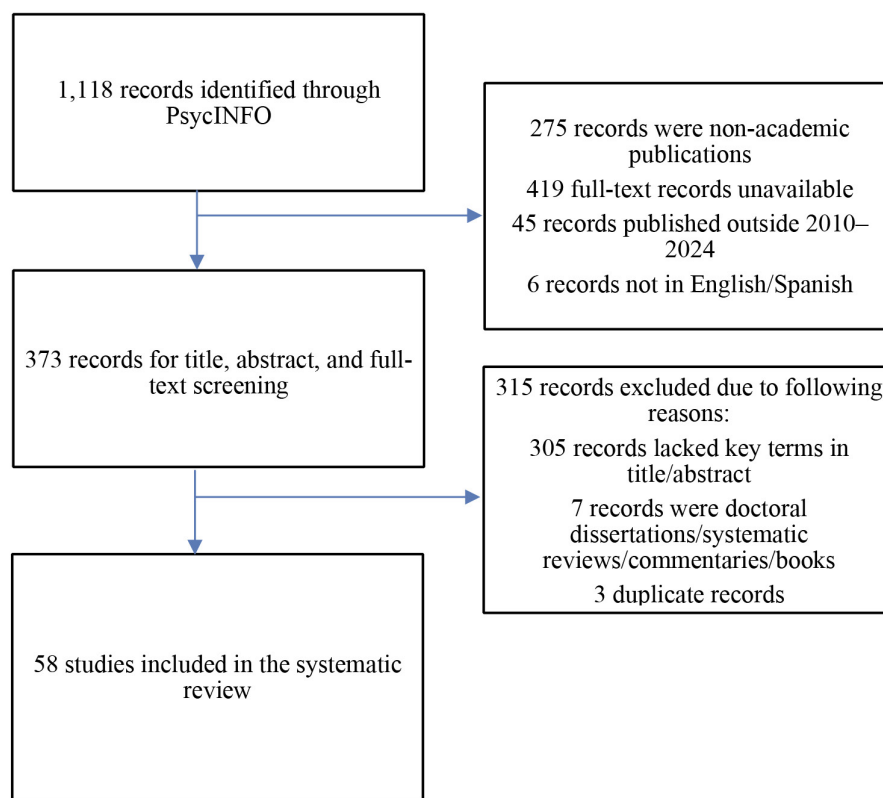
The systematic search identified a total of 1,118 articles, of which 843 were selected because they were academic publications. A total of 419 articles were excluded because full-text access was unavailable, and of these, 45 studies were further excluded because they were not published between 2010 and 2024. After that, six articles were excluded because they were not written in English or Spanish. A total of 373 articles were selected and reviewed to verify that they met all

inclusion criteria. However, 305 of these were discarded because they did not contain the keywords in the abstract or title, seven because they were doctoral dissertations, systematic reviews, commentaries, or books, and three because they were duplicates.

In addition, 1,057 articles were excluded for failing to meet the inclusion criteria, primarily because they did not contain the keywords in the abstract or title.

Finally, following the search strategy, 58 articles met all inclusion criteria (see Fig. 1).

Figure 1
Flow Diagram



The various data extracted for the literature review are summarized in [Table 2](#), with the exception of the instruments used in each study, which are shown in [Table 1](#).

Analysis of the data shown in [Table 2](#) revealed a substantial sample size, with a total of 18,345 participants. Two of the studies (articles 9 and 53) were conducted with minors under 18 years of age, 19 with young adults between 18 and 25 years of age, 22 with young adults between 26 and 35 years of age, eight with participants between 36 and 45 years of age, and one (article 6) with participants whose mean age was over 46 years.

Six studies did not specify the age range. Most of the studies (30 articles) had a sample size of more than 100 participants, with ages ranging from 26 to 35.

Regarding sex distribution, it was found that almost all articles (49) included both male and female participants. Overall, seven examined female-only samples and one examined a male-only sample (article 21). The male-to-female ratio was characterized by a predominance of female participants (45 studies), regardless of the personality disorder, with the exception of four cases where males predominated (articles 5, 21, 31, 40). However, 10 articles did not specify the percentage by sex.

The number of participants with a specific disorder was analyzed, with borderline personality disorder (BPD) being highlighted in 48 articles. Of the remaining studies, six (articles 3, 5, 39, 41, 47, and 52) jointly analyzed two personality disorders to determine which had a greater incidence of difficulties with emotion regulation. The combinations were as follows: BPD and Cluster C disorders; BPD

and schizophrenia; BPD and Asperger syndrome (AS); BPD, major depressive disorder (MDD), anxiety disorders, personality disorders (PDs), and psychiatric disorders; BPD and depressive disorder; and finally, BPD and PDs.

Additionally, three articles focused on three disorders different from those mentioned above. Among them were Cluster B personality disorders (article 10), obsessive-compulsive disorder (OCD) (article 21), and Axis I and II personality disorders (article 32).

Only one article did not report data on the presence of a personality disorder (article 34).

Regarding comorbidity, 24 studies reported a coexistence between the type of disorder analyzed in the research and other disorders. Of these, it is worth noting that 23 articles present an associated comorbidity between BPD and other disorders, such as mood disorders (MD), generalized anxiety disorder (GAD), MDD, substance use disorder (SUD), eating disorders (ED), posttraumatic stress disorder (PTSD), OCD, avoidant personality disorder (AVPD), social anxiety disorder (SAD), and other personality disorders. Comorbidity was also observed with deliberate self-harm (DSH), non-suicidal self-injury (NSSI), trauma, and alcoholism. Thirty-four studies did not provide data on the presence of two or more illnesses or disorders simultaneously in the same individual.

Regarding treatment, 16 articles reported the use of psychotherapeutic interventions. Dialectical behavior therapy (DBT; [Linehan, 1993](#)) was the most frequently used, appearing in 10 studies. The remaining therapies were: metacognitive

Table 2*Characteristics of the Studies Included in the Systematic Review*

Author (year)	N (% of women)	Mean Age (SD)	Type of personality disorder	Comorbid Disorders	Instruments	Criteria variables	Therapies	Therapy effectiveness
1. Aleva et al. (2023)	137 (81.02%)	19.07 (2.75)	BPD	ND	DERS, LPA	Difficulty with emotion regulation	ND	ND
2. Axelrod et al. (2011)	27 (100%)	38.0 (ND)	BPD	Substance use disorder	BDI, DERS	Difficulty with emotion regulation	DBT	DBT was effective in improving emotion regulation
3. Baczkowski et al. (2017)	Broken down as follows: • BPD: 48 (100%) • NPC: 31 (100%) • CPD: 21 (100%)	Broken down as follows: • BPD: 30.79 (9.21) • NPC: 28.67 (10.70) • CPD: 31.48 (11.80)	BPD Cluster C personality disorders	There may be comorbidity with other Axis I disorders	RSFC analysis, BPDSI, ITEC	Difficulty with emotion regulation, impairment of the fronto-limbic inhibitory network	ND	ND
4. Bianchini et al. (2019)	18 (86%)	41.79 (8.14)	BPD	ND	BIS-11, DERS, TAS-20	Motor impulsivity, alexithymia, difficulties with emotion regulation	DBT	DBT was effective in improving emotion regulation and reducing impulsivity, but had no effect on alexithymia
5. Bonfils & Lysaker (2020)	Broken down as follows: • BPD: 32 (19%) • Schizophrenia: 55 (33%)	Broken down as follows: • BPD: 49 (12.5) • Schizophrenia: 51 (10.8)	BPD. Schizophrenia	ND	DTS, DERS	Dysphoria tolerance, difficulty with emotion regulation	ND	ND
6. Bottesi et al. (2018)	Broken down as follows: • BPD: 48 (ND) • Healthy patients: 48 (ND)	ND	BPD	ND	ND	Intolerance of uncertainty, difficulty with emotion regulation	ND	ND
7. Bracken-Minor & McDevitt-Murphy (2014)	480 (79.8%)	21.30 (5.69)	BPD	Non-suicidal self-injury (NSSI)	ISAS, MSI-BPD, DERS, DTS	Self-injury	DBT	ND
8. Cheavens et al. (2012)	Broken down as follows: • Model 1: 537 (ND) • Model 2: 94 (63.2%)	24.93 (10.13)	BPD	ND	DERS, IIP, SOSS, PAI-BOR, CES-D	Depressive symptoms, BPD symptoms, difficulty with emotion regulation	ND	ND
9. Chen et al. (2023)	1,192 (73.55%)	15.10 (1.63)	BPD	Non-suicidal self-injury (NSSI)	FASM, ERQ-CA, BPFS-C	Self-injury, difficulty with emotion regulation	ND	ND
10. Chugani et al. (2013)	19 (94.73%)	21.31 (3.23)	Type B personality disorders	ND	GEDM, DBT-WCCL, DERS	Difficulty with emotion regulation	DBT	DBT was effective in improving emotion regulation
11. Crespo-Delgado et al. (2020)	88 (100%)	28.69 (8.85)	BPD	ND	SCID, BDI-II, PANAS, ERQ, GSE	Positive and negative affect, difficulty with emotion regulation, self-efficacy, psychiatric hospitalizations, suicidal behavior, depression	ND	ND

Author (year)	N (% of women)	Mean Age (SD)	Type of personality disorder	Comorbid Disorders	Instruments	Criteria variables	Therapies	Therapy effectiveness
12. Daros et al. (2018)	Broken down as follows: • BPD: 30 (ND) • MAD: 30 (ND) • HC: 30 (ND)	Broken down as follows: • BPD: 28.97 (9.00) • MAD: 27.97 (9.03) • HC: 27.93 (9.51)	BPD	Major Depressive Disorder (MDD)	SCID	Difficulty with emotion regulation	ND	ND
13. De Panfilis et al. (2019)	Broken down as follows: • BPD: 41 (82.9%) • HC: 41 (70.7%)	Broken down as follows: • BPD: 37.93 (11.61) • HC: 36.07 (13.50)	BPD	ND	GAF, DEP, GSI, SCL-90-R, BPD subscale of the SCID-II questionnaire	Difficulty with emotion regulation, depression	ND	ND
14. Dixon-Gordon et al. (2015)	531 (73.63%)	19.28 (1.65)	BPD	Depression, anxiety, and eating disorder	MASQ-SF, BFNE, MSI-BPD, EAT-26	Difficulty with emotion regulation	ND	ND
15. Dixon-Gordon et al. (2016)	74 (100%)	ND	BPD	ND	PAI-AI, SIDP-IV, SCARED, ASI-4R	Maternal support/validation, maternal problem-solving, negative affect, difficulty with emotion regulation	ND	ND
16. Fitzpatrick et al. (2018)	154 (85.7%)	21.02 (5.81)	BPD	ND	BSL-23, REQ	Difficulty with emotion regulation	ND	ND
17. Fitzpatrick et al. (2020)	22 (63.6%)	ND	BPD	Self-harm	SCID, PDE	Basal respiratory sinus arrhythmia, initial negative emotion intensity, emotion reactivity, deficits in emotion regulation	DBT	ND
18. Fitzpatrick & Kuo (2021)	Broken down as follows: • BPD: 40 (ND) • GAD: 40 (ND) • HCs: 40 (ND)	ND	BPD	Generalized Anxiety Disorder (GAD)	Self-reports, BIOPAC, DSS, emotion-inducing stimuli (imagery scripts)	Difficulty with emotion regulation, increased heart rate reactivity, or respiratory sinus arrhythmia	ND	ND
19. Fitzpatrick et al. (2022)	120 (82.5%) Broken down as follows: • BPD (82.5%) • GAD (78.9%) • HC (80%)	Broken down as follows: • BPD: 25.35 (6.77) • GAD: 25.95 (7.20) • HC: 24.70 (6.88)	BPD	Generalized Anxiety Disorder GAD	SCID-IV-TR, IPDE-BPD, BSL-23, DASS	Difficulties with emotion regulation	ND	ND
20. Gaher et al. (2013)	579 (70%)	20.33 (1.39)	BPD	ND	THQ, PAI-BOR, EIS, DTS, UPPS Impulsive Behavior Scale, TAS-20, PANAS	Traumatic experiences, alexithymia, difficulty with emotion regulation, impulsivity, low tolerance for emotion stress, intolerance to distress	ND	ND
21. Gordon-King et al. (2019)	1 (0%)	22 (0)	OCD	Avoidant personality disorder and social anxiety disorder	SCID-II, OQ-45.2, TAS-20, DASS 21, MIT Fidelity Scale	Chronic anxiety, interpersonal difficulties, difficulty forming meaningful emotion bonds, alexithymia	Metacognitive Interpersonal Therapy (MIT)	MIT was effective in reducing symptoms to a non-clinical range

Author (year)	N (% of women)	Mean Age (SD)	Type of personality disorder	Comorbid Disorders	Instruments	Criteria variables	Therapies	Therapy effectiveness
22. Gratz et al. (2013)	57 (100%) Broken down as follows: • BPD: 39 • Non-BPD: 18	Broken down as follows: • AVPD: 24.9 (11.3) • Non-AVPD: 24.6 (8.8) • Non-BPD: 24.1 (11.5)	BPD	Co-occurring avoidant personality disorder (AVPD)	SCID, DIPD-IV, DERS	Difficulty with emotion regulation, distress, heart rate	ND	ND
23. Gratz et al. (2014)	61 (ND) Broken down as follows: • ERGT + TAU: 31 (ND) • TAU waitlist: 30 (ND)	Broken down as follows: • ERGT + TAU: 33.3 (11.0) • TAU waitlist = 33.0 (10.9)	BPD	Deliberate Self-Harm (DSH)	DSHI, BDI-II, DASS, IIP-BPD, SDS, QOLI, DERS, AAQ	Difficulty with emotion regulation, self-destructive behaviors, symptoms of depression and stress	Emotion Regulation Group Therapy (ERGT)	ND
24. Gratz et al. (2019)	64 (72%)	23.94 (4.79)	BPD	Deliberate self-harm (DSH)	SCID, Deliberate Self-Harm Inventory, Negative Affect (NA) subscale State, S-DERS	emotion reactivity, difficulty with emotion regulation, physiological deficits	ND	ND
25. Gratz et al. (2024)	200 Broken down as follows: • Mothers (100%) • Adolescents (41.5%)	Broken down as follows: • Mothers: 34.7 (+6.2) • Adolescents: 14.2 (+1.3)	BPD	ND	DERS	Intergenerational transmission, difficulty with emotion regulation	ND	ND
26. Haeyen & Noorthoorn (2021)	Broken down as follows: • Patients with personality disorders: 179 (70.9%) • Healthy population: 53 (96.2%)	Broken down as follows: • Patients with personality disorders: 37.66 (12.8) • Healthy population: 24.20 (7.94)	BPD	Anxiety disorder Mood disorder	EES, ERS-ACA, HUMS, SERATS	Difficulty with emotion regulation	ND	ND
27. Haliczzer et al. (2020)	Broken down as follows: • Sample 1: 194 (76.8%) • Sample 2: 88 (84.1%)	Broken down as follows: • Sample 1: 20.61 (4.59) • Sample 2: 31 (10.95)	BPD	ND	PAI-BOR, DERS	Difficulty with emotion regulation, affective instability, low emotion awareness	ND	ND
28. Haliczzer et al. (2021)	173 (84.97%)	20.04 (2.19)	BPD	ND	PAI-BOR	Difficulty with emotion regulation, maladaptive emotion regulation strategies, interpersonal conflict behaviors	ND	ND
29. Hall et al. (2018)	45 (64.4%)	35.8 (10.4)	BPD	Substance use disorder (SUD)	ND	Difficulty with emotion regulation, drug use	ND	ND
30. Hood et al. (2023)	240 (79.2%)	27.75 (ND)	BPD	ND	DERS, KIMS, BSL-23, SCID-II, SCID-I	Difficulties with emotion regulation, self-harm	DBT Mindfulness	DBT was effective in improving emotion regulation. This regulation may mediate the association between mindfulness and BPD symptoms; without this mediation, increased mindfulness may be associated with increased BPD symptoms

Author (year)	N (% of women)	Mean Age (SD)	Type of personality disorder	Comorbid Disorders	Instruments	Criteria variables	Therapies	Therapy effectiveness
31. Howard & Cheavens (2023)	149 (48.3%)	39.8 (10.7)	BPD	ND	SNA, PAI-BOR, PHQ-9	Difficulty with emotion regulation, interpersonal emotion regulation (IER), relationship quality	ND	ND
32. Joyce et al. (2013)	51 (66.7%)	41.0 (11.4)	Axis I and Axis II personality disorders	ND	TAS-20, ECR, ERQ, DSQ, WISPI	Alexithymia, attachment, defense style, emotion regulation, and quality of object relations	Day treatment program (DTP)	The DTP was not effective in reducing alexithymia but was effective in improving emotion regulation
33. Kramer et al. (2016)	Broken down as follows: • SKILLS: 21 (95%) • TAU: 20 (80%)	Broken down as follows: • SKILLS: 35.14 (9.67) • TAU: 33.60 (8.57)	BPD	ND	CAMS	Difficulty with emotion regulation, problematic anger, tolerance for discomfort, mindfulness training, interpersonal effectiveness	DBT	DBT was effective in improving emotion regulation. Training in dialectical behavior therapy (as an adjunct to TAU) resulted in greater symptom change at discharge compared to TAU
34. Kramer et al. (2017)	57 (67%)	33.7 (9.9)	ND	ND	OQ-45, CAPRS	Difficulty with emotion regulation, coping strategies	ND	ND
35. Krause-Utz et al. (2019)	BPD: 57 (100%) Broken down as follows: • BPD: 37 • BPD + PTSD: 20 • HC: 27	Broken down as follows: • BPD: 31.28 (10.28) • HC: 28.88 (6.39) • BPD + PTSD: 34.16 (9.92)	BPD	Post-traumatic stress disorder (PTSD)	SCID-I, IPDE, MWT, BSL-23, BDI, DES, STAI, DERS, ERQ	Difficulty with emotion regulation, reduced high-frequency heart rate variability	ND	ND
36. Kuo et al. (2018)	149 (90.4%)	20.40 (5.71)	BPD	ND	BSL-23	Difficulty with emotion regulation	ND	ND
37. Lin et al. (2019)	82 (ND)	ND	BPD	ND	CMSADS-L, BPDFS, KDI, ASIQ-S, CEQ-S, ERS	Suicide attempts, suicidal ideation, depression, difficulty with emotion regulation	DBT skills training group program (DBTSTG) and cognitive therapy group program (CTG)	DBTSTG and CTG were effective in reducing suicide attempts, suicidal ideation, and depression, and in improving emotion regulation
38. Lizeretti et al. (2012)	Broken down as follows: • Control group: 163 (75.5%) • Clinical group: 163 (78.5%)	Broken down as follows: • Control group: 26.3 (10.97) • Clinical group: 41.3 (12.69)	BPD	Anxiety disorder, mood disorder, substance use disorder, psychotic disorder	SCID-I, TMMS-24, SCL-90-R	Difficulty with emotion regulation	ND	ND
39. López et al. (2017)	Broken down as follows: • AS: 30 (24%) • BPD: 30 (80%) • Control: 60 • CGAS: (30%) • CGBPD: (76%)	Broken down as follows: • AS: 26.60 (7.32) • BPD: 34.07 (8.17) • CGAS: 26.70 (7.68) • GCBPD: 33.23 (7.80)	BPD Asperger's syndrome (AS)	Axis I and Axis II Disorders	SCID-I, SCID-II, Emotion Regulation of Others and Self, Interpersonal Emotion Management Scale	Difficulty regulating interpersonal emotions	ND	ND

Author (year)	N (% of women)	Mean Age (SD)	Type of personality disorder	Comorbid Disorders	Instruments	Criteria variables	Therapies	Therapy effectiveness
40. López et al. (2020)	Broken down as follows: • Study 1: 358 (42%) • Study 2: 70 (86%) • BPD = 35 (86%) • Control group = 35 (86%)	Broken down as follows: • Study 1: 34.87 (11.70) • Study 2: BPD = 30.94 (10.78) • Control = 30.77 (10.90)	BPD	ND	PAI-BOR, DERS, General emotion goals, Mental health condition diagnoses, Contextualized emotion goals	Difficulty with emotion regulation	ND	ND
41. Marco et al. (2021)	250 (94.3%)	29.55 (10.40)	Personality disorders BPD	UFED, bulimia nervosa, ANR, ANP, BED, depressive disorder, SRD, PTSD, OCD, bipolar disorder, GAD, panic disorder, UDD	SCID-I, SCID-II, ERQ, DERS, BSL-23	Difficulty with emotion regulation	ND	ND
42. Meaney et al. (2016)	2,261 (72.62%)	24.82 (8.05)	BPD	Unipolar depression	BSL-23, RTS, TAS-20, ERQ, DASS	Difficulty with emotion regulation, alexithymia, rumination, self-harm, substance use, aggression	ND	ND
43. Mearns et al. (2011)	Broken down as follows: • CM: 29 (58.62%) • TAU (treatment as usual): 31 (51.61%)	Broken down as follows: • CM: 27.9 (5.9) • TAU: 29.7 (6.1)	BPD	ND	WSS, BPD, Zung Depression Questionnaire	Difficulty with emotion regulation, depression, identity disturbance, impulsivity	Conversational model (CM)	The CM was effective in improving emotion regulation
44. Metcalfe et al. (2017)	BPD N=25 (64%) HC N= 30 (66.7%)	BPD 32.72 (9.55) HC 30.07 (9.07)	BPD	ND	SCID-I, IPDE, Self-report, heart rate (HR), skin conductance level (SCL), emotionally evocative images	Difficulty with emotion regulation	ND	ND
45. Miano et al. (2021)	Broken down as follows: • BPD: 60 (ND) • Healthy Control (HC): 68 (ND)	Broken down as follows: BPD: Women = 30.1 (8.64) Men=32.4 (9.18) HC: Women = 27.4 (8.00) Men = 30.9 (8.74)	BPD	ND	SCID-II, MINI, PFB-K, OQCSSP	Excessive seeking of support and closeness, difficulty with emotion regulation	ND	ND
46. Niedtfeld et al. (2017)	Broken down as follows: • DBT: 34 (ND) • TAU: 18 (ND) • HC: 19 (ND)	Broken down as follows: • DBT: 27.71 (7.24) • TAU: 25.06 (5.81) • HC: 28.14 (8.35)	BPD	ND	German versions of the Structured Clinical Interview for DSM-IV, International Personality Disorder Examination, ZAN-BPD, BSL-23, DERS, fMRI	Emotion regulation, self-harming behavior	DBT	DBT was effective in improving emotion regulation and alleviating pain
47. Peng et al. (2021)	619 (56.22%)	24.96 (11.19)	BPD major depressive disorder anxiety disorder personality disorder psychiatric disorders	Childhood Trauma	PDQ-4+, BSL-23, CTQ, ASQ, CERQ, CES-D, STAI, SSES	Difficulty with emotion regulation, insecure attachment, childhood trauma	ND	ND

Author (year)	N (% of women)	Mean Age (SD)	Type of personality disorder	Comorbid Disorders	Instruments	Criteria variables	Therapies	Therapy effectiveness
48. Perez et al. (2016)	10 (100%)	27.8 (ND)	BPD	Panic disorder, social phobia, specific phobia, generalized anxiety disorder, alcohol abuse, cannabis abuse, major depressive disorder, obsessive-compulsive disorder, alcohol dependence, histrionic, avoidant, and narcissistic personality disorders	Tasks using the 3-Tesla SIGNA GE FMRI scanner, International Personality Disorder Examination, SCID-I, TFP Adherence and Competence Rating Scale, MPQ, ALS, OAS-M	Difficulty with emotion regulation, impulsivity, affective lability	Transference-focused psychotherapy (TFP)	TFP was effective in improving behavioral restraint, emotion regulation, and aggression in patients with BPD
49. Rosenstein et al. (2018)	94 (57.1%)	39.7 (14.4)	BPD	ND	Childhood Trauma Questionnaire-Short Form, DERS	Difficulty with emotion regulation, childhood abuse	ND	ND
50. Sahlin et al. (2019)	95 (100%)	25.1 (7.0)	BPD	ND	DSHI, C-SSRS, DERS, SCID-II	Deliberate non-suicidal self-injury (DSH)	Emotion Regulation Group Therapy (ERGT)	ERGT was effective in reducing deliberate non-suicidal self-injury
51. Salgó et al. (2021)	129 (80.6%)	30.7 (11.1)	BPD	ND	CERQ, DERS, SCS, Five-Facet Mindfulness Questionnaire	Difficulty with emotion regulation	ND	ND
52. Schaich et al. (2021)	Broken down as follows: • BPD: 177 (ND) • DD: 128 (ND)	• BPD: 33.25 (10.57) • DD: 41.34 (13.07)	BPD, depressive disorders (DD)	ND	SCID-I, CTQ, DERS, BSI	Difficulty with emotion regulation and child maltreatment	ND	ND
53. Schramm et al. (2013)	208 (60.1%)	15.96 (1.39)	BPD	ND	BPFSC, AFQ-Y, DERS, YSR	Difficulty with emotion regulation	ND	ND
54. Scott et al. (2014)	150 (65%)	44.85 (10.42)	BPD	Antisocial Personality Disorder (ASPD)	SIDP-IV, DERS, NEO-PI-R, CTS2	Difficulties with emotion regulation, impulsivity, physical and psychological aggression	ND	ND
55. Selby (2013)	5692 (ND)	ND	BPD	Chronic sleep disorders, major depressive disorder (MDD), dysthymia, manic episode, alcohol and drug dependence, panic disorder (with and without agoraphobia), generalized anxiety disorder (GAD), and posttraumatic stress disorder (PTSD)	CIDI 3.0, IPDE, WHO-DAS II	Difficulty with emotion regulation, rumination, memory problems, problems with social relationships or self-care, poor sleep, fatigue	ND	ND
56. Southward & Cheavens (2020)	8 (63%)	21.57 (3.05)	BPD	ND	SCID-II-BPD, ADIS-5	Difficulties with emotion regulation, anxiety	ND	ND

Author (year)	N (% of women)	Mean Age (SD)	Type of personality disorder	Comorbid Disorders	Instruments	Criteria variables	Therapies	Therapy effectiveness
57. Southward et al. (2020)	717 (60.4%)	36.36 (10.94)	BPD	Major depressive disorder (MDD)	DBT-WCCL, PHQ-9, PAI-BOR	Difficulties with emotion regulation	ND	ND
58. Winter et al. (2017)	Broken down as follows: • BPD + DBT: 31 (ND) • BPD: 15 (ND) • HC: 22 (ND)	Broken down as follows: • BPD + DBT = 28.17 (7.47) • BPD = 25.73 (5.90) • HC = 27.95 (8.34)	BPD	ND	IPDE, SCID-I, ZAN-BPD, BSL-23, DERS	Difficulties with emotion regulation, distractibility, neural activity	DBT	DBT was effective in improving emotion regulation, and changes were observed in areas associated with emotion distraction (supramarginal gyrus) and automatic attentional control (pgACC)

Note. ND: No data available; BPD: Borderline personality disorder; DBT: Dialectical behavior therapy

interpersonal therapy (MIT; Dimaggio et al., 2015), emotion regulation group therapy (ERGT; Gratz & Roemer, 2014), day treatment program (DTP; Joyce et al., 2017), conversational model (CM; Meares, 2012), and transference-focused psychotherapy (TFP; Kernberg et al., 2008).

Discussion and Conclusions

The relationship between personality disorders and emotion dysregulation is widely recognized in psychology, as these difficulties are a common feature. In this context, Kramer et al. (2017) provide valuable evidence showing how the early reduction of maladaptive coping behaviors—facilitated by individualized therapeutic interventions and the therapist's active response—is linked to significant improvements in the psychological well-being of patients with borderline personality disorder. This finding highlights the importance of focusing treatments on modifying specific emotion regulation strategies to enhance clinical efficacy, supporting previous findings and guiding future research toward personalized interventions. The strong correlation between emotion dysregulation and personality disorders, especially BPD, is confirmed by the literature review, which identifies BPD as the primary subject of investigation in 48 articles. Therefore, it is essential to also address the epidemiology of BPD.

“The prevalence of BPD in the general adult population ranges from 1.4% to 5.9% and is considered the most frequently diagnosed personality disorder (PD) across different levels of care” (Vall d'Hebron Hospital Universitari, 2021), affecting approximately 30%-60% of individuals diagnosed with some type of personality disorder. However, according to Cervera et al. (2005), some authors argue that this could be due to an overestimation of the prevalence rates of this disorder compared to other personality disorders, since patients diagnosed with BPD tend to seek medical care more frequently than patients with other personality disorders, such as avoidant personality disorder.

In this review, BPD stands out as the most prominent disorder, confirming that it is one of the most commonly diagnosed in clinical settings. Furthermore, regarding sex-related diagnostic patterns of

this disorder, “BPD is predominantly diagnosed in females (approximately 75%)” (APA, 2014). As can be seen in the results, most articles included both female and male participants, but the percentage of females was significantly higher (45 articles reported a higher proportion of women than men).

There is much debate regarding why BPD occurs more frequently in women, and according to the Fundación Regional Murciana de Ayuda e Investigación del Trastorno Límite de la Personalidad [Murcia Regional Foundation for Assistance and Research on Borderline Personality Disorder], “there are several theories to explain this prevalence of the diagnosis in women: sexual abuse, which may be a common feature in the literature on BPD, particularly when it occurs in women.”

Moreover, it is believed that the higher incidence observed in women may be because “men with BPD are often misdiagnosed with other disorders” (Vall d'Hebron Hospital Universitari, 2021).

In addition to the adult population, BPD also occurs in adolescents, where it has a prevalence ranging from 0.7% to 2.7% (Vall d'Hebron Hospital Universitari, 2021). In our analysis, only two studies included participants under the age of 18. This scarcity of evidence is believed to stem from four reasons.

First, because the diagnosis of BPD is not valid during adolescence. Second, the typical characteristics of BPD, such as emotion instability or disturbances in self-image, are common among adolescents. Third, personality development is still in progress, which makes diagnosis difficult. Fourth, and perhaps most significantly, BPD is a pejorative term, and clinicians wish to protect their patients from stigmatization and pessimistic attitudes (IntraMed, 2014).

Although research interest in BPD is overrepresented, this does not mean that emotion regulation lacks relevance for other personality disorders. This study mentions several other disorders that are related to difficulties in emotion regulation, including schizophrenia, Asperger syndrome, and depressive disorder.

Throughout this systematic review, it has been observed that, due to the wide range of symptoms it presents, it is common for BPD to co-occur with other disorders. Among these, the most common are mood disorders (with a comorbidity rate of 93%), SUD

(comorbidity rate of 64%), PTSD (comorbidity rate of 56%), and ED (comorbidity rate of 53%) (Consejo Asesor sobre Asistencia Psiquiátrica y Salud Mental, 2006).

Regarding therapies, it was observed that the most commonly used treatment for BPD was DBT, employed in 10 of the articles included in this review, as it was the first form of therapy specifically designed for BPD for which studies supporting its efficacy were published (Vásquez-Dextre, 2016). DBT has proven effective in reducing difficulties with emotion regulation as well as tendencies toward recurrent suicidal and self-injurious behaviors—characteristics that are commonly observed in this disorder. However, other less commonly used therapies, such as DTP, CM, or TFP¹, were also shown to be effective in improving emotion regulation among patients with BPD.

Across the reviewed studies, 114 instruments were used to measure the outcome variables, and most of these instruments exhibited adequate internal consistency, reflecting the reliability of the results obtained.

On the other hand, although sufficient articles were found to conduct this systematic review, one of the limitations identified was the scarce information provided in these articles regarding their characteristics—including the total number of participants in the studies, the percentage of women, and details about the instruments used.

Furthermore, the relatively low number of articles included in this review compared to those identified in the initial search was due, in large part, to the limited number of references for which the full text was accessible and, to a lesser extent, to articles that were not written in English or Spanish.

In conclusion, a clear correlation has been observed between personality disorders and difficulties in emotion regulation, with borderline personality disorder standing out as the prominent object of study—and for which DBT, in particular, has been highly effective in improving the various symptoms of this disorder.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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¹ (Translator's note: A reminder of the meaning of the acronyms for these less commonly used therapies—DTP [day treatment program], CM [conversational model], and TFP [transference-focused psychotherapy])

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