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## **A controlled study of Hostile-Helpless states of mind among borderline and dysthymic women**

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### **Abstract**

The aim of this study was to determine whether women with borderline personality disorder (BPD) are more likely than those with dysthymia to manifest contradictory Hostile-Helpless (HH) states of mind. A reliable rater blind to diagnosis evaluated features of such mental representations in transcripts of Adult Attachment Interviews from 12 women with BPD and 11 women with dysthymia of similar socioeconomic status (SES), all awaiting psychotherapy. In keeping with three hierarchical (non-independent) a priori predictions regarding the mental representations of women with BPD, the results were that (a) all those with BPD, compared with half the group with dysthymia, displayed HH states of mind; (b) those with BPD manifested a significantly higher frequency of globally devaluing representations; and (c) they exhibited a strong trend toward identifying with the devalued hostile caregiver (58% BPD vs. 18% dysthymic). In addition, significantly more BPD than dysthymic patients made reference to controlling behavior towards attachment figures in childhood. These findings offer fresh insights into the nature of BPD and extend previous evidence concerning affected individuals' patterns of thinking and feeling about childhood attachment figures.

**Keywords:** *Borderline personality disorder, attachment, identification, mental representation, Hostile-Helpless*

### **Introduction**

One of the most challenging tasks facing psychiatry is to understand the nature of personality disorder. We seem to be a long way from determining the etiology and pathogenesis of the conditions that fall under this notoriously ill-defined nosological category. The aim of the present paper is to elucidate one relatively clearly demarcated syndrome, that of borderline personality disorder (BPD), through a novel approach to evaluating Adult Attachment Interviews (AAI; George, Kaplan, & Main, 1985). This approach focuses upon qualities of narrative that convey Hostile-Helpless (HH) states of mind in relation to childhood attachment figures (Lyons-Ruth, Yellin, Melnick, & Atwood, 2005).

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*Nature and origins of borderline personality disorder*

There are good reasons for investigating BPD from this point of view. According to DSM-IV, individuals are said to have BPD when they meet five out of nine diagnostic criteria: a pattern of intense, unstable relationships; impulsiveness in at least two areas that are potentially self-damaging; affective instability; inappropriate, intense anger or lack of control of anger; recurrent suicidal threats or self-mutilating behavior; marked and persistent identity disturbance; chronic feelings of emptiness or boredom; frantic efforts to avoid real or imagined abandonment, and transient paranoid or dissociative symptoms. It is far from self-evident that, defined in this way, the syndrome of BPD should be associated with any particular forms of mental representation concerning important relationships. However, there is evidence that childhood experiences (and plausibly, current ways of thinking, feeling, and relating to others that result from such experiences) play a role in its pathogenesis.

There are, of course, a number of complementary perspectives and competing hypotheses concerning the appropriate way to characterize the nature and origins of BPD. For example, there is tentative evidence that temperamental factors such as impulsive aggression and affective instability may act as risk factors for the disorder (e.g. Posner et al., 2003). Although a number of studies have identified familial aggregation of BPD (Silverman et al., 1991; White, Gunderson, Zanarini, & Hudson, 2003, for review), there is, as Posner et al. (2003, p. 1102) conclude, “currently no strong evidence that BPD is heritable.” Attempts to conceptualize the underlying pathology in terms of a biological model of affective disorder have remained speculative (Boutros, Torello, & McGlashan, 2003; Juengling et al. 2003). Therefore it is timely to consider whether there might be another way to capture essential features of borderline psychopathology from a developmental perspective, through a focus upon the nature and implications of affected individuals’ experiences and the mental representations of relationships related to those experiences.

Retrospective self-reports provide highly suggestive evidence in this regard. There are now a number of studies that have indicated how patients with BPD often describe their early childhoods as characterized by sexual, physical, or verbal abuse (Bryer, Nelson, Miller, & Krol, 1987; Herman, Perry, & van der Kolk, 1989; Westen, Ludolph, Misle, Ruffins, & Block, 1990; Zanarini, Frankenburg, & Reich, 2000). Childhood sexual abuse appears to be a strong predictor of symptom severity (Zanarini, Young, & Frankenburg, 2002) but a non-specific predictor of the development of BPD versus other personality disorders (Paris, Zweig-Frank, & Guzder, 1994; Zanarini et al., 2000). Individuals with BPD report early family environments in which they experienced emotional neglect from both parents, and portray caregivers who denied the validity of their thoughts and feelings, were emotionally withdrawn and inconsistent, and either failed to protect them or were overcontrolling (Patrick, Hobson, Castle, Howard, & Maughan, 1994; Zanarini et al., 1997, 2000; Zweig-Frank & Paris, 1991). Early separations are also reported as part of this caregiving constellation (Bandelow, Krause, Wedekind, Broocks, Hajak, & Ruther, 2005; Reich & Zanarini, 2001).

A recent attempt to disentangle the relative contributions of these intercorrelated variables concluded that family environments, parental psychopathology, and early abuse all independently predicted clinical features of BPD, and that family environment mediated the relations between early childhood abuse and these clinical features (Bradley, Jenei, & Westen, 2005). More direct evidence regarding the role of family environment is now emerging from prospective longitudinal studies. As early as the first 2 years of life, deviations in observed parent–child relatedness are predictive of the prevalence of BPD features 19 years later (Lyons-Ruth, Holmes, & Hennighausen, 2005).

*Attachment representations of the BPD patient*

What might this mean for affected individuals' memories and/or construals of attachment relationships, or what is often termed their "mental representations"? Some of the most persuasive evidence has come from controlled studies of patients with BPD that have employed the AAI (George et al., 1985). The first of these studies, by Patrick et al. (1994), yielded evidence that affected women are frequently enmeshed in their attitudes to attachment figures, often "confused, fearful, and overwhelmed" in relation to traumatic aspects of attachment-related experiences, and more likely to be "unresolved" and disoriented with respect to childhood experiences of trauma and loss than are women experiencing dysthymia. These findings are largely in keeping with those from subsequent studies (Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004; Barone, 2003; Fonagy et al., 1996).

A complementary picture has emerged from BPD patients' utterances and behavior in psychotherapy assessment interviews (Hobson, Patrick, & Valentine, 1998), as well as from their responses to projective and other psychological tests (Bell, Billington, & Cicchetti, 1988; Nigg et al., 1991). In these assessments, they respond as though they expect relationships to involve untrustworthy and potentially threatening figures. When compared with women with depression or dysthymia, they imbue relationship representations with malevolence (Nigg, Lohr, Westen, Gold, & Silk, 1992). More often than patients with other personality disorders, they endorse beliefs that they will be hurt or abandoned by others on whom they depend (Butler, Brown, Beck, & Grisham, 2002).

Such findings highlight the need to provide an account of the psychological mechanisms through which adverse childhood experiences might influence a person's subsequent social and emotional functioning to increase the risk of BPD. One approach consistent with current models of neural functioning (Edelman, 1987; Freeman, 1995) has been to consider how mental representations of relations between self and others might account for continuities in social experience and behavior from early to later phases in life. Such mental representations can be described either as the "internal object relations" posited by psychoanalysis or as the "internal working models" described in attachment theory (Bowlby, 1980; Greenberg & Mitchell, 1983). For example, it is proposed that in the absence of sensitive caregiving early in life, an individual may develop particular types of unintegrated idealized and denigrated representations of others and, through *identifying with* the figures-as-represented, assume their characteristics. Such mental representations may color a person's experiences of other people and the self, and also shape his or her unstable and affectively turbulent interpersonal relations.

With this developmental perspective in mind, it appears that one pattern of early relatedness that may have special relevance for adult BPD is disorganized attachment in infancy. Attachment research has provided evidence that when parents display frightened, frightening, or otherwise disrupted forms of affective communication with their infants, the infants may fail to develop an organized strategy for achieving comfort from their caregivers and instead show contradictory and disorganized approach-avoidance behavior toward the parent (Lyons-Ruth, Bronfman, & Parsons, 1999; Schuengel, Bakermans-Kranenburg, & van IJzendoorn, 1999). Recently, infants of mothers with BPD have also been reported to display a high prevalence of disorganized attachment (80%) (Hobson, Patrick, Crandell, Garcia-Perez, & Lee, 2005). Other studies of infants with disorganized attachments indicate that by 3–5 years old, many previously disorganized infants reorganize their attachment behaviors into either a controlling–punitive attachment pattern (hostile or humiliating behavior towards parent) or a controlling–caregiving pattern (helping,

protecting, worrying about the parent; Main, Kaplan, & Cassidy, 1985; NICHD Early Child Care Research Network, 2001; Wartner, Grossmann, Fremmer-Bombik, & Suess, 1994). Such controlling patterns are thought to serve the function of maintaining the attention and involvement of an otherwise emotionally distanced caregiver. If such punitive and caregiving attachment strategies were sustained into adulthood, they might result in the intense, conflictual, and often coercive patterns of relatedness observed among borderline patients. Consistent with this proposal, research suggests that many features of BPD, as assessed by behavioral symptomatology, initially appear during childhood and adolescence (Reich & Zanarini, 2001).

#### *Hostile-Helpless states of mind and borderline personality disorder*

In the present study, we employed a recently developed system to evaluate participants' HH states of mind regarding attachment as manifest in transcripts from the AAI (George et al., 1985). These transcripts had been gathered as part of a previous study of the attachment representations of BPD patients and in the earlier study had been coded using the Main and Goldwyn (1991) coding system (Patrick et al., 1994). The HH coding system differs substantially from the Main, Goldwyn, and Hesse (1985–2005) system for classifying Unresolved states of mind. The unresolved coding which focuses on lapses in reasoning or narrative structure when discussing loss or trauma as the primary indicators of a disorganized adult state of mind. The HH measure, in contrast, does not address how loss or trauma is discussed, but instead assesses the extent to which a person mentally represents attachment figures in contradictory and malevolent ways and also appears to assume (identify with) the characteristics of these figures. As discussed more thoroughly in an earlier paper (Lyons-Ruth et al., 2005), the HH coding system was first developed with the hypothesis that these codes would converge with and provide a more developed theoretical framework for understanding the rare AAI classifications seen mostly among clinical samples, including the Dismissing Derogating (Ds2), Fearfully Preoccupied (E3) and Cannot Classify (CC) categories. Contrary to expectations, the HH codes did not overlap substantially with any of these classifications in initial validity work. There are a number of reasons that this could have occurred, including the lack of demonstrated coder reliability for these rare AAI categories that may contribute to the variable prevalence of the categories across studies.

Recent work has demonstrated that HH representations on the AAI are associated with parental histories of trauma, but not loss (Finger, 2006; Lyons-Ruth, Yellin, Melnick, & Atwood, 2003). Such HH representations also occur more frequently among mothers who display disrupted forms of affective communication with their infants, and disrupted communication mediates the significant relation between mothers' HH attachment representations and their infants' disorganized attachment strategies (Lyons-Ruth et al., 2005). Finally, in previous work, HH representations on the AAI were unrelated to indicators of Unresolved loss or trauma, as coded by the standard Main, Goldwyn, and Hesse (1985–2005) system (Finger, 2006; Lyons-Ruth et al., 2005). The reader is referred to Lyons-Ruth et al. (2005) for more extended description and relevant findings regarding how the criteria for HH states of mind differ from the criteria for organized forms of dismissing and preoccupied states of mind and for Unresolved states of mind.

Drawing on ideas from trauma theory, attachment theory, and psychoanalytic practice, we expected that the interpersonal psychopathology of borderline patients would correspond with a particular style of mental organization characterized by contradictory idealized and denigrated representations of significant attachment figures. This prediction is in keeping

with the clinically observed tendency of such patients to segregate feelings and to switch (often abruptly) between contrasting positive and negative attitudes towards people, as well as their propensity to experience others as untrustworthy and malevolent (e.g., Butler et al., 2002). For these reasons, HH mental representations were predicted to be significantly more characteristic of borderline than dysthymic individuals. The hypothesis was not that high HH ratings would be specific to the group of women with BPD. On the contrary, we anticipated that a subgroup of women with dysthymia would also manifest features of HH mental functioning, because punitive and self-punitive attitudes are a well-established feature of certain forms of depression, and possibly correspond with mental representations of figures embodying these attitudes (Carver & Ganellen, 1983; Freud, 1917/1957). Therefore our group comparison represents a stringent test that such mental representations are even more prevalent among borderline individuals than among patients with dysthymia.

We derived two more specific predictions: first, individuals with BPD would be more likely to represent attachment figures in globally devalued terms; and second, yet more specifically, they would be more likely than women with dysthymia to give evidence of being identified with malevolent figures-as-represented by conveying a close alignment between the qualities of such figures and themselves. As a more exploratory investigation, we assessed whether women with BPD were more likely to indicate that in childhood they engaged in punitive or caregiving forms of controlling relations with attachment figures. This assessment holds special interest from a developmental perspective because of the established connection between controlling behavior in childhood and disorganized attachment strategies in infancy.

## Method

### *Participants*

Participants were 12 borderline and 11 dysthymic adult female patients, identified from the outpatient psychotherapy waiting list of a major teaching hospital. Although the original sample included another person with dysthymia, procedural problems meant that her Adult Attachment Interview could not be coded with the current measures. Categorical diagnoses were assigned based on extensive psychiatric case notes employing as diagnostic criteria DSM-III-R features of BPD (American Psychiatric Association, 1987; the groups were constituted before DSM-IV had appeared). Diagnoses were assigned without reference to patients' early childhood experiences or relationships with their parents. Because of the focus on early attachment relationships, individuals with a history of death of both parents or prolonged separation (e.g., fostering or adoption) before the age of 16 were excluded. All borderline patients met at least seven of the eight DSM-III-R diagnostic criteria for BPD, although only five out of eight were required for the diagnosis to be assigned.

Patients in the dysthymic group exhibited none of the eight DSM-III-R borderline characteristics and fulfilled DSM-III-R criteria for dysthymia, namely a chronic disturbance of affect involving a depression of mood extending over a prolonged period of time (at least 2 years) but without evidence of a major depressive episode, hypomania, or superimposed chronic psychotic disorder. Dysthymic women had experienced the same process of psychiatric referral for outpatient psychotherapy as those with BPD. Individuals with any comorbid Axis I diagnosis were excluded from both groups. Borderline and dysthymic groups were comparable on socio-demographic characteristics: BPD group mean age 35 years 2 months (*SD* 8.5), dysthymic group 32 years 4 months (*SD* 6.8); 58% of borderline patients and 55% of dysthymic patients had university degrees; one subject in the borderline group and two in the dysthymic group were in stable co-habiting relationships; three in each

group were classified as Social Class 1 (Registrar General, 1965), four as Social Class 2, three in the borderline, and two in the dysthymic group were in Social Class 3, and in each group, one was Social Class 4 and one was Social Class 5.

### *Procedure*

Each subject was administered the Adult Attachment Interview, approximately an hour in length, which was tape-recorded and transcribed. Written informed consent was obtained after the procedures had been fully explained to the participants. Interviews were conducted by five clinicians who were blind to diagnosis. Transcripts were coded using the coding system for HH states of mind developed for the Adult Attachment Interview (see *Measures* below). Coders were located in an independent laboratory and were blind to diagnosis.

### *Measures*

*The Beck Depression Inventory* (Beck, 1984) was administered to provide an index of current depression.

*The Adult Attachment Interview* (AAI; George et al., 1985) was developed to elicit a participant's state of mind regarding his or her early attachment experiences. The interview was developed from research on parent–infant attachment relationships (Main et al., 1985). Participants are asked to give adjectives describing the relationship with each parent; to back these up with specific memories; to recall specific experiences of parental responsiveness to upset, accidents, and illness; to discuss incidents of loss or trauma; and to reflect on how relationships with parents had changed over time and how they had influenced their adult personalities.

*The occurrence of physical or sexual abuse to age 16* was recorded from the Adult Attachment Interview. Physical abuse severe enough to leave marks on the child and any kind of sexual activity with an adult was counted as abuse.

*The Hostile-Helpless coding system* for the Adult Attachment Interview (Lyons-Ruth, Melnick, Yellin, & Atwood, 1995–2005) has several components. Individuals are classified as having a HH state of mind regarding attachment experiences if they score five or above on a scale for level of HH state of mind (1–9). Transcripts classified HH are characterized by evidence of opposing and globalized “all-good, all-bad” evaluations of central relationships occurring across the interview that are neither discussed nor reconciled by the participant, e.g., “We were friends... We were enemies”; “She was terrible to me... We were very close.” A HH state of mind suggests that the individual has not engaged in reflection adequate to bring these contradictions to a conscious level and achieve a more coherent evaluation of attachment experiences. In the Hostile subtype, at least one attachment figure from childhood is represented in globally negative terms, whereas in the Helpless subtype, hostile affects are less prominent, pervasive feelings of fearfulness are often present, and one or more caregivers are represented as anxious or helpless to the point of abdicating a parental role. Both states of mind can be evident in a single transcript and are viewed as related aspects of a single HH dyadic representational model of self-other relations (Lyons-Ruth, Bronfman, & Atwood, 1999). Scoring for level of HH state of mind is based on the pervasiveness and/or extreme quality of the manifestations of such contradictory evaluations across the interview.

Before a rating is assigned, the transcript is also scored for seven indicators theoretically related to such contradictory states of mind in prior clinical theory and observation (see Lyons-Ruth et al., 2005, for additional background). While there is no simple algorithm

relating these frequencies to a particular scale score, the first two indicators are especially central to the concept of an HH state of mind and would be heavily weighted in assigning a classification. These seven indicators include frequency of *global devaluation of a caregiver*, including actively hostile devaluation and “cool” derogating descriptions; *evidence of identification with a hostile caregiver*, where the participant appears to accept or value similarities between the negatively evaluated attachment figure and the self, even though these similarities may not be explicitly acknowledged; *frequency of indicators of a sense of special unworthiness*, including generalized negative self descriptors and references to feelings of shame or feelings of being undeserving of positive attention; *frequency of references to fearful affect*; *frequency of instances of laughter at pain*, in which the relating of emotionally painful or negative experiences is accompanied by laughter; *evidence of controlling behavior in childhood* when a participant makes reference to having engaged in either controlling–punitive behavior (e.g., punitive, humiliating, dominating behavior towards the parent in childhood) or controlling-caregiving behavior (e.g., helping, protecting, worrying about, or displaying vigilance towards the parent’s needs in childhood); (Cassidy & Marvin, 1991); and *evidence of ruptured attachments*, when a participant refers to no longer having contact with one or more nuclear family members through a deliberate decision to terminate contact. Table I provides examples of these codes, and additional detail is available elsewhere describing the classification criteria and detailing how this coding system differs from and extends the Main et al. (1985–2005) coding system for the AAI (Lyons-Ruth et al., 1995–2005, 2003, 2005).

Transcripts were coded blind to all other data. Intraclass or kappa coefficients on 15 randomly selected transcripts were as follows: scaled score for HH state of mind  $r_1 = .83$ , HH classification  $K = .86$ ; global devaluation of a caregiver  $r_1 = .77$ ; identification with a hostile caregiver  $r_1 = .80$ ; sense of self as bad  $r_1 = .85$ ; recurrent references to fearful affect  $r_1 = .70$ ; recurrent laughter at pain  $r_1 = .90$ ; ruptured attachments in adulthood  $r_1 = .71$ ; controlling/caregiving behaviors in childhood  $r_1 = .85$ ; controlling/punitive behaviors in childhood  $r_1 = .83$ .

## Results

### *Abuse history and current mood state*

Borderline and dysthymic groups did not differ in incidence of abuse, with 50% and 45% reporting abuse, respectively. Nor did they differ in current mood state at the time of the interviews: mean scores on the Beck Depression Inventory were in the moderately depressed range (borderline group:  $M = 21.6$ ,  $SD = 6.9$ ; dysthymic group:  $M = 19.9$ ,  $SD = 8.9$ ).

### *Hostile-Helpless states of mind among borderline and dysthymic women*

Group differences were assessed by two-tailed tests using  $F$ -tests for frequency data and Mann-Whitney tests for ordinal data. Fisher’s Exact test was used to assess group differences for dichotomous (presence/absence) codes. The data that relate to our predictions are presented by individual participants in Table II. The principal prediction was that an HH state of mind would be significantly more prevalent among participants with BPD than those with dysthymia. In keeping with this prediction, 100% of the borderline group were rated over the threshold for an HH state of mind, whereas this was the case for 55% of the dysthymic group, Fisher’s Exact  $p = .01$ ,  $\phi = .55^1$ . On the ratings for overall level of HH state of mind, women with BPD scored  $M = 6.7$  ( $SD = 1.1$ ), and those with



Table I. Examples of Hostile-Helpless codes.

**A. Global Devaluation of Caregiver**

"I even feel contempt. I don't hate them any more, I used to hate them, I used to daydream what I'd do to them, how I'd kill them, but she is not worth it."

"Tyrannical. He was horrible to us."

**B. Identification with a Hostile Caregiver<sup>1</sup>**

"... and I used to shout at them in the same way that people I felt threatened by used to tell me off like school teachers and things, and my mother. I use the same tone and say the same sort of things."

"... it's very seldom that I get angry, which is the same as my father, but when I do get angry, I fly off the handle, I just go totally AWOL type uurrgh, which again is exactly the same as my father, because my father never expresses his anger to start with, he never says 'you're making me cross' he lets it go and go and go and go until you've made him so furious that he has, he loses control and that's exactly the same as I've got now..."

**C. Sense of Special Unworthiness**

"... it was my fault that she was sick and so, when she got sick and got old I felt it was my fault, you know, it was all my fault that she was just getting old, you know."

"... it always made me feel like a bit of an outsider, the troublemaker of the family."

**D. Repeated References to Fearful Affect**

"... so there was a feeling around all the time that something dreadful was going to happen at any minute."

"... I, kind of, am terrified of what is round the next corner really..."

**E. Laughter at Pain**

"... then I was 9 when I took my first overdose [*you were nine when you took an overdose?*]" (laughs)

"... you know, I could have put in a cardboard substitute for myself and nobody would really have noticed."

(laughs)

**F. References to Controlling-Punitive Behavior towards Caregiver in Childhood**

"I used to say some hateful things to her... and taunt her... (*what would you say?*) That she deserved what he was doing to her..."

"I would push them to a certain point... they'd start to break... because I was very, like, insolent and cheeky and demanding."

**G. References to Controlling-Caregiving Behavior towards Caregiver in Childhood**

"... I think the only way I could experience closeness was to take care of her. Get her tea when she came in from doing this work and go out with her and help her..."

"... I was aware that I was, kind of, responsible for her and I used to... if I was at school I used to be worrying was she alright."

**H. Ruptured Attachment with Family Member**

"I went through quite a long period um... a few years, about four years, five years ago having no contact whatsoever with my parents..."

"I mean, I don't speak to him now. I don't want to have anything to do with him at all."

<sup>1</sup>Identification with a hostile caregiver is usually coded not for a single passage but for the combination of global devaluation and evidence of identification over the entire interview.

dysthymia scored  $M=5.0$  ( $SD$  1.95), Mann Whitney  $U=34.00$ ,  $p < .04$ , Kendall's  $\tau = .48$ .

The second prediction, which focused upon a specific component of the H-H rating scheme, was that the borderline group would display a greater frequency of globally devaluing representations of caregivers. In this respect, there was a highly significant group difference: BPD  $M=2.6$  ( $SD$  .6); dysthymic  $M=.45$  ( $SD$  .82);  $F(1,21) = 16.23$ ,  $p < .001$ ,  $\eta^2 = .66$ <sup>1</sup>. In fact, this aspect of the narratives proved to be most differentiating of the diagnostic groups, with 92% of borderline patients but only 27% of dysthymics evidencing devaluation of caregivers, Fisher's Exact  $p = .003$ ,  $\phi = .66$ .

The third prediction, also not independent of the first, concerned an even more specific aspect of the H-H ratings. We predicted that compared with dysthymic patients, those with BPD would more often make reference to identification with globally devalued hostile

Table II. Data for borderline and dysthymic individuals on indicators of Hostile-Helpless states of mind.

Participants in each group	Level of Hostile-Helpless state of Mind <sup>1</sup>		No. of globally devaluing references to caregiver		No. of references to identification with hostile caregiver	
	BPD	Dysthymic	BPD	Dysthymic	BPD	Dysthymic
S1	7	8	3	1	1	2
S2	7	7	2	2	2	2
S3	7	7	5	2	0	0
S4	7	6	4	0	2	0
S5	7	6	3	0	1	0
S6	6	5	0	0	0	0
S7	6	4	1	0	1	0
S8	6	4	2	0	3	0
S9	6	3	2	0	1	0
S10	6	3	2	0	0	0
S11	5	2	1	0	0	0
S12	5	–	5	–	0	–

<sup>1</sup>Max score = 9; individuals with scores  $\geq 5$  are classified as Hostile-Helpless.

Note: The measures are not independent (see *measures* for hierarchical scheme of rating).

caregivers. This group difference did not reach significance, Fisher's Exact  $p = .09$ ,  $\phi = .41$ . However, the direction of the results was as predicted, and the effect size was substantial: 58% of women with BPD but only 18% of those with dysthymia made reference to one or more identifications with a hostile caregiver. Finally, BPD patients were significantly more likely to report evidence that they had adopted a controlling (punitive or caregiving) attachment strategy toward parents in childhood. Seventy-five percent of women with BPD but only 27% of dysthymic women described controlling behavior toward parents, Fisher's Exact  $p = .04$ ,  $\phi = .48$ . Among the BPD group, 42% reported punitive behavior and 50% reported caregiving behavior (two subjects reported both). Eighteen percent of dysthymic women reported each subtype (one subject reported both). Other aspects of the transcripts, including references to fearful affects, special sense of unworthiness, laughter at pain, and ruptured attachments, were not significantly different between the two groups. However, 42% of BPD patients but only 9% of dysthymic patients had no contact with at least one nuclear family member, and the effect size for such ruptured attachments was sizeable,  $\phi = .37$ , indicating that this finding warrants further study in larger samples.

#### *Hostile-Helpless state of mind and Unresolved (U) or Fearfully Preoccupied (E3) AAI classifications*

As noted in the introduction, the standard Main and Goldwyn (1991) AAI classifications for this sample were previously reported in Patrick et al. (1994). Given this previous report, exploratory/descriptive analyses examined the extent to which the HH codes overlapped with or extended these previous findings regarding attachment states of mind among borderline and dysthymic women. Descriptively, in the total sample of both dysthymic and BPD women, 44% were classified Unresolved (U), 44% Fearfully Preoccupied (E3), and 78% Hostile-Helpless (HH). HH Classification was moderately related to the other two classifications, U by HH  $\phi = .46$ , E3 by HH  $\phi = .46$ , while the U and E3 classifications

were strongly related to one another,  $\phi = .65$ . However, these associations among the classifications were due to the associations of all three features with borderline disturbances, rather than being a characteristic of the coding systems themselves. Among borderline women 75% were classified Unresolved, 83% were classified Fearfully Preoccupied, and 100% were classified HH, while there was less association among these categories among dysthymic women, with none classified Fearfully Preoccupied, 17% classified Unresolved, and 55% classified Hostile-Helpless. This lack of association between HH and Unresolved or Fearfully Preoccupied classifications in the dysthymic group is consistent with previous work (Finger, 2006; Lyons-Ruth et al., 2005).

None of the specific HH indicator codes, except references to a special sense of unworthiness, were associated with Unresolved status. Overall then, the HH codes, including global devaluation of a caregiver and identification with a hostile caregiver, appeared to be indexing aspects of representations of caregivers that were relatively independent of the lapses in discourse related to loss or trauma that lead to categorization as Unresolved. These latter findings are consistent with Lyons-Ruth et al.'s (2005) findings of a lack of overlap between Unresolved classification and HH classification in a less severely disturbed sample of low-income mothers and infants and with similar findings by Finger (2006) in a case-control sample of substance-abusing women.

With regard to the relations between HH states of mind and Fearfully Preoccupied states of mind, two specific links emerged. Fearfully Preoccupied states of mind were significantly associated with references to caregiving behavior in childhood [caregiving Fisher's Exact  $p = .04$ ,  $\phi = .46$ ]. Sixty percent of Fearfully Preoccupied (E3) women (all E3 were also BPD) made reference to caregiving behavior in childhood, while 18% of dysthymic women did so and none of the non-Fearfully Preoccupied BPD women did so. There was no relation between Fearfully Preoccupied states of mind and references to punitive behavior in childhood [punitive Fisher's Exact  $p = 1.00$ ]. In addition, Fearful Preoccupation was related to globally devaluing references to the caregiver during the interview,  $\eta = .62$ ,  $p < .01$ . So Fearfully Preoccupied women described caregiving behavior toward the parent in childhood but in their present discourse made devaluing comments about the same caregiver, comments that were somewhat contradictory to the solicitousness described in childhood. Such unreflected-upon contradictions in orientation towards attachment figures are important aspects of an HH state of mind. Furthermore, the indication that Fearfully Preoccupied adults are likely to have employed caregiving forms of controlling behavior in childhood adds a new developmental dimension to our understanding of the Fearfully Preoccupied classification and deserves follow up in future work. No other relations between Fearful Preoccupation and HH codes were significant.

## Discussion

According to blind ratings of transcripts from AAI, women with BPD displayed a higher prevalence of HH states of mind than did a matched group of participants with dysthymia. Every one of the women with the borderline diagnosis scored above threshold on ratings for this form of mental representation. It was expected that a number of patients with dysthymia would also have had to deal with troubled representations of significant attachment figures, and 55% of women with dysthymia were also categorized as HH. As anticipated, therefore, HH states of mind were not specifically associated with a single diagnosis, but were especially prevalent among, and perhaps characteristic of, women with BPD.

We had also predicted that the mental representations of women with BPD would be characterized by portrayals of caregivers in hostile and devalued terms, and the tendency to devalue caregivers proved to be the characteristic that most strongly differentiated the two groups. There was also a strong trend for BPD women to give evidence of identification with such figures-as-represented, in that 58% of BPD women also conveyed a sense of being like the devalued caregiver in the same ways that were being devalued elsewhere in the transcript. Finally, a greater number of participants with BPD conveyed that in childhood they had engaged in punitive or caregiving forms of controlling behavior toward parents, stances that we have reasoned elsewhere may represent childhood precursors of adult hostile and helpless states of mind, respectively (Lyons-Ruth, Melnick, Bronfman, Sherry, & Llanas, 2004).

There are several methodological limitations of the study. The first concerns the small group sizes. Second, participants were recruited from referrals to a psychotherapy clinic and were probably not representative of the broader range of individuals with the diagnosis of BPD who do not seek outpatient treatment. Finally, BPD and dysthymic patients were screened for comorbid Axis I and II conditions. These considerations limit how far one can generalize the findings to all women who satisfy criteria for these diagnoses, especially those with comorbidity. As noted earlier, the presence of comorbidity presents a constant dilemma in the design of psychiatric studies. Because of the small sample size here, we opted to screen out comorbidity, even at the risk of a lack of generalizability, so that any results could be confidently attributed to the personality diagnosis. Further work is needed to evaluate the degree to which the present findings are generalizable to the broader group of women with BPD comorbid for major depression, post-traumatic stress disorder, or substance abuse, as well as to BPD women who do not seek treatment. However, when considered alongside the close matching for social status, intellectual achievement, history of trauma, and degree of depression, it becomes all the more striking that significant group differences with substantial effect sizes were found. In particular, the measures of depression not only confirmed that the women with dysthymia were significantly troubled, but also established that group differences in response to the Adult Attachment Interview could not be attributed to the effects of current mood state.

The present results also complement prior evidence that a majority of BPD women display lapses in reasoning or narrative structure on the AAI in relation to themes of trauma or loss, as well as high rates of Fearfully Preoccupied stances (Barone, 2003; Fonagy et al., 1996; Patrick et al., 1994). The co-occurrence of high rates of HH features in the same transcripts indicate that contradictory and devaluing references to primary attachment figures are also prominent features of the narratives of BPD women. These several disturbed features captured by different coding systems in the accounts of borderline women are not redundant because these various AAI classifications are not related to one another in less disordered samples. Instead, the convergence of all three sets of features indicates a pervasive form of disturbance among BPD patients, disturbance that is seen in the unintegrated nature of representations of attachment relationships (HH coding), in lapses in reasoning and narrative structure when discussing loss or trauma (Unresolved coding), and in a preoccupation with traumatic events throughout the transcript (Fearful Preoccupation coding).

New hypotheses also emerged regarding the form of earlier attachment relationships that may be differentially associated with borderline psychopathology. Results highlighted an intriguing relation between borderline psychopathology and references to controlling behavior in childhood, as well as a more specific association between Fearfully Preoccupied states of mind and references to caregiving forms of control. These findings suggested that

some BPD women show overt signs of being identified with the punitive attitudes of hostile caregivers, while others are more explicitly preoccupied with the helpless attitudes of inadequate caregivers. Fearfully Preoccupied borderline women, in particular, may have developed fearful preoccupation not only through exposure to fear-inspiring events, as indexed by the Fearfully Preoccupied classification, but also in relation to the overwhelming task of assuming a parental caregiving role in relation to inadequate and unprotective attachment figures in childhood. The further juxtaposition of global devaluation and references to caregiving behavior among those classified Fearfully Preoccupied points to a particular kind of conflict around unintegrated hostility that is associated with this developmental pathway.

It is notable that borderline patients consistently report high rates of abusive experiences early in life (e.g., Zanarini, Gunderson, Marino, Schwartz, & Frankenburg, 1989), and abusive and neglectful parenting may contribute to the child's development of controlling forms of attachment (Cicchetti & Barnett, 1991). In the current study, women with borderline psychopathology made references to such controlling forms of behavior when they were children. In longitudinal investigations, these controlling attachment stances have been predicted by earlier disorganized attachment strategies in infancy, and infant disorganized strategies are also related to maltreatment (Carlson, Cicchetti, Barnett, & Braunwald, 1989; Main et al., 1985; NICHD Early Child Care Research Network, 2001; Wartner et al., 1994). Disorganized infant attachment strategies are characterized by contradictory approach-avoidance behavior toward a caregiver when under stress and needing comfort. Therefore it is plausible that these contradictory responses in the early attachment relationship may bear a developmental relation to the contradictory caregiving and devaluing references observed in the present work and to the contradictory clinging but mistrustful relational attitudes found to characterize borderline patients (Butler et al., 2002; Hobson et al., 1998).

### *Clinical implications*

It is far from trivial that, in keeping with theoretically-based a priori predictions, individuals with the diagnosis of BPD should be characterized by malevolent representations of attachment figures. Women who were selected on the basis of clinical features such as self-cutting, identity disturbance, intense mood fluctuations, and turbulent relationships proved to be globally devaluing towards their central attachment figures. This provides evidence that there is an important relation between their disorder in self-experience, mood, and current relationships, and the quality of their mental representations of attachment figures. The present results complement evidence such as the self-endorsed relational beliefs of patients with BPD (Butler et al., 2002) and their observed-and-reported experiences of other people in videotaped clinical interviews (Hobson et al., 1998) to suggest that representations of untrustworthy and malevolent figures are consistent features of the syndrome. The presence of HH states of mind does not preclude the possibility that genetic and/or other biologically-based disorders in temperament might contribute to early social experience and to the establishment of certain forms of mental representation. Rather, it brings into question any account of BPD that fails to encompass these attachment-representational features of psychopathology and points to the need for an adequate developmental account of the shaping of mental representations that accompany, and, plausibly, underpin, the social relationships of BPD individuals. Why is it that they are intolerant of separation, fear abandonment, and have an inability to trust and rely on others? Why are their patterns of moment-to-moment relatedness with others so often intense,

conflictual, and unstable? Any adequate response to these questions will entail an account of the development of these individuals' mental representations of interpersonal relations.

Evidence is also accumulating regarding the potential for intergenerational transmission of attachment disturbances related to BPD. For example, previous studies have revealed an elevated prevalence of Unresolved states of mind with respect to trauma and loss in women with BPD (Barone, 2003; Patrick et al., 1994). Meta-analytic review has further confirmed that Unresolved states of mind are associated with disorganized attachment in the next generation (van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999). Disorganized attachment in infancy has also been shown to be related to mothers' HH states of mind; states of mind which the current report also finds more prevalent among BPD women (Lyons-Ruth et al., 2005). Finally, recent studies of mothers with BPD have revealed intrusive insensitivity with their own infants at 2 months and 12 months of age (Crandell, Patrick, & Hobson, 2003; Hobson et al., 2005).

Infants of BPD mothers also show deviations in early relatedness. The 2-month-old infants of BPD mothers, compared to infants of mothers without psychopathology, responded to a "still-face" challenge with increased looking away, dazed looks, and subsequent lowering of affect (Crandell et al., 2003). At 12 months, the infants of BPD mothers showed lowered availability for positive engagement with a stranger and higher rates of disorganized attachment with their mothers when compared with infants of mothers without psychopathology (Hobson, Patrick, Crandell, Perez, & Lee, 2004; Hobson et al., 2005). The convergence of these findings prompts clinical concern about potential transgenerational effects of borderline psychopathology. Further developmental investigations are needed that coordinate measures of adult psychopathology, mental representation, parent–infant interaction, and infant attachment. In addition, more systematic evaluation and family supports for children of women suffering from borderline psychopathology may be indicated.

The most far-reaching clinical implication of this work, then, has to do with the nature of the theoretical/developmental framework needed for conceptualizing and treating borderline psychopathology. Present results add credence to the view that borderline psychopathology is associated with ways of understanding relationships that are pervasively unintegrated and are often imbued with both hostility and helplessness. The findings also implicate a developmental account that includes earlier attempts to punish and/or provide care for adult attachment figures. To develop adequate treatments for this complex disorder, the pervasively unintegrated relational representations of the borderline patient will need to be addressed and translated into treatment strategies that increase the patient's ability to contain, integrate, and thereby modify these recurring and unsatisfying expectations and responses in close relationships. A more developmentally sensitive account of the possible origins of such disturbed and unintegrated expectations of others can help both clinician and patient to organize and make sense of the patient's relational experiences. Much remains to be established about the sources of Hostile-Helpless, Fearfully Preoccupied, and Unresolved states of mind among women with BPD. However, future research efforts should focus not only on the links between childhood adverse events and later manifestations of personality disorder, but also upon social-developmental influences that configure an individual's mental representations of self-other relationships, representations that may correspond with specific forms of relational psychopathology.

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## Note

1 *Phi* is a measure of strength of association for a  $2 \times 2$  table; *eta* is a measure of strength of association for the *F* test.

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