

ADULT ATTACHMENT TO TRANSITIONAL OBJECTS AND BORDERLINE PERSONALITY DISORDER

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Borderline personality disorder (BPD) is characterized by tumultuous, unstable personal relationships, difficulty being alone, and an inability to self-soothe. This may explain why patients with BPD tend to develop strong attachments to transitional objects such as stuffed animals. Research in hospital settings has linked the use of transitional objects to the presence of BPD. Using a nonclinical community sample ($N = 80$) we explored the link between attachments to transitional objects and various aspects of personality pathology, as well as to childhood trauma, and parental rearing styles. People who reported intense current attachments to transitional objects were significantly more likely to meet criteria for a BPD diagnosis than those who did not; they also reported more childhood trauma, rated their early caregivers as less supportive, and had more attachment problems as adults. Heavy emotional reliance on transitional objects in adulthood may be an indicator of underlying pathology, particularly BPD.

Borderline personality disorder (BPD) is a severe form of personality pathology characterized by emotional instability, problems with impulse control, and chronic feelings of emptiness (Hooley & St. Germain, 2009). Unstable interpersonal relationships are a hallmark of BPD and those who suffer from this disorder often struggle to form healthy, stable, and emotionally satisfying connections with others (Aaronson, Bender, Skodol, & Gunderson, 2006; Levy, 2005). They also experience intense fears of abandonment and intolerance of being alone (Bender, Farber, & Geller, 2001; Gunderson, 1996).

Although the etiology of BPD is not fully understood, childhood adversity and problematic attachment relationships with early caregivers are implicated (Fossati et al., 2005; Fruzzetti, Shenk, & Hoffman, 2005; Levy, 2005; Patrick, Hobson, Castle, Howard, & Maughn, 1994; Rogosch & Cicchetti, 2005). People with BPD report more childhood experiences of trauma, neglect, and abuse (Bandelow et al., 2005; Paris, Zweig-Frank, &

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Guzder, 1994; Silk, Lee, Hill, & Lohr, 1995). Corroborated histories of childhood neglect and abuse have also been demonstrated to predict the later development of BPD (Johnson, Cohen, Brown, Smailes, & Bernstein, 1999).

Viewed from the perspective of object relations theory, early parental failures lead to a failure to develop internal representations or images of nurturing and empathic caretakers ("good objects") to provide self-soothing in times of distress (Adler & Buie, 1979; Buie & Adler, 1982; Winnicott, 1953). Exposure to inconsistent, uncaring, and overcontrolling caregivers is also thought to contribute to the formation of the maladaptive relationship schemas and problematic attachment styles that are central in BPD (Bateman & Fonagy, 2003; Levy, 2005). Nigg and colleagues have demonstrated that, compared to healthy comparison participants, patients with BPD report early memories containing more malevolent representations of others (Nigg, Lohr, Westen, Gold, & Silk, 1992). It therefore makes sense that people with BPD might be especially inclined to seek attachments that could provide security, stability, comfort, and relief from distress, be consistently available, and have no potential for abandonment. More specifically, it is reasonable to expect that people with BPD might use transitional objects in a different manner than people who do not have BPD.

Transitional objects are soft, comforting, inanimate objects such as stuffed animals or security blankets that are sought in times of distress (Winnicott, 1953). They are called transitional objects because they are used during the period of transition from complete dependence to full autonomy and because they represent a stand-in for the caregiver when the caregiver is absent or unavailable. Children often become very attached to these objects. However, over the course of a healthy development that leads to increasing autonomy, the need for the transitional object gradually diminishes.

Despite the obvious connection between the attachment problems in BPD and the need for a transitional object, this is not an issue that has received much empirical attention. However, available evidence does support a relationship between transitional object attachment and BPD. In an early report, Arkema (1981) noted that 100% of a sample of 45 outpatients with BPD used stuffed animals, blankets, or other transitional objects. Arkema further suggested that use of transitional objects distinguished patients with BPD from those with other personality disorders. Similarly, Labbate and Benedek (1996) found that, of the 36 female adult psychiatric inpatients who displayed stuffed animals at their bedsides, 22 (61%) were diagnosed with BPD. Cardasis, Hochman, and Silk (1997) also reported that a significant majority of inpatients who used transitional objects as adults had BPD diagnoses. In a letter written in response to this study Laporta (1997) wrote that Cardasis et al.'s findings confirmed her and her colleagues' personal observations that those who arrived at inpatient units with stuffed animals or blankets were often later diagnosed with BPD.

This link was so striking that they now referred to it as the “positive bear sign” (Laporta, 1997).

Although not everyone who has a transitional object also has BPD (Cardasis et al., 1997), transitional objects do seem to be more strongly related to BPD than to any other disorder or to psychopathology more generally. Morris, Gunderson, and Zanarini (1986) found that use of transitional objects was higher in patients diagnosed with BPD compared with patients diagnosed with schizophrenia or patients diagnosed with other personality disorders. This suggests that it is not just having a personality disorder or having severe psychopathology that is important. Rather the link seems to be between possession and use of transitional objects and BPD more specifically.

Currently unknown is whether the link between BPD and transitional object attachment extends beyond clinical samples. However, if there is truly an association between transitional objects and BPD we would expect to see a correlation between these variables even when the starting point is people who have strong attachments to transitional objects rather than people with a diagnosis of BPD. In the current study we examined the connection between transitional objects and the presence of borderline pathology in a nonclinical sample. Specifically, we hypothesized that community residents with intense attachments to transitional objects would score more highly on measures of borderline pathology than people without intense transitional object attachments. We further hypothesized that, consistent with previous findings on BPD, people with stronger attachments to transitional objects would score higher on a measure of relationship anxiety, reflecting concerns about the availability or responsiveness of a partner. However, we did not predict differences on relationship avoidance because this construct concerns efforts to maintain emotional distance and autonomy. Finally, we predicted that people who used transitional objects to give themselves emotional comfort would report more childhood experiences of trauma and more negative relationships with caregivers. In sum, because the presence of borderline traits is linked to strong attachments to transitional objects in adulthood, we predicted that adult community residents with strong attachments to stuffed animals would show many of the characteristics associated with BPD.

METHOD

PARTICIPANTS

Participants were 80 adults (61 females; 19 males) between the ages of 18 and 64 ($M = 26.3$ years; $SD = 11.3$). They were recruited via four different printed and e-mail advertisements soliciting people with different levels of attachment to transitional objects. Potential participants received a brief telephone interview to assess likely eligibility. A subsequent interview confirmed group membership. After complete description of the study to sub-

jects, written informed consent was obtained. The study protocol was reviewed and approved by the local committee on the use of human subjects.

Participants were recruited into one of four study groups. The intense attachment group ($n = 18$) consisted of people who reported extreme attachments to one or more transitional objects in adulthood. These were people who responded to advertisements asking "Do you love your stuffed animals or your blanket? Can you not bear to be separated from them? Do you keep one or more with you all the time and depend upon them when you are upset?" The mild attachment group ($n = 30$) consisted of people who retained an attachment to one or more transitional objects in adulthood but did not have an intense emotional reliance on it ("Do you have a stuffed animal or other special object(s) that you sleep with or use for comfort but that you *would be fine going a day or a few days without?*"). The past attachment group ($n = 10$) had at least one transitional object that had been given up in adulthood. They responded to advertisements that asked, "Did you have a stuffed animal or other special object(s) that you slept with or used for comfort but *gave up in adulthood* (after the age of 18)?" Finally, the childhood attachment group ($n = 22$) contained people who had been attached to transitional objects as children but who had given up these attachments before they became adults (mean age of giving them up = 10.5 years, $SD = 2.7$). These participants had responded to recruitment advertisements that asked, "Did you have a favorite stuffed animal or blanket when you were younger but *gave it up in childhood* (before middle school)?"

Participants were assigned to groups based on their self-assessments and responses to questions during the interview. Differentiation between these groups was based upon degree of use of the transitional objects and the distress experienced if the transitional object was not available. Three participants were screened out of participating. One did not have a transitional object of her own but slept with her son's teddy bear when she had had a fight with her husband. Another no longer used her teddy bear but used her cat like a stuffed animal instead. The third excluded participant had a pillow for a bad back, but did not use this for emotional comfort. In the small number of cases ($n = 2$) where there was any doubt about which group a participant should be placed into, an independent assessor was consulted and made the final decision.

MEASURES

Transitional Objects Interview (TOI). The Transitional Objects Interview (TOI; authors, unpublished measure) is a short (approximately 10–15 minute) semi-structured interview that asks about past and present relationships to stuffed animals and other transitional objects. The TOI was designed specifically for this study because no other measure was available. During the interview participants were asked about their history of transitional object use. They also provided details about the transitional objects they were (or had been) attached to. Participants were questioned

about the number of transitional objects, the names (if any) of their transitional objects, as well as about any important characteristics of these objects. The interviewer also inquired about how much participants used their transitional objects in different situations (e.g., to sleep, when away from home) or relied on them for security or comfort during times of distress. Participants' responses were rated on a 0–4 scale ("never" to "always") to yield a total score for transitional object use and emotional attachment to transitional objects. To maximize reliability the same interviewer administered and scored the TOI for all participants.

Schedule for Nonadaptive and Adaptive Personality (SNAP). Borderline traits were measured using the Schedule for Nonadaptive and Adaptive Personality (SNAP; Clark, 1993). This is a 375-item, true/false questionnaire designed to assess a broad range of traits and temperaments associated with personality disorders. The SNAP includes scales that represent 13 different personality disorders, including BPD (Stepp, Trull, Burr, Wolfenstein, & Vieth, 2005). The SNAP borderline scale consists of 27 items that assess such traits as aggression, feelings of emptiness, impulsivity, emotional lability, self-harm, and fear of abandonment. The items on the borderline scale can be organized into 8 different criteria (groups of items) that reflect the clinical symptoms of BPD (excluding transient paranoia or dissociation). To qualify for a SNAP diagnosis of BPD, a respondent must endorse at least 5 of the 8 borderline criteria.

The psychometric properties of the SNAP are good (Clark, McEwen, Colvard, & Hickok, 1993; Melley, Oltmans, & Turkheimer, 2002). The various scales of the SNAP have also been shown to have incremental validity in predicting symptoms and dimensions of personality associated with BPD (Clark et al., 1993; Reynolds & Clark, 2001; Stepp et al., 2005). Other research has demonstrated that the SNAP is effective in distinguishing between PD types (Morey et al., 2003).

Childhood Trauma Questionnaire (CTQ). The Childhood Trauma Questionnaire (CTQ; Bernstein et al., 2003) is a 28-item self-report measure that asks about traumatic experiences in childhood and adolescence. The CTQ has five subscales that concern emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. Each item is scored on a 1–5 (never true–very often true) scale with higher scores corresponding to more trauma. Subscales scores may also be added to form a total trauma score. Studies show that the CTQ is a valid measure of independently verified childhood trauma (Bernstein et al., 2003) and has good psychometric properties (Scher, Stein, Asmundson, McCreary, & Forde, 2001).

Experiences in Close Relationships Inventory (ECR). The ECR (Brennan, Clark, & Shaver, 1998) is a 36-item self-report measure of attachment that measures a person's anxiety and avoidance in romantic relationships. Each item is rated on a 7-point Likert scale where 1 = disagree strongly and 7 = agree strongly. Eighteen of the items are concerned with avoidance (e.g., I am nervous when partners get too close to me) and 18

with anxiety (e.g., I worry about being abandoned). The reliability and validity of these scales, which are uncorrelated, is well established (see Mikulincer & Shaver, 2007).

Parental Bonding Instrument. The Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979) is a 25-item self-report questionnaire that assesses early relationships with parents. Items are rated using a 0–3 scale that indicates how much they agree or disagree with each statement. Participants respond based on their experiences with primary caregivers from infancy to age 16. The PBI has two subscales that measure Care and Overprotection/Control. The care subscale has 12 items (e.g., was affectionate to me) leading to care scores between 0 and 36. The control subscale has 13 items (e.g., invaded my privacy) leading to control scores between 0 and 39.

The construct validity of the PBI has been supported in diverse cultural settings (Qadir, Stewart, Khan, & Prince, 2005). PBI scores have also been shown to be relatively stable over a 20-year period and not affected by gender, mood, life experiences, or a history of neuroticism or depression (Wilhelm, Niven, Parker, & Hadzi-Pavlovic, 2005).

RESULTS

We used one-way ANOVAS to compare the four groups on all measures of interest and post-hoc Tukey HSD tests to further explore specific between group differences.

Validating our group classifications, analyses confirmed that the four study groups differed significantly on the number of transitional objects that they had, $F(3, 76) = 5.46, p < .01$, their emotional attachments to their transitional objects, $F(3, 76) = 127.5, p < .001$, and the ways in which they used these transitional objects, $F(3, 76) = 49.4, p < .001$. Participants assigned to the “intense” attachment group had a greater number of transitional objects, stronger emotional attachments to them, and used their transitional objects more than did participants in any of the other three groups ($p < .05$ in all cases). As noted in Table 1, the mean number of important transitional objects for participants in the intense attachment group was 8.5 compared with a mean of 1.8 for those in the mild attachment group and zero for the past adult and past childhood attachment groups. The majority (78%) of those who reported intense current attachments to transitional objects were attached to stuffed animals. The remaining participants reported strong attachments to blankets, dolls, or in the case of one male participant, a small train.

ATTACHMENT TO TRANSITIONAL OBJECTS AND BORDERLINE PERSONALITY DISORDER

Consistent with prediction, people with intense attachments to stuffed animals scored higher on measures of borderline pathology than did peo-

TABLE 1. Clinical Characteristics of Participants with Different Levels of Adult Attachment to Stuffed Animals

Group Measure	Intense (n = 18)	Mild (n = 30)	Past (n = 10)	None (n = 22)
Age	32.3 (13.8)	24.3 (11.3)	26.4 (4.9)	24.1 (9.9)
Sex (F/M)	13/5	28/2	7/3	13/9
No. of TOs	8.5 ^a (15.2)	1.8 ^b (13.8)	0 ^b	0 ^b
SNAP BPD scale	13.17 ^a (5.4)	6.23 ^b (2.9)	5.8 ^b (2.0)	6.27 ^b (3.6)
SNAP BPD dx	33% ^a	0% ^b	0% ^b	0% ^b
ECR-anxiety	81.1 ^a (18.2)	60.8 ^b (18.9)	58.5 ^b (15.6)	61.8 ^b (17.7)
ECR-avoidance	58.17 (4.3)	53.03 (3.4)	50.40 (5.8)	50.46 (3.9)
PBI-Care	18.0 ^a (10.9)	27.0 ^b (9.4)	29.0 ^b (5.3)	26.4 ^b (10.2)
PBI-Control	20.4 ^a (8.6)	12.9 ^b (8.2)	14.6 (7.5)	16.2 (8.8)
CTQ-Total	59.3 ^a (22.0)	35.5 ^b (9.6)	31.6 ^b (5.1)	37.3 ^b (10.9)
CTQ- Emotional abuse	15.3 ^a (6.3)	8.7 ^b (3.9)	6.8 ^b (1.5)	10.4 ^b (4.9)
CTQ-Emotional neglect	14.3 ^a (6.0)	9.0 ^b (3.5)	8.4 ^b (2.5)	9.1 ^b (4.6)
CTQ-physical abuse	11.1 ^a (6.3)	5.9 ^b (1.2)	5.2 ^b (0.6)	6.5 ^b (2.0)
CTQ-physical neglect	8.6 ^a (3.6)	6.1 ^b (1.9)	6.1 ^b (1.9)	5.8 ^b (1.3)
CTQ-sexual abuse	9.9 ^a (7.4)	5.8 ^b (2.3)	5.1 ^b (0.3)	5.5 ^b (2.1)

Note. TO = transitional objects; SNAP = Schedule for Nonadaptive and Adaptive Personality; ECR = Experiences in Close Relationships Inventory; PBI = Parental Bonding Instrument; CTQ = Childhood Trauma Questionnaire. Figures in parentheses are standard deviations. Means with different superscripts are significantly different.

ple with mild or no attachments to transitional objects (see Table 1 for means). A one-way ANOVA revealed a significant difference between the groups with regard to the number of borderline items endorsed on the SNAP, $F(3, 76) = 16.71, p < .001, \eta^2 = .40$. Post-hoc comparisons revealed that people in the intense attachment group scored significantly higher on the SNAP borderline items scale than did people in any of the other three groups. There were no significant differences between the mild, past, and no attachment groups with respect to the number of SNAP borderline items that they endorsed.

In addition to differences on the BPD items scale, the four study groups also differed with respect to a diagnosis of BPD based on the SNAP, $F(3, 76) = 9.82, p < .001, \eta^2 = .28$. Post-hoc tests revealed that significantly more people from the intense attachment group met criteria for a diagnosis of BPD than was the case for those in the mild, past, or no attachment groups. More specifically, 33% (6/18) of the people in the intense attachment group qualified for a BPD diagnosis. In contrast, no participant in any of the other three groups met SNAP criteria for BPD.

ATTACHMENTS TO TRANSITIONAL OBJECTS AND RELATIONSHIP ANXIETY AND AVOIDANCE

We hypothesized that people with intense attachments to transitional objects would be more anxious in relationships but not be emotionally avoidant in relationships. These predictions were supported. One-way ANOVAs revealed that the groups were significantly different on the ECR measure of anxiety, $F(3, 76) = 6.2, p = .001, \eta^2 = .20$, but not on the ECR measure of avoidance, $F(3, 76) = .68, ns$.

Follow-up Tukey HSD comparisons revealed that participants in the intense attachment group scored significantly higher ($p < .05$) on relationship anxiety than did participants in the other three groups (see Table 1). The mild, past, and no attachment groups did not differ significantly with regard to scores on relationship anxiety.

ATTACHMENT TO TRANSITIONAL OBJECTS AND EARLY RELATIONSHIPS WITH CAREGIVERS

We expected that adults with more intense attachments to transitional objects would rate their early caregivers as less supportive and caring. Consistent with this, two one-way ANOVAs indicated that there were significant differences between the groups on PBI ratings of parental Care, $F(3, 76) = 4.35, p = .007, \eta^2 = .15$, and parental Overprotection/control, $F(3, 79) = 3.08, p = .032, \eta^2 = .11$.

Post-hoc tests indicated that people in the intense attachment group rated their caregivers (typically their mothers) significantly lower on the Care dimension of the PBI than did people in the mild, past, and no attachment groups (see Table 1 for means). As before the mild, past, and no attachment groups did not differ significantly on the parental care rating of the PBI.

Participants in the intense attachment group also tended to rate their caregivers as more controlling than did participants in the other groups. However, post-hoc comparisons revealed that the intense attachment group only differed significantly from the mild attachment group for this measure (see Table 1). The mild, past, and no attachment groups did not differ significantly on their ratings of parental Overprotection/control on the PBI.

TRANSITIONAL OBJECT ATTACHMENT AND EXPERIENCES OF CHILDHOOD TRAUMA

Finally, we hypothesized that attachment to transitional objects would be related to childhood experiences of abuse and neglect. A series of one-way ANOVAs using the subscales of the CTQ revealed significant between-group differences for total trauma rating, $F(3, 76) = 15.0, p < .001, \eta^2 = .37$, as well as for emotional abuse, $F(3, 76) = 9.99, p < .001, \eta^2 = .28$, physical abuse, $F(3, 76) = 12.00, p < .001, \eta^2 = .32$, sexual abuse, $F(3, 76) = 5.88, p = .001, \eta^2 = .19$, emotional neglect, $F(3, 76) = 6.98, p < .001, \eta^2 = .22$, and physical neglect, $F(3, 76) = 6.04, p = .001, \eta^2 = .19$. Post-hoc Tukey HSD analyses showed that the intense group scored significantly higher than the mild, past, and no attachment groups on all measures of childhood trauma, including total trauma (see Table 1 for means). The mild, past, and no attachment groups did not differ significantly on any of the CTQ childhood trauma scales.

HOW SPECIFIC IS THE ASSOCIATION BETWEEN TRANSITIONAL OBJECT ATTACHMENT AND BPD?

Our findings demonstrate that an intense attachment to transitional objects in adulthood is associated with BPD. People with intense attachments to transitional objects also report more problematic early relationships with caregivers and more childhood trauma—both of which are thought to be implicated in the development of BPD. Nonetheless, the extent to which extreme transitional object attachment is specific to BPD versus other forms of personality pathology warrants some consideration.

In addition to assessing BPD, the SNAP has subscales that assess characteristics of 9 other *DSM* personality disorders. In a series of exploratory analyses, we used *t*-tests to examine the association between attachment to transitional objects and these personality disorders as well as to BPD. To simplify the analysis we first created two new participant groupings by collapsing the mild or past attachments groups into one single group ($n = 62$). These participants were then compared to the intense attachment group ($n = 18$) on SNAP item scales that measured 10 different personality disorders (including BPD). As shown in Table 2, as well as the expected difference on the BPD item scale, these analyses also revealed significant between-group differences on the SNAP scales that measured paranoid, schizotypal, antisocial, narcissistic, and dependent PD.

The findings thus raised the question of whether personality traits other than those associated with BPD might be more predictive of strong attachments to transitional objects. To address this issue we entered item scale scores for these six personality disorders into a forward selection logistic regression analysis where the dependent variable was transitional object attachment (intense versus not intense). Score on the BPD item scale was the first and only variable selected to enter the model ($B = .431$, $SE = .107$, $Wald = 16.317$, $df = 1$, $p < .000$). With BPD score entered, the model cor-

TABLE 2. Intense Transitional Object Attachment and Personality Disorders

SNAP PD Item Scale	No Intense Attachment	Intense Attachment	<i>t</i> (78)	<i>p</i>
	<i>N</i> = 62	<i>N</i> = 18		
Paranoid	6.53 (4.8)	10.94 (5.4)	3.34	.001
Schizoid	4.44 (2.7)	4.94 (3.2)	0.66	.508
Schizotypal	6.45 (3.7)	10.61 (6.1)	2.73	.013
Antisocial	6.06 (3.2)	9.44 (5.3)	2.58	.017
Histrionic	8.77 (3.7)	10.7 (4.4)	1.90	.061
Narcissistic	8.32 (3.5)	11.1 (4.3)	2.84	.006
Avoidant	7.22 (4.1)	9.10 (4.1)	1.68	.104
Dependent	5.63 (3.1)	8.72 (4.4)	3.35	.001
Obsessive-Compulsive	10.53 (3.4)	11.61 (3.9)	1.14	.258
Borderline	6.18 (3.0)	13.17 (5.4)	7.16	.000

Note. SNAP = Schedule for Nonadaptive and Adaptive Personality. Figures in parentheses are standard deviations.

rectly classified 95.2% of those who were intensely attached to transitional objects (specificity) and 55.6% of those who were not (sensitivity), for an overall correct classification rate of 86.2%. The odds ratio indicated that each 1 point increase in the BPD score increased the odds of having an intense attachment to transitional objects by a factor of 1.54.

DISCUSSION

This is the first study to demonstrate a link between transitional objects and borderline pathology in a nonclinical sample of community residents. As hypothesized, adults with intense emotional attachments to stuffed animals or other transitional objects scored higher on measures of borderline pathology than did adults with mild or no emotional attachments to transitional objects. Those with intense attachments to transitional objects also reported less early parental care, more controlling caregivers, more relationship anxiety, and more experiences of childhood trauma than did comparison participants. Overall, the findings are consistent with the notion that problems in early attachment relationships may be associated with later relationship problems and developmentally inappropriate attachments to transitional objects.

Importantly, people who were only mildly attached to their transitional objects in adulthood did not differ from people who had past or no adult attachments to transitional objects. This suggests that the presence of a transitional object in adulthood is not in itself problematic. Instead, it is the degree of reliance on these transitional objects that is indicative of a broader array of difficulties. Our findings suggest that heavy emotional reliance on transitional objects in adulthood may serve as an indicator of underlying pathology, specifically BPD traits.

There were significant differences between the groups on several of the SNAP psychopathology scales. This may be due, in part, to the fact that people with borderline traits often have a large number of comorbid diagnoses (Hooley & St. Germain, 2008; Zanarini et al., 1998; Zimmerman & Mattia, 1999). It may also be due to an overlap in some of the items for the various diagnostic scales (Clark, 1993). However, the results of a regression analysis suggested that an intense attachment to transitional objects was especially linked to BPD, even when characteristics associated with other personality disorders were taken into account.

Our findings concerning transitional object attachment and BPD are of additional interest in light of the reported link between dissociation and attachment to companion animals. In one study Brown and Katcher (1997) found a correlation of $r = .24$ between score on the Dissociative Experiences Scale (Bernstein & Putnam, 1986) and pet attachment. In another investigation involving 113 veterinary technician students, the correlation was $r = .37$ (Brown & Katcher, 2001). Relevant here is that, within the *DSM*, dissociation is a symptom of BPD. In future research it might be advantageous to explore the links between BPD and attachment to pets,

considering also the specific role of dissociation. Those interested in the link between pet attachment and dissociation might also consider the role that BPD might play in this relationship.

One limitation of the current study is that the sample included relatively few male participants. However, subsequent analyses confirmed that gender was not a variable that was significantly associated with any of the measures we describe. Another limitation is that all measures relied on self-report and we did not verify the diagnosis of BPD with a clinical interview. Participants were classified into the study groups based on their self-descriptions as well as on their responses to an interview created specifically for this study. In practice, however, classification of participants into the different study groups was quite straightforward. Although we did not assess the reliability of group assignment, findings from the questionnaire validate our approach insofar as we were able to link intense current attachments to transitional objects to borderline pathology as well as to problems in current and past relationships. It is also noteworthy that 33% of the intensely attached group met criteria for BPD based on the SNAP. In sharp contrast, *no* subject from any of the other study groups met criteria for a diagnosis of BPD.

Overall our findings suggest that people who, in adulthood, have intense emotional attachments to stuffed animals and other transitional objects are likely to report that they have experienced chaotic, abusive, and traumatic childhoods in combination with a lack of maternal care. They are also likely to show evidence of BPD. Problems in early attachment relationships may make it difficult for these people to find and maintain healthy and emotionally supportive relationships. These early experiences may also create an emotional void that transitional objects are called upon to fill. Whether reliance on transitional objects is beneficial or problematic with regard to the clinical course of diagnosed BPD is an issue that might warrant future attention.

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