

EMPIRICAL ARTICLE

Sense of Emptiness: The Role of Adverse Childhood Experiences, Preoccupied Attachment, Self-Hate, and Burdening Guilt

Marianna Santodoro¹  | Eleonora Fiorenza¹  | Camilla Mannocchi²  | Francesco Gazzillo² 

¹Control-Mastery Theory Italian Group, Rome, Italy | ²Department of Dynamic and Clinical Psychology & Health Studies, “Sapienza” University of Rome, Rome, Italy

Correspondence: Marianna Santodoro (mariannasantodoro17@gmail.com)

Received: 15 January 2025 | **Revised:** 18 August 2025 | **Accepted:** 20 August 2025

Funding: The authors received no specific funding for this work.

Keywords: adverse childhood experiences | depression | emptiness | interpersonal guilt | preoccupied attachment

ABSTRACT

The sense of emptiness is still a poorly defined construct in the literature, yet it is frequently reported in individuals with borderline personality disorder, depressive symptoms, and narcissistic personality disorder. This paper aims to replicate those research studies showing that there are significant correlations between emptiness, insecure attachment styles, maladaptive childhood experiences, shame, impulsivity, depression, and borderline and narcissistic personality features. Additionally, it was hypothesized that a significant correlation would exist between the sense of emptiness and burdening guilt and self-hate, and that self-hate would mediate the relationship between adverse childhood experiences and preoccupied attachment and sense of emptiness. The sample consisted of 128 Italian participants recruited online, who completed a battery of self-report questionnaires designed to measure the psychopathological features described above. The sense of emptiness was strongly correlated with depression ($\rho = 0.81, p < 0.001$), borderline personality traits ($\rho = 0.59, p < 0.01$), and narcissistic vulnerability ($\rho = 0.39, p < 0.01$). Additionally, it was correlated with adverse childhood experiences ($\rho = 0.39, p < 0.01$), interpersonal problems ($\rho = 0.41, p < 0.01$), shame ($\rho = 0.54, p < 0.01$), and interpersonal guilt. Burdening guilt and self-hate mediated the relationship between adverse childhood experiences and preoccupied attachment on one side and the sense of emptiness on the other. The study confirms the correlation between the sense of emptiness and psychopathology, particularly with personality disorders and depression. Additionally, the study identifies interpersonal guilt, particularly self-hate and burdening guilt, as factors correlated with the sense of emptiness and mediating the relationships between adverse childhood experiences and preoccupied attachment with the sense of emptiness.

1 | Introduction

The sense of inner emptiness is frequently observed in clinical settings, yet its nature and role in mental health disorders remain inadequately understood. Existing definitions and conceptualizations of emptiness lack consistency, and its significance across various psychopathologies is still debated (D'Agostino et al. 2020).

Historically, empirical research on chronic feelings of emptiness has been limited (Blasco-Fontecilla et al. 2013), likely due to the challenges in defining and measuring this construct. The sense of emptiness, in fact, is a complex and multifaceted experience that is difficult to articulate or evaluate concisely, and the various descriptions and meanings associated with the sense of emptiness further complicate its study. For instance, individuals may describe it as a “feeling of an inner void,” “feeling

Summary

- The sense of emptiness is positively associated with self-hate and burdening guilt.
- Self-hate and burdening guilt mediate the relationship between adverse childhood experiences and emptiness.
- Burdening guilt mediates the association between preoccupied attachment and emptiness.
- Emptiness emerges as a central construct in psychopathology, particularly in relation to depression, personality disorders and shame.

hollow,” “feeling a hole inside,” or “experiencing a sense of purposelessness” (Elsner et al. 2018). Chronic feelings of emptiness have also been described as akin to “deadness,” “nothingness,” a “void,” a feeling “swallowed” (Cary 1972), a sense of “vagueness” (Singer 1977), a feeling of “internal absence” (Kernberg 1984), “woodenness” (Lafarge 1989), a “hole” or “vacuum,” “aleness” (Lamprell 1994) “numbness” and “alienation” (Fuchs 2007).

This sense of emptiness has been conceptualized as an emotion, a symptom, a defense mechanism, or an existential state. For example, Lafarge (1989) attributed a defensive role to the feeling of emptiness in borderline patients, suggesting that it served to prevent regression into psychotic states. Kernberg (1975), on the other hand, described the subjective feeling of emptiness as a complex affective state that emerges in the context of a potential merger of self and object representation coupled with a syndrome of identity diffusion.

Additional conceptualizations of emptiness come from descriptive psychopathology. Peteet (2011), for instance, proposed three dimensions of the sense of emptiness: the subjective dimension, that is, a distorted perception stemming from a mental disorder, such as depression; an objective dimension, that is, an experience of loss or the absence of something or someone significant and meaningful, typically occurring during mourning; and an existential dimension, that is characterized by a more spiritual quality, involving experiences where life seems devoid of meaning. According to D’Agostino et al. (2021, 287), the “feeling of emptiness” is “a complex, negative emotional state that is experienced in different ways by different individuals. This feeling includes a physical or bodily component, a component of aloneness or social disconnectedness, and a component of a deep sense of personal unfulfillment or lack of purpose.”

Recent work has emphasized how multidimensional disruptions in the sense of self, particularly in the organization of self-representations, can help explain the emergence of chronic emptiness in both clinical and subclinical populations. For instance, emerging psychometric models propose that a fragmented or weakened sense of identity and agency, especially when fluctuating across time and context, may predispose individuals to experiences of internal void and disconnection (e.g., Di Plinio et al. 2020, 2024). These approaches suggest that emptiness might not be merely a symptom or affective state,

but rather a phenomenological expression of disturbed self-continuity, potentially resulting from the interaction between unstable internal models (e.g., due to attachment trauma) and impaired agentic functioning. In addition, other theoretical lines have drawn attention to how prospective sense of agency and affective-motivational coherence may act as buffers against existential distress. When these processes are undermined, for instance by relational or environmental inconsistency, the resulting cognitive-affective state may mirror what is described phenomenologically as “emptiness.”

1.1 | Emptiness, Personality Disorders, and Psychopathology

Gunderson and Links (2008, 26) described emptiness in borderline personality disorder (BPD) as a “visceral sensation, typically perceived in the abdomen or chest.” The DSM-5 (APA 2013) includes chronic emptiness as a diagnostic criterion for BPD, reinforcing its strong association with the disorder: chronic emptiness is reported by 71%–73% of individuals with BPD, a significantly higher prevalence than the 26%–34% observed in psychiatric patients without BPD (Grilo et al. 2001; Johansen et al. 2004). Longitudinal studies by Zanarini et al. (1998) categorized emptiness as a “temperamental symptom,” characterized by persistence and slow remission compared to other symptoms, such as chronic depression and fear of abandonment. Meares et al. (2011) identified emptiness as a central feature of BPD, intrinsically linked to identity instability, fear of abandonment, and a fragmented self-concept.

Chronic emptiness in BPD is often linked to maladaptive behaviors such as impulsivity, self-harm, and suicidal tendencies (Miller et al. 2018; Brickman et al. 2014). Studies have demonstrated that feelings of emptiness frequently precede impulsive behaviors: for instance, 67% of a college sample reported feelings of emptiness before engaging in self-harm (Klonsky 2008). Another study found that chronic emptiness and identity disturbances were associated with a history of self-harm, highlighting their role in motivating these behaviors (Brickman et al. 2014). These findings suggest that individuals may engage in impulsive or self-harming behaviors to cope with the distress caused by emptiness.

Emptiness is also strongly associated with depressive symptoms (Trull and Widiger 1991; Rhodes et al. 2019). A study by Klonsky (2008) reported a significant correlation ($r=0.50$) between emptiness and depression, even when controlling for anxiety (partial $r=0.41$). However, there is an ongoing debate about whether emptiness is an intrinsic component of depression or whether its co-occurrence with depressive symptoms indicates an underlying personality disorder, particularly BPD (Kernberg 1975; Klonsky 2008).

Beyond depression, emptiness has been observed in conditions like schizophrenia (Stanghellini 2009; Zandersen and Parnas 2019) and chronic anxiety disorders (Yates 2015). Chronic emptiness is also present in patients with narcissistic personality disorder (NPD), though the literature about this link is sparse and primarily psychodynamic. Kernberg (1975) connected the

sense of emptiness to boredom and restlessness, while Svrakić (1985) highlighted a dichotomy between the grandiose self and the deeper, split-off real self of patients with NPD. Chronic emptiness, along with envy, anger, and aggression, dominates the deeper self, while destabilization of the grandiose self can lead to brief episodes of emptiness.

Shame is also central to NPD and mediates relationships with suicidal behaviors (Jaksic et al. 2017) and addictive tendencies (Bilevicius et al. 2019). However, shame is less typical among grandiose narcissists compared to vulnerable narcissists (van Schie et al. 2021).

In summary, chronic emptiness is a transdiagnostic construct that plays a central role in BPD, contributes to impulsive and self-harming behaviors, is associated with depressive symptoms, and is present in NPD. Further research is needed to address its implications across various psychopathologies.

1.2 | Emptiness and Attachment

The sense of emptiness is often attributed to difficulties in maintaining stable object relations (Buie and Adler 1982–1983; Pazzagli and Monti 2000) and the inability to internalize soothing and nurturing experiences (Adler and Buie 1979; Cohen and Sherwood 1996). This is frequently linked to inadequate parental care, leading to unstable self- and object-representations and a persistent sense of inner emptiness. Deutsch (as cited in Zanarini 2005) noted that identity diffusion and emptiness in patients with “as if” personalities stem from the absence of a stable, good internal object.

Bowlby's attachment theory (1988) highlights how the quality of childhood caregiving shapes attachment styles and the perceptions of self and others. Insecure attachment styles—such as anxious-ambivalent, avoidant, and disorganized—are associated with emotional vulnerability, insecurity, and a sense of emptiness in relationships. Disorganized attachment, in particular, often results in emotional and relational processing challenges, fostering a chronic sense of emptiness and disconnection, especially in cases of early trauma (Lyons-Ruth et al. 2015). Inconsistent caregiving, including emotional unresponsiveness or excessive control, hinders emotional regulation and the development of a secure base, contributing to the development of a sense of emptiness during adolescence and adulthood (Betts et al. 2013; Diamond et al. 2014). Conversely, consistently nurturing caregiving predicts secure attachment and emotional fulfillment, protecting against feelings of emptiness (Kokko et al. 2013).

Individuals with borderline personality disorder commonly exhibit “fearful/disorganized” (negative views of both self and others) or “preoccupied” attachment (negative self-view but positive views of others) (Erkoreka et al. 2022). These attachment styles reflect internal fragmentation and an unstable sense of self, which can fuel the experience of emotional and relational emptiness (Liotti and Gumley 2008; Choi-Kain et al. 2009). Insecure attachment also influences internal models of the self and relationships, shaping perceptions of worthlessness and fostering dysfunctional interpersonal behaviors.

Immature defense mechanisms, such as splitting and denial, further reinforce feelings of emptiness, as Prunas et al. (2019) showed: their study linked these primitive mechanisms to insecure attachment styles, whereas mature defenses like altruism and sublimation correlated with secure attachment. Westen et al. (2006) confirmed that insecure and disorganized attachment styles are more frequent in BPD and are significantly linked to feelings of emptiness. Factors such as physical or emotional abuse and prolonged separations from parents exacerbate these experiences, further complicating individuals' abilities to narrate and process past events (Thomson and Jaque 2017). This often results in vague or incoherent language when recalling significant life events, underscoring difficulties in meaning-making.

1.3 | Self-Hate and Emptiness

According to CMT (Gazzillo 2021; Weiss et al. 1986), individuals are intrinsically motivated to adapt to reality and solve problems, and to adapt to traumatic childhood experiences, they develop beliefs that are defined as pathogenic in that they associate the pursuit of a healthy, desirable goal with negative consequences for oneself, others, or one's relationship with significant others, generating feelings of shame, guilt, or fear (Sampson 1990, 1992; Weiss 1997). There are five types of guilt theorized by CMT: omnipotent responsibility guilt (one believes one is responsible for the well-being of others; Gazzillo et al. forthcoming), separation/disloyalty guilt (one believes one cannot distance or differentiate oneself from loved ones or their values, ideas etc.), survivor's guilt (one believes one cannot have a better life than one's loved ones; Fimiani et al. 2021), burdening guilt (one believes to be a burden to others; Gazzillo and Leonardi 2024; Leonardi et al. 2023) and self-hate (one believes not to deserve appreciation, love and protection; Gazzillo and Kealy forthcoming).

Within the framework of CMT, it is possible to consider individuals with more severe symptomatology who fall under the diagnosis of borderline personality disorder according to the DSM-5 (DSM-5; American Psychiatric Association 2013) and in the PDM-2 category of Borderline Personality Organisation, as people who, to adapt to a traumatic developmental environment, have developed a multiplicity of beliefs, often contradictory (Gazzillo 2023), which fuel intense interpersonal guilt. In particular, some research (Faccini et al. 2020; Leonardi et al. 2020, 2023) showed that self-hate is the most implicated in personality pathology in general. Self-hate is related to the belief that one is worthless, inherently wrong, bad, does not deserve the love and respect of others, and can receive only rejection in interpersonal relationships (Gazzillo 2021). People who experience feelings associated with self-hate feel that what they are or feel is wrong, and these feelings can lead people to experience loneliness, social alienation, depression, anxiety, feelings of helplessness, and possibly a sense of inner emptiness.

Considering these recent contributions of Control Mastery Theory (Gazzillo et al. 2020, 2021; Leonardi et al. 2025), this research hypothesizes that self-hate mediates the relationship between adverse childhood experiences and preoccupied attachment on one side and sense of emptiness on the other,

the sense of emptiness being a characteristic associated with severe personality pathology.

2 | The Present Study

The main aim of this study was to understand the possible relationship between the sense of emptiness and interpersonal feelings of guilt as conceptualized by CMT; moreover, in line with the previous studies reviewed in the previous part of this paper, we wanted to investigate the relationship between the sense of emptiness and feelings of shame and depression. We also wanted to assess whether maladaptive experiences with caregivers and insecure attachment were correlated with the feelings of emptiness experienced by adults, and explore the possible relationship between the sense of emptiness, impulsiveness, and dysfunctional interpersonal behaviors.

Specifically, we hypothesized that: (1) feelings of emptiness were correlated with borderline and narcissistic personality features; (2) feelings of emptiness were correlated with impulsivity and interpersonal problems; (3) feelings of emptiness were correlated with depression; (4) adverse childhood experiences with caregivers and insecure attachment were strongly correlated with the sense of emptiness; (4) all types of interpersonal guilt, particularly self-hate, were correlated with feelings of emptiness. Finally, (5) we hypothesized that interpersonal guilt, and in particular self-hate, mediated the relationship between adverse childhood experiences and preoccupied and disorganized attachment on one side, and the sense of emptiness on the other side.

3 | Methods

3.1 | Sample

Our sample was composed of 131 subjects, all from Italy, recruited online via social media. Participants responded to advertisements about a research project regarding feelings of emptiness. In the advertisements, it was stated that the study required the completion of some questionnaires at a single time point via Google Forms, which would have taken approximately 30 min. It was also stated that participation would have been voluntary, and all the data would have been pseudonymized to protect the participants' privacy. Finally, participants were assured that none of the questionnaires had diagnostic value and that for any distress during the completion, doubts about the study, or need for clarification, they would have been free to contact the researchers or to drop out of the study without any problems.

90% of the sample had an age between 18 and 30 years old, 8.4% had an age between 31 and 40 years old, and one subject had an age between 41 and 50 years old.

92 (70.2%) were female, 35 (26.7%) were male, and 4 subjects (3.1%) were identified as non-binary.

One hundred twenty-nine of them (98.5%) were Caucasian, one subject was Hispanic, and another one was Asian. Five of them

(3.8%) reported having a low socio-economic status, 41 of them (31.3%) a medium-low socio-economic status, 66 (50.4%) were middle-class, 17 (13%) had a medium-high socio-economic status, and 2 of them (1.5%) reported a high socio-economic status.

The distribution of the educational level of our sample was 1 (0.8%) none; 39 (29.8%) high school diploma; 78 (59.1%) graduated from college, and 13 (9.9%) had a postcollege educational level.

Their employment situation was 74 (56.5%) students, 5 (3.8%) were self-employed, 3 (2.3%) were entrepreneurs, 17 (13%) were fixed-term employees, 19 (14.5%) were permanent employees, and 13 (9.9%) were unemployed. After screening the questionnaire, we realized that data for 3 subjects were incomplete. So, our final sample was of 128 subjects. The width of the sample for detecting effect sizes of 0.30 with a $p \leq 0.05$ with correlational measures was calculated using GPower 3.1. This analysis showed that a sample of 117 subjects was adequate.

4 | Measures

Socio-demographic Schedule (Gazzillo and Faccini 2019). First of all, a brief instrument comprising 11 items was implemented to collect information about age, gender, ethnicity, educational level, occupation, socio-economic status, and the presence of traumatic experiences in childhood (like verbal or physical abuse from parents, neglect, and so on).

Subjective Emptiness Scale (SES; Price et al. 2020); we used the Italian version for the present study (see D'Agostino et al. 2021). Price et al. (2019, 3) defined the sense of emptiness as "a state of profound hollowness in which the individual feels bereft of fulfillment and connection to the external world." It referred to this definition to create the Subjective Emptiness Scale (SES) as a measure to assess the subjective feeling of emptiness in both clinical and non-clinical samples. Items are based on the transcript of therapeutic sessions and a literature review and include statements such as "I feel alone in the world," "It does not matter what I do, I still feel unsatisfied," "I feel empty inside," "I feel like I am forced to exist," "I feel like I am disconnected from the world". Each item is rated according to a 4-point Likert scale (from 1 = not at all true to 4 = very true). SES has a single-factor structure and has shown excellent internal reliability ($\alpha = 0.92$) and good concordant and discriminant validity.

McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD; Zanarini 2003) it's a screening tool designed to assess the characteristics of borderline personality disorder (BPD). It is a 10-item questionnaire rated either True or False. The MSI-BPD includes one question for each of the first eight DSM-IV and DSM-5 criteria for BPD, and two questions for the ninth criterion regarding paranoia/dissociation. The original version of the scale showed a high level of sensitivity (0.81) and specificity (0.85), with a score of 7 (considered excellent as a cut-off point). It has also been reported to have high test-retest reliability (Spearman correlation coefficient of 0.72, $p < 0.0001$).

Pathological Narcissism Inventory (PNI; Pincus and Lukowitsky 2010; Italian version by Di Pierro et al. 2014). It is a 52-item questionnaire that assesses the construct of pathological

narcissism in a multidimensional way. Its structure allows us to assess the grandiose and vulnerable variants through seven subscales. Narcissistic Grandiosity (NG) is defined by the subscales Exploitativeness (EXP, 5 items), Self-Sacrificing Self-Enhancement (SSSE, 6 items), and Grandiose Fantasy (GF, 7 items); Narcissistic Vulnerability (NV) is described by the subscale Contingent Self-Esteem (CSE, 12 items), Hiding the Self (HS, 7 items), Devaluing (DEV, 7 items), and Entitlement Rage (ER, 8 items). Subjects are asked to indicate, on a 6-point Likert-type scale, how much every assessment describes them (from 0 = completely different from me, to 5 = completely similar to me), with high scores indicating high levels of pathological narcissism.

S-UPPS-P (impulsive behavior Scale Urgency, [lack of] Premeditation, [lack of] Perseverance, Sensation seeking; Billieux et al. 2012; Cándido et al. 2012; Cyders et al. 2014; Italian version by D'Orta et al. 2015). It is the short form of the UPPS-P Impulsive Behavior Scale (Lynam et al. 2006). It comprises 20 items that assess the five aspects of impulsiveness according to the UPPS-P model (Cyders et al. 2007; Whiteside and Lynam 2001): Negative Urgency (tendency to act impulsively in presence of negative emotions), Positive Urgency (the tendency to act impulsively when facing positive emotions), Lack of Premeditation (the tendency to not thinking about the consequences of one's actions), Lack of Perseverance (the tendency to struggle to remain focused on complex and tedious tasks), and Sensation Seeking (tendency to prefer stimulating and exciting activities). Every aspect of impulsiveness is assessed on a 4-point Likert-type scale. The Italian version of the S-UPPS-P has shown adequate psychometric properties: it has a solid factor structure and good internal consistency (Cronbach's alpha ranging from 0.73 to 0.84).

Beck Depression Inventory-II (BDI-II; Beck et al. 1996; Montano and Flebus 2006) is a 21-item, self-report questionnaire employed to assess depressive symptoms. Each item is rated on a scale from 0 to 3. The Italian validation of the instrument (Ghisi et al. 2006) confirmed the existence of two sides of depression, somatic and mental. Each item reflects a distinct aspect of depression, and subjects are asked to select, out of four, which statement most closely corresponds to their situation. Higher scores indicate a more severe symptomatology.

The Measure of Parenting Style (MOPS; Parker et al. 1997; Italian version by Picardi et al. 2013) is a refined version of the Parental Bonding Instrument (PBI; Parker et al. 1979). It is a self-report tool created to assess adults' memories regarding the behaviors and attitudes of their parents during childhood. It comprises 30 items (15 items for each parent) that assess Indifference/Disinterest (6 items), Abuse (5 items), and Overcontrol (4 items). Every item is rated on a 4-point Likert-type scale. The internal consistency for the Maternal Indifference, Maternal Abuse, and Maternal Overcontrol was 0.87, 0.73, and 0.76, respectively. For the Father scales, the alpha was 0.83 for the Indifference, 0.78 for the Abuse, and 0.59 for the Overcontrol.

Relationship Questionnaire (RQ; Bartholomew and Horowitz 1991, in its Italian version, see Carli 1995). It is a measure composed of four brief paragraphs, each of which describes a pattern of attachment related to an adult intimate relationship,

according to the authors' conceptualization: Secure (A), Fearful (B), Preoccupied (C), Detaching/Dismissive (D). Subjects are asked, first, to choose the model of attachment in which they recognize themselves the most; then, they are invited to rate the extent to which they correspond to each of the prototypes on a 7-point Likert-type scale. The RQ was designed to obtain continuous estimates of each of the four attachment patterns.

Inventory of Interpersonal Problems (IIP-32; Horowitz et al. 1988, 2000, Italian version by Lo Coco et al. 2018) is a self-report questionnaire that identifies a person's most salient interpersonal difficulties. It has two versions, one with 64 items and one with 32, designed for screening purposes. Both of them comprise eight interpersonal dimensions. The 32 items of this tool have to be assessed on a 5-point Likert-type scale (ranging from 0 = not at all to 4 = very), with higher scores reflecting higher interpersonal problems. There are four items for each subscale: Domineering/Controlling, Vindictive/Self-centered, Cold/Distant, Socially Inhibited/Avoidant, Non-assertive, Overly Accommodating/Exploitable, Self-sacrificing/Over nurturant, and Intrusive/Needy. The Italian version (Lo Coco et al. 2018) has shown moderate to good Cronbach's alpha values (from 0.65 to 0.85).

The Interpersonal Guilt Rating Scale—20s (IGRS-20s; Leonardi et al. 2023) is a self-report questionnaire that assesses interpersonal feelings of guilt according to Control-Mastery Theory. It comprises 20 items that derive from clinical and empirical literature and clinical experience. It is a brief tool readily employable for clinical and research purposes. Every item is rated by the subject on a 5-point Likert scale, ranging from 1 (“not at all representative”) to 5 (“completely representative”). It presents a four-factor structure: survivor guilt (“I do not like feeling better off than other people”), omnipotence guilt (that comprises both omnipotence responsibility guilt, e.g., “I feel it is my responsibility to solve other people's problems” and separation/disloyalty guilt, e.g., “I feel I should put my parents' wishes ahead of my own”), burdening guilt (“I believe that if I am spontaneous other people will feel oppressed”) and self-hate guilt (“I feel that I do not deserve to be happy”). The internal consistency of the four guilt factors (Cronbach's alpha values; $p < 0.001$) were adequate to good: Survivor 0.82; Omnipotence 0.77; Self-hate 0.81; Burdening 0.73.

5 | Analytic Approach

To assess the relationships between the sense of emptiness and all the other variables of interest (borderline traits, impulsivity, interpersonal problems, depression, narcissistic traits, attachment patterns, parental style, adverse childhood experiences, and interpersonal guilt), Spearman's rho correlation coefficients and partial correlations were calculated. A network analysis was performed to facilitate interpretation, showing the network of partial correlations among all the variables of interest. Lastly, we performed a mediation analysis to assess if interpersonal guilt mediated the relationship between adverse childhood experiences and preoccupied attachment on one side and the sense of emptiness on the other.

Statistical analyses were performed with SPSS—Version 22 and with JASP 0.18.3.

6 | Results

The sense of emptiness was correlated positively with the educational level ($\rho = 0.24$, $p = 0.05$) and negatively with the socio-economic status ($\rho = -0.21$, $p = 0.01$). There was no other significant correlation between the sense of emptiness and any other socio-demographic variable.

6.1 | Sense of Emptiness, Personality Disorders, Interpersonal Problems and Impulsivity

The sense of emptiness was significantly correlated with borderline personality traits ($\rho = 0.59$, $p < 0.01$), with both aspects of narcissism (respectively, $\rho = 0.27$, $p < 0.01$ for Narcissistic Grandiosity and $\rho = 0.39$, $p < 0.01$ for Narcissistic Vulnerability). The correlation analysis revealed a significant positive correlation between sense of emptiness and total interpersonal problems score ($\rho = 0.41$, $p < 0.01$) and between the sense of emptiness and the "Lack of perseverance" scale of the UPPP-S ($\rho = 0.31$, $p < 0.001$).

6.2 | Sense of Emptiness and Depression

Feelings of emptiness were positively correlated with depression ($\rho = 0.81$, $p < 0.001$).

6.3 | Sense of Emptiness, Attachment, and Adverse Childhood Experiences

The sense of emptiness was correlated with adverse childhood experiences ($\rho = 0.39$, $p < 0.01$); in particular, the correlation with the total score of negative maternal style was $\rho = 0.41$, $p < 0.01$, and the correlation with the total score of the negative paternal style was $\rho = 0.31$, $p < 0.01$.

Sense of emptiness was also significantly correlated with fearful attachment ($\rho = 0.19$, $p < 0.05$), preoccupied attachment

($\rho = 0.31$, $p < 0.01$), and negatively correlated with secure attachment ($\rho = -0.22$, $p < 0.05$).

Partial correlation showed that only preoccupied attachment significantly correlated with the sense of emptiness ($\rho = 0.20$, $p = 0.02$).

6.4 | Sense of Emptiness, Interpersonal Guilt, and Shame

In line with our hypothesis, the sense of emptiness was positively correlated with almost all the interpersonal feelings of guilt (see Table 1), especially self-hate and burdening guilt.

Partial correlations showed that, among the guilt variables, only self-hate and burdening guilt were significantly associated with a sense of emptiness ($\rho = 0.25$, $p = 0.004$; $\rho = 0.29$, $p = 0.001$).

Based on the results of partial correlations, we decided to use only these factors (self-hate, burdening guilt, preoccupied attachment, and the total score of negative parental style) as key variables in the subsequent mediation analyses.

7 | Mediation Analyses

We performed a mediation analysis to verify our hypotheses. The relationship between MOPS and sense of emptiness is entirely mediated by self-hate and burdening guilt, while the relationship between preoccupied attachment and sense of emptiness is mediated only by burdening guilt (Tables 2, 3, 4).

The path plot presented in Figure 1 provides a visual representation of the mediation results.

Finally, in this sample, borderline features were also connected with adverse childhood experiences, and the effect of these experiences was partially mediated by self-hate (direct effect: estimate = 0.048, standard error = 0.014, z -value = 3.376, $p < 0.001$;

TABLE 1 | Spearman's correlations between sense of emptiness and interpersonal feelings of guilt.

	Survivor guilt	Separation/ disloyalty	Omnipotence responsibility	Self-hate	Burdening guilt
Sense of emptiness					
Rho	0.31**	0.10	0.26**	0.53**	0.53**
Sign. (two-tailed)	≤ 0.001	0.28	0.003	≤ 0.001	≤ 0.001

** $p = 0.01$ (two-tailed).

TABLE 2 | Direct effects of MOPS and preoccupied attachment on sense of emptiness.

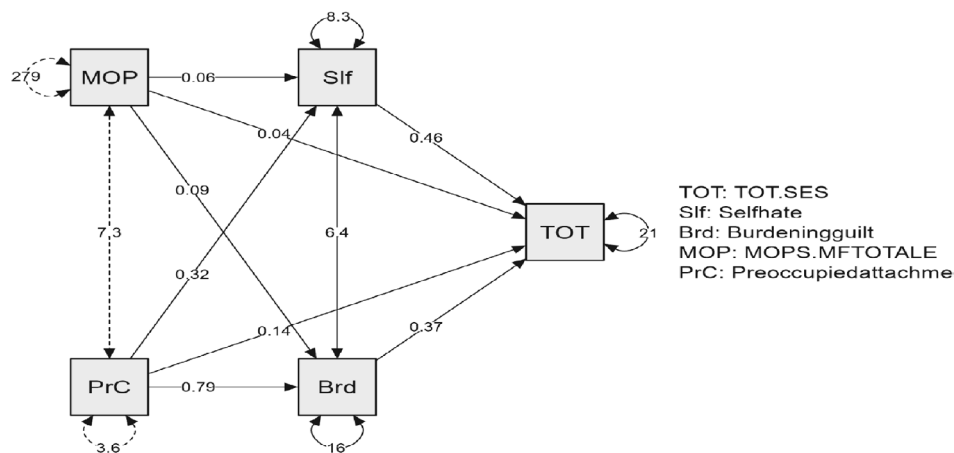
	Estimate	Std. error	z-value	p	95% confidence interval	
					Lower	Upper
MOPS → sense of emptiness	0.04	0.03	1.58	0.11	-0.01	0.10
Preoccupied attachment → sense of emptiness	0.14	0.23	0.61	0.54	-0.32	0.60

TABLE 3 | Indirect effect on sense of emptiness mediated by self-hate and burdening guilt from MOPS and preoccupied attachment.

	Estimate	Std. error	z-value	p	95% confidence interval	
					Lower	Upper
MOPS → self-hate → emptiness	0.03	0.01	2.16	0.03	0.00	0.05
MOPS → burdening → emptiness	0.03	0.01	1.43	0.02	0.00	0.06
Preo. attachment → burdening → emptiness	0.15	0.08	1.74	0.08	−0.02	0.30
Preo. attachment → burdening → emptiness	0.03	0.12	2.40	0.02	0.05	0.52

TABLE 4 | Total effect of MOPS and preoccupied attachment on sense of emptiness.

	Estimate	Std. error	z-value	p	95% confidence interval	
					Lower	Upper
MOPS → sense of emptiness	0.10	0.02	3.62	<0.00	0.05	0–16
Preoccupied attachment → sense of emptiness	0.58	0.25	2.31	0.02	0.09	1.07

**FIGURE 1** | Structural path model showing direct and indirect effects of MOPS and preoccupied attachment on sense of emptiness.

indirect effect: estimate=0.012, standard error=0.006, z-value=1.1979; $p=0.048$; total effect: estimate=0.053, standard error=0.014, z-value=3.934, $p<0.001$).

8 | Network Analysis

We performed a network analysis to estimate the complex relationship patterns that emerged from our analyses (Figure 2). Using a network plot with autocorrelations and normalized centrality measures with the EBICglasso method, the network revealed a well-connected structure among the five variables: self-hate, burdening guilt, preoccupied attachment, MOPS (adverse childhood experience), and sense of emptiness. These factors were selected because they showed a positive and significant correlation with the sense of emptiness in the partial correlations. The model included 9 out of 10 possible edges (sparsity=0.10), indicating a dense network. Analyzing the network structure, self-hate and burdening guilt emerge clearly as central nodes of the network. These two constructs

have the largest number of direct connections, including the strongest link in the entire network, and are also directly connected to the sense of emptiness. This topological position indicates that self-hate and burdening guilt play a crucial role in the system of relationships between the variables considered: preoccupied attachment and adverse childhood experiences, on the sense of emptiness.

9 | Discussion

The results of this study confirm and expand existing knowledge on the sense of emptiness, highlighting significant correlations with psychopathology. They align with previous studies that associate the sense of emptiness with personality disorders such as borderline personality disorder (Zanarini et al. 1998; Meares et al. 2011) and narcissistic personality disorder (Kernberg 1975; Svrakic 1985). The strong link between the sense of emptiness and depression suggests that emptiness may also be a central component of depressive

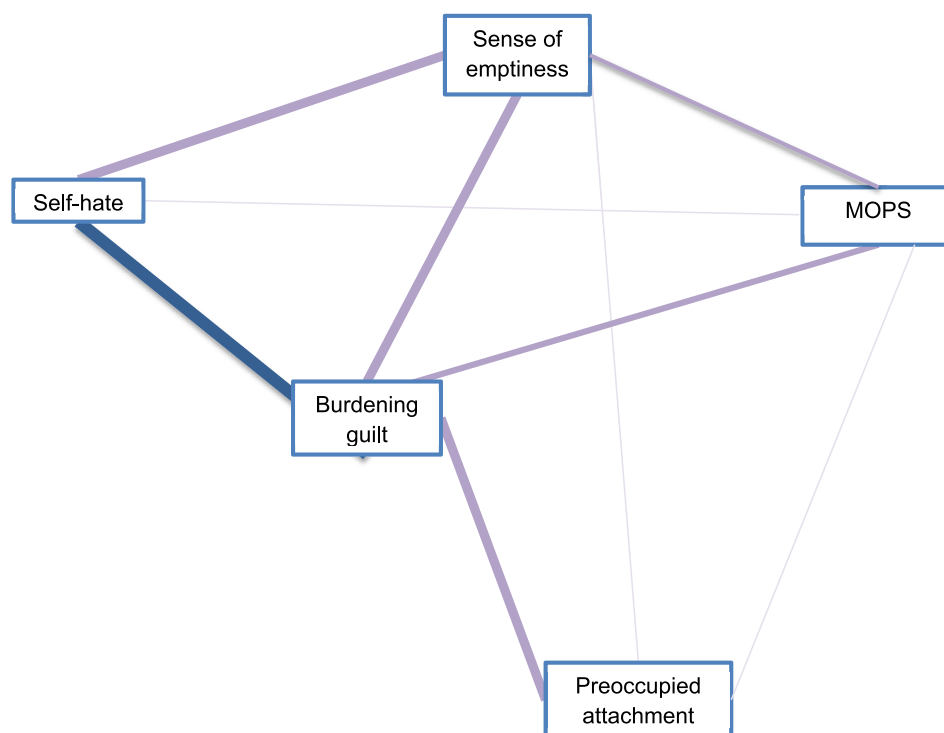


FIGURE 2 | Network analysis.

symptomatology, consistent with previous studies (Trull and Widiger 1991; Klonsky 2008; Rhodes et al. 2019).

Interpersonal problems are a fundamental symptom of patients with borderline and narcissistic personality disorders, who are often impulsive, alternate between idealization and devaluation, and strongly fear real or imaginary abandonment (APA 2013; Domes et al. 2009). The results of this research show that the sense of emptiness correlates with interpersonal problems in general and with the *Lack of Perseverance* scale of the UPPP-S in particular; it is likely that individuals with a strong sense of emptiness struggle with maintaining consistency in tasks, activities, or relationships because they perceive their efforts as unfulfilling, which in turn exacerbates their sense of emptiness.

The findings of this study also support the relationship between adverse childhood experiences, insecure attachment styles, and the development of a persistent sense of emptiness. These results align with the theories of Adler and Buie (1979) and Cohen and Sherwood (1996), which propose that the inability to internalize soothing and nurturing experiences leads to unstable self- and other-representations, fueling a chronic sense of emptiness.

An innovative contribution of this study is the identification of interpersonal guilt, particularly self-hate and burdening guilt, which are correlated with the sense of emptiness and mediate the relationships between adverse childhood experiences and preoccupied attachment with the sense of emptiness. These results reinforce the idea that the sense of emptiness is associated with a “heavy,” “excessive” or negative and unworthy self-image that, in turn, is fostered by negative relational experiences with the caregivers.

In line with the data presented in this study, we think that children who experience adverse childhood events and/or

inconsistent caregiving may internalize these experiences by attributing responsibility to themselves. As a result, they might develop the belief that they were victims of such adversities because they were inherently bad or unworthy. Another possibility is that they come to believe that their needs, emotions, and very presence were a burden to their caregivers, making them difficult to love or care for. These beliefs, in turn, are among the roots of the sense of inner emptiness, which can be interpreted as one of the manifestations of the unconscious belief that there is nothing good within themselves. Other manifestations of these beliefs include depression, shame, self-esteem (narcissistic) problems, and problematic interpersonal behaviors (see, e.g., Faccini et al. 2020), which can also be seen as maladaptive attempts to reduce this sense of an inner “void.” It is worth noting that previous research and clinical studies support the view that early traumas, adverse experiences, and insecure attachments (in particular, preoccupied and disorganized attachment) are among the roots of borderline personality features (see, e.g., Agrawal MD et al. 2004; Liotti and Farina 2011), and that self-hate mediates the effects of these experiences (see, e.g., Gazzillo et al. 2020, 2021).

Overall, these data support the centrality of the sense of emptiness in different clinical pictures and highlight the relevance of self-hate and burdening guilt in the genesis of the sense of emptiness. One of the most important implications of these data, in our opinion, is that psychotherapists who want to help their patients overcome their feeling of an inner void should help them disprove the pathogenic beliefs that underlie their self-hate and burdening guilt. In other words, they should help their patients feel worthy of love, care, and appreciation, enhance their self-esteem, and help them feel that their emotions, needs, and way of being are not a burden to other people.

10 | Limitations and Future Directions

Several limitations should be noted for this study. One of the major ones concerns the exclusive use of self-report instruments, which implies that our results might be biased by the self-observation ability and the defensive functioning of the participants and by the consequent difficulties in inferring and identifying unconscious contents and processes. The absence of clinical diagnostic tools prevents confirmation of specific disorders, which might affect the accuracy of the correlations observed between the sense of emptiness and psychopathology. In addition, the sample was restricted to 128 Italian participants recruited online, mainly females, limiting the generalizability of results to the population.

Moreover, the cross-sectional nature of the data collection further limits the ability to establish causal relationships between the variables studied.

Future research should aim to address this limitation. Longitudinal studies could provide a clearer understanding of the causal relationships between emptiness and factors such as attachment, adverse childhood experiences, interpersonal guilt, and emptiness. Future research could further investigate whether the sense of emptiness is commonly found in patients with covert narcissism. It is also essential to clarify the specific nature of the relationship between emptiness and depression, determining whether emptiness is a symptom, a consequence, or a contributing factor to depression.

Future studies might consider exploring how constructs such as self-fragmentation, loss of agentive control, and temporal incoherence contribute to feelings of emptiness, possibly offering a bridge between psychodynamic models and contemporary cognitive neuroscience.

Author Contributions

Marianna Santodoro: conceptualization, methodology, writing – original draft; **Eleonora Fiorenza:** resources, investigation, writing – review and editing; **Camilla Mannocchi:** resources, investigation, writing – review and editing; **Francesco Gazzillo:** conceptualization, data curation, methodology, project administration, supervision.

Ethics Statement

The research was approved by the Ethics Committee for Transdisciplinary Research of Sapienza University of Rome (Approval number: Deliberation No. 219/2024).

Consent

Participants were provided with information about the study and invited to consent to participate by initiating questionnaire completion.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from the last author upon reasonable request.

References

- Adler, G., and D. H. Buie. 1979. "Aloneness and Borderline Psychopathology: The Possible Relevance of Child Development Issues." *International Journal of Psycho-Analysis* 60: 83–96.
- Agrawal, H. R., MD, J. Gunderson MD, B. M. Holmes PhD, and K. Lyons-Ruth PhD. 2004. "Attachment Studies With Borderline Patients: A Review." *Harvard Review of Psychiatry* 12, no. 2: 94–104. <https://doi.org/10.1080/10673220490447218>.
- American Psychiatric Association. 2013. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. APA.
- Bartholomew, K., and L. M. Horowitz. 1991. "Attachment Styles Among Young Adults: A Test of a Four-Category Model." *Journal of Personality and Social Psychology* 61, no. 2: 226–244. <https://doi.org/10.1037//0022-3514.61.2.226>.
- Beck, A. T., R. A. Steer, and G. Brown. 1996. "Beck Depression Inventory–II." *Psychological Assessment*. <https://doi.org/10.1037/t00742-000>.
- Betts, L. R., M. Trueman, L. Chiverton, A. Stanbridge, and J. Stephens. 2013. "Parental Rearing Style as a Predictor of Attachment and Psychosocial Adjustment During Young Adulthood." *Journal of Social and Personal Relationships* 30, no. 6: 675–693. <https://doi.org/10.1177/0265407512465998>.
- Bilevicius, E., D. C. Neufeld, A. Single, et al. 2019. "Vulnerable Narcissism and Addiction: The Mediating Role of Shame." *Addictive Behaviors* 92: 115–121. <https://doi.org/10.1016/j.addbeh.2018.12.035>.
- Billieux, J., L. Rochat, G. Ceschi, et al. 2012. "Validation of a Short French Version of the UPPS-P Impulsive Behavior Scale." *Comprehensive Psychiatry* 53, no. 5: 609–615. <https://doi.org/10.1016/j.comppsy.2011.09.001>.
- Blasco-Fontecilla, H., V. de León-Martínez, D. Delgado-Gómez, L. Giner, S. Guillaume, and P. Courtet. 2013. "Emptiness and Suicidal Behavior: An Exploratory Review." *Suicidology Online* 4: 21–32.
- Brickman, L. J., B. A. Ammerman, A. E. Look, M. E. Berman, and M. S. McCloskey. 2014. "The Relationship Between Non-Suicidal Self-Injury and Borderline Personality Disorder Symptoms in a College Sample." *Borderline Personality Disorder and Emotion Dysregulation* 1, no. 14: 1–8. <https://doi.org/10.1186/2051-6673-1-14>.
- Buie, D. H., and G. Adler. 1982–1983. "Definitive Treatment of the Borderline Personality." *International Journal of Psychoanalytic Psychotherapy* 9: 51–87.
- Cándido, A., E. Orduña, J. C. Perales, A. Verdejo-García, and J. Billieux. 2012. "Validation of a Short Spanish Version of the UPPS-P Impulsive Behaviour Scale." *Trastornos Adictivos* 14, no. 3: 73–78. [https://doi.org/10.1016/s1575-0973\(12\)70048-x](https://doi.org/10.1016/s1575-0973(12)70048-x).
- Carli, L., ed. 1995. *Attaccamento e rapporto di coppia*. Raffaello Cortina.
- Cary, G. L. 1972. "The Borderline Condition: A Structural-Dynamic Viewpoint." *Psychoanalytic Review* 59, no. 1: 33–54.
- Choi-Kain, L. W., G. M. Fitzmaurice, M. C. Zanarini, O. Laverdière, and J. G. Gunderson. 2009. "The Relationship Between Self-Reported Attachment Styles, Interpersonal Dysfunction, and Borderline Personality Disorder." *Journal of Nervous and Mental Disease* 197, no. 11: 816–821. <https://doi.org/10.1097/nmd.0b013e3181bea56e>.
- Cohen, C. P., and V. R. Sherwood. 1996. *Becoming a Constant Object in Psychotherapy With the Borderline Patient*. Jason Aronson.
- Cyders, M. A., A. K. Littlefield, S. Coffey, and K. A. Karyadi. 2014. "Examination of a Short English Version of the UPPS-P Impulsive Behavior Scale." *Addictive Behaviors* 39, no. 9: 1372–1376. <https://doi.org/10.1016/j.addbeh.2014.02.013>.
- Cyders, M. A., G. T. Smith, N. S. Spillane, S. Fischer, A. M. Annus, and C. Peterson. 2007. "Integration of Impulsivity and Positive Mood to Predict Risky Behavior: Development and Validation of a Measure of

- Positive Urgency." *Psychological Assessment* 19: 107–118. <https://psycn.apa.org/doi/10.1037/1040-3590.19.1.107>.
- D'Agostino, A., R. Pepi, M. R. Monti, M. Rossi Monti, V. Starcevic, and A. Price. 2021. "Measuring Emptiness: Validation of the Italian Version of the Subjective Emptiness Scale in Clinical and Non-Clinical Populations." *Journal of Affective Disorders Reports* 6: 100226. <https://doi.org/10.1016/j.jadr.2021.100226>.
- D'Agostino, A., R. Pepi, M. R. Monti, and V. Starcevic. 2020. "The Feeling of Emptiness: A Review of a Complex Subjective Experience." *Harvard Review of Psychiatry* 28, no. 5: 287–295. <https://doi.org/10.1097/HRP.000000000000026>.
- Di Pierro, R., F. Madeddu, A. Dakanalis, and M. Gallucci. 2014. *The Italian version of the pathological narcissism inventory: Factor structure and psychometric properties*. In 3rd International Congress on Borderline Personality Disorder and Allied Disorders.
- Di Plinio, S., S. Arnò, and S. J. H. Ebisch. 2024. "The State-Trait Sense of Self Inventory (ST-SoSI): A New Instrument to Measure State-Trait Dimensions of the Multidimensional Sense of Self." *Consciousness and Cognition* 118: 103634. <https://doi.org/10.1016/j.concog.2024.103634>.
- Di Plinio, S., S. Arnò, M. G. Perrucci, and S. J. H. Ebisch. 2020. "The Evolving Sense of Agency: Context Recency and Quality Modulate the Interaction Between Prospective and Retrospective Processes." *Consciousness and Cognition* 80: 102903. <https://doi.org/10.1016/j.concog.2020.102903>.
- Diamond, D., K. N. Levy, J. F. Clarkin, et al. 2014. "Attachment and Mentalization in Female Patients with Comorbid Narcissistic and Borderline Personality Disorder." *Personality disorders* 5, no. 4: 428–433. <https://doi.org/10.1037/per0000065>.
- Domes, G., L. Schulze, and S. C. Herpertz. 2009. "Emotion Recognition in Borderline Personality Disorder—A Review of the Literature." *Journal of Personality Disorders* 23, no. 1: 6–19. <https://doi.org/10.1521/pedi.2009.23.1.6>.
- D'Orta, I., J. Burnay, D. Aiello, et al. 2015. "Development and Validation of a Short Italian UPPS-P Impulsive Behavior Scale." *Addictive Behaviors Reports* 2: 19–22. <https://doi.org/10.1016/j.abrep.2015.04.003>.
- Elsner, D., J. H. Broadbear, and S. Rao. 2018. "What Is the Clinical Significance of Chronic Emptiness in Borderline Personality Disorder?" *Australasian Psychiatry* 26: 88–91. <https://doi.org/10.1177/1039856217734674>.
- Erkoreka, L., I. Zamalloa, S. Rodriguez, et al. 2022. "Attachment Anxiety as Mediator of the Relationship Between Childhood Trauma and Personality Dysfunction in Borderline Personality Disorder." *Clinical Psychology & Psychotherapy* 29, no. 2: 501–511. <https://doi.org/10.1002/cpp.2640>.
- Faccini, F., F. Gazzillo, B. S. Gorman, E. de Luca, and N. Dazzi. 2020. "Guilt, Shame, Empathy, Self-Esteem, and Traumas: New Data for the Validation of the Interpersonal Guilt Rating Scale–15 Self-Report (IGRS 15s)." *Psychodynamic Psychiatry* 48: 79–100. <https://doi.org/10.1521/pdps.2020.48.1.79>.
- Fimiani, R., F. Gazzillo, N. Dazzi, and M. Bush. 2021. "Survivor Guilt: Theoretical, Empirical, and Clinical Features." *International Forum of Psychoanalysis* 31, no. 3: 176–190. <https://doi.org/10.1080/0803706X.2021.1941246>.
- Fuchs, T. 2007. "Fragmented Selves: Temporality and Identity in Borderline Personality Disorder." *Psychopathology* 40: 379–387. <https://doi.org/10.1159/000106468>.
- Gazzillo, F. 2021. *Fidarsi dei pazienti*. Cortina Editore.
- Gazzillo, F. 2023. "Toward a More Comprehensive Understanding of Pathogenic Beliefs: Theory and Clinical Implications." *Journal of Contemporary Psychotherapy* 53, no. 3: 227–234. <https://doi.org/10.1007/s10879-022-09564-5>.
- Gazzillo, F., N. Dazzi, E. de Luca, M. Rodomonti, and G. Silberschatz. 2020. "Attachment Disorganization and Severe Psychopathology: A Possible Dialogue Between Attachment Theory and Control-Mastery Theory." *Psychoanalytic Psychology* 37, no. 3: 173–184. <https://doi.org/10.1037/pap0000260>.
- Gazzillo, F., N. Dazzi, D. Kealy, and R. Cuomo. 2021. "Personalizing Psychotherapy for Personality Disorders: Perspectives From Control-Mastery Theory." *Psychoanalytic Psychology* 38, no. 4: 266–278. <https://doi.org/10.1037/pap0000295>.
- Gazzillo, F., and F. Faccini. 2019. *Socio-Demographic Schedule* [Unpublished manuscript]. Department of Dynamic and Clinical Psychology, Sapienza University of Rome.
- Gazzillo, F., E. Fiorenza, M. Rodini, and M. Bush. Forthcoming. "Omnipotent Responsibility Guilt: Theoretical, Clinical and Empirical Features." *Psychodynamic Psychiatry* 54: 1.
- Gazzillo, F., and D. Kealy. Forthcoming. "Self-Hate: Theoretical, Clinical and Empirical Features." *International Forum of Psychoanalysis*.
- Gazzillo, F., and J. Leonardi. 2024. "Burdening Guilt: Theoretical and Clinical Features." *International Forum of Psychoanalysis* 33, no. 1: 39–50. <https://doi.org/10.1080/0803706X.2023.2236343>.
- Ghisi, M., G. B. Flebus, A. Montano, E. Sanavio, and C. Sica. 2006. *Beck Depression Inventory—Second Edition*. Adattamento italiano: Manuale. Organizzazioni Speciali.
- Grilo, C. M., T. H. McGlashan, L. C. Morey, et al. 2001. "Internal Consistency, Inter-Criterion Overlap, and Diagnostic Efficiency of Criteria Sets for DSM-IV Schizotypal, Borderline, Avoidant, and Obsessive-Compulsive Personality Disorders." *Acta Psychiatrica Scandinavica* 104: 264–272. <https://doi.org/10.1034/j.1600-0447.2001.00436.x>.
- Gunderson, J. G., and P. S. Links. 2008. *Borderline Personality Disorder: A Clinical Guide*. 2^a ed. American Psychiatric Publishing.
- Horowitz, L. M., L. E. Alden, J. S. Wiggins, and A. L. Pincus. 2000. *Inventory of Interpersonal Problems Manual*. Psychological Corporation.
- Horowitz, L. M., S. E. Rosenberg, B. A. Baer, G. Ureño, and V. S. Villaseñor. 1988. "Inventory of Interpersonal Problems: Psychometric Properties and Clinical Applications." *Journal of Consulting and Clinical Psychology* 56, no. 6: 885. <https://doi.org/10.1037/0022-006X.56.6.885>.
- Jaksic, N., D. Marcinko, M. Skocic Hanzek, B. Rebernjak, and J. S. Ogrodniczuk. 2017. "Experience of Shame Mediates the Relationship Between Pathological Narcissism and Suicidal Ideation in Psychiatric Outpatients." *Journal of Clinical Psychology* 73, no. 12: 1670–1681. <https://doi.org/10.1002/jclp.22472>.
- Johansen, M., S. Karterud, G. Pedersen, T. Gude, and E. Falkum. 2004. "An Investigation of the Prototype Validity of the Borderline DSM-IV Construct." *Acta Psychiatrica Scandinavica* 109: 289–298. <https://doi.org/10.1046/j.1600-0447.2003.00268.x>.
- Kernberg, O. F. 1975. *Borderline Conditions and Pathological Narcissism*. Jason Aronson.
- Kernberg, O. F. 1984. *Severe Personality Disorders: Psychotherapeutic Strategies*. Yale University Press.
- Klonsky, E. D. 2008. "What Is Emptiness? Clarifying the 7th Criterion for Borderline Personality Disorder." *Journal of Personality Disorders* 22, no. 4: 418–426. <https://doi.org/10.1521/pedi.2008.22.4.418>.
- Kokko, K., A. Korkalainen, A. L. Lyyra, and T. Feldt. 2013. "Structure and Continuity of Well-Being in Mid-Adulthood: A Longitudinal Study." *Journal of Happiness Studies* 14, no. 1: 99–114. <https://doi.org/10.1007/s10902-011-9318-y>.
- Lafarge, L. 1989. "Emptiness as Defense in Severe Regressive States." *Journal of the American Psychoanalytic Association* 37, no. 4: 965–995. <https://doi.org/10.1177/000306518903700405>.

- Lamprell, M. 1994. "From Emptiness to Loss: A Journey From the Intrapersonal to the Interpersonal." *British Journal of Psychotherapy* 10, no. 3: 331–343. <https://doi.org/10.1111/j.1752-0118.1994.tb00665.x>.
- Leonardi, J., F. Dazzi, and F. Gazzillo. 2025. "Exploring Interpersonal Guilt: Association With Emotion Dysregulation, Mentalization, Frustration Intolerance and Body Appreciation." *Psychodynamic Psychiatry* 53: 235–257. <https://doi.org/10.1521/pdps.2025.53.2.235>.
- Leonardi, J., R. Fimiani, F. Faccini, B. S. Gorman, M. Bush, and F. Gazzillo. 2020. "An Empirical Investigation Into Pathological Worry and Rumination: Guilt, Shame, Depression and Anxiety." *Psychology Hub* 38: 31–42. <https://doi.org/10.13133/2724-2943/17229>.
- Leonardi, J., F. Gazzillo, B. Gorman, and M. Bush. 2023. "Assessing Burdening Guilt and Its Correlates." *Psychodynamic Psychiatry* 51, no. 4: 479–499. <https://doi.org/10.1521/pdps.2023.51.4.479>.
- Liotti, G., and B. Farina. 2011. *Sviluppi Traumatici/Traumatic Developments*. Raffello Cortina.
- Liotti, G., and A. Gumley. 2008. "An Attachment Perspective on Schizophrenia: The Role of Disorganized Attachment, Dissociation and Mentalization." *Psychosis, trauma and dissociation: Emerging perspectives on severe psychopathology* 117–133. <https://doi.org/10.1002/9780470699652.ch9>.
- Lo Coco, G., G. Mannino, L. Salerno, et al. 2018. "The Italian Version of the Inventory of Interpersonal Problems (IIP-32): Psychometric Properties and Factor Structure in Clinical and Non-Clinical Groups." *Frontiers in Psychology* 9: 341. <https://doi.org/10.3389/fpsyg.2018.00341>.
- Lynam, D. R., S. P. Whiteside, G. T. Smith, and M. A. Cyders. 2006. *The UPPS-P: Assessing five personality pathways to impulsive behavior*. Purdue University.
- Lyons-Ruth, K., L. E. Brumariu, J. F. Bureau, K. Hennighausen, and B. Holmes. 2015. "Role Confusion and Disorientation in Young Adult-Parent Interaction Among Individuals with Borderline Symptomatology." *Journal of Personality Disorders* 29, no. 5: 641–662. https://doi.org/10.1521/pedi.2014_28_165.
- Meares, R., F. Gerull, J. Stevenson, and A. Korner. 2011. "Is Self-Disturbance the Core of Borderline Personality Disorder? An Outcome Study of Borderline Personality Factors." *Australian and New Zealand Journal of Psychiatry* 45: 214–222. <https://doi.org/10.3109/00048674.2010.551280>.
- Miller, C. E., K. L. Lewis, E. Huxley, M. L. Townsend, and B. F. S. Grenyer. 2018. "A 1-Year Follow-Up Study Capacity to Love and Work: What Components of Borderline Personality Disorder Most Impair Interpersonal and Vocational Functioning?" *Personality and Mental Health* 12, no. 4: 334–344. <https://doi.org/10.1002/pmh.1432>.
- Montano, A., and G. B. Flebus. 2006. "Presentazione del Beck Depression Inventory-seconda edizione (BDI-II): conferma della struttura bifattoriale in un campione di popolazione italiana." *Psicoterapia cognitiva e comportamentale* 12, no. 1: 67.
- Parker, G., J. Roussos, D. Hadzi-Pavlovic, P. Mitchell, K. Wilhelm, and M. P. Austin. 1997. "The Development of a Refined Measure of Dysfunctional Parenting and Assessment of Its Relevance in Patients with Affective Disorders." *Psychological Medicine* 27, no. 5: 1193–1203. <https://doi.org/10.1017/S003329179700545X>.
- Parker, G., H. Tupling, and L. B. Brown. 1979. "A Parental Bonding Instrument." *British Journal of Medical Psychology* 52, no. 1: 1–10. <https://doi.org/10.1111/j.2044-8341.1979.tb02487.x>.
- Pazzagli, A., and M. R. Monti. 2000. "Dysphoria and Aloneness in Borderline Personality Disorder." *Psychopathology* 33, no. 4: 220–226. <https://doi.org/10.1159/000029147>.
- Peteet, J. R. 2011. "Approaching Emptiness: Subjective, Objective and Existential Dimensions." *Journal of Religion and Health* 50: 558–563. <https://doi.org/10.1007/s10943-010-9443-7>.
- Picardi, A., L. Tarsitani, A. Toni, et al. 2013. "Validity and Reliability of the Italian Version of the Measure of Parental Style (MOPS)." *Journal of Psychopathology* 19: 54–59. <https://doi.org/10.1037/t72306-000>.
- Pincus, A. L., and M. R. Lukowitsky. 2010. "Pathological Narcissism and Narcissistic Personality Disorder." *Annual Review of Clinical Psychology* 6, no. 1: 421–446. <https://doi.org/10.1146/annurev.clinpsy.121208.131215>.
- Price, A. L., H. Mahler, and C. J. Hopwood. 2019. "Subjective Emptiness: A Clinically Significant Trans-diagnostic Psychopathology Construct." <https://doi.org/10.31235/osf.io/f2x6r>.
- Price, A. L., H. I. M. Mahler, and C. J. Hopwood. 2020. "Construction and Validation of a Self-Report Subjective Emptiness Scale." *Assessment* 28, no. 1: 13–25. <https://doi.org/10.1177/1073191120968275>.
- Prunas, A., R. Di Pierro, J. Huemer, and A. Tagini. 2019. "Defense Mechanisms, Remembered Parental Caregiving, and Adult Attachment Style." *Psychoanalytic Psychology* 36, no. 1: 64. <https://doi.org/10.1037/pap0000158>.
- Rhodes, J. E., S. J. Hackney, and J. A. Smith. 2019. "Emptiness, Engulfment, and Life Struggle: An Interpretative Phenomenological Analysis of Chronic Depression." *Journal of Constructivist Psychology* 32, no. 4: 390–407. <https://doi.org/10.1080/10720537.2018.1515046>.
- Sampson, H. 1990. "How the Patient's Sense of Danger and Safety Influence the Analytic Process." *Psychoanalytic Psychology* 7, no. 1: 115–124. <https://doi.org/10.1037/h0079147>.
- Sampson, H. 1992. "The Role of "Real" Experience in Psychopathology and Treatment." *Psychoanalytic Dialogues* 2: 509–528.
- Singer, M. 1977. "The Experience of Emptiness in Narcissistic and Borderline States: I. Deficiency and Ego Defect Versus Dynamic-Defensive Models." *International Review of Psycho-Analysis* 4: 459–469.
- Stanghellini, G. 2009. "Embodiment and Schizophrenia." *World Psychiatry* 8, no. 1: 56–59. <https://doi.org/10.1002/j.2051-5545.2009.tb00212.x>.
- Svrakić, D. M. 1985. "Emotional Features of Narcissistic Personality Disorder." *American Journal of Psychiatry* 142, no. 6: 720–724. <https://doi.org/10.1176/ajp.142.6.720>.
- Thomson, P., and S. V. Jaque. 2017. "Adverse Childhood Experiences (ACE) and Adult Attachment Interview (AAI) in a Non-Clinical Population." *Child Abuse & Neglect* 70: 255–263. <https://doi.org/10.1016/j.chiabu.2017.06.001>.
- Trull, T. J., and T. A. Widiger. 1991. "The Relationship Between Borderline Personality Disorder Criteria and Dysthymia Symptoms." *Journal of Psychopathology and Behavioral Assessment* 13, no. 2: 91–105. <https://doi.org/10.1007/bf00961425>.
- van Schie, C. C., H. L. Jarman, S. Reis, et al., 2021. "Narcissistic Traits in Young People and How Experiencing Shame Relates to Current Attachment Challenges." *BMC Psychiatry* 21: 246. <https://doi.org/10.1186/s12888-021-03249-4>.
- Weiss, J. 1997. "The Role of Pathogenic Beliefs in Psychic Reality." *Psychoanalytic Psychology* 14: 427–434. <https://doi.org/10.1037/h0079734>.
- Weiss, J., H. Sampson, and Mount Zion Research Group. 1986. *The Psychoanalytic Process: Theory, Clinical Observations, and Empirical Research*. Guilford Press.
- Westen, D., O. Nakash, C. Thomas, and R. Bradley. 2006. "Clinical Assessment of Attachment Patterns and Personality Disorder in Adolescents and Adults." *Journal of Consulting and Clinical Psychology* 74, no. 6: 1065–1085. <https://doi.org/10.1037/0022-006X.74.6.1065>.
- Whiteside, S. P., and D. R. Lynam. 2001. "The Five Factor Model and Impulsivity: Using a Structural Model of Personality to Understand Impulsivity." *Personality and Individual Differences* 30, no. 4: 669–689. [https://doi.org/10.1016/S0191-8869\(00\)00064-7](https://doi.org/10.1016/S0191-8869(00)00064-7).

Yates, S. L. 2015. *Agoraphobia And Emptiness: Theoretical Considerations From A Psychoanalytic Perspective*. University of Western Ontario (Canada).

Zanarini, M. C., ed. 2005. *Borderline personality disorder*. CRC Press.

Zanarini, M. C., F. R. Frankenburg, C. J. DeLuca, J. Hennen, G. S. Khera, and J. G. Gunderson. 1998. "Rivista di psichiatria di Harvard." <https://doi.org/10.3109/10673229809000330>.

Zanarini, M. C., A. A. Vujanovic, E. A. Parachini, J. L. Boulanger, F. R. Frankenburg, and J. Hennen. 2003. "A Screening Measure for BPD: The McLean Screening Instrument for Borderline Personality Disorder (MSIBPD)." *Journal of Personality Disorders* 17, no. 6: 568–573. <https://doi.org/10.1521/pedi.17.6.568.25355>.

Zandersen, M., and J. Parnas. 2019. "Identity Disturbance, Feelings of Emptiness, and the Boundaries of the Schizophrenia Spectrum." *Schizophrenia Bulletin* 45, no. 1: 106–113. <https://doi.org/10.1093/schbul/sbx183>.