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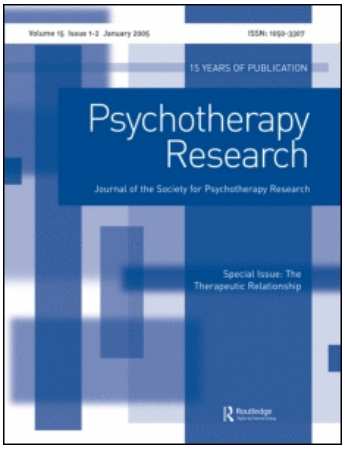

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The influence of psychodynamically oriented therapists' attachment representations on outcome and alliance in inpatient psychotherapy abstract

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The influence of psychodynamically oriented therapists' attachment representations on outcome and alliance in inpatient psychotherapy abstract

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Abstract
The Adult Attachment Interview (AAI) was used to study 31 psychotherapists who treated 1,381 patients in intensive multimodal inpatient psychotherapy. AAI dimensional ratings of security versus insecurity and dismissiveness versus preoccupation were used to predict alliance and outcome via multilevel regression techniques (hierarchical linear modeling). There were no main effects of therapists' attachment dimensions. However, higher attachment security of the therapist was associated with both better alliance and outcome in more severely impaired patients. Implications of the findings as well as limitations of the study are discussed.

Keywords: attachment; outcome research; alliance

The figure of the therapist has long attracted attention in psychotherapy and psychiatric research (e.g., Fleming, 1961; Holt & Luborsky, 1955). Even though current developments emphasize therapeutic techniques and manuals, there is still a common interest in therapist effects among researchers from all therapeutic orientations, especially since significant outcome differences between therapists have been reported in various patient populations and therapeutic settings (e.g., Dinger, Strack, Leichsenring, Wilmers, & Schauenburg, 2008; Elkin, Falconnier, Martinovich, & Mahoney, 2006; Kim, Wampold, & Bolt, 2006; Lutz, Leon, Martinovich, Lyons, & Stiles, 2007). In addition to overall outcome differences among therapists, Baldwin, Wampold, and Imed (2007) showed that therapists who form better alliances with their clients also reach better outcomes. With regard to influential therapist characteristics, Beutler et al. (2004) reported that sociodemographic characteristics of therapists as well as professional experience or amount of training exert only little influence on therapy outcome, but certain interpersonal characteristics, such as empathy, warmth, supportiveness, and dominance, are influential therapist variables.

Among the many interpersonal constructs known in personality psychology, Bowlby's attachment theory seems to be a promising approach for further studies in this field. The theory focuses on relevant interpersonal experiences, affective patterns, and regulatory capacities. It also proposes that early relationship experiences influence not only significant attachment relationships later in life but also caregiving behavior toward others (Bowlby, 1988).

Clinical applications of attachment theory have become popular in psychotherapy research over the past decade (Davila & Levy, 2006), but the majority of studies on attachment in psychotherapy have focused on the attachment patterns of clients. In previous theoretical contributions, therapists have been viewed as attachment figures for their clients

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(Halpern, 2003). They are sought out in states of distress (activated attachment system), they offer empathic support and safety, and they are expected to be "wiser" and "stronger." All of this can be viewed as analogous to the child–caretaker interaction of classical attachment theory (Dozier & Bates, 2004; Farber, Lippert, & Nevas, 1995).

To fulfill the attachment needs of their clients, therapists should possess certain characteristics such as empathy, sensitivity, control of affect, and abilities for reflecting and perspective taking (e.g., Diamond, Stovall-McClough, Clarkin, & Levy, 2003). Individuals with secure attachment representations are more autonomous and flexible in difficult interpersonal situations. In addition, they are less likely to be driven by their own attachment fears and needs (Lopez & Brennan, 2000). This might enable a securely attached psychotherapist to provide good care for the patient. Therapists with dismissive attachment representations, on the other hand, might wish to distance themselves from difficult clients, and therapists with preoccupied attachment representations might experience feelings of guilt and fear that they are not adequate. In addition, securely attached therapists might be less receptive to countertransference reactions induced by the insecure inner working models of their clients, making them less likely to reinforce negative relationship patterns of their patients (Dozier, 1990). According to Mallinckrodt's social competencies in interpersonal process model, therapists' attachment representations and other childhood experiences influence their technical skills as well as social competencies and dispositions. These variables can be framed as the therapist's contribution to therapy and are assumed to influence the therapeutic relationship (Mallinckrodt, 2000).

Few studies have investigated therapists' attachment representations empirically. One study in the context of clinical case management examined the process measure depth of intervention and showed that secure case managers acted complementary to their patients' attachment style. Whereas insecure case managers intervened in greater depth and perceived higher dependency needs in patients with hyperactivating attachment systems, the opposite was true for secure case managers, who intervened in greater depth with patients whose attachment systems used deactivating strategies. This behavior of the case managers was interpreted as a therapeutic challenge to patients' predominant attachment behavior (Dozier, Cue, & Barnett, 1994). A subsequent study found interaction effects between psychiatric patients' and case managers' attachment state of mind (Tyrrell, Dozier, Teague, & Fallot, 1999). When Adult Attachment Interviews (AAIs) were coded on a dimension of attachment activation from de- to hyperactivation, complementary attachment patterns of patients and case managers were most effective in promoting positive therapeutic outcome. A few other studies have assessed therapists' attachment styles by questionnaire (e.g., Black, Hardy, Turpin, & Parry, 2005). Findings range from no effects (Ligiero & Gelso, 2002) to a small negative influence of attachment anxiety (Sauer, Lopez, & Gormley, 2003). In addition, anxious therapists have been shown to respond less empathically to hypothetical patients (Rubino, Barker, Roth, & Fearon, 2000). Romano, Fitzpatrick, and Janzen (2008) detected an interaction effect between volunteer clients and their graduate student therapists: When highly anxious clients were treated by very avoidant therapists, session depth as indexed by patients' self-report was lower. However, there was no association between therapist attachment and working alliance in this study.

With the exception of the studies conducted by Dozier et al., most clinical studies on the attachment representations of therapists have used self-report questionnaires. Researchers questioning the exclusive use of self-report instruments have noted that there are aspects of attachment representations that are more likely captured by observer ratings in standardized situations designed to "surprise the unconscious" (Waters, Crowell, Elliott, Corcoran, & Treboux, 2002). Both traditions have achieved meaningful results in research efforts, and empirical steps toward their integration seem feasible because both methods assess different aspects of the underlying concept of attachment (Kirchmann et al., 2009). To connect the present study to classic findings in developmental psychology on the transgenerational passing of attachment, including results on parental caregiving (De Wolff & van IJzendoorn, 1997; van IJzendoorn, 1995) and attachment behavior between adult partners (Waters et al., 2002), we chose to use the expert-rated AAI (George, Kaplan, & Main, 1985; Main, Goldwyn, & Hesse, 2002).

The present study was conducted to investigate the influence of therapists' attachment representations on alliance and outcome in inpatient psychotherapy. Unfortunately, and because of the naturalistic nature of the study, only retrospective alliance ratings could be obtained for the assessment of alliance quality, which are likely confounded by outcome. Another study concerning the development of the therapeutic alliance over time used a subset of the data set of this study, because weekly alliance ratings were available for only 12 therapists and 283 patients. However, because the research question was concerned with alliance development, no outcome data were included. When weekly rated alliance ratings were analyzed, therapists with highly

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preoccupied attachment representations had lower levels of alliance quality with patients who described high levels of interpersonal problems. Therapists' attachment security was not related to alliance level (Dinger, Strack, Sachsse, & Schauenburg, 2009).

In the present sample, patients treated by therapists with a secure attachment representation were expected to report better (retrospective) therapeutic alliances with their individual therapists and to profit more from therapy in terms of symptomatic outcome. In addition and based on the Dinger et al. (in press) study, patients treated by highly preoccupied therapists were expected to report less positive alliances.

Method

Participants

We studied outcome and alliance ratings of 31 psychodynamically oriented psychotherapists who treated 1,381 patients in an intensive multimodal inpatient setting. The psychotherapists were on the staff of two psychotherapy hospitals in Germany and were asked for participation based on their caseloads (minimum of 10 documented cases). Therapists gave information about their backgrounds in a self-report questionnaire. They were between 26 and 54 years old ($M = 37.42$, $SD = 6.54$), and gender was equally distributed (48.4% female). Their professional backgrounds were mainly medical education with psychotherapeutic specializations (27 physicians and four clinical psychologists). Professional experience ranged from 0.1 to 21.5 years ($M = 6.62$, $SD = 4.79$). At the beginning of the study, each therapist completed treatment of a mean of 44.6 patients ($SD = 29.43$, range: 13–182). Most therapists were psychodynamically oriented (38% psychodynamic, 32% psychoanalytic, 19% systemic/family therapy), and some were still in postgraduate psychotherapeutic training (38.7%).

Patients were treated in two psychotherapeutic hospitals in Germany. In both clinics, a change of therapist (e.g., as a result of illness, vacation) during therapy was documented so that we were able to include only those patients who did not change their individual therapist over the course of treatment. The patients' ages varied between 18 and 71 years ($M = 34.58$, $SD = 11.30$), and 66.4% were female. The distribution of International Classification of Diseases (10th revision) diagnoses is typical for a German inpatient psychotherapy population (Schauenburg et al., 2007; Tritt et al., 2003), which is characterized by severe, chronic disorders and high comorbidity. The diagnoses, obtained by clinical rating, were mostly affective disorders (55.6%), followed by anxiety disorders (35.7%) and adjustment/stress disorders (32.5%). Less frequent were eating disorders (19.4%), somatoform disorders (16.9%), obsessive–compulsive disorders (6.6%), and psychotic disorders (3.8%). A substantial percentage (41.1%) had a comorbid personality disorder, and most patients received more than one diagnosis (24.5% received one diagnosis, 37.8% two, 28.4% three, and 9.3% more than three diagnoses).

Measures

The AAI (George et al., 1996; Main et al., 2002) is a 1-hr semistructured interview with 18 questions about childhood experiences with primary attachment figures (mostly parents). Test–retest reliability of the AAI in samples of not-at-risk mothers ranges between 80 and 90% of cases with stable ratings over a period up to 1 year (Bakermans-Kranenburg & van IJzendoorn, 1993; Benoit & Parker, 1994). The interview is transcribed for the coding procedure. An intensive rater training is necessary to ensure reliability of coding and subsequent classifications. The underlying assumption is that attachment status manifests itself in the mental organization of attachment experiences. The coding takes into account coherence, flexibility, and completeness of the discourse. The resulting AAI categories are as follows: secure/autonomous (F), insecure/dismissing (Ds), insecure/preoccupied (E), and unresolved (U). In the case of unresolved attachment, one of the organized patterns (F, Ds, or E) was chosen as secondary classification. Recent work from attachment researchers has repeatedly discussed the limitations that lie in the use of categorical variables (Fraley & Spieker, 2003). A relatively new method allows the derivation of two continuous measures from the AAI State of Mind scale: security versus insecurity and dismissive versus preoccupied (Waters, Treboux, Fyffe, Crowell, & Corcoran, 2005). Based on a discriminant analysis of 560 AAIs, Waters et al. provide weighted linear composites of AAI State of Mind scales. For the secure versus insecure dimension, five weighted AAI State of Mind scales are added. Coherence of Transcript has the highest coefficient, whereas the scales Idealization of Mother, Idealization of Father, Anger at Mother, and Overall Derogation of Attachment are weighted lower and with negative coefficients. The dimension dismissive versus preoccupied includes seven AAI State of Mind scales and positive coefficients for Idealization of Mother, Idealization of Father, and Derogation. Negative weights are applied for the scales Passivity, Anger at Mother, and Anger at Father.

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The Helping Alliance Questionnaire (HAQ) consists of 11 items covering the relationship with the therapist on a 6-point Likert scale (German version: Bassler, Potratz, & Krauthauser, 1995). The mean was taken as a measure of the overall quality of patient-rated alliance. Data on construct validity and reliability have been reported for the German version of the HAQ for an unselected inpatient sample with mixed diagnoses (Cronbach's $\alpha = .89$; Bassler et al., 1995). The original version also correlates with other established measures of alliance (e.g., Hatcher & Barends, 1996). The assessment of the therapeutic alliance at termination brings about some limitations because retrospective alliance ratings are likely to be confounded with outcome (Tang & DeRubeis, 1999). HAQ ratings and Global Severity Index (GSI) posttherapy scores in this study were significantly correlated ($r = -.26$, $p < .01$). The present data set does not, however, allow for testing whether this correlation is because strong alliances have a positive influence on outcome or because patients with successful outcome tend to give higher alliance ratings. Limitations that derive from the use of a retrospective alliance measure are discussed.

The Symptom Checklist 90-R (SCL-90-R) assesses psychopathological symptoms during the last 7 days on a 5-point scale. The mean score of the measure, the GSI, is an internationally accepted outcome measure and was used in the present study as the primary measure of symptomatology from the patients' perspective. The GSI measures overall symptom distress; its reliability and validity have been demonstrated in numerous studies. A validation study in a large, representative German population sample replicated the scale's high internal consistency (Cronbach's $\alpha = .97$; Hessel, Schumacher, Geyer, & Brähler, 2001).

The German version of the Inventory of Interpersonal Problems (IIP; Horowitz, Strauss, & Kordy, 2000) consists of 64 items rated on a 5-point scale. It covers frequent interpersonal problems on eight scales in a circumplex structure around the dimensions of dominance and affiliation. For the present study, the mean IIP total score was used as a measure of interpersonal distress. The psychometric quality of the IIP has been established for the original version (e.g., Alden, Wiggins, & Pincus, 1990) as well as for the German translation (e.g., Braehler, Horowitz, Kordy, Schuhmacher, & Strauss, 1999).

The Impairment Score (IS), a common German measure, results from a therapist or an independent observer rating of patient psychological, sociocommunicative, and physical impairment on a 4-point scale (Schepank, 1995). A global score, the sum of the three subscales, is computed and can be interpreted as a global measure of patient impairment from the therapists' perspective. Good interrater reliability (Kendall's $W = .82$ for five raters, intraclass correlations between .89 and .97 for different samples) as well as good concordance with similar measures has been reported (Schepank, 1995).

Procedure

Patients were assigned to therapists within each clinic by an administrative secretary before they entered the unit and followed the regular flow of admission and discharge. It is important to note that it was impossible for either therapists or patients to interfere with the standardized assignment procedure. In both clinics, the assignment followed a consecutive order with no respect to preferences by patients or therapists.

Patients completed routine assessments of symptom load and interpersonal problems at the beginning and end of treatment and retrospectively evaluated the therapeutic relationship with their individual therapist on the last day of therapy. Patients gave informed consent for their anonymous data to be used in future research projects. The study was approved by the local ethics committee. Therapy outcome was assessed with three measures to increase validity of the findings. Symptomatology from the patients' perspective was measured with the German version of the SCL-90-R (Franke, 1995), and the degree of interpersonal problems was assessed with the IIP (Horowitz et al., 2000). Each patient's global impairment was also assessed from the therapist's perspective with the IS (Schepank, 1995).

Therapists were asked to participate in a study on "attachment and therapeutic outcome" and were assured that several steps would be taken to guarantee their anonymity. After they agreed to participate in the study, therapists were contacted by the trained interviewer of the AAI (Katja Brenk-Franz), who was affiliated with a distant university and whom they did not know personally. Interviews were conducted in a place suggested by the therapist (clinic, private practice, at home). All AAIs were audiotaped, and a verbatim transcript was written based on the audiotapes. The AAI transcripts were coded by two experienced and certified reliable coders (Anna Buchheim, Kathrin Beckh). Interviews were conducted after most therapies had taken place, and the time span between a therapist's interview and the therapies included in the outcome evaluations in this study was between 6 and 24 months. This is acceptable because attachment representations are seen as relatively stable over time.

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Setting

All patients received multimodal intensive inpatient psychotherapy with cognitive– behavioral as well as psychodynamic elements. They had individual therapy sessions (one to two times per week) as well as additional therapeutic interventions (e.g., disorder-specific interventions). The individual therapist also coordinated the other therapeutic interventions and acted as the primary contact person for patients. The therapeutic staff (nurses) and the other patients on the unit played an additional important role in the therapeutic concept of both clinics. Most patients also had group therapy sessions (twice a week), and art therapy and body-oriented therapy were available in both clinics. In some but not all cases, the individual therapist also served as group therapist. Therefore, patients typically met between 2 and 4 hrs with their therapist during 1 week. The average symptom load at admission was relatively high (mean SCL-90-R–GSI at intake was 1.46 [$SD = 0.65$]) and was significantly decreased at discharge ($M = 0.95$, $SD = 0.66$), $t(1380) = 32.0$, $p < .001$. Average duration of treatment in this severely impaired sample was 12.01 weeks ($SD = 5.40$).

Results

For descriptive reasons, we first report the distribution of attachment representations in the therapist sample as obtained from the AAI coding from two raters (Table I).

Concordance of ratings occurred in 93% of cases (Cohen's $\kappa = .88$). In consensus ratings, more than half of the therapists were classified with a secure attachment representation, but a substantial percentage (20%) fell into the unresolved attachment category. Only a few therapists were classified as insecure/dismissing. This corresponds to the distribution of the continuous AAI dimensions following Waters et al. (2005). The dimension security versus insecurity ($ICC_{just} = 0.77$) ranged from high security scores (max. $= 2.40$) to moderate insecurity scores (min. $= -1.33$), with a mean of 0.59 ($SD = 1.11$). The dimension dismissive versus preoccupied ($ICC_{just} = 0.82$) showed a skew in the direction of preoccupation with no high dismissive score (max. $=$ 0.79) but with high preoccupation scores (min. $= -$ 3.71), with a mean of -1.07 ($SD = 1.15$). Assuming that categorical variables conceal existing differences between individuals in one category, we computed the following multilevel models with continuous AAI dimensions. The continuous score used for analyses was the mean score obtained from both coders' ratings. Therapists' attachment security was unrelated to gender ($t = 1.5$, $p > .10$), profession ($t = 0.7$, $p > .50$), age ($r = -.04$, $p > .50$), and therapeutic experience ($r = -.11$, $p > .50$). The same was true for the dismissive versus preoccupied dimension. In addition, neither of the two attachment dimensions was related to treatment duration of patients.

Table I. Adult Attachment Interview (AAI) Distribution among Psychotherapists ($N = 31$)

AAI category	Four strategies	Organized strategies only
Secure/autonomous	19 (61.3%)	20 (64.5%)
Insecure/dismissing	2 (6.5%)	3 (9.7%)
Insecure/preoccupied	3 (9.7%)	8 (25.8%)
Unresolved/disorganized	7 (22.6%)	

Multilevel Regression Analyses: Alliance

Multilevel regression techniques adequately take into account the nested structure of the data (patients nested within therapists) as well as the different sample sizes at each level. Therapists were treated as random factors in all subsequent analyses. HLM 6.02 software was used for multilevel analyses (Raudenbush, Bryk, Cheong, & Congdon, 2004). In the first step, the amount of variance in retrospective alliance ratings as a result of the person of the therapist was calculated. In this so-called intercept-only model, therapists were responsible for 36.9% of the alliance variance.

To test whether patients' initial difficulties exert an influence on the terminal alliance rating, the following analyses tested whether three measures of patient difficulties before treatment were influential for alliance quality: patients' levels of interpersonal distress (IIP total), patient-reported symptomatology (GSI), and therapist-rated patient impairment (IS). The results are displayed in Table II. Higher overall levels of interpersonal problems were negatively related to alliance quality, whereas interpersonal problems related to affiliation were positively associated with HAQ scores.

On the therapist level, therapists' continuous AAI scores were used as predictors for retrospective alliance ratings, and interactions between variables on the patient and therapist level were allowed. Although there were no main effects of therapists' attachment dimensions on retrospective alliance ratings, attachment security versus insecurity appeared as a moderator of patient variables. The IIP total score, the GSI, and the IS showed significant interactions with therapists' attachment dimensions. The overall level of interpersonal problems (IIP total score) interacted with therapists' attachment security, suggesting that the influence of pretherapy interpersonal distress was moderated by therapists'

Table II. Multilevel Estimates for Retrospectively Assessed Alliance (HAQ)

Fixed effects	Coefficient	*SE*	*t*(28)
Mean alliance (intercept)	1.43	0.205	6.98***
× AAI secure–insecure	0.07	0.127	0.53
× AAI dismissive–preoccupied	0.10	0.150	0.66
IIP total score	−0.35	0.144	−2.4**
IIP × AAI secure–insecure	0.16	0.063	2.57**
IIP × AAI dismissive–preoccupied	−0.03	0.061	−0.57
GSI pre score	−0.08	0.121	−0.66
GSI × AAI secure–insecure	0.15	0.065	2.25**
GSI × AAI dismissive–preoccupied	−0.07	0.059	−1.15
IS pre score	< 0.01	0.033	0.09
IS × AAI secure–insecure	−0.06	0.020	−2.79***
IS × AAI dismissive–preoccupied	0.03	0.017	1.62

Note. HAQ = Helping Alliance Questionnaire; AAI = Adult Attachment Interview; IIP = Inventory of Interpersonal Problems (total score); GSI = Global Severity Index; IS = Impairment Score (therapist rated); AAI secure–insecure and AAI dismissive–preoccupied = dimensional measures of therapists' attachment representation.
**$p < .05$. ***$p < .01$.

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attachment status. This interaction indicates that when therapists are treating interpersonally more distressed patients, higher attachment security of the therapist is associated with better alliances. Stated differently, attachment security of therapists was associated with good alliances only for patients who described high levels of interpersonal problems before therapy. A similar pattern was found for patients' symptomatic impairment (GSI pretherapy score). The findings for the therapist-rated IS differed from the two patient measures: Those patients who had been rated as less severely impaired by their therapist before treatment reported better retrospective alliances when treated by more secure therapists.

Contrary to our expectations, therapists' scores on the AAI dimension dismissing versus preoccupied were unrelated to retrospective alliance ratings.

Multilevel Regression Analyses: Outcome

To investigate the influence of therapists' attachment dimensions on outcome, multilevel models for three outcome measures were computed: patients' interpersonal problems (IIP total score), patients' symptomatology (GSI), and patients' impairments as rated by therapists (IS). In a procedure analogous to that for alliance, the amount of explained variance resulting from the person of the therapists for the three outcome measures was obtained. Intercept-only models were computed for GSI, IIP, and IS posttherapy scores. Whereas therapist factors explained 4.5% of the GSI posttherapy score variance, only 0.5% of IIP posttherapy scores were due to therapist factors. Therapist differences, however, were considerably larger for the therapist-rated IS (17.6%). For the patient-rated outcome measures IIP and GSI, it is important to keep in mind that the variance resulting from therapists is relatively small compared with the large amount of variance usually explained by patient factors.

For further analyses, the procedure was similar to that described for alliance. For each outcome variable, each corresponding pretherapy score (i.e., GSI, IIP total, and IS) was used as a measure of patients' initial difficulties. The influence of these patient-level predictors was allowed to vary freely between therapists. This differs from the residual change score approach that is frequently used in psychotherapy studies but is more adequate if therapist effects are of particular interest (Lutz et al., 2007).

The multilevel models revealed slightly different results for the three outcome measures (Table III). The GSI at the end of treatment was not directly predicted by therapists' attachment dimensions, whereas the influence of GSI pretherapy scores was moderated by dimensional therapist attachment security. On average, high pretreatment symptom load led to higher GSI posttherapy scores. This effect was diminished when considering therapists with high attachment security, which corresponds to the finding that therapists with high attachment security had better alliances with severely disturbed patients.

The same pattern was observed for the change in interpersonal problems. There were no main effects of therapists' attachment dimensions on IIP posttherapy scores, but there was an interaction effect of patients' pretreatment IIP score and therapists' attachment security dimension. Again, higher attachment security of therapists diminished the negative impact of high pretreatment interpersonal problems on the IIP score at termination. However, this interaction effect did not meet the conventional significance level ($t = -1.74$, $p = .09$).

Table III. Multilevel Estimates for Three Outcome Variables

Outcome	Fixed effects	Coefficient	*SE*	*t*(28)
GSI post	Mean GSI post (intercept)	0.03	0.069	0.43
	× AAI secure–insecure	0.07	0.044	1.49
	× AAI dismissive–preoccupied	−0.01	0.040	−0.07
	GSI pre influence	0.66	0.035	19.25***
	GSI × AAI secure–insecure	−0.07	0.032	−2.31**
	GSI × AAI dismissive–preoccupied	0.02	0.032	0.72
IIP post	Mean IIP post (intercept)	0.26	0.077	3.43***
	× AAI secure–insecure	0.07	0.051	1.42
	× AAI dismissive–preoccupied	−0.06	0.062	−0.95
	IIP pre influence	0.72	0.036	20.07***
	IIP × AAI secure–insecure	−0.04	0.022	−1.74*
	IIP × AAI dismissive–preoccupied	0.01	0.029	0.46
IS post	Mean IS post (intercept)	2.24	0.484	4.63***
	× AAI secure–insecure	−0.22	0.304	−0.71
	× AAI dismissive–preoccupied	−0.14	0.264	−0.52
	IS pre influence	0.38	0.051	7.49***
	IS × AAI secure–insecure	0.01	0.041	0.20
	IS × AAI dismissive–preoccupied	0.01	0.039	0.03

Note. GSI = Global Severity Index; AAI = Adult Attachment Interview; IIP = Inventory of Interpersonal Problems (total score); IS = Impairment Score (therapist rated); AAI secure–insecure and dismissive–preoccupied = dimensional measures of therapist attachment representation.
*$p < .10$. **$p \leq .05$. ***$p \leq .01$.

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There were no influences of therapists' attachment dimensions on the therapist-rated outcome variable IS.

Discussion

The distribution of attachment patterns showed that the majority of therapists in our sample were classified as secure. The frequency of secure attachment closely parallels the rate of security in other nonclinical samples. However, there were more preoccupied and fewer dismissive therapists in comparison to other nonclinical samples (van IJzendoorn & Bakermans-Kranenburg, 1996). This is consistent with a study describing psychodynamic therapists as more sensitive to threats of separation, whereas cognitive therapists have a lower need for affection or expression of feelings in relationships (Arthur, 2000). These findings seem intuitively plausible, because choice of profession is likely influenced by interpersonal trait variables. Therefore, dismissive individuals may be more likely to choose nonrelationship-oriented professions and therapy forms. This might serve as a speculative explanation for the relatively small number of dismissing therapists in our psychodynamic therapist sample. None of the therapists, in particular those with insecure attachment representations, showed any significant psychological symptomatology at the time of the interview, except for one, who showed a Beck Depression Index score of 11, indicating a minor depressive mood.

We then investigated the association between therapists' attachment representations and the quality of the therapeutic alliance. We found that 36.5% of alliance variance was due to differences between therapists. Even though retrospective assessment of alliance is likely to be influenced by outcome, patients' ratings of the alliance showed much larger variations between therapists than their rating of outcome (GSI posttherapy score: therapist variation 4.5%).

We did not find direct influences of therapists' attachment security on alliance. However, dimensional therapist attachment security interacted with patients' pretreatment impairment. In general, patients with high interpersonal distress report lower alliances qualities. This effect is attenuated by therapists' secure attachment: More securely attached therapists established better alliances with more interpersonally distressed patients. The continuous dimension dismissive versus preoccupied attachment did not reveal the expected negative influence on alliance quality. A plausible interpretation of these findings is that secure therapists may be better able to adapt their behavior in order to appropriately fit the needs of interpersonally difficult patients. However, because the results reported here are associations, inferences about underlying mechanisms remain speculative.

Next, we investigated the degree to which therapist attachment security is associated with therapy outcome. As mentioned, between-therapist variance of patient-rated outcome was small. This corresponds with findings from a study investigating therapist effects in inpatient therapy in a larger sample (Dinger et al., 2008). The finding seems plausible, because

inpatients can establish helpful relationships with several people on their ward (staff, other patients) and thereby balance possible negative therapists' outcome effects.

When testing the influence of the two dimensions security versus insecurity and dismissiveness versus preoccupation, secure attachment was associated with better outcome when patients with high initial symptomatology were treated. This effect was consistent for both patient-rated outcome measures but was not observed for the therapist-rated IS. A higher degree of therapist attachment security, therefore, is especially helpful when treating patients with greater symptomatic impairment.

Attachment security of therapists in this study was not directly related to outcome. A reason for this might be that the focus of the AAI is on personal relationships in childhood. On the other hand, coherence of discourse as a central coding criterion assesses qualities that seem to be relevant for the successful psychotherapeutic treatment of patients. Hill and Knox (2009) assume that both clients' and therapists' attachment status might influence the processing of the therapeutic relationship, which calls for further studies on the matching of attachment representations in therapists and patients. Also, studies will be needed in order to investigate whether the effect of attachment security is indeed limited to interpersonally demanding patients or whether the lack of a direct association between representational attachment security and outcome is due to methodological characteristics of this study (e.g., the small therapist effect in this inpatient sample).

Some limitations must be taken into account. A major shortcoming can be seen in the use of retrospective alliance ratings because such evaluations are likely to be confounded by outcome. In addition, the HAQ contains some outcome items, which further confounds both constructs. It is unclear how much of the HAQ ratings are true alliance ratings and to what extent they are actually measuring outcome. Patients who improved during therapy might attribute their success to the person of the therapist and tend to evaluate him or her more positively. Tang and DeRubeis (1999) showed that sudden gains in depressive symptoms were followed, but not preceded, by more positive alliance ratings. The correlation between retrospective alliance and outcome in this study, however, is not large ($r = -.26$) and, as mentioned, therapist differences in HAQ alliance ratings were considerably larger than therapist effects on outcome. This indicates that the retrospective alliance measure captured unique features of the patients' view of their psychotherapy that were not reflected in the outcome measures.

A further limitation is the selective and relatively small sample of therapists. We included only psychodynamically oriented therapists who worked in inpatient psychotherapy clinics with a high standard of care and also a significant degree of social control during the therapeutic process via team decisions and regular supervision. Although an average number of 44 patients per therapist seems adequate in order to obtain a reliable estimate of a particular therapist's outcome and alliance ratings, the overall number of therapists ($N = 31$) should be increased in future studies.

Attachment interviews with therapists were conducted after they had worked with the patients whose data were analyzed for this study. Even though attachment representations are supposed to be stable over time, the possibility of changes in attachment security occurring between the time point of therapy and the interview assessment cannot be ruled out. Future studies should, therefore, adopt a prospective design.

As noted, the proportion of outcome variance resulting from therapist factors in our sample was small. This is due to the inpatient setting, and caution should be taken in generalizing the results to other settings. Nevertheless, one main advantage of this study is the quasi-random assignment of patients to therapists (no choice of therapist by patients), which is often difficult to realize in naturalistic studies. Despite its limitations, this is one of the first studies that assessed therapists' attachment state of mind with AAI interviews and related it to alliance and outcome measures. We were able to include a sufficient number of randomly assigned patients per therapist, which enabled us to study interactions between patient and therapist variables. Most of the participating therapists reported having enjoyed their interview and considered the feedback about their own attachment representations helpful and informative. The finding of a positive influence of therapist attachment security on outcome with severely disturbed patients seems clinically plausible and might serve as a research-generating hypothesis for future samples with outpatients. In addition, it seems desirable to assess both patients' and therapists' attachment to investigate possible matching effects. If one is interested in a deeper understanding of how therapist attachment representations manifest in the therapeutic process, one has to look beyond pre–post evaluations and investigate therapists' interventions on a microanalytic level in quantitative and qualitative studies.

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