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The Relationship Between Different Forms of Childhood Abuse and Subsequent Body Dysmorphic Disorder and Complex PTSD Symptoms Among Israeli Women

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Body dysmorphic disorder (BDD) is common in childhood abuse survivors. Nonetheless, the relation between symptoms of BDD, posttraumatic stress disorder (PTSD), and complex PTSD, as well as the effects of different forms of childhood abuse in explaining these symptoms, remains unclear. This study explored (a) BDD scores as a function of childhood abuse; (b) the relationship between symptoms of BDD, PTSD, and disturbances in self-organization (DSO) in childhood abuse survivors; and (c) the effect of levels of different forms of childhood abuse on BDD, PTSD, and DSO symptoms. An online survey was conducted among a convenience sample of 404 Israeli adult women, of whom 53.7% ($n = 217$) were classified as having a history of childhood abuse. Background variables, BDD symptoms, and the classification and symptoms of PTSD and complex PTSD were assessed online via self-report measures. Results indicated elevated BDD scores in childhood abuse survivors and relationships between symptoms of BDD, PTSD, and DSO in childhood abuse survivors. Levels of emotional abuse served as a trans-diagnostic risk factor for PTSD, DSO, and BDD symptoms, whereas sexual abuse was associated with PTSD symptoms, and physical abuse had no significant effect. The strongest noncausal effect was found for PTSD and DSO symptoms, followed by BDD and DSO symptoms and BDD and PTSD symptoms. The present findings suggest that childhood abuse may be a risk factor for BDD and that trauma-related disorders and BDD are strongly associated in childhood abuse survivors.

Public Policy Relevance Statement

This study underscores the profound and lasting mental health effects of childhood abuse, particularly emotional abuse, which was found to be associated with symptoms of posttraumatic stress disorder, complex posttraumatic stress disorder, and body dysmorphic disorder. Sexual abuse was also found to be linked to posttraumatic stress disorder symptoms. These findings highlight the urgent need for trauma-informed policies and clinical practices that fully recognize the enduring psychological impact of emotional abuse—an often overlooked but equally damaging form of maltreatment, comparable to physical and sexual abuse. Furthermore, the current findings emphasize the importance of prevention, early identification, and tailored interventions to mitigate the long-term psychological harm of emotional and sexual abuse and

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Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data are not available.

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improve outcomes for survivors. Prevention efforts must include widespread public education campaigns, parenting support programs, and targeted interventions in high-risk communities to reduce the incidence of emotional and sexual abuse. Early identification and intervention should be prioritized through systematic screening in schools, pediatric settings, and child welfare systems. Treatment policies must ensure that children exposed to abuse receive timely, sustained access to trauma-focused, developmentally appropriate mental health care, including therapies that address the unique and complex needs associated with emotional abuse.

Body dysmorphic disorder (BDD) is a debilitating mental health condition characterized by preoccupation with perceived physical deformations or flaws, which are unobservable or appear only slight to others, but nevertheless fuel substantial distress. Individuals with BDD may exhibit preoccupation with any feature of their appearance (e.g., nose, eyes, skin, or hair) and execute repetitive behaviors, such as mirror checking, excessive grooming and skin picking, or mental acts, such as comparing their appearance with that of others, in response to these concerns (American Psychiatric Association, 2013). The prevalence of BDD ranges between 1.7% and 2.9% in the general population and is substantially higher in psychiatric inpatient, psychiatric outpatient, and medical settings, such as dermatology or cosmetic surgery clinics (Buhlmann et al., 2010; Gieler et al., 2016; Schieber et al., 2015; Veale et al., 2016).

BDD is associated with high rates of functional impairment across multiple domains (e.g., occupational impairment, unemployment, social dysfunction), hospitalization, psychiatric comorbidity (e.g., major depressive disorder, social anxiety disorder, and obsessive-compulsive disorder) as well as suicidal ideation and suicide attempts (Angelakis et al., 2016; Phillips, Didie, et al., 2006; Rautio et al., 2022). BDD often becomes chronic and has been found to have low levels of remission, if left untreated (Phillips et al., 2013). Therefore, identifying risk factors for BDD is imperative.

Childhood abuse, a global health concern that affects the well-being of millions of children worldwide (Stoltenborgh et al., 2015), appears to be one such risk factor. Evidence has indicated a plethora of negative outcomes of childhood abuse such as anxiety, depression, substance use disorders, eating disorders, dissociative disorders, nonsuicidal self-injury, suicidality, sexual dysfunction, and poor physical health (Ford & Gómez, 2015; Gewirtz-Meydan & Lahav, 2020, 2021; Halpern et al., 2018; Lahav, 2021; Lahav & Elklit, 2016; Lindert et al., 2014; Liu et al., 2017; Nelson et al., 2017; Vonderlin et al., 2018, Wegman & Stetler, 2009; Wegman & Stetler, 2009). In addition, two trauma-related disorders, *International Classification of Diseases*, 11th Revision (*ICD-11*) Posttraumatic Stress Disorder (PTSD) and *ICD-11* Complex PTSD (CPTSD), have been consistently documented among this population (e.g., Cloitre et al., 2019; World Health Organization, 2022).

ICD-11 PTSD consists of three symptom clusters relating to trauma exposure: reexperiencing the trauma in the present, avoiding traumatic reminders, and sense of threat (World Health Organization, 2022). Reexperiencing trauma symptoms refers to the perception of past traumatic events as occurring in the present moment. These symptoms commonly manifest as vivid intrusive memories or images, flashbacks, and distressing nightmares. Symptoms of avoidance involve efforts to evade trauma-related stimuli, either internally—by avoiding thoughts or memories associated with the trauma—or externally—by avoiding people, conversations, activities, or environments that serve

as reminders of the traumatic experience. Finally, persistent perceptions of current threat are characterized by heightened arousal symptoms such as hypervigilance, an exaggerated startle response, and a sustained sense of being on alert.

Exposure to repeated and prolonged interpersonal trauma—such as childhood abuse—is associated with pervasive and enduring psychological effects that may extend beyond the symptomatology of PTSD (Brewin et al., 2017; Cloitre, 2020; Maercker et al., 2022; van der Kolk et al., 2005). These cumulative impacts can lead to widespread and persistent disruptions to core self-functions. Recognizing such outcomes, the *ICD-11* introduced the diagnosis of CPTSD. CPTSD encompasses the three core PTSD symptom clusters—reexperiencing, avoidance, and a persistent sense of threat—as well as an additional set of symptoms termed disturbances in self-organization (DSO). These include affect dysregulation, a persistently negative self-concept, and enduring difficulties in forming and maintaining interpersonal relationships. The affect dysregulation cluster encompasses symptoms indicative of pervasive difficulties in emotional regulation, including heightened emotional reactivity to relatively minor stressors, episodes of intense anger or violent outbursts, engagement in reckless or self-destructive behaviors, dissociative experiences, and emotional numbing. The persistent negative self-concept cluster is characterized by enduring beliefs of being diminished, defeated, or worthless, often accompanied by intense feelings of shame, guilt, or failure. The persistent difficulties in relationships cluster reflects chronic impairments in interpersonal functioning, including consistent avoidance of or disinterest in social connections or, alternatively, engagement in relationships that are unstable or difficult to maintain.

Research has indicated that CPTSD is particularly prevalent among individuals with histories of early-life interpersonal trauma, especially childhood abuse (Cloitre et al., 2019; Karatzias et al., 2017; Omidbakhsh et al., 2025). Additionally, it has been found that, in contrast to PTSD, CPTSD is more consistently linked to pronounced functional impairments and a broader range of co-occurring psychological difficulties, including symptoms of depression, generalized anxiety, and dissociation (Hyland et al., 2018; Karatzias et al., 2017; van Dijke et al., 2012).

This study is grounded in the *ICD-11* conceptualization of CPTSD, which distinguishes core PTSD symptoms from DSO symptoms (Cloitre et al., 2019; Karatzias & Cloitre, 2019). This framework is particularly relevant given evidence that chronic and relational forms of childhood abuse contribute significantly to DSO symptomatology. Given the clinical overlap between features of DSO and BDD, including negative self-evaluation and difficulties in affect regulation, the *ICD-11* model provides a useful lens for investigating how different forms of childhood abuse relate to these co-occurring symptoms. By integrating this theoretical perspective, the present study seeks to extend trauma research by elucidating the

associations between PTSD, DSO, and BDD symptoms among childhood abuse survivors.

Although research comparing childhood abuse survivors to individuals without a history of childhood abuse in BDD scores has been limited (Malcolm, Pikoos, Grace, et al., 2021), evidence has suggested a link between childhood abuse and BDD (Buhlmann et al., 2012; Didie et al., 2006; Malcolm, Pikoos, Grace, et al., 2021; Neziroglu et al., 2006). For example, a study conducted by Didie et al. (2006) involving 75 BDD patients found that 56.0% reported a history of emotional abuse, 34.7% reported physical abuse, and 28.0% reported sexual abuse. Another study indicated more retrospective reports of childhood sexual and physical abuse in the BDD group compared to a healthy control group (Buhlmann et al., 2012). Lastly, a recent study of BDD patients ($n = 52$) and matched controls ($n = 57$) revealed higher prevalence of emotional abuse among BDD participants than among matched controls (61.5% vs. 33.3%; Malcolm, Pikoos, Grace, et al., 2021).

Nonetheless, two important questions remain unanswered. First, the impact of the levels of distinct forms of childhood abuse—namely, emotional, physical, and sexual abuse—on the development of BDD remains largely unknown. Previous research has indicated that different types of childhood abuse may vary in their associations with mental health outcomes (Dye, 2020; Haselgruber et al., 2020; Norman et al., 2012; Spinazzola et al., 2014) and suggested that emotional and sexual abuse may be more strongly associated with PTSD and CPTSD symptoms compared to physical abuse (Gallagher et al., 2023; Haselgruber et al., 2020; Pederson & Wilson, 2009). For instance, a study among 207 women found that only emotional and sexual abuse significantly predicted PTSD symptoms after controlling for other types of abuse and the total number of abuse experiences (Pederson & Wilson, 2009). Additionally, a study exploring the relative contributions of childhood maltreatment and intimate partner violence to CPTSD symptoms in a sample of 553 women identified childhood emotional abuse as the primary predictor of CPTSD (Gallagher et al., 2023). Finally, a study among 208 Austrian foster children found emotional abuse, sexual abuse, and emotional neglect to be the strongest predictors of CPTSD (Haselgruber et al., 2020). It is possible that similar patterns exist with regard to BDD, suggesting that emotional and sexual abuse may be more strongly associated with BDD symptoms than physical abuse; to date, no study has systematically explored this association.

Second, the relationships between BDD and trauma-related symptoms—specifically PTSD and DSO symptoms among survivors of childhood abuse—are poorly understood. It appears that symptoms of both PTSD and DSO may contribute to the development of BDD. For instance, PTSD symptoms such as intrusive reexperiencing may reinforce feelings of humiliation and negative self-appraisal tied to past abuse, potentially leading to distorted perceptions of physical appearance (Valderrama et al., 2020). Additionally, DSO symptoms—including affect dysregulation, a persistently negative self-concept, and relational difficulties—may further increase survivors' vulnerability. Survivors with prominent DSO symptomatology may internalize feelings of defectiveness and unworthiness, which could manifest as preoccupation with perceived bodily flaws (Buhlmann et al., 2012). Moreover, difficulties with affect regulation, a hallmark of DSO (Cloitre, 2020), may intensify appearance-related distress and drive compulsive behaviors aimed at managing this distress.

Research in this area remains limited. Existing studies examining the relationship between BDD and PTSD have largely focused on

individuals diagnosed with obsessive-compulsive disorder who have been exposed to various types of traumas, including non-interpersonal trauma. These investigations have yielded inconsistent findings—some reporting no significant associations (Phillips et al., 2007; Stewart et al., 2008), while others have identified positive associations between PTSD and BDD symptoms (Conceição Costa et al., 2012; Valderrama et al., 2020). However, these studies may not adequately capture the unique dynamics between PTSD and BDD in the context of childhood abuse, underscoring the need for targeted research among this specific population.

Moreover, no known study to date has simultaneously examined BDD, PTSD, and DSO symptomatology—either in the general population or specifically among survivors of childhood abuse. As a result, the nature and direction of potential associations among these constructs remain unclear. The present study seeks to address this gap by examining (a) BDD symptom severity as a function of childhood abuse history; (b) the relationships between symptoms of BDD, PTSD, and DSO; and (c) the effect of the levels of different forms of childhood abuse (emotional, physical, and sexual) on BDD, PTSD, and DSO symptomatology.

Method

Participants and Procedure

An online survey was conducted among a convenience sample of Israeli adult women aged 18 and older residing in Israel. A secure web-based survey data collection system was published on social media and accessible through Qualtrics. The survey was advertised as a study exploring the implications of early adverse life events, took an average of 25 min to complete, and was open from September 28, 2022, to January 12, 2023. It was anonymous, and no data were collected linking participants to recruitment sources. The Tel Aviv University institutional review board approved all procedures and instruments. Clicking the link to the survey guided potential respondents to a page with information about the purpose of the study, the nature of the questions, and a consent form. Participants were also provided with contact information of the research team and of several Israeli organizations that provide support/treatment, in case they feel discomfort or distress and need help. To avoid duplicate entries to the survey, a built-in option of the Qualtrics platform (“Prevent Ballot Box Stuffing”) was utilized. Additionally, to detect potential fraudulent entries from bots, records associated with duplicated IP addresses in the data set were discarded.

A total of 550 women began the survey and completed some of the study questionnaires. Of those, 404 (73.5%) provided data regarding the study variables, forming the current sample (see Table 1). As shown in Table 1, most participants were secular (i.e., nonreligious or not affiliated with any religious tradition), were in a relationship, held a bachelor's degree or higher, worked in full-time or part-time jobs, and reported an income below the average.

Measures.

Background Variables. Participants completed a Brief Demographic Questionnaire that assessed age, education, and relational status. These data were collected to assess the representativeness and inclusiveness of the sample.

Table 1
Description of Demographic Characteristics Among Participants (n = 404)

Variable	M (SD) or n (%)
Age, M (SD)	36.68 (10.94)
Education, n (%)	
High school diploma or less	67 (16.6)
Some higher education	33 (8.2)
Bachelor's degree	154 (38.1)
Master's degree and above	124 (30.7)
Other	26 (6.4)
Relationship status, n (%)	
In a relationship	252 (62.4)
Not in a relationship	147 (36.4)
Other	5 (1.2)
Religiosity, n (%)	
Secular	274 (67.8)
Religious/traditional	116 (28.7)
Other	14 (3.5)
Employment status, n (%)	
Working in a full or part-time job	305 (75.5)
Not working	48 (11.9)
Other	51 (12.6)
Income, n (%)	
Below-average income	288 (71.3)
Average income or above	116 (28.7)

History of Childhood Abuse and Levels of Different Forms of Abuse. Childhood abuse history was assessed using two methods: (1) direct self-report and (2) the Childhood Trauma Questionnaire–Short Form (CTQ-SF; Bernstein et al., 2003). Participants were asked directly whether they had experienced emotional, physical, or sexual abuse before the age of 18. Additionally, they completed the CTQ-SF, a self-report measure that assesses child maltreatment through questions phrased as “experiences growing up.” For this study, we utilized the emotional, physical, and sexual abuse subscales, each consisting of five items rated on a 5-point Likert scale (1 = *never true* to 5 = *very often true*). Subscale scores range from 5 to 25, with higher scores indicating higher levels of abuse. Participants were classified as having a history of childhood abuse if their subscale scores met or exceeded the thresholds proposed by Tietjen et al. (2010): physical abuse ≥ 8 , sexual abuse ≥ 6 , and emotional abuse ≥ 9 . We found no inconsistencies between participants’ self-reported abuse (via the direct question) and their classification based on the CTQ-SF. The levels of each type of abuse were treated as a continuous variable, using total subscale scores. The CTQ-SF has demonstrated strong convergent and discriminant validity as well as high internal consistency (Bernstein & Fink, 1998). In this study, internal consistency was 0.87 for physical abuse, 0.94 for sexual abuse, and 0.89 for emotional abuse.

Symptoms of BDD. Symptoms of BDD were assessed via a Hebrew version of the Dysmorphic Concern Questionnaire (Schieber et al., 2015). The Original Inventory (Schieber et al., 2015) was separately translated into Hebrew by two independent translators. These translations were discussed, differences resolved in consensus, and a final translation was done, which was then back-translated into English. After comparing the back-translation to the original, several minor revisions were made.

The Dysmorphic Concern Questionnaire consists of seven items that assess concerns regarding physical appearance and related behavioral patterns (e.g., “Been very concerned about some aspect of your physical appearance”; “Spent a lot of time covering up defects in your appearance/bodily functioning”; “Consulted or felt that you needed to consult a plastic surgeon/dermatologist/physician about these concerns”). All items are answered on a 4-point scale that ranges from 0 (*not at all*) to 4 (*much more than most people*). The total score, which ranges from 0 to 21 and is calculated by summing all items, reflects the severity of dysmorphic concerns (Mancuso et al., 2010). The Dysmorphic Concern Questionnaire has demonstrated good reliability and validity in previous studies and is sensitive to dysmorphic concerns (Jorgensen et al., 2001; Mancuso et al., 2010). In the present study, the internal consistency was excellent, with a Cronbach’s α of .90.

Symptoms of PTSD and DSO. The International Trauma Questionnaire (ITQ; Cloitre et al., 2018), a self-report scale, was used to measure symptoms of *ICD-11* PTSD and CPTSD following childhood abuse. Only participants identified as having a history of childhood abuse (based on direct report and/or CTQ-SF scores) were asked to complete the ITQ. Distinct items assess PTSD and DSO symptoms, allowing for separate evaluation of each symptom cluster in accordance with the *ICD-11* diagnostic framework.

There are six items measuring PTSD symptoms across the clusters of “reexperiencing in the here and now,” “avoidance,” and “sense of threat.” These items are answered in terms of how much the respondent has been bothered by that symptom in the past month. Three questions assess functional impairment in social, occupational, and other important domains. An additional six items measure DSO symptoms across the clusters of “affective dysregulation,” “negative self-concept,” and “disturbed relationships.” The DSO symptoms are answered in terms of how respondents typically feel, think about themselves, and relate to others. Three additional items assess the functional impairment associated with these symptoms. All items are answered on a 5-point Likert scale that ranges from 0 (*not at all*) to 4 (*extremely*), and a symptom is considered to be present based on a score of ≥ 2 (moderately) on the Likert scale. In this study, the internal consistency was high: 0.90 for PTSD symptoms, 0.88 for DSO symptoms, and 0.91 for the total CPTSD symptom score, which includes all 12 items from both the PTSD and DSO symptom clusters.

Although not the primary focus of this investigation, PTSD and CPTSD classifications were also assessed using the ITQ. For a classification of PTSD, at least one symptom must be present from each cluster, and at least one indicator of functional impairment associated with these symptoms must be endorsed. For a classification of CPTSD, at least one symptom must be present from the six symptom clusters, and endorsement of functional impairment associated with the PTSD and DSO symptoms must be present. According to the *ICD-11* diagnostic guidelines, a person can be classified as having either PTSD or CPTSD, but not both.

Data Analysis

The analyses were performed using SPSS 27 and R. None of the data were missing, and thus no imputation procedures were needed in order to fit the data in our study. All continuous data were tested

for the group-wise normality assumption, using the Shapiro–Wilk test. For variables that failed to meet the normality assumption, we examined the main indices of the shape of their distribution, specifically kurtosis and skewness, to assess their compatibility to parametric hypothesis testing routines. In cases where these assumptions are not met, standard nonparametric statistical hypothesis testing is applied.

To explore the differences between participants with a history of childhood abuse and participants without such a history in BDD, a Mann–Whitney *U* test was conducted. Next, to explore the relationships between the symptoms of BDD, PTSD, and DSO among participants with a history of childhood abuse, correlation analyses were conducted. Correlation was calculated using Pearson's correlation coefficient, where applicable, and Kendall's τ_B and τ_C where the values were limited to less than four (i.e., in the PTSD and DSO subscales; Hollander & Wolfe, 1999). To test for the effect of the levels of different forms of childhood abuse on BDD, PTSD, and DSO symptoms, path analysis was conducted. Since the data violated the multivariate normality assumption, a standard maximum likelihood estimation technique could not be applied. To guarantee unbiased and efficient estimators, we applied an estimation technique with robust standard errors, and the Satorra–Bentler scaled test statistics (Chou et al., 1991). Model significance was tested for using a χ^2 -based model comparison test. We tested for multicollinearity in both the measurement model and the structural one by estimating the variance inflation factor of each variable, setting a highly conservative threshold of variance inflation factor < 4 , as suggested by O'brien (2007).

Results

Symptoms of BDD Among the Present Sample

The average BDD score was 7.53 ($SD = 5.17$, range = 0–21), indicating a moderate level of symptom severity. Of the total sample, 42.3% did not endorse any BDD symptoms, and 11.1% reported only one BDD symptom. In contrast, 46.6% reported two or more BDD symptoms.

History of Childhood Abuse and BDD

Of the current sample ($N = 404$), 217 participants (53.7%) were classified as having a history of childhood abuse, while the remaining 187 participants (46.3%) did not report such a history. Of the subgroup of childhood abuse survivors, 106 (48.8%) had a history of childhood physical abuse; 158 (72.8%) had a history of childhood sexual abuse; and 195 (89.9%) had a history of childhood emotional abuse. Among participants classified as having a history of childhood abuse, the majority ($n = 166$; 76.5%) experienced more than one type of abuse. Specifically, two participants (0.9%) experienced both sexual and physical abuse, 28 (12.9%) experienced emotional and physical abuse, 60 (27.6%) experienced emotional and sexual abuse, and 76 (35.0%) experienced all three types: emotional, sexual, and physical abuse. In contrast, a smaller proportion experienced only one type of abuse: 20 (9.2%) experienced sexual abuse only, and 31 (14.3%) experienced emotional abuse only.

The distribution of the BDD score for subjects with a history of childhood abuse and those without failed to meet the normality

assumption ($W = 0.95$, $p < .001$, and $W = 0.89$, $p < .001$, respectively) and presented vastly different kurtosis and skewness values, $sk = 0.5$ ($SE = 1.76$), $k = 2.4$ ($SE = 4.16$), and $sk = 1.4$ ($SE = 3.17$), $k = 5.8$ ($SE = 6.64$), respectively, as well as some influential outliers. To explore group differences in BDD scores, we replaced the common independent samples *t* test for mean differences with its nonparametric equivalent, the Mann–Whitney *U* test. Results revealed a significantly higher BDD score in participants with history of childhood abuse (mean rank = 223.8) than in participants without history of childhood abuse (mean rank = 153.3, $U = 11198.0$; $p < .001$), demonstrating a large effect size for the stochastic dominance of the childhood abuse group over the nonchildhood abuse one ($rg = 0.89$).

BDD, PTSD, and DSO Symptoms Among Childhood Abuse Survivors

Exploring trauma-related classifications indicated that 8.3% of childhood abuse survivors met requirements for PTSD classification, and an additional 36.9% met diagnostic requirements for CPTSD classification. Frequencies of symptom cluster endorsement were the following: 77.0% endorsed symptoms of current threat, 71.4% endorsed symptoms of avoidance, 52.1% endorsed symptoms of reexperiencing, 91.7% endorsed symptoms of affective dysregulation, 80.2% endorsed symptoms of disturbed relationships, and 71.9% endorsed symptoms of sense of negative self-concept. As shown in Table 2, correlation analysis indicated a positive and statistically significant association between symptoms of BDD, PTSD, and DSO—higher symptoms of PTSD and DSO were associated with higher BDD scores.

Effect of Levels of Different Forms of Childhood Abuse on BDD, PTSD, and DSO Symptoms

To estimate the effect of the levels of different forms of childhood abuse on symptoms of PTSD, DSO, and BDD, path analysis was conducted (see Figure 1). Levels of emotional abuse, sexual abuse, and physical abuse were tested as explanatory variables for the PTSD, DSO, and BDD scores, which were allowed to covary in our model. Age was used as a covariate in the model. Since the model is saturated, we used a model without the explanatory effect of the levels of different forms of childhood abuse, similar to the null model (i.e., a restricted model where regression coefficients are fixed to zero). A model comparison test indicated that the overall model was statistically significant ($\chi^2_9 = 55.88$, $p < .001$).

Results are presented in Table 3 and Figure 2. Emotional abuse served as a trans-diagnostic risk factor for BDD, PTSD, and DSO symptoms, with a moderate significant effect: Higher levels of emotional abuse were associated with elevated symptom levels across all three types of symptomatology ($.33 < \beta < .35$, $p < .001$). Sexual abuse had a slightly weaker effect ($\beta = .19$, $p = .003$) and was associated with higher levels of PTSD symptoms. Physical abuse had no significant effect on any of the study variables. Age had a significant weak negative effect in explaining PTSD symptoms ($\beta = -.14$, $p = .025$). The estimated model's variance was primarily explained by PTSD (19.6%), followed by DSO (14.1%) and BDD (11.2%). Association between the outcome variables was positive and significant. The strongest noncausal effect was measured for symptoms of PTSD and DSO ($r_p = .47$, $p < .001$), followed by

Table 2*Correlations Between Symptoms of BDD, PTSD, and Disturbances in Self-Organization (n = 217)*

Variable	1	2	3	4	5	6	7	8	9
1. BDD total score	—								
2. Reexperiencing	.20***	—							
3. Avoidance	.19**	.5***	—						
4. Sense of threat	.21***	.43***	.55***	—					
5. PTSD total score	.27***	.83***	.80***	.72***	—				
6. Affective dysregulation	.19**	.28***	.34***	.34***	.35***	—			
7. Negative self-concept	.33***	.22***	.32***	.37***	.33***	.41***	—		
8. Disturbed relationships	.21***	.34***	.42***	.37***	.40***	.51***	.44***	—	
9. CPTSD total score	.35***	.31***	.40***	.37***	.49***	.64***	.69***	.65***	—

Note. Kendall's τ_B and Kendall's τ_C serve as a measure of association, where Pearson or Spearman correlation is inapplicable. PTSD = posttraumatic stress disorder; BDD = body dysmorphic disorder; CPTSD = complex posttraumatic stress disorder.

** $p < .01$. *** $p < .001$.

symptoms of DSO and BDD ($r_p = .26, p < .001$) and symptoms of PTSD and BDD ($r_p = .17, p = .01$).

Discussion

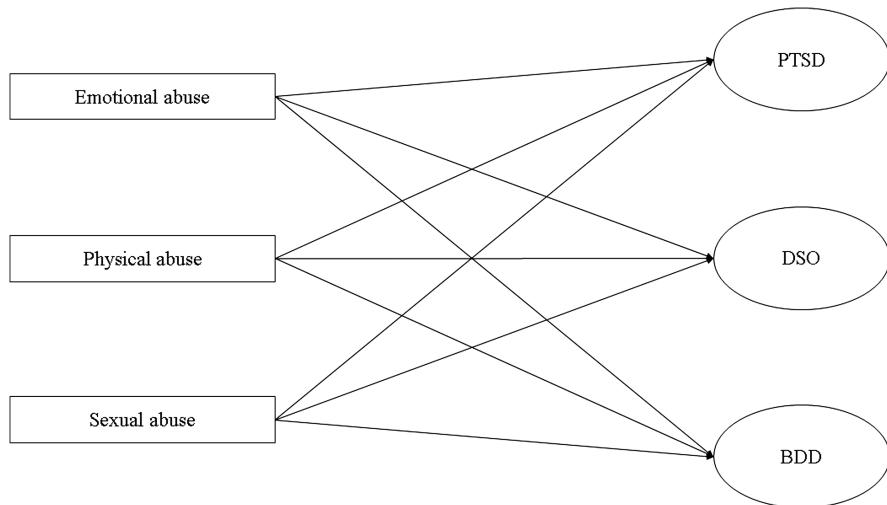
Although BDD is a highly debilitating condition that is associated with a history of childhood abuse (Buhmann et al., 2012; Didie et al., 2006; Malcolm, Pikoos, Grace, et al., 2021; Neziroglu et al., 2006), little is known about the factors that might explain BDD in childhood abuse survivors. The present investigation explored, for the first time, the relationships between trauma-related symptoms and BDD, as well as the impact of varying levels of different forms of childhood abuse on BDD, PTSD, and DSO symptoms.

The present results replicated previous evidence that indicated an association between childhood abuse and BDD (Buhmann et al., 2012; Didie et al., 2006; Malcolm, Pikoos, Grace, et al., 2021; Neziroglu et al., 2006). As expected, our findings revealed elevated

BDD scores among childhood abuse survivors compared to participants with no history of childhood abuse and imply that being subjected to abuse during childhood intensifies the risk for future BDD. Moreover, our results examining the levels of different forms of childhood abuse indicated that while the level of physical abuse was unrelated to any symptoms, and the level of sexual abuse was related only to PTSD symptoms, the level of emotional abuse was associated with elevated symptoms of BDD, PTSD, and DSO. These findings are consistent with evidence on the strong effects of childhood emotional abuse on PTSD (Pederson & Wilson, 2009; Sullivan et al., 2006) and CPTSD symptoms (Gallagher et al., 2023; Haselgruber et al., 2020).

Children exposed to abuse are deprived of the essential conditions needed for healthy physical, emotional, and cognitive development. Instead, they find themselves in environments marked by harm, pain, objectification, and exploitation (Herman, 1992a, 1992b; Lahav et al., 2017, 2025; van der Kolk, 2005). Emotional abuse, in particular,

Figure 1
Conceptual Path Model Illustrating Hypothesized Relationship Between Different Forms of Childhood Abuse and Symptoms of PTSD, DSO, and BDD



Note. PTSD = posttraumatic stress disorder; DSO = disturbances in self-organization; BDD = body dysmorphic disorder.

Table 3
Results of the Path Analysis Modeling Scheme (N = 404)

Measurement variable	PTSD symptom	DSO symptom	BDD symptom
	$\hat{\beta}$ (SE)	$\hat{\beta}$ (SE)	$\hat{\beta}$ (SE)
Structural model			
Age	-0.14* (0.06)	-0.08 (0.06)	-0.09 (0.06)
Levels of emotional abuse	0.33*** (0.07)	0.35*** (0.07)	0.34*** (0.07)
Levels of physical abuse	-0.001 (0.07)	-0.006 (0.07)	-0.08 (0.08)
Levels of sexual abuse	0.19** (0.07)	0.03 (0.06)	0.006 (0.07)
R^2	.19	.11	.26
Association between outcome variable			
DSO symptoms	0.47*** (0.06)		
BDD symptoms	0.17** (0.07)	0.26*** (0.06)	

Note. β values are standardized. PTSD = posttraumatic stress disorder; DSO = disturbances in self-organization; BDD = body dysmorphic disorder; SE = standard error.

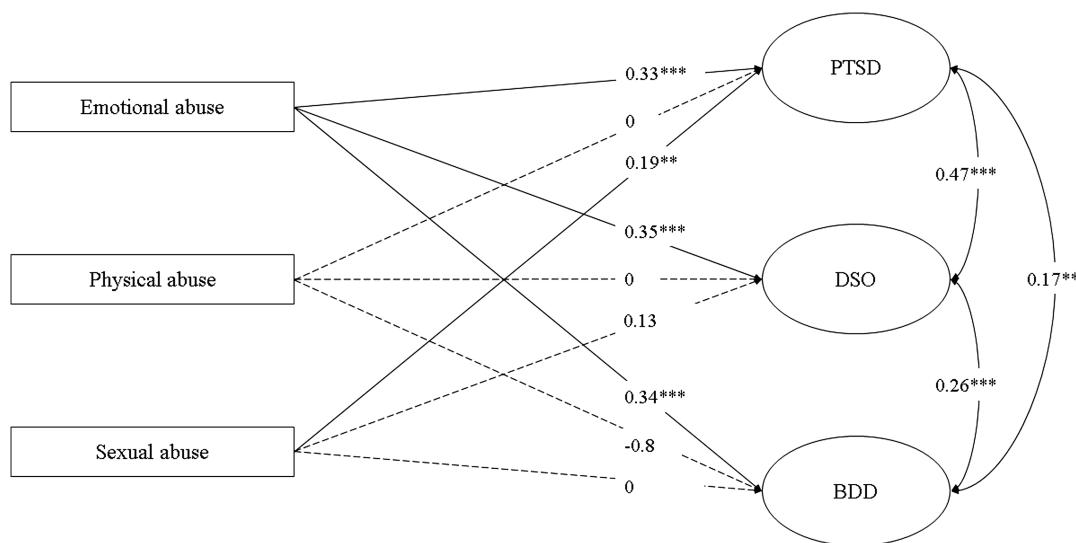
* $p < .05$. ** $p < .1$. *** $p < .001$.

involves chronic assaults on a child's self-worth, often manifesting as rejection, ridicule, and verbal degradation (Xiao et al., 2023; Zhang et al., 2023). These experiences—marked by a deep sense of being unwanted and unloved, when coupled with frequent derogatory remarks about the child's physical appearance—can be especially damaging, laying the groundwork for later appearance-related distress. Importantly, unlike physical or sexual abuse, emotional abuse often lacks visible bodily marks or physical indicators and is less clearly condemned by societal norms (Spinazzola et al., 2014). This invisibility can hinder survivors' recognition of their trauma (Porat-Moeller et al., 2025) and complicate their ability to process and integrate these experiences meaningfully (Lahav et al., 2025). Consequently, emotional abuse may not only increase vulnerability to PTSD and DSO but also contribute to lasting negative and distorted perceptions of the body, as seen in symptoms of BDD.

As expected, our findings indicated significant associations between symptoms of PTSD, DSO, and BDD in childhood abuse survivors—specifically, higher levels of PTSD and DSO symptoms were associated with higher BDD scores. These results suggest that both forms of trauma-related symptomatology are significantly related to BDD. However, given that the current investigation cannot determine the temporal sequencing of the relationship between PTSD symptoms, DSO, and BDD, several nonmutually exclusive explanations could account for the present results.

The consequences of childhood abuse, which occur during a critical developmental period, are often deep and extensive and may be manifested in multiple mental difficulties (MacMillan et al., 2001). Thus, the present findings may reflect the simultaneous emergence of trauma-related symptomatology (i.e., PTSD and DSO symptoms) and BDD rooted in the trauma of childhood abuse. On the other hand, it

Figure 2
Results of Path Analysis Showing Standardized Coefficients of Associations Between Different Forms of Childhood Abuse and Symptoms of PTSD, DSO, and BDD



Note. PTSD = posttraumatic stress disorder; DSO = disturbances in self-organization; BDD = body dysmorphic disorder.
** $p < .01$. *** $p < .001$.

might be that BDD symptomatology intensifies symptoms of PTSD and DSO. Childhood abuse survivors who suffer from BDD may experience alleged defects in their appearance as reminders of their traumatic memories. In this way, their preoccupation with perceived physical deformations may exacerbate the reliving of past abuse and increase their posttraumatic distress. Alternatively, trauma-related symptoms of PTSD and DSO may intensify BDD symptomatology among survivors. Survivors experiencing PTSD symptoms may be haunted by intrusive memories of abuse, including episodes of humiliation, mockery, or being viewed through a distorted, degrading lens by their perpetrators. These reexperiencing symptoms can reinforce negative self-perceptions, particularly regarding one's physical appearance, and may contribute to increased preoccupations with appearance. Additionally, DSO, as defined within the CPTSD framework, may further elevate the risk of developing BDD. Individuals with DSO symptoms, characterized by a pervasive sense of worthlessness, relational instability, and emotional dysregulation—may externalize their internal struggles by focusing distress on perceived bodily flaws. A fragmented self-identity and chronic difficulty in regulating emotions may lead survivors to overly rely on physical appearance as a primary source of self-definition and self-worth. This dependence can, in turn, drive the adoption of maladaptive coping strategies, such as excessive grooming, appearance-based comparisons, and compulsive rituals, as attempts to manage overwhelming emotional pain. Last, a fourth explanation suggests a reciprocal association between trauma-related symptomatology and BDD over time, so that PTSD and DSO symptoms fuel BDD symptomatology and vice versa. This way, a vicious cycle that deepens childhood abuse survivors' distress, is formed.

Research in the BDD field has revealed some trends that are in line with some of the explanations mentioned above. For example, a previous study indicated that BDD patients experience elevated rates of spontaneously occurring negative images related to their appearance, which are linked to early stressful memories (Osman et al., 2004). Additionally, studies have documented negative attitudes toward oneself, such as hatred of one's self as a person and poor self-esteem (Brohede et al., 2016; Phillips et al., 2004; Weingarden et al., 2018), "loss" of the sense of self (Silver & Reavey, 2010), and identity disruption (Malcolm, Pikoos, Castle, et al., 2021) in individuals with BDD. Nevertheless, given that these studies have not explored the aforementioned processes directly, more research is required to explore these paths over time.

This study contributes to the literature in several important ways. First, it extends prior research linking childhood abuse to BDD by demonstrating that emotional abuse, in particular, plays a critical role in the development of BDD symptoms, beyond its known association with PTSD and DSO. Second, it provides the first empirical evidence of significant associations between trauma-related symptomatology—especially DSO—and BDD, suggesting that BDD should be conceptualized not only as an obsessive-compulsive-related disorder but also as potentially trauma-related. These findings support an emerging theoretical framework that emphasizes the interplay between trauma, self-organization disturbances, and body image pathology, indicating that trauma-informed approaches may be essential for effective assessment and treatment of BDD.

Some study limitations are worth noting. First, its cross-sectional design prevented conclusions about the directionality or causality of the observed relationships among PTSD, DSO, and BDD symptoms. Second, this study has relied on convenience sampling and self-report measures, which may be subject to response biases and shared method variance. Third, the ITQ was administered only to participants with a

history of childhood abuse, which limited the ability to examine PTSD and DSO symptoms related to other types of trauma exposure. Fourth, important characteristics of the abuse—such as the quality of the relationship with the perpetrator and age of onset—were excluded from the analysis due to substantial missing data. Fifth, while the study highlights the differential impact of abuse subtypes, it did not investigate the potential mechanisms underlying the particularly strong association between emotional abuse and symptomatology. Additionally, while this study did not explicitly assess polyvictimization, the high rate of co-occurrence among types of childhood abuse highlights the need for future research to explore how exposure to multiple forms of abuse may relate to PTSD, DSO, and BDD. Last, the present investigation was conducted solely among Israeli women, which limits its generalizability. Future research should include more diverse populations in terms of gender and cultural background, assess a broader range of abuse characteristics, and explore potential mechanisms linking specific abuse types to symptoms of BDD, PTSD, and DSO.

Implications for Practice

Despite these limitations, the present study provides the first empirical evidence on the relationships between symptoms of PTSD, DSO, and BDD, as well as the impact of the levels of various forms of childhood abuse on these symptoms among survivors of childhood abuse. This research has important implications. First, given its high prevalence and strong predictive power, childhood emotional abuse must be recognized as a serious and distinct form of maltreatment that requires focused clinical and societal attention. Mental health and social service training programs should prioritize the identification and conceptualization of emotional abuse as a standalone trauma with significant psychological consequences. Second, there is an urgent need for comprehensive public health strategies—including mental health outreach, psychoeducational resource development, and large-scale awareness campaigns—to enhance societal recognition of the pervasive and enduring impact of childhood emotional abuse.

While emotional abuse emerged as the strongest predictor across outcomes, the study also highlights the significant impact of childhood sexual abuse, particularly its association with PTSD symptoms. When considered together, the high prevalence of emotional and sexual abuse identified in this sample highlights a public health crisis that demands trauma-informed approaches to address the distinct and overlapping effects of multiple types of abuse. Third, our findings emphasize the importance of clinicians recognizing the elevated risk of BDD among individuals with a history of childhood abuse, especially those presenting with symptoms of PTSD or DSO. Routine screening for BDD in this population is essential, given the substantial functional impairment associated with the disorder and its frequent underdiagnosis and undertreatment (Phillips, Pagano, & Menard, 2006). Individuals presenting with primary BDD symptoms should also be thoroughly screened for histories of childhood abuse, due to the significant associations observed in this study.

Cognitive-behavioral therapy remains the first-line, evidence-based intervention for BDD (Rasmussen et al., 2017) and has demonstrated effectiveness in reducing symptom severity (Harrison et al., 2016; Wilhelm et al., 2019). However, response rates are variable, and many patients do not achieve full remission (Krebs et al., 2017; Veale et al., 2015; Weingarden et al., 2021). Moreover,

individuals with complex trauma histories, such as those with PTSD, may benefit less from traditional cognitive-behavioral therapy due to difficulties in emotional regulation and impaired access to higher order cognitive processes. In such cases, phase-based or modular interventions may offer a more suitable therapeutic framework. Approaches like Skills Training in Affective and Interpersonal Regulation, followed by trauma-focused therapy, have been recommended for PTSD and may better address the underlying dysregulation and interpersonal challenges often co-occurring with BDD (Karatzias & Cloitre, 2019). Further research is warranted to examine the effectiveness of these integrative approaches for individuals presenting with both BDD and trauma-related symptoms.

Keywords: body dysmorphic disorder, childhood abuse, posttraumatic stress disorder, complex posttraumatic stress disorder, trauma

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>

Angelakis, I., Gooding, P. A., & Panagioti, M. (2016). Suicidality in body dysmorphic disorder (BDD): A systematic review with meta-analysis. *Clinical Psychology Review*, 49, 55–66. <https://doi.org/10.1016/j.cpr.2016.08.002>

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

Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., Stokes, J., Handelman, L., Medrano, M., Desmond, D., & Zule, W. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse & Neglect*, 27(2), 169–190. [https://doi.org/10.1016/S0145-2134\(02\)00541-0](https://doi.org/10.1016/S0145-2134(02)00541-0)

Brewin, C. R., Cloitre, M., Hyland, P., Shevlin, M., Maercker, A., Bryant, R. A., Humayun, A., Jones, L. M., Kagee, A., Rousseau, C., Somasundaram, D., Suzuki, Y., Wessely, S., van Ommeren, M., & Reed, G. M. (2017). A review of current evidence regarding the ICD-11 proposals for diagnosing PTSD and complex PTSD. *Clinical Psychology Review*, 58, 1–15. <https://doi.org/10.1016/j.cpr.2017.09.001>

Brohede, S., Wijma, B., Wijma, K., & Blomberg, K. (2016). 'I will be at death's door and realize that I've wasted maybe half of my life on one body part': The experience of living with body dysmorphic disorder. *International Journal of Psychiatry in Clinical Practice*, 20(3), 191–198. <https://doi.org/10.1080/13651501.2016.1197273>

Buhlmann, U., Glaesmer, H., Mewes, R., Fama, J. M., Wilhelm, S., Brähler, E., & Rief, W. (2010). Updates on the prevalence of body dysmorphic disorder: A Population-Based Survey. *Psychiatry Research*, 178(1), 171–175. <https://doi.org/10.1016/j.psychres.2009.05.002>

Buhlmann, U., Marques, L. M., & Wilhelm, S. (2012). Traumatic experiences in individuals with body dysmorphic disorder. *Journal of Nervous and Mental Disease*, 200(1), 95–98. <https://doi.org/10.1097/NMD.0b013e31823f6775>

Chou, C. P., Bentler, P. M., & Satorra, A. (1991). Scaled test statistics and robust standard errors for non-normal data in covariance structure analysis: A Monte Carlo Study. *British Journal of Mathematical and Statistical Psychology*, 44(2), 347–357. <https://doi.org/10.1111/j.2044-8317.1991.tb00966.x>

Cloitre, M. (2020). ICD-11 complex post-traumatic stress disorder: Simplifying diagnosis in trauma populations. *The British Journal of Psychiatry*, 216(3), 129–131. <https://doi.org/10.1192/bjp.2020.43>

Cloitre, M., Hyland, P., Bisson, J. I., Brewin, C. R., Roberts, N. P., Karatzias, T., & Shevlin, M. (2019). ICD-11 posttraumatic stress disorder and complex posttraumatic stress disorder in the United States: A population-based study. *Journal of Traumatic Stress*, 32(6), 833–842. <https://doi.org/10.1002/jts.22454>

Cloitre, M., Shevlin, M., Brewin, C. R., Bisson, J. I., Roberts, N. P., Maercker, A., Karatzias, T., & Hyland, P. (2018). The International Trauma Questionnaire: Development of a self-report measure of ICD-11 PTSD and complex PTSD. *Acta Psychiatrica Scandinavica*, 138(6), 536–546. <https://doi.org/10.1111/acps.12956>

Conceição Costa, D. L., Chagas Assunção, M., Arzeno Ferrão, Y., Archetti Conrado, L., Hajaj Gonzalez, C., Franklin Fontenelle, L., Fossaluzza, V., Constantino Miguel, E., Rodrigues Torres, A., & Gedanke Shavitt, R. (2012). Body dysmorphic disorder in patients with obsessive-compulsive disorder: Prevalence and clinical correlates. *Depression and Anxiety*, 29(11), 966–975. <https://doi.org/10.1002/da.21980>

Didie, E. R., Tortolani, C. C., Pope, C. G., Menard, W., Fay, C., & Phillips, K. A. (2006). Childhood abuse and neglect in body dysmorphic disorder. *Child Abuse & Neglect*, 30(10), 1105–1115. <https://doi.org/10.1016/j.chab.2006.03.007>

Dye, H. L. (2020). Is emotional abuse as harmful as physical and/or sexual abuse? *Journal of Child & Adolescent Trauma*, 13(4), 399–407. <https://doi.org/10.1007/s40653-019-00292-y>

Ford, J. D., & Gómez, J. M. (2015). The relationship of psychological trauma and dissociative and posttraumatic stress disorders to nonsuicidal self-injury and suicidality: A review. *Journal of Trauma & Dissociation*, 16(3), 232–271. <https://doi.org/10.1080/15299732.2015.989563>

Gallagher, A. R., Moreland, M. L., Watters, K. N., & Yalch, M. M. (2023). Relative effects of childhood trauma, intimate partner violence, and other traumatic life events on complex posttraumatic stress disorder symptoms. *Traumatology*, 29(1), 57–64. <https://doi.org/10.1037/trm0000379>

Gewirtz-Meydan, A., & Lahav, Y. (2020). Sexual dysfunction and distress among childhood sexual abuse survivors: The role of post-traumatic stress disorder. *Journal of Sexual Medicine*, 17(11), 2267–2278. <https://doi.org/10.1016/j.jsxm.2020.07.016>

Gewirtz-Meydan, A., & Lahav, Y. (2021). Childhood sexual abuse and sexual motivations—The role of dissociation. *Journal of Sex Research*, 58(9), 1151–1160. <https://doi.org/10.1080/00224499.2020.1808564>

Gieler, T., Schmutzler, G., Braehler, E., Schut, C., Peters, E., & Kupfer, J. (2016). Shadows of beauty—Prevalence of body dysmorphic concerns in Germany is increasing: Data from two representative samples from 2002 and 2013. *Acta Dermato-Venereologica*, 96(217), 83–90. <https://doi.org/10.2340/00015555-2375>

Halpern, S. C., Schuch, F. B., Scherer, J. N., Sordi, A. O., Pachado, M., Dalbosco, C., Fara, L., Pechansky, F., Kessler, F., & Von Diemen, L. (2018). Child maltreatment and illicit substance abuse: A systematic review and meta-analysis of longitudinal studies. *Child Abuse Review*, 27(5), 344–360. <https://doi.org/10.1002/car.2534>

Harrison, A., Fernández de la Cruz, L., Enander, J., Radua, J., & Mataix-Cols, D. (2016). Cognitive-behavioral therapy for body dysmorphic disorder: A systematic review and meta-analysis of randomized controlled trials. *Clinical Psychology Review*, 48, 43–51. <https://doi.org/10.1016/j.cpr.2016.05.007>

Haselgruber, A., Sölvä, K., & Lueger-Schuster, B. (2020). Validation of ICD-11 PTSD and complex PTSD in foster children using the International Trauma Questionnaire. *Acta Psychiatrica Scandinavica*, 141(1), 60–73. <https://doi.org/10.1111/acps.13100>

Herman, J. L. (1992a). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, 5(3), 377–391. <https://doi.org/10.1002/jts.2490050305>

Herman, J. L. (1992b). *Trauma and recovery: The aftermath of violence—From domestic abuse to political terror*. Basic Books.

Hollander, M., & Wolfe, D. A. (1999). *Nonparametric statistical methods* (2nd ed.). Wiley.

Hyland, P., Shevlin, M., Fyvie, C., & Karatzias, T. (2018). Posttraumatic stress disorder and complex posttraumatic stress disorder in DSM-5 and

ICD-11: Clinical and behavioral correlates. Journal of Traumatic Stress, 31(2), 174–180. <https://doi.org/10.1002/jts.22272>

Jorgensen, L., Castle, D., Roberts, C., & Groth-Marnat, G. (2001). A clinical validation of the Dysmorphic Concern Questionnaire. *Australian and New Zealand Journal of Psychiatry, 35*(1), 124–128. <https://doi.org/10.1046/j.1440-1614.2001.00860.x>

Karatzias, T., & Cloitre, M. (2019). Treating adults with complex post-traumatic stress disorder using a modular approach to treatment: Rationale, evidence, and directions for future research. *Journal of Traumatic Stress, 32*(6), 870–876. <https://doi.org/10.1002/jts.22457>

Karatzias, T., Shevlin, M., Fyvie, C., Hyland, P., Efthymiadou, E., Wilson, D., Roberts, N., Bisson, J. I., Brewin, C. R., & Cloitre, M. (2017). Evidence of distinct profiles of posttraumatic stress disorder (PTSD) and complex posttraumatic stress disorder (CPTSD) based on the new *ICD-11 Trauma Questionnaire (ICD-TQ)*. *Journal of Affective Disorders, 207*, 181–187. <https://doi.org/10.1016/j.jad.2016.09.032>

Krebs, G., Fernández de la Cruz, L., Monzani, B., Bowyer, L., Anson, M., Cadman, J., Heyman, I., Turner, C., Veale, D., & Mataix-Cols, D. (2017). Long-term outcomes of cognitive-behavioral therapy for adolescent body dysmorphic disorder. *Behavior Therapy, 48*(4), 462–473. <https://doi.org/10.1016/j.beth.2017.01.001>

Lahav, Y. (2021). Suicidality in childhood abuse survivors—the contribution of identification with the aggressor. *Journal of Affective Disorders, 295*, 804–810. <https://doi.org/10.1016/j.jad.2021.08.138>

Lahav, Y., & Elklit, A. (2016). The cycle of healing—dissociation and attachment during treatment of CSA survivors. *Child Abuse & Neglect, 60*, 67–76. <https://doi.org/10.1016/j.chab.2016.09.009>

Lahav, Y., Huberman, M., Dokkedahl, S. B., & Gafter, L. (2025). Agonizing uncertainty: The development and psychometric evaluation of the Abuse Doubt Scale. *Journal of Interpersonal Violence*. Advance online publication. <https://doi.org/10.1177/08862605251372577>

Lahav, Y., Seligman, Z., & Solomon, Z. (2017). Countertransference in the face of growth: Reenactment of the trauma. In D. R. Aleksandrowicz & A. O. Aleksandrowicz (Eds.), *Countertransference in perspective: The double-edged sword of the patient–therapist emotional relationship* (pp. 57–79). Academic Press.

Lindert, J., von Ehrenstein, O. S., Grashow, R., Gal, G., Braehler, E., & Weisskopf, M. G. (2014). Sexual and physical abuse in childhood is associated with depression and anxiety over the life course: Systematic review and meta-analysis. *International Journal of Public Health, 59*(2), 359–372. <https://doi.org/10.1007/s00038-013-0519-5>

Liu, J., Fang, Y., Gong, J., Cui, X., Meng, T., Xiao, B., He, Y., Shen, Y., & Luo, X. (2017). Associations between suicidal behavior and childhood abuse and neglect: A meta-analysis. *Journal of Affective Disorders, 220*, 147–155. <https://doi.org/10.1016/j.jad.2017.03.060>

MacMillan, H. L., Fleming, J. E., Streiner, D. L., Lin, E., Boyle, M. H., Jamieson, E., Duku, E. K., Walsh, C. A., Wong, M. Y.-Y., & Beardslee, W. R. (2001). Childhood abuse and lifetime psychopathology in a community sample. *The American Journal of Psychiatry, 158*(11), 1878–1883. <https://doi.org/10.1176/appi.ajp.158.11.1878>

Maercker, A., Cloitre, M., Bachem, R., Schlumpf, Y. R., Khouri, B., Hitchcock, C., & Bohus, M. (2022). Complex post-traumatic stress disorder. *The Lancet, 400*(10345), 60–72. [https://doi.org/10.1016/S0140-6736\(22\)00821-2](https://doi.org/10.1016/S0140-6736(22)00821-2)

Malcolm, A., Pikoos, T. D., Castle, D. J., Labuschagne, I., & Rossell, S. L. (2021). Identity and shame in body dysmorphic disorder as compared to obsessive-compulsive disorder. *Journal of Obsessive–Compulsive and Related Disorders, 31*, Article 100686. <https://doi.org/10.1016/j.jocrd.2021.100686>

Malcolm, A., Pikoos, T. D., Grace, S. A., Castle, D. J., & Rossell, S. L. (2021). Childhood maltreatment and trauma is common and severe in body dysmorphic disorder. *Comprehensive Psychiatry, 109*, Article 152256. <https://doi.org/10.1016/j.comppsych.2021.152256>

Mancuso, S. G., Knoesen, N. P., & Castle, D. J. (2010). The Dysmorphic Concern Questionnaire: A screening measure for body dysmorphic disorder. *Australian and New Zealand Journal of Psychiatry, 44*(6), 535–542. <https://doi.org/10.3109/00048671003596055>

Nelson, J., Klumparendt, A., Doeblner, P., & Ehring, T. (2017). Childhood maltreatment and characteristics of adult depression: Meta-analysis. *The British Journal of Psychiatry, 210*(2), 96–104. <https://doi.org/10.1192/bj.p.115.180752>

Neziroglu, F., Khemlani-Patel, S., & Yaryura-Tobias, J. A. (2006). Rates of abuse in body dysmorphic disorder and obsessive-compulsive disorder. *Body Image, 3*(2), 189–193. <https://doi.org/10.1016/j.bodyim.2006.03.001>

Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: A systematic review and meta-analysis. *PLOS Medicine, 9*(11), Article e1001349. <https://doi.org/10.1371/journal.pmed.1001349>

O'brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity: International Journal of Methodology, 41*(5), 673–690. <https://doi.org/10.1007/s11135-006-9018-6>

Omidbakhsh, Z., Mohammadi, Z., & Soltanabadi, S. (2025). Childhood maltreatment and complex PTSD: A systematic literature review. *Trauma, Violence, & Abuse. Advance online publication*. <https://doi.org/10.1177/15248380251320985>

Osman, S., Cooper, M., Hackmann, A., & Veale, D. (2004). Spontaneously occurring images and early memories in people with body dysmorphic disorder. *Memory, 12*(4), 428–436. <https://doi.org/10.1080/0965821044000043>

Pederson, C. L., & Wilson, J. F. (2009). Childhood emotional neglect related to posttraumatic stress disorder symptoms and body mass index in adult women. *Psychological Reports, 105*(1), 111–126. <https://doi.org/10.2466/PR.105.1.111-126>

Phillips, K. A., Didie, E. R., Menard, W., Pagano, M. E., Fay, C., & Weisberg, R. B. (2006). Clinical features of body dysmorphic disorder in adolescents and adults. *Psychiatry Research, 141*(3), 305–314. <https://doi.org/10.1016/j.psychres.2005.09.014>

Phillips, K. A., Menard, W., Quinn, E., Didie, E. R., & Stout, R. L. (2013). A 4-year prospective observational follow-up study of course and predictors of course in body dysmorphic disorder. *Psychological Medicine, 43*(5), 1109–1117. <https://doi.org/10.1017/S0033291712001730>

Phillips, K. A., Pagano, M. E., & Menard, W. (2006). Pharmacotherapy for body dysmorphic disorder: Treatment received and illness severity. *Annals of Clinical Psychiatry, 18*(4), 251–257. <https://doi.org/10.1080/10401230600948464>

Phillips, K. A., Pinto, A., & Jain, S. (2004). Self-esteem in body dysmorphic disorder. *Body Image, 1*(4), 385–390. <https://doi.org/10.1016/j.bodyim.2004.07.001>

Phillips, K. A., Pinto, A., Menard, W., Eisen, J. L., Mancebo, M., & Rasmussen, S. A. (2007). Obsessive-compulsive disorder versus body dysmorphic disorder: A comparison study of two possibly related disorders. *Depression and Anxiety, 24*(6), 399–409. <https://doi.org/10.1002/da.20232>

Porat-Moeller, E., Keidar, A., Gafter, L., & Lahav, Y. (2025). Shadows of doubt: Ambivalent acknowledgment of abuse and identification with the aggressor. *Child Abuse & Neglect, 163*, Article 107401. <https://doi.org/10.1016/j.chab.2025.107401>

Rasmussen, J., Gomez, A. F., & Wilhelm, S. (2017). Cognitive-behavioral therapy for body dysmorphic disorder. In K. A. Phillips (Ed.), *Body dysmorphic disorder: Research and clinical advances* (pp. 357–377). Oxford University Press.

Rautio, D., Jassi, A., Krebs, G., Andrén, P., Monzani, B., Gumpert, M., Lewis, A., Peile, L., Sevilla-Cerméño, L., Jansson-Fröhmark, M., Lundgren, T., Hillborg, M., Silverberg-Morse, M., Clark, B., Fernández de la Cruz, L., & Mataix-Cols, D. (2022). Clinical characteristics of 172 children and adolescents with body dysmorphic disorder. *European*

Child & Adolescent Psychiatry, 31(1), 133–144. <https://doi.org/10.1007/s00787-020-01677-3>

Schieber, K., Kollei, I., de Zwaan, M., & Martin, A. (2015). Classification of body dysmorphic disorder—what is the advantage of the new *DSM-5* criteria? *Journal of Psychosomatic Research*, 78(3), 223–227. <https://doi.org/10.1016/j.jpsychores.2015.01.002>

Silver, J., & Reavey, P. (2010). “He’s a good-looking chap aint he?”: Narrative and visualisations of self in body dysmorphic disorder. *Social Science & Medicine*, 70(10), 1641–1647. <https://doi.org/10.1016/j.socsci.2009.11.042>

Spinazzola, J., Hodgdon, H., Liang, L.-J., Ford, J. D., Layne, C. M., Pynoos, R., Briggs, E. C., Stolbach, B., & Kisiel, C. (2014). Unseen wounds: The contribution of psychological maltreatment to child and adolescent mental health and risk outcomes. *Psychological Trauma: Theory, Research, Practice, and Policy*, 6(Suppl. 1), S18–S28. <https://doi.org/10.1037/a0037766>

Stewart, S. E., Stack, D. E., & Wilhelm, S. (2008). Severe obsessive-compulsive disorder with and without body dysmorphic disorder: Clinical correlates and implications. *Annals of Clinical Psychiatry*, 20(1), 33–38. <https://doi.org/10.1080/10401230701844463>

Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R. A., & van IJzendoorn, M. H. (2015). The prevalence of child maltreatment across the globe: Review of a series of meta-analyses. *Child Abuse Review*, 24(1), 37–50. <https://doi.org/10.1002/car.2353>

Sullivan, T. P., Fehon, D. C., Andres-Hyman, R. C., Lipschitz, D. S., & Grilo, C. M. (2006). Differential relationships of childhood abuse and neglect subtypes to PTSD symptom clusters among adolescent inpatients. *Journal of Traumatic Stress*, 19(2), 229–239. <https://doi.org/10.1002/jts.20092>

Tietjen, G. E., Brandes, J. L., Peterlin, B. L., Eloff, A., Dafer, R. M., Stein, M. R., Drexler, E., Martin, V. T., Hutchinson, S., Aurora, S. K., Recober, A., Herial, N. A., Utley, C., White, L., & Khuder, S. A. (2010). Childhood maltreatment and migraine (part I): Prevalence and adult revictimization: A Multicenter Headache Clinic Survey. *Headache*, 50(1), 20–31. <https://doi.org/10.1111/j.1526-4610.2009.01556.x>

Valderrama, J., Hansen, S. K., Pato, C., Phillips, K., Knowles, J., & Pato, M. T. (2020). Greater history of traumatic event exposure and PTSD associated with comorbid body dysmorphic disorder in a large OCD cohort. *Psychiatry Research*, 289, Article 112962. <https://doi.org/10.1016/j.psychres.2020.112962>

van der Kolk, B. A. (2005). Developmental trauma disorder: Toward a rational diagnosis for children with complex trauma histories. *Psychiatric Annals*, 35(5), 401–408. <https://doi.org/10.3928/00485713-20050501-06>

van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*, 18(5), 389–399. <https://doi.org/10.1002/jts.20047>

van Dijke, A., Ford, J. D., van der Hart, O., van Son, M., van der Heijden, P., & Buhring, M. (2012). Complex posttraumatic stress disorder in patients with borderline personality disorder and somatoform disorders. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(2), 162–168. <https://doi.org/10.1037/a0025732>

Veale, D., Gledhill, L. J., Christodoulou, P., & Hodsoll, J. (2016). Body dysmorphic disorder in different settings: A systematic review and estimated weighted prevalence. *Body Image*, 18, 168–186. <https://doi.org/10.1016/j.bodyim.2016.07.003>

Veale, D., Miles, S., & Anson, M. (2015). Long-term outcome of cognitive behavior therapy for body dysmorphic disorder: A naturalistic case series of 1 to 4 years after a controlled trial. *Behavior Therapy*, 46(6), 775–785. <https://doi.org/10.1016/j.beth.2015.06.003>

Vonderlin, R., Kleindienst, N., Alpers, G. W., Bohus, M., Lyssenko, L., & Schmahl, C. (2018). Dissociation in victims of childhood abuse or neglect: A meta-analytic review. *Psychological Medicine*, 48(15), 2467–2476. <https://doi.org/10.1017/S0033291718000740>

Wegman, H. L., & Stetler, C. (2009). A meta-analytic review of the effects of childhood abuse on medical outcomes in adulthood. *Psychosomatic Medicine*, 71(8), 805–812. <https://doi.org/10.1097/PSY.0b013e3181bb2b46>

Weingarden, H., Hoeppner, S. S., Snorrason, I., Greenberg, J. L., Phillips, K. A., & Wilhelm, S. (2021). Rates of remission, sustained remission, and recurrence in a randomized controlled trial of cognitive behavioral therapy versus supportive psychotherapy for body dysmorphic disorder. *Depression and Anxiety*, 38(7), 700–707. <https://doi.org/10.1002/da.23148>

Weingarden, H., Shaw, A. M., Phillips, K. A., & Wilhelm, S. (2018). Shame and defectiveness beliefs in treatment seeking patients with body dysmorphic disorder. *Journal of Nervous and Mental Disease*, 206(6), 417–422. <https://doi.org/10.1097/NMD.0000000000000808>

Wilhelm, S., Phillips, K. A., Greenberg, J. L., O’Keefe, S. M., Hoeppner, S. S., Keshaviah, A., Sarvode-Mothi, S., & Schoenfeld, D. A. (2019). Efficacy and posttreatment effects of therapist-delivered cognitive behavioral therapy vs supportive psychotherapy for adults with body dysmorphic disorder: A randomized clinical trial. *JAMA Psychiatry*, 76(4), 363–373. <https://doi.org/10.1001/jamapsychiatry.2018.4156>

World Health Organization. (2022). *ICD-11 for mortality and morbidity statistics* (version: 02/2022). <https://icd.who.int/browse11/l-m/en/#/>

Xiao, Z., Murat Baldwin, M., Wong, S. C., Obsuth, I., Meinck, F., & Murray, A. L. (2023). The impact of childhood psychological maltreatment on mental health outcomes in adulthood: A systematic review and meta-analysis. *Trauma, Violence, & Abuse*, 24(5), 3049–3064. <https://doi.org/10.1177/15248380221122816>

Zhang, H., Wang, W., Liu, S., Feng, Y., & Wei, Q. (2023). A meta-analytic review of the impact of child maltreatment on self-esteem: 1981 to 2021. *Trauma, Violence, & Abuse*, 24(5), 3398–3411. <https://doi.org/10.1177/15248380221129587>