ADULT ATTACHMENT PROFILES, INTERPERSONAL DIFFICULTIES, AND RESPONSE TO INTERPERSONAL PSYCHOTHERAPY IN WOMEN WITH RECURRENT MAJOR DEPRESSION

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We examined adult attachment profiles, interpersonal difficulties, and treatment response in 162 women receiving interpersonal psychotherapy (IPT) for recurrent major depression. Nearly half (43%) of the women in this clinical sample reported a 'Fearful Avoidant' attachment profile in self-reports obtained upon abatement of acute depressive symptoms. As predicted, Fearful Avoidant women reported lower levels of self-esteem and more negative attitudes toward others, as compared with their Secure counterparts. These women also reported heightened interpersonal difficulties in the areas of sociability and intimacy, which remained salient both during and following the acute depressive episode. Although attachment group
Both cognitive and interpersonal processes have been hypothesized to play a crucial role in the etiology and course of major depressive disorder. Whereas cognitive theories of depression (e.g., Abramson, Seligman, & Teasdale, 1978; Beck, 1976) emphasize the role of negative or maladaptive thought processes, interpersonal theories (e.g., Brown & Harris, 1978; Coyne, 1976; Paykel & Weissman, 1973) stress the importance of interpersonal conflict, loss, or lack of social support to predict the onset, persistence, and recurrence of depressive episodes. Recently, several researchers (e.g., Carnelley, Pietromonaco, & Jaffe, 1994; Cummings & Cicchetti, 1990; Hammen, 1992) have proffered attachment theory (Bowlby, 1969, 1973, 1980, 1988) as a developmental model of depression that integrates both cognitive and interpersonal approaches.

Attachment theory posits that early interactions with primary caregivers lead to the development of internal working models (Bowlby, 1973) or cognitive representations about the self and others that provide prototypes for later social relationships. These working models not only shape one's self-image, but also organize cognition, behavior, and affect regulation within later relationships (Mikulincer, 1995). Theoretically, if early caretakers are consistently warm and responsive to the child's needs, the child is likely to develop a model of others as warm, reliable, and available in time of need, and a model of oneself as lovable and worthy of care—or a secure attachment style. In contrast, attachment theory posits that the experience of cold, rejecting, or inconsistent parenting may lead one to view others as rejecting or unreliable, and/or the self as unlovable or unworthy—resulting in the development of an insecure attachment style.

Drawing from attachment theory and Ainsworth's infant-caregiver attachment paradigm (Ainsworth, Blehar, Waters, & Wall, 1978), recent research has differentiated three patterns of insecure attachment in adults: Preoccupied (or anxious-ambivalent), Dismissing Avoidant, and Fearful Avoidant (Bartholomew & Horowitz, 1991; see also Hazan & Shaver, 1987, for an earlier description). Preoccupied individuals view the self as unworthy or unlovable but hold a positive evaluation of others. They tend to be preoccupied with attempts to gain the love, acceptance, and emotional closeness of others, are anxious about possible abandonment, and are often viewed by others as clingy or demanding. In contrast, Dismissing Avoidant individuals view the self as worthy,
yet view others as unreliable or rejecting. They find it difficult to trust or be close to others, and are often seen as defensively independent, taking a dismissing or detached attitude toward attachment relationships. Fearful Avoidant individuals hold negative views of both the self and others—they see the self as unworthy and others as rejecting or unreliable. Although Fearful Avoidant individuals desire close relationships, they find it difficult to trust and become close to others, fear interpersonal rejection and abandonment, and may be seen as socially avoidant (e.g., see Griffen & Bartholomew, 1994a).

There is reason to believe that insecurely attached adults are particularly vulnerable to experiencing depression. First, individuals with a Fearful Avoidant or Preoccupied attachment style are likely to have internalized a diffuse and dysfunctional negative view of the self. Such negative self-views are, in turn, associated with depressive features. Second, internalized beliefs that others are rejecting or unreliable (such as those seen in Fearful and Dismissing Avoidant adults), may lead these individuals to interact with others in overly distancing or demanding ways (Kobak & Scerri, 1988), thereby increasing social avoidance and interpersonal conflict, and negating the potentially positive effects of social support.

Consistent with this hypothesis, insecurely attached adults have been shown to report lower levels of self-esteem (Collins & Read, 1990; Feeney & Noller, 1990), poorer interpersonal functioning in romantic relationships (Bookwala & Zdaniuk, 1998; Collins & Read, 1990; Klohnen & Bera, 1998), more dysfunctional affect regulation strategies (Brennan & Shaver, 1995), and to be less likely to seek and receive emotional support from relationship partners when under stress (Simpson, Rholes, & Nelligan, 1992). Further, research on nonclinical samples attests to the relationship between insecure attachment patterns and current depressive symptoms (e.g., Carnelley, Pietromonaco, & Jaffe, 1994, Study 1; Murphy & Bates, 1997; West et al., 1998) and indicates that this relationship is mediated, in part, by dysfunctional attitudes and low self-esteem (Roberts, Gottlib, & Kassel, 1996). Secure attachment, on the other hand, appears to buffer psychological distress in the face of life stress (Hammen et al., 1995). Indeed, recent data from the National Comorbidity Survey indicates that lifetime prevalence of major depression (as well as other psychiatric conditions) is related positively to insecure attachment and negatively to secure attachment (Mickelson, Kessler, & Shaver, 1997). Yet, surprisingly little is known about the prevalence or significance of insecure adult attachment profiles in samples of clinically depressed adults.

Two distinct lines of adult attachment assessment and research are apparent in the psychological literature. One line of research, developed by
Main and colleagues, has traditionally taken a psychodynamic approach to measuring underlying "states of mind with respect to attachment," that are inferred from how individuals represent their own early child-parent relationship history within a clinical interview (the Adult Attachment Interview or AAI; George, Kaplan, & Main, 1985; Main & Goldwyn, 1988). Results from two studies using the AAI assessment approach suggest higher levels of an insecure attachment 'state of mind' in psychiatric patients with depression (Fonagy et al., 1996) or dysthymia (Patrick et al., 1994) as compared with nonclinical populations.

A second line of adult attachment research (and the one taken in the current study) emerged from a social/personality psychology research tradition and relies on subject self-reports of current adult attachment patterns (e.g., Hazan & Shaver, 1987; West et al., 1987). The few studies of psychiatric patients stemming from this research tradition also support a relationship between depression and insecure patterns of adult attachment. For example, Pettem et al. (1993) found that psychiatric outpatients with higher depression scores [as assessed via self-report on the Millon Clinical Multiaxial Inventory dysthymia scale (MCMI; Millon, 1983)] were more likely than nondepressed patients to display characteristics of anxious attachment (such as feared loss of the attachment figure). Similarly, Carmelley et al. (1994) compared 25 married women recovering from an episode of major depression and 23 nondepressed controls and found previously depressed women to report greater levels of Fearful attachment as compared with their nondepressed peers. Indeed, among the three insecure attachment profiles described by Bartholomew and Horowitz (1991), one would expect Fearful Avoidant individuals, who hold negative views of both the self and others, to be most likely to experience low self-esteem and elevated interpersonal difficulties, and, in turn, to be particularly vulnerable to experiencing recurrent episodes of depression.

Major depressive disorder strikes twice as many women as men (Kessler, McGonagle, Swartz, Blazer, & Nelson, 1993; Weissman, Bruce, Leaf, Florio, & Holzer, 1991; Wolk & Weissman, 1995), and, for many women, represents a recurrent condition that severely impairs functioning and emotional quality of life. Patients with a history of multiple depressive episodes are, moreover, among the most treatment-resistant. The current research was developed as a first step toward understanding the prevalence and significance of adult attachment patterns in this particularly vulnerable clinical population: women with recurrent major depression.

We developed and tested a set of hypotheses based on attachment literature and theory. First, we hypothesized that women with insecure attachment styles, and, in particular, Fearful Avoidant attachment pat-
terns, would be at heightened risk for depression; hence, this profile should be over-represented in a clinical sample of women with recurrent major depression. Second, although depression itself is associated with both interpersonal difficulty and negative cognitive sets, we hypothesized that depressed women with Fearful Avoidant attachment styles would report even greater interpersonal difficulty, more negative self-views, and more negative attitudes toward others—as compared with their depressed yet securely attached counterparts.

Finally, current literature and theory would suggest that adult attachment patterns may influence the development of, and reliance on, therapeutic relationships (Dozier, 1990; Dozier & Tyrrell, 1998), as well as one's pattern of interpersonal problems and response to psychotherapy (Horowitz et al., 1993). Thus, we planned to examine how adult attachment patterns would affect women's response to interpersonal psychotherapy (IPT; Klerman et al., 1984), an empirically supported treatment for depression that focuses on the relationship between depression and current interpersonal problems (see Frank & Spanier, 1995; Weissman & Markowitz, 1994). Given the paucity of data on this issue, we did not have a clear hypothesis about the impact of attachment on IPT response rates and instead posed this as a research question to be addressed empirically. Specifically, how would adult attachment patterns impact women's response to IPT? On the one hand, IPT may, over time, be particularly effective for targeting the interpersonal issues of insecurely attached women. On the other hand, insecure women's negative view of self/others and interpersonal difficulties may hamper the development of a trusting therapeutic alliance, thus impeding IPT treatment response. For example, women who view others as rejecting (i.e., Fearful and Dismissing Avoidants) may find it difficult to engage with their therapist, and thus may take longer to respond to IPT than their securely attached counterparts. Hence, a final goal was to examine attachment-related differences in clinical response to interpersonal psychotherapy.

METHOD

PARTICIPANTS

The study sample consisted of 162 women with recurrent major depression, who participated in an outpatient treatment study of the prophylactic effects of maintenance IPT (MH 49115, E. Frank, PI). Women who entered the protocol between September 1992 and February 1998 are included in the current analyses.

Inclusion Criteria. Participants were required to: (a) be in at least their second episode of major depression as determined by structured clinical
interview; (b) report at least one other episode of major depression within the previous 2.5 years; (c) report a remission period between the index episode and most recent previous episode of not less than 10 weeks and not more than 130 weeks; and (d) be between the ages of 20 and 60. In addition, women had to receive a score 15 on the 17-item Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960).

**Exclusion Criteria.** Women were excluded if they had a lifetime diagnosis of schizophrenia, schizoaffective disorder, organic affective syndrome, unspecified functional psychosis, bipolar I disorder, or cyclothymic disorder, or if they met diagnostic criteria for borderline or antisocial personality disorder. Women with a history of alcohol or substance abuse/dependence within the past 2 years were also excluded. Those with significant medical illness and/or women whose index depression episode appeared to be secondary to the effect of medically prescribed drugs were excluded. Participants were required to be free of antidepressant medications for a period of 2 weeks prior to study entry. Women who required inpatient treatment due to suicidal risk or psychotic symptoms were excluded (or withdrawn) from the study and referred for inpatient treatment.

The first 44 patients were diagnosed with the Schedule for Affective Disorders and Schizophrenia (SADS; Endicott & Spitzer, 1978), and the remaining 118 patients were diagnosed with the Structured Clinical Interview for DSM-IV (SCID-I; First, Spitzer, Gibbon, & Williams, 1995). Interviewers were bachelor and master's level nurses, social workers, or psychologists, all of whom were experienced in working with depressed patients and had been extensively trained through discussion of the diagnostic criteria, observation, and supervised administration of diagnostic interviews.

**Recruitment.** Participants were recruited through a combination of medical referrals, self-referrals, and public information campaigns for the treatment of recurrent depression. Of the 301 applicants who underwent full clinical evaluation between September 1992 and February 1998, 200 (66.5%) entered the protocol. Reasons for exclusion or nonparticipation (n = 101) were as follows: presence of an exclusionary psychiatric disorder (34.7%); failure to meet recurrent depression criteria (20.8%); failure to meet current depression severity criteria (17.8%); refusal to participate in the protocol (17.8%); presence of exclusionary medical criteria (3.0%); and, other reasons (5.9%). Those who entered the study were referred through a variety of channels, including mass media campaigns (52.9%), health care professionals (17.0%), and families, friends or employers (15.0%). For 4.3% the referral source was unknown, and 10.7% were self-referred. Of the 200 patients to enter the study pro-
tocol during this time period, 162 completed attachment style questionnaires and are thus included in the current analyses.¹

Sample Characteristics. Patients' mean age at study entry was 37.6 years (SD = 9.9, range 20-59). Of the participants, 40.7% were married, 32.7% were single, 22.8% were separated/divorced, and 3.7% were widowed. The majority of women were Caucasian (86.4%); 8.6% were African American, 1.9% were Hispanic, and 3.1% belonged to other ethnic minority groups. Patients had received an average of 14.9 years (SD = 1.9) of education. While the vast majority of participants (n = 150; 92.6%) received a primary diagnosis of major depressive disorder, recurrent, a small percent (n = 12; 7.4%) also reported a past history of at least one minor hypomanic episode, and thus received a primary diagnosis of bipolar II disorder. In addition to their primary diagnosis, 44 participants (27.2%) met criteria for one or more current, comorbid diagnoses (range = 1 - 3), including: dysthymia (14.2%), panic disorder (4.9%), eating disorder NOS (4.3%), specific phobia (2.5%), social phobia (1.2%), obsessive-compulsive disorder (1.2%), and post-traumatic stress disorder (1.2%).

Mean duration of patients' index episode of depression was 26.5 weeks (SD = 20.7, Mdn = 20). Although only one previous depressive episode was required for study entry, the average was 6.1 (SD = 5.6, Mdn = 4). Mean age at onset of the first depressive episode was 24.6 years (SD = 5.6). At study entry, patients obtained average scores of 18.5 (SD = 3.0) on the 17-item Hamilton Rating Scale for Depression, and 25.5 (SD = 7.2) on the Beck Depression Inventory (BDI; Beck & Steer, 1987).

MEASURES

DEPRESSION MEASURES

At study entry and prior to each therapy session, women were administered the Beck Depression Inventory (BDI; Beck & Steer, 1987) and 17-item Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960). The BDI is a 21-item self-report questionnaire that measures the severity of affective, cognitive, and vegetative symptoms of depression experienced over the past week. The HRSD is a clinician-administered inter-

¹ A number of patients (n = 38) who were recruited for the MPRD protocol during this time period did not complete adult attachment ratings and hence are not included in the present analyses. Reasons include: missing data (n = 13); subject drop-out early in protocol (n = 9); and subject termination early in the protocol due to clinical nonresponse or deterioration (n = 10), change in psychiatric diagnosis (n = 1), inpatient hospitalization (n = 1), or noncompliance with treatment (n = 4).
view that assesses the presence and severity of 17 symptoms of depression experienced over the past week. Trained, independent evaluators conducted HRSD assessments.

Measures of Attachment, Cognitive and Interpersonal Functioning. At study entry, all patients completed the Inventory of Interpersonal Problems (IIP; Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988; Horowitz, Rosenberg, Ureno, Kalehzan, & O’Halloran, 1989). In order to limit the potential effect of depressive response bias, patients completed a second set of measures after they had achieved an HRSD score of less than 10, or, on average, 12.8 weeks (SD = 6.9) following study entry. This set of measures included the adult attachment profile, measures related to women’s view of the self and others, and a second IIP.

Adult Attachment Profiles. We used Bartholomew and Horowitz’s Relationship Questionnaire (RQ) to assess women’s predominant adult attachment styles (Bartholomew, 1990; Bartholomew & Horowitz, 1991). The RQ consists of four brief paragraphs, describing each of the four adult attachment profiles: Secure, Dismissing Avoidant, Preoccupied, and Fearful Avoidant patterns. Participants first rated the extent to which each prototype described them and their typical style of relating within emotionally close relationships, on a 5-point scale ranging from 1 (not at all like you) to 5 (extremely like you). Participants then rated which of the four prototypes is “MOST like you.” The RQ and similar categorical measures of adult attachment (i.e., Hazan & Shaver, 1987) have been widely used and have shown adequate validity as assessed with observer-based ratings of behavioral and personality characteristics (e.g., see Klohnen & Bera, 1998). Bartholomew and Horowitz’s (1991) four adult attachment profiles are listed in the Appendix.

View of Self. Three measures of self-concept were included. First, global self-esteem was assessed with the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). This widely used instrument has demonstrated adequate reliability and validity (Robinson & Shaver, 1973; Rosenberg, 1965), and includes such items as “I feel that I have a number of good qualities.” Chronbach’s alpha for this scale was .86 in the current sample. Second, global self-view was assessed with the 25-item Phillips Attitudes Toward Self Scale (Phillips, 1951), which includes items such as “I feel inferior as a person to some of my friends.” Chronbach’s alpha was

2. For 38 patients, follow-up questionnaire packets were completed after initiation of antidepressant medication treatment.
3. RQ is typically rated on a 7-point scale (Bartholomew & Horowitz, 1991), a 5-point scale was used in the current study in order to provide subjects with a consistent rating scale to use across self-report measures.
.88 in the current sample. Third, the 5-item Fey Estimated Acceptability to Others subscale (Fey, 1955) was included to assess the degree of which patients feel liked and accepted by others (e.g., “People seem to like me”). Scores on this measure have been found to correlate positively with self-acceptance ratings (Fey, 1955). Fey (1955) reported a split-half reliability of .89 for this scale (Fey, 1955). Cronbach’s α was .71 in the current sample.

View of Others. Two self-report measures tapping patients’ view of others were included. The 20-item Acceptance of Others subscale (Fey, 1955) assesses the degree to which one likes and accepts others (e.g., “I like people I get to know”). Fey (1955) reported a split-half reliability of .90 for this scale. Cronbach’s α was .74 in the current sample. Second, the degree to which patients prefer to socialize with others (e.g., “I like to be with people”) was assessed with the 5-item Sociability Scale (Cheek & Buss, 1981). This measure has been shown to reflect one’s preference for social affiliation and to be distinct from measures of shyness or social discomfort (Cheek & Buss, 1981). Cronbach’s α was .84 in the current sample. Both scales have demonstrated adequate reliability (Bartholomew & Horowitz, 1991; Fey, 1955) and have been shown to relate to dimensions of adult attachment in college samples (Bartholomew & Horowitz, 1991).

Interpersonal Difficulties. The 127-item Inventory of Interpersonal Problems (IIP; Horowitz et al., 1988; Horowitz et al., 1989) assesses the amount of distress experienced from a variety of interpersonal problems as rated on a 5-point scale ranging from 0 (not at all) to 4 (extremely). The IIP is comprised of six scales: Hard to be assertive (21 items, e.g., “It is hard for me to say ‘no’ to other people”); Hard to be sociable (18 items, e.g., “It is hard for me to feel comfortable around other people”); Hard to be intimate (12 items, e.g., “It is hard for me to feel close to other people”); Hard to be submissive (10 items, e.g., “It is hard for me to do what another person wants me to do”); Too responsible (12 items, e.g., “I feel too responsible for solving other people’s problems”); and Too controlling (10 items, e.g., “I try to change other people too much”). Cronbach’s αs in the current sample ranged from .78 to .92 across scales. The IIP has demonstrated acceptable internal consistency, test-retest reliability, validity, and sensitivity to change with psychotherapy (Horowitz et al., 1988, 1989).

TREATMENT

INTERPERSONAL PSYCHOTHERAPY (IPT)

The maintenance IPT protocol requires that patients are first treated with between 12 and 24 weekly individual IPT sessions until remission
of the current depressive episode is achieved. Once remission is achieved in the acute treatment phase, patients enter an 8-week treatment continuation phase. In the present report, we examined patients’ response to the acute treatment phase only.

Therapists were experienced master’s or doctoral-level social workers or psychologists trained either by the original Boston-New Haven IPT group (G.L. Klerman, M.M. Weissman, B.J. Rounsaville, and E.S. Chevron) or a certified IPT trainer who is a member of our research group (C.L. Comes). Therapists’ adherence to the protocol was promoted through the use of a treatment manual and weekly supervision sessions conducted by Dr. Comes. All therapy sessions were video- or audiotaped for review in supervision sessions in which clinical issues, the integrity of treatment implementation, and prevention of drift over time were discussed.

INDICATORS OF TREATMENT RESPONSE

We examined two indicators of treatment response: remission versus nonremission with IPT treatment and time to clinical stabilization of depressive symptoms with IPT.

Remission vs. Nonremission with IPT treatment. Patients were classified as IPT remitters if they attained HRSD scores of ≤ 7 for 3 consecutive weeks during the first 24 weeks of the acute IPT treatment. These criteria take into account both the degree of residual symptoms and duration of sustained improvement for defining clinically meaningful reduction in depressive symptoms and are comparable to other remission criteria reported in the literature (Frank et al., 1991; Kupfer & Frank, 1987). Patients who did not achieve full remission criteria within 24 weeks were declared IPT nonremitters. In addition, patients who did not display graded clinical improvement (operationalized by reductions in HRSD scores) within specified time frames throughout the protocol were declared IPT nonremitters prior to week 24. Nonremitters were reassigned to an alternate arm of the study protocol (and started on medication treatment). Figure 1 details the clinical decision-making parameters for the present study.

Patients with attachment data who dropped out (n = 5) or were terminated (n = 3) early in the protocol, prior to being declared either an IPT remitter or nonremitter, were categorized as nonremitters for the purpose of the present analysis.4 In general, follow-up data for nonremitters is not included in the present report.

4. Dropping these attritors from subsequent analyses does not alter reported results.
FIGURE 1. Flow chart depicting clinical decision-making guidelines utilized within the study protocol.
Time to Stabilization. Time (in weeks) to stabilization with IPT was included as a second outcome variable. Stabilization dates were assessed via chart review, back-tracking from patients' remission date (defined above) in order to identify the date at which each patient obtained the first (in a series of at least three) Hamilton scores ≤ 7.

DATA ANALYSES

Analyses of variance (ANOVAs) and chi-square tests were performed in order to explore potential attachment group differences across demographic characteristics (i.e., age, marital status, education) and clinical variables (i.e., baseline depression scores, number of past depressive episodes, age at onset of first depressive episode, length of index episode, parental history of psychiatric illness). Next, we tested for hypothesized attachment group differences on measures of self-view, view of others, and interpersonal difficulties. In order to decrease the likelihood of Type I error, conceptually related measures of women's self-view and view of others were examined using multivariate analyses of variance (MANOVAs). Attachment group differences across various interpersonal difficulties were examined using ANOVAs for each of the six IIP scales and a Bonferroni adjusted familywise error rate (\(p = .05/6 = .008\)).

In order to examine the effect of treatment on interpersonal difficulties, a series of \(4 \times 2\) ANOVAs with repeated measures on the second factor were calculated using those IIP scales that differentiated between attachment groups as the dependent variable. Tukey post-hoc tests were used to compare groups across these outcomes. Because we hypothesized that the largest attachment group differences would be apparent between the Fearful and Secure groups, these comparisons are highlighted throughout. Finally, in order to examine each of the attachment dimensions as continuous rather than categorical constructs (see Fraley & Waller, 1998; Griffen & Bartholomew, 1994b), Pearson correlation coefficients were used to test associations between continuous attachment ratings and self-report measures of self-view, view of others, and interpersonal difficulties.

IPT remission rates were compared using chi-square tests across the four "most like me" attachment groups and Student t-tests comparing continuous attachment ratings between IPT remitters and nonremitters. Next, a Kaplan-Meier survival analysis was conducted to compare the median time to stabilization across the four "most like me" attachment groups. This analysis utilized all 162 subjects, censoring 75 subjects at the time they were declared IPT nonremitters. Finally, Pearson correlation coefficients were calculated to examine the relationship between
continuous attachment ratings and time to stabilization for those patients who remitted with IPT.

RESULTS

ADULT ATTACHMENT PROFILES

When asked to rate which of the attachment profiles was “most like you,” 42.6% of the women described themselves as Fearful Avoidant (n = 69); 21.6% described themselves as Secure (n = 35); 20.4% described themselves as Preoccupied (n = 33); and 15.4% described themselves as Dismissing Avoidant (n = 25). Mean scores for continuous ratings of the four attachment profiles were as follows: 3.0 (SD = 1.47) for Fearful Avoidant; 2.5 (SD = 1.1) for Secure; 2.48 (SD = 1.28) for Dismissing Avoidant; 2.37 (SD = 1.36) for Preoccupied. The continuous Secure and Fearful Avoidant attachment ratings showed a moderately strong, negative relationship (r = -.41, p < .0001). Significant but weaker associations emerged between the Secure and Dismissing profiles (r = -.21, p < .01); Dismissing and Fearful profiles (r = .23, p < .01); and Dismissing and Preoccupied profiles (r = -.20, p < .05).

Next, we compared the four attachment groups derived from the “most like you” attachment ratings across the various demographic and clinical variables. One significant group difference emerged, such that women in the Fearful Avoidant group were more likely to report the presence of a psychiatric or substance abuse disorder in at least one parent (85.9%), as compared to the Dismissing (76%), Preoccupied (63.3%), and Secure (62.5%) groups, (2(3,151) = 8.9, p < .05. The four attachment groups did not differ, however, in terms of age [F(3,158) = .52, p = .67], marital status [(2 (9, n = 162) = 14.01, p = .12], education [F(3,158) = .35, p = .79], age of onset of first depressive episode [F(3,156) = .26, p = .85], number of previous depressive episodes [F(3,158) = .56, p = .64], or length of index episode [F(3,157) = 1.53, p = .21]. Nor did they differ in terms of

5. As would be expected, continuous attachment scores supported the subjects’ forced-choice “most like you” attachment categorizations. For example, subjects who chose the Fearful Avoidant profile as “most like you” provided significantly higher ratings on the continuous Fearful scale (with a mean score of 4.09, or “quite a bit like you”; SD = .94), as compared with the Secure (M = 1.54, SD = 1.01), Dismissing (M = 2.84, SD = 1.31), and Preoccupied (M = 2.35; SD = 1.17) groups [F(3,156) = 49.87, p < .0001]. In contrast, subjects who chose the Secure profile as “most like you” provided significantly higher ratings on the continuous Secure scale (with a mean score of 3.57, or between “moderately like you” and “quite a bit like you”; SD = .78), as compared with the Dismissing (M = 2.08, SD = 1.06), Preoccupied (M = 2.59, SD = 1.07), and Fearful (M = 2.06, SD = .88) groups [F(3, 155) = 22.33, p < .0001].
baseline depression severity, as measured with the HRSD \( F(3,158) = .26, p = .85 \) or BDI \( F(3,158) = .90, p = .44 \). The latter finding may be due, in part, to a restricted range or threshold effect, in that all patients were required to meet stringent depression severity criteria for study entry.

ATTACHMENT GROUP DIFFERENCES ACROSS COGNITIVE AND INTERPERSONAL VARIABLES

View of Self. A MANOVA testing for differences between the four attachment groups on scores from the Rosenberg, Phillips, and Fey Estimated Acceptability to Others scales yielded significant results, \( F(9,407) \)
Follow-up ANOVAs for each of the individual scales also yielded significant results ($p$'s < .05). As predicted, post-hoc comparisons indicated that women in the Secure group reported a more positive self-view across all three self-report measures ($p$'s < .05), as compared with women in the Fearful Avoidant group. Additional group differences were obtained for the Fey scale only. Specifically, women in the Secure group were more likely than women in the Preoccupied group to report feeling liked and accepted by others, while women in the Dismissing group were more likely than women in the Fearful group to report feeling liked and accepted by others. See Figure 2a for a representative example of group differences on the Rosenberg Self-Esteem scale.

As expected, high Secure attachment ratings were correlated with positive self-views, while high Fearful ratings were related to negative self-views. See Table 1. In line with existing research, high Preoccupied ratings were also related to negative self-views. Notably, however, Dismissing Avoidant attachment scale ratings were unrelated to the three measures of self-view or self-esteem.

**View of Others.** A MANOVA testing for group differences on the Fey Acceptance of Others scale and Cheek's Sociability scale yielded significant results, $F(6,288) = 7.11, p < .0001$. Follow-up ANOVAs for each of the individual scales were also significant ($p$'s < .01). As predicted, post-hoc comparison indicated that women in the Secure group were more likely to report liking and accepting others and greater levels of sociability, as compared with women in the Fearful group ($p < .01$). In addition, women in the Preoccupied group were more likely than women in the Fearful Avoidant group to report liking and accepting others, and they reported greater levels of sociability than women in the Fearful Avoidant and Dismissing Avoidant groups. See Figure 2b for a representative example of group differences on the Fey Acceptance of Others scale.

As expected, high Secure attachment ratings were associated with high levels of sociability, while high Fearful Avoidant ratings were associated with less sociability. Also in line with existing research, high Preoccupied attachment ratings were associated with high levels of sociability, while high Dismissing Avoidant ratings were associated with less sociability. See Table 1. In addition, high Fearful Avoidant and Dismissing Avoidant ratings were associated with a diminished tendency to like and accept others. No significant associations emerged, however, between the Fey scale and continuous Secure and Preoccupied attachment ratings. See Table 1.

**Interpersonal Difficulties.** ANOVA results showed "most like you" attachment group differences that reached statistical significance at the Bonferroni adjusted $p$ value of .008 for two of the six IIP scales: Hard to
TABLE 1. Associations between Ratings on Continuous Adult Attachment Dimensions and Measures of Self-View, View of Others, and Interpersonal Difficulties

<table>
<thead>
<tr>
<th>Attachment Style</th>
<th>Self-Esteem</th>
<th>Attitudes Toward Self</th>
<th>Estimated Acceptability to Others</th>
<th>Acceptance of Others</th>
<th>Cheek Sociability Scale</th>
<th>IIP: Hard to be Sociable</th>
<th>IIP: Hard to be Intimate</th>
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<tr>
<td>Secure</td>
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<td>.11</td>
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<td>-.18*</td>
<td>-.34***</td>
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<td>(157)</td>
<td>(149)</td>
<td>(158)</td>
<td>(159)</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>$r$</td>
<td>-.18*</td>
<td>-.26**</td>
<td>-.26***</td>
<td>-.12</td>
<td>.29***</td>
<td>.16*</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>(154)</td>
<td>(150)</td>
<td>(158)</td>
<td>(149)</td>
<td>(159)</td>
<td>(160)</td>
</tr>
<tr>
<td>Fearful Avoidant</td>
<td>$r$</td>
<td>-.17*</td>
<td>-.24**</td>
<td>-.33***</td>
<td>-.24**</td>
<td>-.24**</td>
<td>.52***</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>(155)</td>
<td>(151)</td>
<td>(158)</td>
<td>(150)</td>
<td>(159)</td>
<td>(160)</td>
</tr>
</tbody>
</table>

Self-Esteem = Rosenberg Self-Esteem Scale; Attitudes Toward Self = Phillips Attitudes Toward Self Scale; Estimated Acceptability to Others = Fey Estimated Acceptability to Others subscale; Acceptance of Others = Fey Acceptance of Others subscale; IIP = Inventory of Interpersonal Problems. *$p < .05$; **$p < .01$; ***$p < .001$. 
be sociable \(F(3,157) = 16.61, p < .0001\) and Hard to be intimate \(F(3,157) = 5.95, p < .001\). A repeated measures ANOVA comparing the IIP Hard to be sociable scores at study entry and acute symptom abatement (HRSD < 10) time points yielded significant main effects for Attachment Group \(F(3,125) = 9.87, p < .001\) and Time \(F(1,125) = 28.90, p < .001\), but no significant Attachment x Time interaction \(F(3,125) = 1.49, p = .22\).

Similarly, a repeated measures ANOVA with IIP Hard to be intimate scores as the dependent variable yielded significant main effects for Attachment Group \(F(3,124) = 7.35, p < .001\) and Time \(F(1,124) = 6.44, p < .05\), but no significant Attachment x Time interaction \(F(3,124) = .32, p = .81\). Thus, although all groups showed some reduction in interpersonal difficulties with treatment, attachment group differences on the IIP Hard to be sociable and Hard to be intimate scales remained significant following abatement of the acute depressive episode. Post-hoc comparison indicated that the Fearful Avoidant group reported significantly more interpersonal difficulties than the Secure group on both scales at both time points \((p's < .05)\). This represented the only significant group difference at baseline assessment. Upon abatement of acute depressive symptoms, women in the Fearful Avoidant group reported significantly more difficulties being social than women in all other attachment groups \((p's < .05)\). See Figure 3 for a representation of IIP Hard to be sociable findings.

As predicted, high Fearful Avoidant attachment ratings were associated with greater interpersonal difficulties with sociability and intimacy, while high Secure attachment ratings were associated with fewer difficulties with sociability and intimacy. High Dismissing and Preoccupied attachment ratings were also associated with greater difficulties with sociability. See Table 1.

TREATMENT RESPONSE

Remission vs. Nonremission with IPT Treatment. Eighty-seven women (53.7% of those entering treatment) achieved depression remission within 24 weeks of IPT. The proportion of IPT remitters vs. nonremitters did not differ significantly across the four ('most like you') attachment groups, (23

6. Attachment group differences on the IIP Hard to be assertive \(F(3,157) = 3.27, p = .02\) and Too responsible \(F(3,157) = 3.41, p = .02\) subscales approached significance, while outcomes on the Hard to be submissive \(F(3,157) = 1.5, p < .20\) and Too controlling \(F(3,157) = 2.11, p < .10\) subscales did not. Although reported analyses represent attachment group differences on the IIP completed at partial symptom remission (HRSD < 10), the pattern of group differences across the IIP subscales is nearly identical to those obtained at study entry.
Remission rates across the four attachment categories were as follows: Preoccupied, 60.6%; Dismissing, 56%; Fearful, 53.6%; and, Secure, 45.7%. Similarly, Student t-tests failed to show significant differences between IPT remitters and nonremitters across the four continuous attachment ratings (Secure, $t[156.7] = -1.18$, $p = .85$; Dismissing, $t[155.2] = 1.54$, $p = .13$; Preoccupied, $t[157.7] = .38$, $p = .70$; and Fearful, $t[155.7] = .75$, $p = .45$).

**Time to Stabilization with IPT.** Kaplan-Meier survival analysis (utilizing all 162 subjects and censoring nonremitters) failed to show significant differences on time to clinical stabilization across the four ('most like me') attachment categories (Wilcoxon test = 1.41, $p = .70$), with median time to stabilization across the groups as follows: Secure, 13 weeks; Fearful, 14.9 weeks; Preoccupied, 14.1 weeks; Dismissing, 15.6 weeks.

However, among subjects who remitted with IPT treatment ($n = 87$), high Fearful Avoidant attachment ratings were associated with a longer time to stabilization ($r = .32$, $p < .01$). In addition, high Secure attachment ratings were associated with a trend toward a shorter time to stabilization ($r = -.19$, $p < .08$). Neither the Dismissing nor Preoccupied attachment ratings were correlated with time to stabilization ($p$'s > .30).
DISCUSSION

Surprisingly little research has examined the distribution of adult attachment profiles within well-defined psychiatric populations. We investigated self-reported attachment styles, as well as attachment-relevant cognitive and interpersonal patterns in a large sample of women with recurrent major depression. Similar to Carnelley et al.'s (1994) preliminary data on 25 married women recovering from a depressive episode, a large proportion (43%) of women in our sample described themselves as holding a Fearful Avoidant attachment style. In contrast, only 22% of our clinical sample described themselves as having a Secure attachment style. These findings stand in contrast to those obtained in nonclinical middle-aged samples, where approximately 60% described themselves as securely attached, whereas only 25% (or less) described themselves as avoidant (which may represent either Fearful or Dismissing Avoidant attachment styles; see Mickelson et al., 1997).

Consistent with the hypothesis that Fearful Avoidant individuals view the self as unworthy and others as rejecting, Fearful Avoidant women in our sample reported a more negative self-view, more negative attitudes toward others, and greater problems socializing with other people—particularly as compared with their similarly depressed yet securely attached counterparts. Fearful Avoidant women also reported greater interpersonal difficulties with sociability and intimacy than did securely attached women, and these differences were apparent both during and following the acute depressive episode. These results provide preliminary evidence for the stability of these individual differences in interpersonal functioning in women with recurrent major depression. Although attachment style was assessed following the acute depressive episode, it was able to reliably distinguish differences in interpersonal functioning apparent across the groups approximately 12 weeks earlier, when all patients were severely depressed. Although these distinctive psychological and interpersonal dimensions of adult attachment are well established within nonclinical populations, this data is, to our knowledge, among the first to demonstrate these properties within a large and well-defined psychiatric population.

It is noteworthy that the Relationship Questionnaire (RQ), a brief measure of adult attachment, was powerful enough to detect cognitive and interpersonal differences even within this homogeneously severe clinical population. As would be expected in individuals with depression, women in our sample reported, on average, relatively low levels of self-esteem and elevated levels of interpersonal difficulty. For example, average IIP scores in the present sample were similar to those in Horowitz et al.'s (1988) sample of outpatients awaiting treatment. Yet,
even in this generally low-functioning sample, adult attachment profiles were able to distinguish between the somewhat better interpersonal functioning of the Secure patients, versus the more extreme interpersonal difficulties reported by the Fearful Avoidant patients (see Figure 3).

Visual inspection of Figures 2a and 2b indicates that the ordering of attachment group means across measures of self- and other-view is generally consistent with attachment theory. First, Fearful Avoidant and Preoccupied individuals have been theorized to hold a negative view of self. Consistent with this hypothesis, these groups appear to report more negative self-views than their Secure and Dismissing counterparts. Post-hoc group comparisons within these categorical analyses, however, found only the Secure versus Fearful group comparisons to consistently reach significance. Similarly, the strongest and most consistent associations obtained in the continuous or dimensional attachment analyses support the relationship between a Secure attachment orientation and positive self-view, and between a Fearful attachment orientation and negative self-view. See Table 1. The expected relationship between a Preoccupied attachment orientation and negative self-view was also obtained. However, no relationships emerged between Dismissing Avoidant attachment ratings and subject reports of self-esteem or self-view. Thus, contrary to findings in nonpsychiatric populations, a Dismissing attachment orientation may not be associated with a more positive view of oneself among individuals with a history of recurrent depressive episodes.

Second, Fearful Avoidant and Dismissing Avoidant individuals have been theorized to hold a negative view of others. Consistent with this hypothesis, categorical analyses showed women in the Fearful and Dismissing attachment groups to report less liking and acceptance of others and lower levels of sociability then their Secure and Preoccupied counterparts. Again, however, this relationship was most striking and consistent when comparing the Fearful Avoidant and Secure attachment groups (see Figure 2b, Table 1).

Notably, Fearful Avoidant women's negative self-views and heightened interpersonal difficulties could not be explained by differences in demographic or clinical characteristics across attachment groups. Indeed, the only variable that differentiated attachment groups was parental psychiatric history, with Fearful Avoidant women being most likely to report psychiatric or substance abuse disorder in at least one parent. This finding should be interpreted with caution, because it is based on patient report and because a correction for Type I error was not applied for these exploratory analyses. Nonetheless, the possibility that Fearful Avoidant individuals are more likely to grow up in less stable
family environments, or that they carry a stronger genetically linked vulnerability (such as, for example, social or behavioral inhibition, see Kagan, 1997), is worthy of future examination.

Findings regarding the role of adult attachment on remission versus nonremission with IPT treatment were more variable. Contrary to our expectation, there were no significant group differences in IPT remission rates. Moreover, a survival analysis conducted to compare the median time to stabilization across the four attachment groups also failed to reach significance. Notably, however, this analysis utilized data from all subjects, censoring IPT nonremitters (46% of the sample) at the point at which they were declared nonremitters and removed from the IPT treatment arm. Interestingly, however, an inspection of data for those patients who did remit with IPT ($n = 87$) showed a trend for securely attached women to respond faster to IPT (8.5 weeks) than Fearful Avoidant women (13 weeks).\(^7\) Similarly, when we relied on the greater variance afforded by the continuous attachment profile scores, a significant relationship was obtained between Fearful Avoidant attachment ratings and time to stabilization among IPT remitters.

Hence, it would appear that among IPT remitters, having a Fearful Avoidant attachment style interfered with a timely IPT treatment response. Why might this be the case? The concept of 'therapeutic alliance' has been defined "narrowly as the patient's active collaboration" (Frieswyk, Colson, & Allen, 1984, p. 460), but also "the extent to which the patient makes active use of the treatment as a resource for constructive change" (Frieswyk et al., 1986, p. 36). One hypothesis is that Fearful Avoidant patients—who view the self as unlovable and others as unreliable, and, thus, experience heightened discomfort with social interaction—took longer to develop a trusting therapeutic alliance, which, in turn, delayed the onset of an observable treatment response. Unfortunately, we were unable to test this hypothesis directly because the current study did not include a specific measure of therapeutic alliance. Further examination of the role of adult attachment patterns on the development of therapeutic alliance would, however, represent an important area for future research (e.g., see Dozier, 1990; Dozier & Tyrrell, 1998).

In the present study, women who did not show a positive response to IPT alone within a relatively short time frame (e.g., 33% reduction in HRSD scores by 8 weeks, 50% reduction by 12 weeks, full stabilization

\(^7\) These figures were obtained from IPT remitters only ($n = 87$), and hence differ from those presented as part of the survival analysis that incorporated information from all 162 subjects, censoring data from nonremitters at the point at which they were withdrawn from the study.
by 24 weeks; see Figure 1) were designated as IPT nonremitters and re-assigned to an alternate treatment (i.e., adjunctive medication). Although this represents good clinical practice, it is also likely to lead to a truncation of variance in treatment outcomes. A stronger test of the role of attachment on time to stabilization with IPT would require a study design that allowed patients to continue in IPT alone for longer periods of time prior to withdrawal due to nonremission. Hence, given the protocol constraints, we believe that the present findings are noteworthy.

Limitations of the current study include the fact that adult attachment styles were assessed at only one time point, following an initial abatement (HRSD < 10) of patients' acute depressive symptoms. An advantage of this assessment strategy is the minimization of potential depressive response bias that may have been apparent had we obtained attachment ratings while patients were acutely depressed. Indeed, for some patients (n = 38), this level of mood elevation (and thus questionnaire completion) occurred only after being declared an IPT nonremitter, and initiation of adjunctive medication treatment. Thus, depression scores obtained at the point at which patients completed questionnaires (HRSD < 10) did not differ between attachment groups and should not have influenced the current results. Nevertheless, the current protocol did not allow us to determine what percentage of women may have described themselves as insecurely attached during the acute depressive episode—yet who described themselves as securely attached following acute symptom remission. An accurate determination of such unstable attachment reports may be particularly important in view of research regarding the clinical significance of attachment style change as an individual difference variable (e.g., see Davila, Burge, & Hammen, 1997). Future research designed to test the stability of self-reported attachment styles during, and at repeated intervals following, acute psychiatric episodes would be informative.

A second potential limitation of the current study includes the use of an attachment assessment strategy that relied upon patient self-report rather than clinician assessment (of, for example, AAI interview materials) and/or other reports. Clearly, self-reported attachment instruments hold an advantage over the AAI in terms of ease-of-administration; however, they may be criticized for their assumed susceptibility to self-report bias and/or the fact that shared method variance may inflate relationships between attachment and alternate self-reported psychological and interpersonal variables. Nevertheless, self-report measures of adult attachment have been validated repeatedly in studies differentiating identified attachment groups across relevant personality and be-
behavior indicators (Klohn & Bera, 1998), relationship functioning (Bookwalter & Zdaniuk, 1998; Collins & Read, 1990), and responses to multiple life stressors (Cozzeelli, Sumer, & Major, 1998; Hammen et al., 1995; Mikulincer, Florian, & Weller, 1993). Hence, the profile approach to attachment assessment we used was, at the outset of the study, the most well-validated yet practical assessment tool available. Notably, however, newly developed multi-item attachment scales (e.g., Brennan, Clark, & Shaver, 1998; Collins & Read, 1990; Simpson, Rholes & Nelligan, 1992) may capture greater variability across adult attachment dimensions and may thus represent more powerful self-report assessment tools.

Thus, future studies examining adult attachment patterns within well-defined psychiatric samples that utilize and compare multiple adult attachment assessment strategies (such as self-reported attachment patterns and the AAI) would be helpful. Further research examining the influence on adult attachment of other types of therapeutic approaches, such as cognitive behavioral therapy, behavioral marital therapy, or social skills or assertiveness training, would also be informative. Finally, studies testing the influence of insecure attachment profiles on well-specified and operationalized process variables (such as ‘therapeutic alliance’) in treatment outcome studies would represent an important next step in this line of research.

CONCLUSIONS

The current report examined the prevalence and significance of adult attachment patterns in a sample of 162 women with recurrent major depression. Results indicate that 43% of this clinical population described themselves as Fearful Avoidant in their adult attachment relationships (as compared to 22% Secure, 20% Preoccupied, and 15% Dismissing). As predicted, Fearful Avoidant women reported a more negative view of self, more negative attitudes toward others, and heightened interpersonal difficulties with sociability and intimacy—particularly when compared with their similarly depressed yet securely attached counterparts. Although attachment group categorization did not distinguish between IPT remitters versus nonremitters, a positive association was obtained between Fearful Avoidant attachment ratings and time to clinical stabilization in IPT remitters. These results support the validity of attachment style assessment within well-defined clinical samples and highlight the need for future research to study the etiology and clinical implications of attachment-relevant vulnerabilities within psychiatric samples.
APPENDIX

SELF-REPORT ATTACHMENT STYLE PROTOTYPES
[THE RELATIONSHIP QUESTIONNAIRE; Adapted from Bartholomew & Horowitz, 1991.]
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1. [Secure] It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others not accept me.
2. [Dismissing Avoidant] I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient and I prefer not to depend on others or have others depend on me.
3. [Preoccupied] I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.
4. [Fearful Avoidant] I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become close to others.

REFERENCES


ATTACHMENT PROFILES IN RECURRENTLY DEPRESSED WOMEN


