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Attachment Organization, Emotion Regulation, and Expectations of Support in a Clinical Sample of Women With Childhood Abuse Histories

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Despite the consistent documentation of an association between compromised attachment and clinical disorders, there are few empirical studies exploring factors that may mediate this relationship. This study evaluated the potential roles of emotion regulation and social support expectations in linking adult attachment classification and psychiatric impairment in 109 women with a history of childhood abuse and a variety of diagnosed psychiatric disorders. Path analysis confirmed that insecure attachment was associated with psychiatric impairment through the pathways of poor emotion regulation capacities and diminished expectations of support. Results suggest the relevance of attachment theory in understanding the myriad psychiatric outcomes associated with childhood maltreatment and in particular, the focal roles that emotion regulation and interpersonal expectations may play.

Compromised attachment organization in adults has been associated with a range of disorders and clinical symptoms including mood, anxiety, eating, and personality disorders (see Dozier, Stovall-McClough, & Albus, in press; Westen, Nakash, Thomas, & Bradley, 2006). Although this association has been repeatedly demonstrated, there are very few empirical studies identifying factors that may mediate this relationship or explore clinically relevant processes that may relate one to the other. Identifying and characterizing these processes is important as they would lend specificity to the influence of attachment organization on clinical phenomena and more effectively inform treatment intervention and process.

The theory of attachment as developed by Bowlby (1988) describes a process of interaction between an individual and their caregiving environment in which proximity to the caregiver provides a sense of safety and a secure base from which exploration in the larger world can be successfully negotiated. Attachment theory proposes that in a secure relationship, children can turn to the attachment figure during times of danger, stress or novelty, find that the attachment figure is available and responsive and be comforted in a way that allows them to feel better and return to exploration. Over time and with repeated positive experiences, the child internalizes these emotion modulation strategies and develops confidence in the helpfulness of others. Thus, effective adaptation in the context of secure attachment derives from evolving self-generated capacity for emotion regulation interacting with continuing reliance on the support of others when demand exceeds the individual's capacity. On the other hand, when distress is not easily tolerated by a parent and the parent responds to the child in an overly emotional, exaggerated, or chaotic way, the child is likely to internalize an exaggerated sense of his or her own distress as being unmanageable. This may lead a child to overreact to internal cues and hyperactivate the attachment relationship, as is the case in insecure ambivalent/resistant attachments. Alternatively, the child may be made to feel that his or her distress is unreasonable, unwarranted, or overwhelming. Children pushed to deny their distress may develop a distorted sense of self-reliance and emotional fortitude, consistent with an insecure avoidant attachment.

Studies in the developmental literature have charted insecure attachment as associated with compromised emotion and interpersonal regulatory processes in a variety of settings and relationships. It has repeatedly demonstrated an association between insecure attachment and difficulties in emotion regulation such as diminished emotional self awareness, difficulty modulating excitement in emotionally arousing situations, and difficulty recovering from episodes of upset or distress mood liability (e.g., Shields & Cicchetti, 1997). Interpersonal difficulties among maltreated children have included problems with reactive aggression and withdrawal in peer conflict situations (see Weinfeld, Sroufe, Egeland, & Carlson, 1999), as well as with behaviors concerning reliance on others for support. They expect little help under

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stressful circumstances and tend to interpret the ambiguous or even supportive efforts of others as hostile (e.g., Suess, Grossmann, & Sroufe, 1992).

It is widely assumed that the relationship between attachment status and problematic emotion and interpersonal regulatory processes so well described and evidenced in studies of children are also substantiated in studies of adults. However, studies of high risk and clinical populations have focused very specifically on the relationship of attachment to psychopathology (see Dozier et al., in press, for review). These include, for example, the presence of psychopathology such as demonstrated by the MMPI (Pianta, Egeland, & Adam, 1996), fits of anger/derogation (Turton, McGauley, Marin-Avellan, & Hughes, 2001), self-reported depression and eating disorder symptoms (Cole-Detke & Kobak, 1996) or by empirically diagnosed psychiatric disorders such as depression, borderline personality disorder (Fonagy et al., 1996) and posttraumatic stress disorder (Riggs et al., 2007; Stovall-McClough & Cloitre, 2006). The association between insecure attachment and presence of a psychiatric disorder and increased psychiatric symptoms has been interpreted as being related to underlying disturbances in emotional and interpersonal functioning (see Westen et al., 2006). However, the specific nature of these problems has not yet been measured or evaluated in the empirical literature.

In contrast, there is a growing literature demonstrating the relationship between attachment and emotion regulation and social support processes among normative (nonclinical) samples using empirically derived measures of emotion regulation and of social support. Two studies of college students have demonstrated separately that negative mood regulation difficulties (Creasey, 2002) and social support expectations (Larose & Bernier, 2001) mediated the relationship between attachment status and psychological distress. In addition, self-reported measures of attachment and/or romantic styles have been evaluated in the context of a variety of self-report and observer-rated support seeking behaviors and persuasively demonstrate an association between insecure attachment and negative social support perceptions, behaviors, and interpersonal dynamics (e.g., Collins & Feeney, 2000; Ognibene & Collins, 1998). Based on theory, the evidence from the developmental literature and nonclinical adult population studies, we propose that difficulties with negative mood regulation and social support expectations are important specific emotion and interpersonal processes that mediate the relationship between insecure attachment and psychiatric disorders. The purpose of this study was to extend the investigations of the relationships that have been observed in normative samples to a clinical population. The study was comprised of women who have experienced childhood physical and/or sexual abuse and have a diagnosed psychiatric disorder. As noted by others, childhood maltreatment appears to be the single strongest predictor of attachment insecurity and psychological maladjustment in later life (e.g., Riggs et al., 2007), suggesting the clinical and theoretical relevance of this population for study. Moreover, there is evidence that such individuals have problems with negative mood regulation defined by poor ability to modulate and tolerate negative affect (e.g., Cloitre, Scarvalone, & Difede, 1997; Zlotnick, 1997) and interpersonally expect little by way of comfort, reassurance, or reliance on others in times of need (see Briere & Jordan, 2004; Punamäki, Komproe, Qouta, El-Masri, & de Jong, 2005). Notably, these observations parallel those reported about children with histories of maltreatment in the developmental literature.

We have proposed a path model that brings together the observations about the relationship between childhood maltreatment, attachment status, and psychiatric disturbances derived from disparate studies into a single coherent model. Specifically, we tested a path model hypothesizing attachment organization would be related to negative mood regulation and interpersonal expectations of support, and that each of these characteristics would be independent contributors to psychiatric impairment, predicting better outcomes for those with secure as compared to insecure attachment. We included cumulative childhood maltreatment history as a control variable in the model. Although we would expect and tested for a relationship between childhood maltreatment and attachment status, our goal was to determine whether attachment status as a psychological state of mind, independent of reported maltreatment events, exerted an influence on daily functioning and the identified mediators. Given that the members of this sample carry various clinical diagnoses, some thought was given to the selection of a measure that would reflect psychiatric impairment in a uniform way. We selected functional impairment in daily life as our outcome measure for several reasons. First, impairment in functional capacity is a global index of psychopathology that cuts across all disorders and clinical syndromes, and indeed, is a requirement for the diagnosis of any psychiatric disorder (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* [*DSM-IV*]; American Psychiatric Association, 1994). Second, it is conceptually consistent with a basic tenet of attachment theory wherein secure attachment representations are thought to support the individual's capacity to function effectively. Third, it has ecological value in that it reflects the capacity of the individual in day-to-day life across domains such as social, family, and work venues, which are important to the quality of life.

METHOD

Participants

Participants were self-referred as part of a randomized clinical trial for posttraumatic stress disorder (PTSD) related to childhood sexual and/or physical abuse. All participants were reached through advertisements in local papers, hospital and community clinics, and word-of-mouth. Advertisements targeted adults with histories of abuse who were currently experiencing a broad range of abuse-related symptoms including posttraumatic stress symptoms, mood

problems, and relationship difficulties. Participants were included in this study if they were women, had a history of sexual or physical abuse by a caregiver or person in authority to them before the age of 18, were literate in English, and were currently between the ages of 18 and 65. Potential candidates were excluded at if they reported current bipolar disorder, moderate to severe substance dependence, psychotic symptoms, severe eating disorder, or acute suicidality requiring immediate clinical attention.

One hundred nine women, ranging in age from 21 to 64 years ($M = 35.61$, $SD = 10.79$), participated in this study. The sample was ethnically diverse with 40% of the sample White, 25% African American, and 21% Hispanic. The majority of the sample had at least some college training (91%), most were single (60%) and living alone (33%) or with family members (39%), and most reported annual earnings of $30,000 or less (67%). The sample varied in type of psychiatric disorders. The most frequent Axis I diagnoses as determined by the Clinician Administered PTSD Scale (CAPS; Blake, Weathers, Nagy, & Kaloupek, 1995) and the Structured Interview for DSM-IV (SCID; Spitzer, Williams, Gibbon, & First, 1994) were PTSD (78%) followed by major depression (MD; 33%), general anxiety disorder (28%), dysthymia (23%), and social phobia (22%). The average number of diagnoses was 2.39 ($SD = 1.55$).

Procedure

Participants completed the assessment in two separate evaluation appointments. During the first, attachment status was assessed using the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1996). At the second interview, history of abuse, PTSD diagnosis and additional Axis I and II diagnostic information were obtained. Each evaluation was administered by a different set of trained masters or doctoral-level clinicians and the second set of clinicians was blind to the outcome of the first evaluation. Thus, psychiatric status and attachment status were independently assessed. No incentives for completion of interviews were provided.

Measures

The childhood cumulative maltreatment index was calculated as the sum of traumatic experiences with parents or primary caretakers and ranged from 1 through 4 for the following experiences: (a) sexual abuse—0 or 1 (*absent/mild* vs. *moderate/severe*), (b) physical abuse—0 or 1 (*absent/mild* vs. *moderate/severe*), (c) neglect—0 or 1 (*absent* vs. *present*), and (d) witnessing domestic violence—0 or 1 (*absent* vs. *present*). These data were obtained from The Child Maltreatment Interview Schedule (CMI; Briere, 1992) and the interrater reliability on a subset of variables has been reported in previous publications with kappas ranging from 1.00 to .56 (Cloitre et al., 1997).

The Adult Attachment Interview (AAI; George et al., 1996) is an hour-long, 18-question interview designed to elicit the individual's account of his or her childhood attachment and separation experiences, together with his or her evaluations of the effects of those experiences. The AAI classification scheme delineates three major attachment "states of mind," which parallel the secure, ambivalent/resistant, and avoidant child classifications. Individuals classified as Autonomous/Secure speak about early relationships in a way that is balanced, open, and flexible, even when reporting of painful experiences. Those classified as Preoccupied described attachment relationships with excessive emotional involvement, often including anger. Individuals categorized as Dismissing tended to idealize and/or dismiss attachment relations and their importance (see Bakermans-Kranenburg & van IJsendoorn, 1993). A fourth and more recent classification, Unresolved regarding trauma and/or loss, can be ascribed in conjunction with the three main categories above, and rates the individual's ability to present a coherent and integrated discourse when asked to discuss experiences of abuse or bereavement.

Four independent coders, blind to all study information including psychiatric status and trained to code the AAI by Mary Main and Erik Hesse, participated in the coding of transcribed interviews according to Main and Goldwyn's (2002) classification system. For the purposes of this investigation, a three-category classification of attachment—Secure, Preoccupied, and Dismissing—was examined. Classification of interviews rated as Unresolved in regards to trauma and loss were not included in our primary analyses because this rating is associated with momentary disorganization when discussing specific past trauma and has been found to be most relevant to trauma-related symptoms such as posttraumatic stress and dissociation (Stovall-McClough & Cloitre, 2006; Riggs et al., 2007). Distribution of Unresolved status is reported within each of the three main classifications.

Interrater reliability in a subsample of AAI's ($n = 60$) for the 3-way attachment classifications (Secure, Preoccupied, Dismissing) was excellent (kappa = .89). The AAI classifications have been found to be independent of verbal IQ, nonattachment-related autobiographical memory, and social desirability (Bakermans-Kranenburg & van IJzendoorn, 1993).

Measurement of emotion regulation was derived from the General Expectancy for Negative Mood Regulation scale (NMR; Catanzaro & Mearns, 1990), an inventory in which beliefs about the ability to alleviate negative moods are endorsed on a 5-point scale (0 = *strongly disagree* to 5 = *strongly agree*), with higher scores reflecting greater self efficacy beliefs. In this study, 6 of 30 items were selected to reflect emotion regulation as defined in the study, namely the capacity to contain, reduce, and tolerate negative affects (i.e., "It won't be long before I can calm myself down," "Telling myself it will pass will help calm me down," "I can forget about what's upsetting me pretty easily," and [reverse coded] "I'll start feeling really down about myself," "Thinking that things will eventually be better won't help me feel any better" and "I'll be upset for a long time"). The items selected were shown to have good internal consistency (.70) and good test-retest

reliability (.70) in a 3-month interval among 22 clients on waitlist for treatment in a previous study (Cloitre, Koenen, Cohen, & Han, 2002). The NMR has been implemented in attachment studies of nonclinical populations (Creasy, 2002). Cronbach's alpha for this sample was .72. Social support was measured by the Interpersonal Support Evaluation List (ISEL). The ISEL consists of 40 statements with item responses rated in a yes/no fashion concerning the perceived availability of others for a range of supportive functions and resources. Scores range from 0 to 40 with higher scores indicating more positive perceptions. Support is evaluated in four domains: tangible support, appraisal or advice, self-esteem, and belonging. The ISEL is a well-established measure with reported internal consistency in the moderate to high range and good test-retest reliability (Cohen, Kamarck, & Mermelstein, 1983). Chronbach's alpha for this sample was .93.

Functional impairment was measured by the Social Adjustment Scale-Self Report (SAS-SR). The SAS-SR is a 54-item questionnaire that assesses functional impairment in various roles including work, social, and family domains. Items are rated on a 5-point scale (0 = *never a problem*; 5 = *always a problem*). The SAS-SR has demonstrated adequate concordance with interview-based measures of social adjustment (Weissman & Bothwell, 1976). The index of overall functioning was used in the present study. Chronbach's alpha for this sample was .78.

Data Analysis

We estimated a path model using AMOS 7.0 (Arbuckle, 1999). Overall, 10% of participants had missing data on at least one measure of interest. To retain a sample greater than 100, and thus yield acceptable power in explaining our findings, we specified the path analyses to estimate missing data using full information maximum likelihood. We evaluated the model with the χ^2 test, which is a measure of exact fit, with nonsignificant values indicating no discrepancies between the model-reproduced covariance matrix and the sample covariance matrix. We also evaluated the goodness-of-fit index (GFI), the Tucker-Lewis Index (TLI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). Values for GFI, TLI, and CFI above .90 are considered acceptable fit (Brown, 2006).

In our primary path analyses, attachment status was treated as a 2-group categorical variable [secure vs. insecure (preoccupied and dismissing)]. Exploratory analyses examined attachment as a 3-group variable (secure, preoccupied and dismissing) and as a binary variable distinguishing those with and without unresolved states of mind.

We were not interested in describing the causal direction between emotion regulation and social support, thus a priori, we correlated the error terms between these variables to control for this relationship. To control for childhood cumulative maltreatment, paths were created from cumulative maltreatment to the endogenous variables (emotional regulation, social support, and functional impairment). Correlations were specified among all exogenous predictors. We calculated Sobel tests to assess the significance of the indirect effects of emotion regulation and social support on the relationship between attachment status and functional impairment (Preacher & Hayes, 2004).

RESULTS

Adult Attachment States of Mind

The distribution of attachment classifications revealed that slightly less than half the sample was judged as having a secure attachment state of mind ($n = 51$; 47%), and the remainder with an insecure state of mind where 37% ($n = 40$) were judged preoccupied and 12% ($n = 13$) judged dismissing. Attachment classifications were further broken down into unresolved status, with 35% ($n = 18$) unresolved within secure, 60% ($n = 24$) unresolved within preoccupied, and 15% ($n = 2$) unresolved within dismissing. Compared to other clinical samples, this sample is characterized by proportionately fewer dismissing and higher preoccupied and secure classifications (see the meta-analysis by van IJzendoorn & Bakermans-Kranenburg, 1996).

Cumulative Childhood Maltreatment

Sixty-three percent (63%) of the sample reported sexual abuse, 50% reported physical abuse, 62% reported witnessing domestic violence, and 45% reported neglect. In addition to their index trauma (sexual or physical abuse), 36% reported one additional trauma, 35% reported two, and 29% reported three or more ($M = 1.94$, $SD = 1.04$). Comparison of secure versus insecure (preoccupied and dismissing) indicated that the average number of types of maltreatment traumas reported was lower for secure ($M = 1.82$; $SD = 1.04$) than insecure ($M = 2.23$, $SD = 0.99$), $t = -2.03$, $p < .05$, with no differences between the preoccupied and dismissing groups.

Mediator and Outcome Characteristics

Table 1 presents the descriptive statistics for the relevant study variables by attachment status. The insecure groups (preoccupied versus dismissing) did not differ from each other on any variable. However, insecure classifications (preoccupied and dismissing combined) as compared to those with secure attachment reported significantly lower social support, $t(97) = 2.60$, $p < .05$, and negative mood regulation scores, $t(102) = 1.96$, $p < .05$, and more problematic functioning, $t(99) = -2.33$, $p < .01$. Overall, the sample reported substantial functional impairment. Ninety-two percent (92%) of the sample scored above 1 standard deviation and (69%) scored above 2 standard deviations of the average score obtained for women in a community sample (Weissman & Bothall, 1976). Regression results indicated that secure versus

Table 1. Means and Standard Deviations of Functional Impairment, Social Support Perceptions, and Emotion Regulation Self-Efficacy by Attachment Status

			Attachment state of mind					
	Total sample ($N = 109$)		Secure ($n = 51$)		Preoccupied ($n = 30$)		Dismissing ($n = 14$)	
Measures	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Functional impairment status	2.63	0.55	2.50	0.53	2.80	0.60	2.60	0.5
Social support expectations	22.90	9.79	25.79	8.93	20.51	10.13	21.54	9.5
Emotion regulation self-efficacy	15.27	4.77	16.17	4.50	13.93	5.10	14.62	4.4

insecure attachment significantly predicted functional impairment, ($\beta = .25$, $p < .05$). We further assessed the attachment groups with regard to unresolved status in relation to all study measures: no group differences were found.

Path Model

Because the primary model is just-identified, no fit indexes are computed (i.e., by definition, these models provide perfect fit to the data). As predicted, individuals classified as insecure reported lower emotion regulation capacity and lower social expectations of support than those classified as secure (see Figure 1). Both lower emotion regulation and lower social support were associated with greater functional impairment. Of note, the correlated relationship between emotion regulation and social support was significant. The direct effects between each exogenous variable and functional impairment were not significant. Predictors in the model accounted for 4% of the variance in emotion regulation, 6% of the variability in social support and 48% in functional impairment. Results of Sobel tests indicated that impairment differences across secure and insecure classifications were mediated through both emotion regulation, $\beta = .09$, $z = 1.76$, $p < .05$, and social support, $\beta = .15$, $z = 2.15$, $p < .01$.

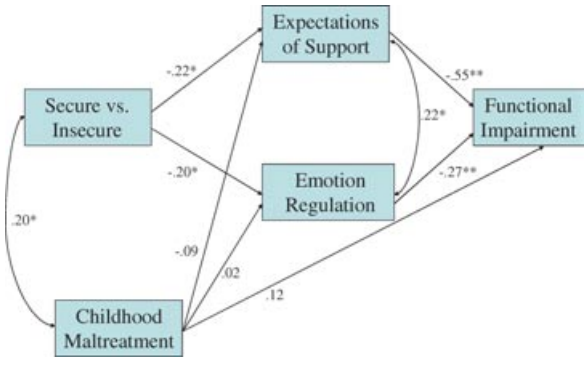

Figure 1. Standardized path coefficients for direct effects among functioning, social support, emotion regulation, and childhood adversity. $^{**}p < .01$. $^{*}p < .05$.

To further explore the relationship of attachment states of mind on functional impairment, we broke down our model and treated attachment as a 3-group categorical variable (secure, preoccupied, and dismissing). Two dummy codes were created to better specify group comparisons, defining the comparison of preoccupied versus secure states of mind and dismissing versus secure states of mind (i.e., secure was the reference group for these contrasts and both contrasts were entered simultaneously). The model showed excellent fit to the data on the chi-square test, χ^2 (2) = 0.52, $p = .77$; GFI = 1.0; TLI = 1.1; CFI = 1.0; and RMSEA = .00, $p = .81$. Null effects were specified between the two dummy coded attachment variables and functional impairment. As predicted, individuals classified as preoccupied reported lower emotion regulation capacity and lower social expectations of support than those classified as secure. However, the difference between those classified as dismissing and those classified as secure was not significant, although the difference was in the expected direction.

Finally, we hypothesized a just-identified model defining attachment using the binary categorization of unresolved to explore whether this classification influenced emotion regulation, social support expectations, and functional impairment regardless of the secure/insecure distinction. Contrary to our prediction, no effects were found between attachment and the variables of interest.

DISCUSSION

The results of the study indicate that in a clinical sample of treatment-seeking adults with a history of childhood maltreatment, insecure attachment contributes to observed psychiatric impairment. Importantly, we were able to demonstrate two pathways through which attachment organization exerted its effects: diminished capacity for negative emotion regulation and reduced expectations of support from the social environment. These findings lend empirical support to one of the central tenets of attachment theory; namely that attachment insecurity compromises successful

management of negative emotions and confidence in the availability of others. It also indicates that such difficulties significantly impact the functional status of the psychiatric client and implies the importance of attending to these emotional and behavioral problems in the treatment.

No differences were found when comparing unresolved status with regard to any of the study measures. This finding was not surprising as this classification was previously found to be strongly predictive of trauma-related difficulties, namely posttraumatic stress and dissociative symptoms and was not directly predictive of global indices of functioning in this sample (Stovall-McClough & Cloitre, 2006). Unresolved speech on the AAI is associated with only momentary disruptions of linguistic and cognitive organization when discussing specific past trauma on the AAI rather than general perceptions about emotional and interpersonal processes. We speculate that such lapses in mental organization under acute stress might have their parallel in day-to-day life as exhibited in the cognitive or emotional disorientation characteristic of individuals with PTSD upon exposure to traumatic reminders (e.g., "triggers") and as such may only be indirectly related to functional impairment via the presence of PTSD or dissociation symptoms.

Of note, there was an absence of findings when comparing secure and dismissing attachment, although differences between the groups were in the expected direction. It is plausible that given the small number of participants in this category ($n = 13$), the study lacked the necessary power to detect statistically significant differences. Alternatively, people with dismissing states of mind are characterized as strong, independent, indifferent to, or unaffected by negative experiences, and have low expectations regarding help from others (e.g., Fonagy et al., 1996). This characterization is consistent with the low proportion of dismissing classifications identified in this treatment-seeking sample, as dismissing individuals may be unlikely to see themselves as needing therapy. Moreover, use of self-report measures with such individuals may not elicit accurate reporting of negative views of themselves or others, or accurate levels of impairment. Dozier and Lee (1995) reported that psychiatric patients with dismissing states of mind tend to have lower levels of self-reported symptoms compared to preoccupied patients, although they were rated as displaying more symptoms behaviorally compared to secure patients. Furthermore, individuals with dismissing attachment organization have been shown to have marked increases in physiological arousal when asked about negative experiences during the AAI, despite self-reported indifference or emotional fortitude during the AAI (Dozier & Kobak, 1992). Thus, the attenuated relationship between the dismissing/secure contrast and self-reported symptoms may be the result of the dismissing participants' positively biased self-report.

The study addresses significant issues for attachment research and clinical practice. We believe it is the first published study to assess attachment status in conjunction with measures of negative mood regulation and interpersonal expectation in a psychiatric sample. The current study advances efforts to understand the link between attachment and adult clinical psychopathology by providing empirical evidence for the potential mechanisms by which attachment may influence adult functioning. Moreover, while the AAI designations (e.g., insecure vs. secure) theoretically imply difficulties with emotion regulation and interpersonal functioning, they do not empirically demonstrate their presence. Thus, this study contributes to the literature by identifying self-report measures that represent constructs of significant interest in attachment research and that also have relatively transparent relevance to psychotherapeutic intervention work.

The importance of emotion regulation and interpersonal expectations as identified mediators lies in their modifiability through clinical intervention and process. There is a growing intervention literature concerning individuals with disorders related to or associated with histories of childhood maltreatment (e.g., PTSD, Complex PTSD, PTSD comorbid with substance use disorders and borderline personality disorder) in which impaired emotional and social competencies are an integral part of the clinical profile. Treatment programs have developed that incorporate explicit and sustained self-regulation and interpersonal skills-building strategies (e.g., Cloitre et al., 2002; Linehan et al., 2006) and have demonstrated observed benefit with regard to these capacities at treatment end.

The question of whether attachment organization itself can be changed through the therapy remains to be determined. Recent therapies have focused on facilitating mentalization or construction of representational models of self and attachment figures (e.g., Bateman, Ryle, Fonagy, & Kerr, 2007). Cognitive–behavioral therapies, particularly those with narrative process, focus on past experiences and relationships (i.e., working models) with the goal of revising the legacy of these experiences, importantly distinguishing between interpersonal schemas derived from past versus current relationships. These tasks provide an opportunity for reevaluating the client's state of mind with regard to past relationships, and perhaps more importantly, proposing new ways of thinking about and behaving in current and future relationships.

It is unclear that a treatment which attempts to reevaluate and revise state of mind with regard to attachment relationships will be sufficient to ensure maximum improvement in functional capacity. Despite their link to insecure attachment, problematic attitudes and behaviors reflected in difficulties with mood regulation and low expectations of help from others, take on a life of their own over time and become deeply entrenched cognitive and behavioral routines. Thus, specifically targeting these problems, providing alternative approaches to affective expression and interpersonal behavior followed by experiential engagement of these alternatives may be a necessary complement to more evaluative or insight-oriented work.

These data also contribute to emerging interest in disturbances in emotion regulation and related interpersonal processes as the

basis for unified approaches to understanding and treating emotional disorders (Barlow, Allen, & Choate, 2004). Clinical researchers studying diverse disorders (e.g., panic disorder, generalized anxiety disorder, addictive disorders) have begun exploring the idea that emotion regulation disturbances may be a core feature underlying many psychiatric disorders and have begun a dialogue about identifying methods and measures that may characterize emotion regulation and related disturbances across disorders (e.g., Rottenberg & Gross, 2007). The path model approach implemented, which albeit requires a relatively large sample size (over 100), examples one approach that can be taken.

Limitations of the study include a relatively homogeneous sample (i.e., adults with childhood maltreatment), which may limit generalizability to individuals with other types of trauma or psychiatric disorders. Furthermore, the presence of independent observer measures in addition to the self-report measures (e.g., emotion regulation and functional impairment) would have been useful and provided a complement and contrast to the potential biases that may be associated with self-report measures among those with insecure attachment. Nevertheless, the study contributes to the growing literature that attachment organization is relevant to psychopathology in that it has empirically demonstrated the mediating role of specific affective and relational tendencies. Future research may address the potential differences in affective and interpersonal characteristics as they are associated with variations in insecure attachment (e.g., preoccupied and dismissing) and regarding their relative roles in shaping treatment processes and outcome.

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