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# AN EMOTIONAL NEGLECT–PERSONALITY DISORDER APPROACH: QUANTIFYING A DIMENSIONAL TRANSDIAGNOSTIC MODEL OF TRAUMA-RELATED AND PERSONALITY DISORDERS

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Are personality disorders (PDs) associated with emotional neglect? Draijer (2003) developed a dimensional model of trauma-related disorders and PD. The first dimension consists of the severity of the trauma endured. The second dimension consists of emotional neglect, which is assumed to be related primarily to personality pathology. In this article, we investigate whether an association between retrospective reports of emotional neglect and the presence and severity of PD exists. A sample of 150 patients was systematically assessed. Results indicate that there is little evidence to support a link between emotional neglect and problematic personality functioning at the disorder level; however, there might be a link between emotional neglect and problematic personality functioning in a dimensional way. Findings indicate a relationship between lack of parental warmth and problematic personality functioning, supporting the existence of the emotional neglect-axis of the proposed model in a dimensional framework of viewing personality pathology.

*Keywords:* emotional neglect, personality disorders, maladaptive personality functioning, trauma-related disorders, childhood maltreatment

As a means of better understanding clinical features in survivors of early childhood trauma and emotional neglect across trauma-related disorders and PD and to be able to indicate treatment, Draijer (2003) proposed a two-dimensional model (see Figure 1; Wildschut, Langeland, Smit, & Draijer, 2014). The first dimension, situated on the y-axis, consists of the severity of the trauma endured. This severity is supposed to fluctuate depending on factors such as the age at which the trauma occurred, whether it was physically intrusive, how much force was used, how frequently it occurred, the relation-

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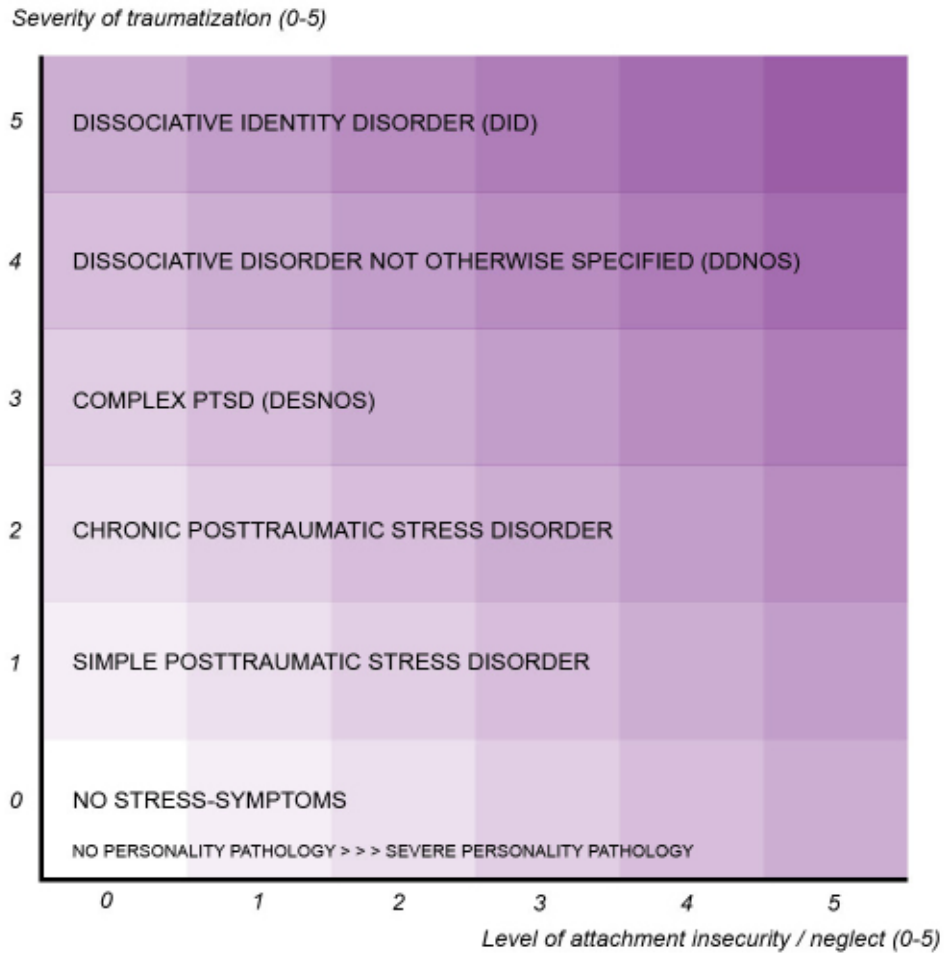


FIGURE 1. Diagnostic model for the spectrum of trauma-related disorders and personality disorders.

ship to the perpetrator, and the number of perpetrators. It is assumed that this dimension is related primarily to trauma-related and dissociative disorders. The second dimension, situated on the x-axis, consists of emotional neglect or, in other words, the (negative) quality of the early attachment to the primary caregivers. This dimension is thought to be related primarily to personality pathology. In their literature review of the developmental psychopathology of PDs, Johnson and colleagues (2005) state that research indicates that childhood neglect and maladaptive parenting are independently associated with elevated risk for PDs, even after childhood abuse and parental psychiatric disorders are accounted for.

Traditionally, trauma-related disorders and PDs have been viewed as separate groups of disorders (American Psychiatric Association [APA], 2013). An explanation for this distinction might be that trauma-related disorders have always been associated with the presence of trauma (Moreau &

Zisook, 2002), while PDs have been associated with dissimilar constructs like attachment, object relations, and relational functioning (e.g., Bowlby, 1969; Fonagy & Target, 2006; Kernberg, 1984).

During the last few decades, the effects of trauma are being viewed as taking place in a social context, giving more prominence to constructs used in PD treatment like attachment and relational functioning when it comes to trauma-related disorders. Terr (1991) distinguished two types of trauma: Type I and Type II. Type I traumatic conditions follow from unanticipated single events, whereas Type II conditions follow from long-standing or repeated exposure to extreme external events (for example, a child being sexually abused by a parent). According to Terr (1991), Type II traumas appear to breed personality problems.

Further, PDs are viewed increasingly as (partially) stemming from early childhood trauma (e.g., Carr, Martins, Stingel, Lemgruber, & Juruena, 2013; de Carvalho et al., 2015; Taillieu, Brownridge, Sareen, & Afifi, 2016). In their landmark article "Traumatic Antecedents of Borderline Personality Disorder," Herman and van der Kolk (1987) expressed their amazement about the lack of systematic investigations into the role of actual parental abuse in the development of borderline personality disorder (BPD). Although early studies focused on the relationship between BPD and early childhood trauma (e.g., Herman, Perry, & van der Kolk, 1989; Nigg et al., 1991; Silk, Lee, Hill, & Lohr, 1995), later studies focused also on other PDs (e.g., Johnson, Cohen, Brown, Smailes, & Bernstein, 1999; Yen et al., 2002).

In the 1980s, attention was drawn to the impact of emotional neglect on psychopathology in addition to and separate from childhood trauma: neglect increased the risk of occurrence of childhood trauma and turned out to contribute independently to the psychological consequences of childhood trauma (Draijer, 1988). Neglect in the early social environment renders trauma more likely to exert a lasting effect, because the child is unable to either experience or perceive the support of a caregiver able to offset the physiological disturbance caused by the trauma (Sabo, 1997).

The primary aim of the current study is to investigate whether an association between retrospective reports of emotional neglect and the presence and severity of PD exists. To study this association, we assessed a sample of patients indicated for treatment in a trauma-related or PD treatment program. This study is part of a research project (Wildschut et al., 2014) aimed at testing the two-dimensional model of trauma-related and personality disorders (Draijer, 2003).

## METHOD

### PARTICIPANTS

The sample ($n$ = 150) consisted of patients in specialized mental health care in the Dutch province of Friesland where care is divided into diagnostic-driven treatment programs. We collected data from consecutively referred patients to two of the treatment programs: a trauma-related disorders treatment program, aimed specifically at adult survivors of prolonged early child-

hood trauma ($n$ = 49), and a PD treatment program ($n$ = 101). The exclusion criterion was insufficient mastery of the Dutch language. The reason for choosing these diagnostic groups is explained elsewhere (Wildschut et al., 2014). Briefly: we expected that a wide range of PDs and a reported history of neglect, both in childhood and adulthood, are presented within these diagnostic groups.

In total, 220 patients were invited to participate in the study. Seventy patients refused to participate or did not complete the whole assessment battery. There were no significant differences between respondents and nonrespondents on demographic variables (sex, age, marital status, educational level, and employment status).

## MEASURES

Demographic characteristics were obtained using psychiatric records. Four psychologists administered the clinical interview. The self-report questionnaires were handed out to fill in at home between appointments, although assistance was always offered.

To establish a valid diagnosis of PD, we used the Structured Interview for DSM-IV Personality Disorders (SIDP-IV; Pfohl, Blum, & Zimmerman, 1995). The SIDP-IV is a semistructured interview. PD criteria are organized into different facets (e.g., interests and activities, close relationships, emotions) of the patient's life. We used the SIDP-IV to establish the number of PD and PD traits. The SIDP-IV has good inter-rater reliability and is distinguished from other PD measures by the quality of the clinical inquiries (Rogers, 2001).

For a more dimensional approach to personality pathology, we included the Severity Indices of Personality Problems (SIPP-118; Verheul et al., 2008) and the Young Schema Questionnaire (SQ; Rijkeboer, van den Bergh, & van den Bout, 2005). The SIPP-118 (Verheul et al., 2008) is a self-report questionnaire that covers five important domains (Self-control, Identity integration, Relational capacities, Responsibility, and Social concordance) of (mal) adaptive personality functioning. The 118 items are rated on a 4-point Likert scale from 1 ("I fully disagree") to 4 ("I fully agree"), covering the last 3 months. To calculate individual scores on different domains, $t$-scores are used. To calculate means, weighed means are used. The SIPP-118 has good psychometric qualities (Verheul et al., 2008). The subscales demonstrated excellent internal consistency (Cronbach's alpha .92) in our study.

The Young Schema-Questionnaire (SQ; Rijkeboer, van den Bergh, & van den Bout, 2005), a 205-item self-report questionnaire, measures character problems in a dimensional way. The 205 items are rated on a 6-point Likert scale from 1 ("not at all true") to 6 ("very true"). According to Young, Klosko, and Weishaar (2003), a schema is a general theme or pattern consisting of memories, emotions, cognitions, and physical experiences related to the self and to relationships with others that developed during childhood and expanded into adulthood, being largely dysfunctional. Psychometric qualities are good (Rijkeboer et al., 2005). The subscales demonstrated excellent internal consistency (Cronbach's alpha ranging from .78 to .92) in our study.

Emotional neglect was operationalized in research by Parker, Tupling, & Brown (1979) as a (perceived) lack of care and strong control/overprotection and is measured with the Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979). We used the PBI as a proxy to operationalize emotional neglect before age 12. The PBI assesses two dimensions of parenting: emotional warmth ("care": 12 items; range from 0 to 36) and control ("overprotection": 13 items; range from 0 to 39), scored separately for mother and father figures. Reliability and validity of the scales appear to be acceptable and are independent of the parent's sex (Parker et al., 1979). Each item is scored on a 4-point Likert scale from 0 ("very like") to 3 ("very unlike"). For mothers, care scores equal or higher than 27 and overprotection scores equal or higher than 13.5 are considered high, whereas for fathers, care scores equal or higher than 24 and overprotection scores equal or higher than 12.5 are considered high. The subscales demonstrated good internal consistency (Cronbach's alpha ranging from .81 to .94) in our study.

## PROCEDURE

The Institutional Review Board of Mental Health Institutions (METiGG; registration no. 11.121) approved the study protocol. After admission to one of the two treatment programs, patients were contacted by a psychologist. If a patient agreed to participate in the study, informed consent was obtained. Four thoroughly trained and supervised (by N.D.) psychologists administered the SIDP-IV. Some interviews were videotaped and evaluated during supervision sessions. Inter-rater agreement was based on the percentage of equally scored categories (the number of personality traits on all PDs). Inter-rater agreement for the interview was high (93%).

All patients consecutively referred to the trauma treatment program (which provides only outpatient care) for a period of 2 years were included. Due to the large size of the PD treatment program (which also has intensive outpatient treatment and inpatient facilities), we were unable to cover all departments. Therefore, we included all consecutively referred outpatients and inpatients given a period of multiple months in one department and then moved on to the next.

We tested the representativeness of our sample of patients in the PD treatment program ($n$ = 101) by comparing them on sex and age with the population of patients referred to the PD programs ($n$ = 1,563) during the study period. We found no significant differences for sex of the patients. However, patients in the PD population were significantly older ($M_{sample}$ = 32.1, $SD$ = 12.3, $M_{population}$ = 35.7, $SD$ = 11.5; $p < .01$), though the effect size was small ($r$ = .07). We conclude that our sample can be considered a representative reflection of the whole population of patients admitted to the PD programs during the study period.

## DATA ANALYSIS

First, demographic variables were calculated, using frequencies. Second, we conducted Pearson correlations (one-tailed) among the PBI scales and the

**TABLE 1. Demographic and Clinical Characteristics of the Sample ($n$ = 150) According to the Structured Interview for DSM-IV Personality Disorders (SIDP-IV)**

| Characteristic | |
|---|---|
| Sex ($n$, %) | |
| Male | 34 (22.7) |
| Female | 116 (77.3) |
| Age (mean years, *SD*) | 34.2 (11.9) |
| Marital status ($n$, %) | |
| Single | 74 (49.3) |
| Married/living with partner | 47 (31.3) |
| Divorced/widowed | 29 (19.4) |
| Education ($n$, %) | |
| Elementary education | 14 (9.3) |
| High school | 112 (74.7) |
| College | 24 (16.0) |
| Employment status ($n$, %) | |
| Yes | 39 (26.0) |
| No | 111 (74.0) |
| SIDP-IV Number of PD (mean, *SD*) | 1.5 (1.1) |
| SIDP-IV Number of PD traits (mean, *SD*) | 12.6 (7.0) |
| SIDP-IV PD ($n$, %)[a,b] | |
| Paranoid PD | 9 (6.0) |
| Schizotypical PD | 3 (2.0) |
| Antisocial PD | 1 (0.7) |
| Borderline PD | 44 (29.3) |
| Avoidant PD | 42 (28.0) |
| Dependent PD | 12 (8.0) |
| Obsessive Compulsive PD | 20 (13.3) |
| PD not otherwise specified | 90 (60.0) |

[a]Due to comorbidity, the total number exceeds 150; [b]patients with Schizoid PD, Histrionic PD, and Narcissistic PD were not found in our sample.

categorial level of PD (SIDP-IV presence, SIDP-IV number of PD, and SIPD-IV number of PD traits) as well as the dimensional level (SIPP-118 domains and SQ scales). Due to non-normality of the distributions of variables, we conducted Spearman correlations (one-tailed) among the PBI scales and each individual PD (according to the SIDP-IV). All correlations were employed for both the whole sample and for men and women separately.

## RESULTS

Demographic and clinical information is displayed in Table 1. PBI Care Mother ranged from 0 to 35 in our sample ($M$ = 16.4, $SD$ = 9.4), PBI Overprotection Mother ranged from 0 to 33 ($M$ = 17.0, $SD$ = 7.0), whereas both PBI Care Father and Overprotection Father ranged from 0 to 36 ($M$ = 14.9, $SD$ = 9.6, and $M$ = 15.3, $SD$ = 7.4).

**TABLE 2. Pearson Correlation Coefficients of Severity Indices of Personality Problems (SIPP-118) and Parental Bonding Instrument (PBI) ($n$ = 150)**

| | PBI Care Mother | | PBI Overprotection Mother | | PBI Care Father | | PBI Overprotection Father | |
|---|---|---|---|---|---|---|---|---|
| | *r* | *p* | *r* | *p* | *r* | *p* | *r* | *p* |
| SIPP-118 Self-control | .14 | .05 | –.12 | .07 | –.02 | .42 | .00 | .48 |
| Women ($n$ = 116) | .15 | .05 | –.15 | .06 | –.09 | .17 | .10 | .16 |
| Men ($n$ = 34) | .06 | .38 | .01 | .48 | .24 | .09 | –.33 | .03 |
| SIPP-118 Identity integration | .21 | .01 | –.07 | .19 | .10 | .12 | –.09 | .15 |
| Women ($n$ = 116) | **.27** | **.00** | –.09 | .17 | .04 | .35 | –.03 | .37 |
| Men ($n$ = 34) | –.02 | .45 | .02 | .46 | .30 | .04 | –.28 | .05 |
| SIPP-118 Relational capacities | **.24** | **.00** | –.13 | .06 | **.24** | **.00** | –.09 | .13 |
| Women ($n$ = 116) | **.25** | **.00** | –.11 | .12 | .17 | .04 | –.01 | .45 |
| Men ($n$ = 34) | .19 | .14 | –.14 | .21 | **.46** | **.00** | –.34 | .02 |
| SIPP-118 Responsibility | .07 | .18 | –.10 | .11 | .00 | .49 | –.00 | .49 |
| Women ($n$ = 116) | .05 | .29 | –.08 | .20 | –.10 | .15 | .04 | .35 |
| Men ($n$ = 34) | .21 | .12 | .24 | .09 | .33 | .03 | –.17 | .18 |
| SIPP-118 Social concordance | .02 | .40 | .06 | .23 | .06 | .23 | –.05 | .26 |
| Women ($n$ = 116) | .11 | .13 | –.05 | .29 | –.03 | .40 | .07 | .24 |
| Men ($n$ = 34) | –.20 | .13 | .13 | .42 | .35 | .02 | **–.48** | **.00** |

*Note*. Values in bold: To correct for multiple testing, we used the Bonferroni correction when using Pearson correlation coefficients. While we performed 20 correlations between the SIPP-118 and the PBI, we used a significance level of $p <$ .01 (0.05/20 = .003). SIPP-118 Self-control: the capacity to tolerate, use, and control one's own emotions and impulses. SIPP-118 Identity integration: the ability to see oneself and one's own life as stable, integrated, and purposive. SIPP-118 Relational capacities: the capacity to genuinely care about others as well as feeling cared about by them. SIPP-118 Responsibility: the capacity to set realistic goals and to achieve these goals in line with the expectations generated in others. SIPP-118 Social concordance: the ability to value someone's identity, withhold aggressive impulses towards others, and to work together with others.

Correlations between emotional neglect (PBI scales) and SIDP-IV PD presence, SIDP-IV number of PDs, and SIDP-IV number of PD traits were not significant for the total sample or for women and men separately. At the specific SIDP-IV PD level, we found two significant correlations: between BPD and low PBI Care Father scores for men ($r_s$ = –.51; $p$ = .00; $n$ = 34) and between Obsessive Compulsive PD and low PBI Overprotection Father scores for women ($r_s$ = –.23; $p$ = .00; $n$ = 116; to correct for multiple testing, we used the Bonferroni correction when using Spearman correlation coefficients; when we performed the 32 correlations between the SIDP-IV and the PBI, we used a significance level of $p <$ .01 [0.05/32 = .002]).

At a more dimensional level, the domains of Identity integration, Relational capacities, and Social concordance as measured with the SIPP-118 are associated with the PBI scales. Pearson correlations between the domains of the SIPP-118 and the scales of the PBI for the total sample and women and men separately are displayed in Table 2.

Further, Pearson correlations between the PBI scales and the SQ scales for the total sample and for women and men separately are displayed in Table 3. SQ Emotional deprivation is especially associated with most PBI scores.

**TABLE 3. Pearson Correlation Coefficients of Schema Questionnaire (SQ) and Parental Bonding Instrument (PBI) ($n$ = 150)**

| | PBI Care Mother | | PBI Overprotection Mother | | PBI Care Father | | PBI Overprotection Father | |
|---|---|---|---|---|---|---|---|---|
| | *r* | *p* | *r* | *p* | *r* | *p* | *r* | *p* |
| SQ Abandonment/instability | –.20 | .01 | .13 | .06 | –.18 | .01 | .14 | .05 |
| Women ($n$ = 116) | –.18 | .03 | .08 | .19 | –.16 | .04 | .10 | .14 |
| Men ($n$ = 34) | .22 | .11 | .23 | .09 | –.21 | .12 | .22 | .10 |
| SQ Mistrust/abuse | –.10 | .12 | .03 | .35 | –.12 | .07 | .08 | .15 |
| Women ($n$ = 116) | –.12 | .09 | .02 | .42 | –.14 | .06 | .09 | .17 |
| Men ($n$ = 34) | –.01 | .48 | .06 | .37 | –.04 | .42 | .05 | .39 |
| SQ Emotional deprivation | **–.49** | **< .001** | **.33** | **< .001** | **–.30** | **< .001** | .10 | .12 |
| Women ($n$ = 116) | **–.44** | **< .001** | .27 | .00 | –.30 | .00 | .10 | .15 |
| Men ($n$ = 34) | **–.62** | **< .001** | .48 | .00 | –.31 | .04 | .07 | .35 |
| SQ Defectiveness/shame | –.24 | .00 | .06 | .22 | –.22 | .00 | .15 | .04 |
| Women ($n$ = 116) | –.24 | .01 | .03 | .37 | –.20 | .02 | .12 | .10 |
| Men ($n$ = 34) | –.18 | .16 | .09 | .31 | –.25 | .07 | .18 | .15 |
| SQ Social isolation/alienation | **–.27** | **< .001** | .13 | .06 | –.21 | .01 | .15 | .03 |
| Women ($n$ = 116) | –.28 | .00 | .10 | .15 | –.20 | .02 | .16 | .05 |
| Men ($n$ = 34) | –.23 | .10 | .22 | .11 | –.23 | .10 | .13 | .23 |
| SQ Social undesirability | –.16 | .03 | .06 | .25 | –.09 | .14 | .15 | .03 |
| Women ($n$ = 116) | –.16 | .04 | –.01 | .45 | –.09 | .16 | .14 | .07 |
| Men ($n$ = 34) | –.14 | .21 | .23 | .10 | –.07 | .36 | .19 | .15 |
| SQ Dependence/incompetence | –.16 | .03 | .04 | .30 | –.11 | .09 | .01 | .47 |
| Women ($n$ = 116) | –.16 | .04 | .01 | .45 | –.09 | .16 | .02 | .43 |
| Men ($n$ = 34) | –.20 | .12 | .20 | .12 | –.19 | .14 | –.05 | .39 |
| SQ Vulnerability to harm/illness | –.08 | .16 | .15 | .03 | –.02 | .42 | .16 | .03 |
| Women ($n$ = 116) | –.17 | .03 | .12 | .11 | –.05 | .30 | .16 | .04 |
| Men ($n$ = 34) | .11 | .28 | .30 | .04 | .05 | .38 | .19 | .15 |
| SQ Enmeshment | –.17 | .02 | **.29** | **< .001** | –.02 | .43 | .09 | .14 |
| Women ($n$ = 116) | –.16 | .04 | .23 | .01 | .04 | .35 | .05 | .32 |
| Men ($n$ = 34) | –.20 | .13 | .50 | .00 | –.19 | .15 | .25 | .07 |
| SQ Failure to achieve | –.17 | .02 | .00 | .49 | –.03 | .35 | .02 | .41 |
| Women ($n$ = 116) | –.17 | .03 | –.07 | .23 | –.44 | .32 | .01 | .47 |
| Men ($n$ = 34) | –.14 | .21 | .22 | .11 | .03 | .44 | .04 | .42 |
| SQ Entitlement/grandiosity | .01 | .44 | –.01 | .46 | .08 | .16 | .01 | .45 |
| Women ($n$ = 116) | –.03 | .39 | .00 | .50 | .13 | .09 | –.03 | .36 |
| Men ($n$ = 34) | .02 | .46 | .06 | .37 | .09 | .31 | .22 | .10 |
| SQ Insufficient self-control | –.02 | .41 | .07 | .18 | –.02 | .40 | –.02 | .43 |
| Women ($n$ = 116) | –.04 | .34 | .10 | .16 | .06 | .26 | –.05 | .30 |
| Men ($n$ = 34) | .01 | .48 | .04 | .40 | –.33 | .03 | .14 | .21 |
| SQ Subjugation | –.25 | .00 | .16 | .03 | –.07 | .19 | .09 | .13 |
| Women ($n$ = 116) | –.27 | .00 | .13 | .09 | –.05 | .29 | .10 | .15 |
| Men ($n$ = 34) | –.18 | .15 | .26 | .07 | –.14 | .22 | .07 | .34 |
| SQ Self-sacrifice | –.25 | .00 | .06 | .24 | –.11 | .10 | .08 | .16 |
| Women ($n$ = 116) | –.24 | .00 | .01 | .44 | –.12 | .10 | .13 | .08 |
| Men ($n$ = 34) | –.22 | .11 | .16 | .19 | –.03 | .43 | –.13 | .24 |
| SQ Emotional inhibition | –.17 | .02 | .08 | .17 | –.13 | .05 | –.03 | .37 |
| Women ($n$ = 116) | –.20 | .02 | .04 | .36 | –.07 | .23 | –.12 | .09 |
| Men ($n$ = 34) | –.13 | .23 | .23 | .10 | –.34 | .02 | .28 | .05 |
| SQ Unrelenting standards | –.12 | .07 | –.01 | .47 | –.08 | .18 | .00 | .48 |
| Women ($n$ = 116) | –.14 | .07 | –.02 | .42 | –.06 | .27 | –.02 | .42 |
| Men ($n$ = 34) | –.05 | .40 | .02 | .45 | –.13 | .23 | .07 | .34 |

*Note*. Values in bold: To correct for multiple testing, we used the Bonferroni correction when using Pearson correlation coefficients. While we performed 64 correlations between the SQ and the PBI, we used a significance level of $p < .001$ (0.05/64 = .0007).

## DISCUSSION

Overviewing our results, we conclude that there is no clear evidence for a solid association between emotional neglect, as operationalized with the PBI, and PD, as measured with the SIDP-IV. We did not find a single significant correlation between presence of PD, number of PDs, and number of PD traits according to the SIDP-IV and the PBI scales for the total sample and for women and men separately. In addition, we found only two significant correlations between PBI scales and each individual PD and one in a direction not expected (low paternal overprotection correlates with Obsessive Compulsive PD for women), which is difficult to interpret. These results are in line with the findings of De Panfilis and colleagues (2008) who, using both the PBI and the SIDP-IV, concluded that although altered parental bonding may enhance the risk of PD, its effect is completely mediated by the alexithymic feature "difficulty describing feelings to others." On the other hand, Taillieu and colleagues (2016) suggest that the mechanism linking childhood emotional neglect to specific disorders could be through its impact on early attachment processes.

Looking at the association between emotional neglect and personality functioning in a more dimensional way, a different picture appears. Emotional neglect seems to be related to the schema's Emotional deprivation, Social isolation/alienation, and Enmeshment. Further, high warmth/care indicates good Relational capacities and Identity integration (for women). Emotional neglect from a primary caretaker thus seems associated with low self-esteem and interpersonal problems.

In general, the PBI Care scale leads to more significant correlations than the PBI Overprotection scale, which indicates that a lack of warmth in the relationship with a parent or primary caregiver is especially associated with problematic personality functioning. These results are in line with other samples, as for example among male adult offenders and female adolescents, in which both the PBI and the SQ were used (e.g., Pellerone, Craparo, & Tornabuoni, 2016; Turner, Rose, & Cooper, 2005).

In conclusion, our results indicate that the x-axis of the model is not valid when it comes to the link between emotional neglect and personality at the disorder level (considering presence as well as number and type of PD). However, it does seem valid when it comes to the link between neglect and problematic personality functioning in a dimensional way. Work in the area of a personality pathology has sought to go beyond the *Diagnostic and Statistical Manual of Mental Disorders,* fourth edition (*DSM-IV*; APA, 1994) categories, and this raises the question of whether the changes the description of PD has undergone in the *Diagnostic and Statistical Manual of Mental Disorders,* fifth edition (*DSM-5*; APA, 2013) have gone far enough, as discussed earlier (Skodol, 2014; Skodol, Morey, Bender, & Oldham, 2015). Our results indicate the usefulness of incorporating dimensional measures in measuring maladaptive personality functioning.

## STRENGTHS AND LIMITATIONS

One strength of our study is that we used a clinical interview to establish a valid PD diagnosis and a second is that we used measurements to view personality functioning in a more dimensional way. Much of the research considering PD in the light of childhood trauma and neglect has been limited by methodological problems—for example, measuring PDs solely in a dimensional way, without subjects having a clinical diagnosis, and depending on psychiatric records or self-report measures (screeners) for establishing a clinical PD diagnosis or excluding certain PDs (Wildschut et al., 2014). Another strength of our study is that we conducted our research in a real-life setting and it consisted of patients seeking help in a specialized mental health care facility, instead of, for example, a college setting.

Some limitations of our study should also be noted. First, we had to find a proxy to operationalize emotional neglect retrospectively, for which we chose the PBI, which of course raises the question of whether we actually measured emotional neglect. The PBI has been widely used to measure emotional neglect (e.g., Johnstone et al., 2009; Young, Lennie, & Minnis, 2011). Further, the PBI has been validated by relating it to lack of parental affection (Draijer & Langeland, 1999). It was found to be a good indicator of emotional neglect, with the advantage that it refers to factual, observable behavior of parents rather than to more subjective indications of their unavailability or lack of affection.

Another limitation is that we were unable to incorporate a measurement that assesses PDs according to *DSM-5*, since data collection started 4 years ago. However, since differences between *DSM-IV* and *DSM-5* in classifying PDs are rather limited, we do not expect much difference in outcome if we had had the opportunity to use *DSM-5*. Another limitation is that we found low numbers of certain PDs in our sample, which might constitute an alternative explanation for the sparsity of significant correlations found.

Our results indicate that the link between emotional neglect and personality pathology should be elaborated on in future research. Cohen and colleagues (2013) found that compared to other kinds of childhood maltreatment, neglect and emotional abuse were the only significant predictors of adult personality pathology. In addition, in a systematic review of longitudinal studies of childhood maltreatment and mental health outcomes, Gilbert and colleagues (2009) found that, compared to other types of abuse, neglect has received the least scientific and public attention, but is at least as damaging as physical or sexual abuse in the long term.

## REFERENCES

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Bowlby, J. (1969). *Attachment and loss, Vol. 1: Attachment*. New York, NY: Basic Books.

Carr, C. P., Martins, C.M.S., Stingel, A. M., Lemgruber, V. B., & Juruena, M. F. (2013). The role of early life stress in adult psychiatric disorders. A systematic review according to childhood trauma subtypes. *Journal of Nervous and Mental Disease, 201,* 1007–1020. doi:10.1097/NMD.0000000000000049

Cohen, L. J., Foster, M. F., Nesci, C., Tanis, T., Halmi, W., & Galynker, I. (2013). How do different types of childhood maltreatment relate to adult personality pathology? *Journal of Nervous and Mental Disease, 201,* 234–242. doi:10.1097/NMD.0b013e3182848ac4

de Carvalho, H. W., Pereira, R., Frozi, J., Bisol, L. W., Ottoni, G. L., & Lara, D. R. (2015). Childhood trauma is associated with maladaptive personality traits. *Child Abuse & Neglect, 44,* 18–25. doi:10.1016/j.chiabu.2014.10.013

De Panfilis, C., Salvatore, P., Marchesi, C., Cazzolla, R., Tonna, M., & Maggini, C. (2008). Parental bonding and personality disorder: the mediating role of alexithymia. *Journal of Personality Disorders, 22,* 496–508.

Draijer, N. (2003). Diagnostiek en indicatiestelling bij (een vermoeden van) seksueel misbruik in de voorgeschiedenis [Diagnostics and indication assessment with (a suspicion of) sexual abuse in the history]. In N. Nicolai (Ed.), *Handboek psychotherapie na seksueel misbruik* [Handbook of psychotherapy after sexual abuse] (pp. 21–47). Utrecht, The Netherlands: De Tijdstroom.

Draijer, N. (1988). *Seksueel misbruik van meisjes door verwanten: Een landelijk onderzoek naar de omvang, de aard, de gezinsachtergronden, de emotionele betekenis en de psychische en psychosomatische gevolgen* [Sexual abuse of girls by relatives: A nationwide investigation into the size, nature, family backgrounds, emotional meaning and the psychological and psychosomatic consequences]. 's-Gravenhage, The Netherlands: Ministerie van Sociale Zaken en Werkgelegenheid.

Draijer, N., & Langeland, W. (1999). Childhood trauma and perceived parental dysfunction in the etiology of dissociative symptoms in psychiatric inpatients. *American Journal of Psychiatry, 156,* 379–385.

Fonagy, P., & Target, M. (2006). The mentalization-focused approach to self-pathology. *Journal of Personality Disorders, 20,* 544–576. doi:10.1521/pedi.2006.20.6.544

Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high income countries. *Lancet, 373,* 68–81.

Herman, J. L., Perry, J. C. & van der Kolk, B. A. (1989). Childhood trauma in borderline personality disorder. *American Journal of Psychiatry*, *146,* 490–495.

Herman, J. L., & van der Kolk, B. (1987). Traumatic antecedents of borderline personality disorder. In B. van der Kolk (Ed.), *Psychological trauma* (pp. 111–126). Washington, DC: American Psychiatric Press.

Johnson, J. G., Cohen, P., Brown, J., Smailes, E. M., & Bernstein, D. P. (1999). Childhood maltreatment increases risk for personality disorders during early adulthood. *Archives of General Psychiatry*, *56,* 600–606. doi:10.1001/archpsyc.56.7.600

Johnson, J. G., McGeoch, P. G., Caskey, V. P., Abhary, S. G., Sneed, J. R., & Bornstein, R. F. (2005). The developmental psychopathology of personality disorders. In B. L. Hankin, & J. R. Z. Abela (Eds.), *Development of psychopathology: A vulnerability-stress perspective* (pp. 417–464). Thousand Oaks, CA: Sage.

Johnstone, J. M., Luty, S. E., Carter, J. D., Mulder, R. T., Frampton, C. M. A., & Joyce, P. R. (2009). Childhood neglect and abuse as predictors of antidepressant response in adult depression. *Depression and Anxiety, 26,* 711–717.

Kernberg, O. F. (1984). *Object relations theory and clinical psychoanalysis*. Lanham, MD: Rowman & Littlefield.

Moreau, C., & Zisook, S. (2002). Rationale for a posttraumatic stress spectrum disorder. *Psychiatric Clinics of North America, 25,* 775–790.

Nigg, J. T., Silk, K. R., Westen, D., Lohr, N. E., Gold, L. J., Goodrich, S., & Ogata, S. (1991). Object presentation in the early memories of sexually abused borderline patients. *American Journal of Psychiatry*, *148,* 864–869.

Parker, G., Tupling, H., & Brown, L. B. (1979). A parental bonding instrument. *British Journal of Medical Psychology*, *52,* 1–10. doi:10.1111/j.2044-8341.1979.tb02487.x

Pellerone, M, Craparo, G., & Tornabuoni, Y. (2016). Relationship between parenting and cognitive schemas in a group of male adult offenders. *Frontiers in Psychology, 7,* 302. doi:10.3389/fpsyg.2016.00302

Pfohl, B., Blum, N., & Zimmerman, M. (1995). *The Structured Interview for DSM-IV Personality: SIDP-IV*. Iowa City: University of Iowa.

Rijkeboer, M. M., van den Bergh, H., & van den Bout, J. (2005). Stability and discriminative power of the Young Schema-Questionnaire in a Dutch clinical versus non-clinical population. *Journal of Behavior Therapy and Experimental Psychiatry*, *36*, 129–144. doi:10.1016/j.jbtep.2004.08.005

Rogers, R. (2001). *Handbook of diagnostic and structured interviewing*. New York, NY: Guildford.

Sabo, A. N. (1997). Etiological significance of associations between childhood trauma and borderline personality disorder: Conceptual and clinical implications. *Journal of Personality Disorders*, *11,* 50–70. doi:10.1521/pedi.1997.11.1.50

Silk, K. R., Lee, S., Hill, E. M., & Lohr, N. E. (1995). Borderline personality disorder symptoms and severity of sexual abuse. *American Journal of Psychiatry*, *152,* 1059–1064.

Skodol, A. E. (2014). Personality disorder classification: Stuck in neutral, how to move forward? *Current Psychiatry Reports, 16,* 480. doi:10.1007/s11920-014-0480-x

Skodol, A. E., Morey, L. C., Bender, D. S., & Oldham, J. M. (2015). The alternative DSM-5 model for personality disorders: A clinical application. *American Journal of Psychiatry, 172,* 606–613. doi:10.1176/appi.ajp.2015.14101220

Taillieu, T. L., Brownridge, D. A., Sareen, J., & Afifi, T. O. (2016). Childhood emotional maltreatment and mental disorders: Results from a nationally representative adult sample from the United States. *Child Abuse & Neglect, 59,* 1–12. doi:10.1016/j.chiabu.2016.07.005

Terr, L. C. (1991). Childhood traumas: An outline and overview. *American Journal of Psychiatry*, *148,* 10–20.

Turner, H. M., Rose, K. S., & Cooper, M. J. (2005). Schema and parental bonding in overweight and non-overweight female adolescents. *International Journal of Obesity, 29,* 381–387.

Verheul, R., Andrea, H., Berghout, C. C., Dolan, C., Busschbach, J. J. V., van der Kroft, P., Bateman, A. W., & Fonagy, P. (2008). Severity Indices of Personality Problems (SIPP-118): Development, factor structure, reliability, and validity. *Psychological Assessment, 20,* 23–34.

Wildschut, M., Langeland, W., Smit, J. H., & Draijer, N. (2014). Survivors of early childhood trauma: Evaluating a two-dimensional diagnostic model of the impact of trauma and neglect. *European Journal of Psychotraumatology, 5,* 21824. doi:10.3402/ejpt.v5.21824

Yen, S., Shea, M. T., Battle, C. A., Johnson, D. M., Zlotnick, C., Dolan-Sewell, R., … McGlashan, T. H. (2002). Traumatic exposure and posttraumatic stress disorder in borderline, schizotypal, avoidant and obsessive-compulsive personality disorders: Findings from the collaborative longitudinal personality disorders study. *Journal of Nervous and Mental Disease, 190,* 510–518.

Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). *Schema therapy: A practitioner's guide*. New York, NY: Guilford.

Young, R., Lennie, S., & Minnis, H. (2011). Children's perceptions of parental emotional neglect and control and psychopathology. *Journal of Child Psychology and Psychiatry, 52,* 889–897.