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The Therapeutic Alliance in Schema-Focused Therapy and Transference-Focused Psychotherapy for Borderline Personality Disorder

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This study investigated the quality and development of the therapeutic alliance as a mediator of change in schema-focused therapy (SFT) and transference-focused psychotherapy (TFP) for borderline personality disorder. Seventy-eight patients were randomly allocated to 3 years of biweekly SFT or TFP. Scores of both therapists and patients for the therapeutic alliance were higher in SFT than in TFP. Negative ratings of therapists and patients at early treatment were predictive of dropout, whereas increasingly positive ratings of patients in the 1st half of treatment predicted subsequent clinical improvement. Dissimilarity between therapist and patients in pathological personality characteristics had a direct effect on growth of the therapeutic alliance but showed no relationship with clinical improvement. The authors conclude that the therapeutic alliance and specific techniques interact with and influence one another and may serve to facilitate change processes underlying clinical improvement in patients with borderline personality disorder.

Keywords: borderline personality disorder, therapeutic alliance, therapeutic relationship, schema-focused therapy, transference-focused psychotherapy

The therapeutic alliance can be defined as the quality of involvement between therapist and patient as reflected in their task teamwork and personal rapport (Orlinsky, Ronnestad, & Willutzki, 2004). The quality of the alliance proves to be consistently associated with a positive outcome across different forms of psychotherapy. Especially the therapist's contribution to the alliance as rated by patients shows a consistent although modest relationship with outcome (Martin, Garske, & Davis, 2000; Orlinsky et al., 2004). Although the therapeutic alliance seems to be a common therapy factor crucial to the change process across different therapeutic orientations, comparative research of the quality of the therapeutic alliance is necessary to detect possible similarities and differences across orientations.

The results of studies investigating the therapeutic alliance across different treatment modalities in mostly heterogeneous groups of patients with an Axis I disorder have been equivocal (e.g., Brunink & Schroeder, 1979; Marmar, Gaston, Gallagher, & Thompson, 1989; Raue, Goldfried, & Barkham, 1997; Sloane, Staples, Cristol, Yorkston, & Whipple, 1975). Nevertheless, the available evidence has suggested that compared with psychodynamic psychotherapy the alliance in cognitive behavior therapy is more characterized by supportive communication, expressed sympathy, and interpersonal contact. It is conceivable that there are more pronounced differences in the therapeutic alliance in the treatment of personality disorders instead of Axis I disorders. From a cognitive-behavioral perspective on the treatment of personality disorders, a closer, warmer therapeutic alliance is deemed more necessary than in the treatment of an acute Axis I disorder such as anxiety or depression (Beck, Freeman, & Associates, 1990; Beck, Freeman, Davis, & Associates, 2004). Much of the therapist's role consists of a process of reeducation, and in the course of time the therapist even becomes a role model for the patient. In schemafocused therapy (SFT), therapists even try to provide "limited reparenting" to meet partially the unmet emotional needs in an effort to develop more healthy schemas (Young, Klosko, & Weishaar, 2003). This is in contradiction to transference-focused psychotherapy (TFP), in which an active supportive relationship

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with the patient is considered contraproductive. In TFP, the predominance of negative transference reactions distorting the real relationship, including the one with the therapist, is seen as the core pathology of the borderline patient. Supportive interventions are considered to interfere with the development of the negative transference or—in a less harsh scenario—to blur the negative transference, creating an as-if world and making the negative transference less amenable to therapeutic interventions. The destructive aggression of the patient, as manifested in the transference, however, is addressed early in treatment to protect the treatment, enhance reality testing, and foster the development of a more differentiated, realistic representation of important others as, for example, the therapist (Clarkin, Yeomans, & Kernberg, 1999).

Until now, no longitudinal research has been available in different alliance qualities between psychodynamic versus cognitive– behavioral therapy in the treatment of personality-disordered individuals. This study tries to advance earlier comparative research of the therapeutic alliance (a) by investigating a homogeneous group of patients with a borderline personality disorder (BPD), (b) by using two well-defined forms of cognitive–behavioral and psychodynamic therapy with dissimilar therapeutic alliance qualities, and (c) by studying the development of the therapeutic alliance during treatment.

The consistent relationship of the quality of the therapeutic alliance with outcome can be interpreted in different ways. Outcome and alliance measures may be confounded, and the quality of the alliance may even be a mere epiphenomenon of positive treatment change. However, in many studies, evidence for the therapeutic alliance as a mediator of change has been collected showing that outcome can be predicted from early alliance ratings (e.g., Gaston, Marmar, Gallagher, & Thompson, 1991; Salvio, Beutler, Wood, & Engle, 1992). Although it may be expected that in the treatment of personality-disordered individuals early rating of the therapeutic alliance will predict premature termination and outcome, it is conceivable that, in addition, growth of the therapeutic alliance during the first phase of treatment will facilitate later outcome. Especially in the treatment of BPD patients, the establishment of a therapeutic relationship is not readily accomplished because most of these patients' problems are generally manifested in the interpersonal realms. As a result, the development and maintenance of a collaborative therapeutic alliance during the first year of treatment as a prerequisite for further treatment is seen as one of the central issues of intensive long-term treatment across different psychotherapeutic orientations (Beck et al., 1990; Clarkin et al., 1999).

The investigation of the intertwined and sequential relationship between alliance and client improvement during treatment is seen as an advancement compared with the research into early alliance scores as predictors of later outcome (Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000; Klein et al., 2003). Until now, no systematic research has been reported on the predictive relationships among changes in the therapeutic alliance and outcome in different phases of long-term treatment of personality disorder. Consequently, the purposes of the present study are not only to analyze (a) whether the quality of the therapeutic alliance at early treatment predicts dropout and outcome but also (b) whether there is any support of a causal role of growth of the therapeutic alliance during the first phase of treatment in facilitating later outcomes. In psychotherapy outcome research, the major focus is on comparing the effectiveness of various theoretical and technical approaches while trying to control, reduce, or eliminate the influence of therapist factors. Therapist factors are controlled by constructing treatment manuals that ideally can be applied identically by any therapist to all patients within a particular diagnostic category (Lambert, 1989). As a result, relatively little attention has been given to the therapeutic impact of discrete therapist variables such as age, experience and training, ethnicity, and gender, and only a few studies have examined therapist variables in a relational or interpersonal context (Beutler et al., 2004).

Particularly with respect to personality traits, research has tried to define ways in which therapist and patient qualities mutually interact, resulting in patterns of match and mismatch (Beutler et al., 2004). Two opposing viewpoints have been developed. The conventional presupposition that similarity in personality traits increases the attachment and participation in treatment and consequently promotes outcome has been confirmed in some studies (e.g., Herman, 1998), but support for the opposite presupposition has also been found (e.g., Berry & Sipps, 1991). In this view, it is argued that if the therapist's and the patient's dysfunctional personality characteristics are harmoniously blended, this will result in a therapist's blind spot severely hampering an adequate understanding of his or her emotional reactions to the patient and controlling these in the therapeutic relationship.

It is well known that the therapeutic alliance can be extremely complicated in the treatment of BPD (Beck et al., 1990; Yeomans, Clarkin, & Kernberg, 2002; Young, 1994). Both within a cognitive and psychodynamic perspective, personal qualities of the therapists in their reciprocal relationship with the personal qualities of the patient are assumed to be responsible for the quality and development of the therapeutic alliance. Activation of therapists' cognitive schemas by the expression of similar early maladaptive schemas in patients (Beck et al., 1990; Young et al., 2003) or unconscious countertransference reactions elicited by the patient's primitive projective mechanisms (Clarkin et al., 1999) may preclude the functional processing of transference reactions in the therapeutic relationship. Therefore, it is to be expected that the match of pathological personality characteristics of therapists and patients will impede the development of the therapeutic alliance.

By examining dissimilarity in pathological personality characteristics between therapists and patients, the development of the therapeutic alliance, and the clinical outcome within one comprehensive analysis, the present study tries to improve on earlier research on the impact of therapists' personality traits on outcome (a) by assessing pathological personality traits of relevance for borderline personality disorder, (b) by studying these traits in an interpersonal context, and (c) by investigating whether therapist– patient similarity in pathological personality characteristics indirectly impacts outcome by its direct effect on the therapeutic alliance.

In sum, the purpose of the present study was to investigate the following predictions: (a) The quality of the therapeutic alliance is rated higher in SFT than in TFP; (b) a lower quality of the therapeutic alliance at early treatment predicts premature treatment termination and a worse clinical outcome; (c) growth of the therapeutic alliance during the first year of therapy facilitates later clinical improvement; and (d) dissimilarity in pathological personality characteristics between therapists and patients facilitates the

development of the therapeutic alliance and indirectly affects therapy outcome.

Method

The present study was conducted as part of a multicenterrandomized two-group design. Randomization to SFT or TFP was stratified over four community mental health centers, was carried out by a study-independent person, and was performed following the adaptive biased urn procedure (Schouten, 1995). The study was conducted between September 1, 1999, and April 30, 2004. Details about participants, method, and results of this trial have been reported elsewhere (Giesen-Bloo et al., 2006) and are summarized in Figure 1.

Design

Patients' first assessment was made after inclusion and before random allocation to treatment conditions. Then, assessments were made every 3 months for 3 years. Primary outcome measures were administered at each assessment. The measurements for the quality of the therapeutic alliance were collected only after 3 months (i.e., early treatment), after 15 months (i.e., midtreatment), and after 33 months (i.e., late treatment). Personality assessments of patients

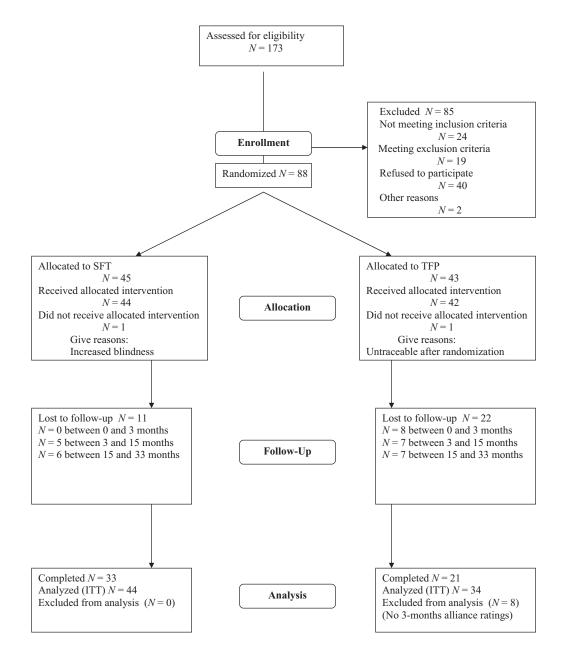


Figure 1. Flow diagram of participant progress through the phases of the randomized trial. SFT = schema-focused therapy; TFP = transference-focused psychotherapy; ITT = intention-to-treat.

took place at baseline, whereas therapists answered the personality questionnaires 3 months after the start of therapy.

Independent trained research assistants assessed patients. Patients' diagnoses were assessed with the semistructured clinical interviews for the *Diagnostic and Statistical Manual of Mental Disorders*, (4th ed.; *DSM-IV*; First, Spitzer, Gibbon, & Williams, 1994, 1997). Patients were also screened with a semistructured clinical interview, the Borderline Personality Disorder Severity Index (4th version; BPDSI-IV; Arntz et al., 2003). A BPDSI-IV cutoff score of 20 (range = 0–90) discriminates BPD patients from other personality pathology patients. Signed informed consent was obtained after full explanation of procedures and of both therapies but before the first assessment and randomization. Study researchers, therapists, and research assistants had no foreknowledge of treatment allocation. The study protocol was approved by the medical ethical committees of the four participating centers.

Participants and Settings

Patients were referred by mental health institutes. Inclusion criteria were a main diagnosis of BPD, age between 18 and 60 years, a BPDSI-IV score above 20, and Dutch literacy. General exclusion criteria were psychotic disorders (except short, reactive psychotic episodes), bipolar disorder, dissociative identity disorder, antisocial personality disorder, attention-deficit/hyperactivity disorder, addiction of such severity that clinical detoxification was indicated (after which entering treatment was possible), psychiatric disorders secondary to medical conditions, and mental retardation.

Treatment Conditions and Therapists

Both treatments were administered in biweekly 50-min sessions. Treatment protocols addressed the theoretical model, treatment frame, different phases, and the use of strategies and techniques of SFT (Young, 1994; Young et al., 2003) and TFP (Clarkin et al., 1999; Yeomans et al., 2002). Jeffrey Young (SFT) and Frank Yeomans (TFP) trained the participating therapists before the start of the study in SFT and TFP, respectively. Essential to both treatments is supervision. Weekly local peer supervision with 4–5 SFT or TFP therapists as well as 4-monthly 1-day central supervision and 9-monthly 2-day central supervision by Jeffrey Young (SFT) or Frank Yeomans (TFP) was provided in the study.

Treatment Integrity Check

Randomly selected audio tapes of Sessions 1–6 (for the TFPcontract phase), and of each quarter, were saved for evaluation. All raters were study independent and blinded for treatment outcome. One psychologist listened to one randomly selected tape of each patient then stated the treatment administered and classified all tapes except one SFT tape correctly. Twenty-one (partial) TFPcontract phases were rated by trained graduate students in psychology on the Contract Rating Scale (Yeomans, Selzer, & Clarkin, 1993). The contract setting adherence and competence had an average rating of 3.22 (range = 2.86-3.54), whereas a predetermined rating of 3 was considered adequate (Yeomans, Selzer, & Clarkin, 1989, 1993). Other trained therapists for each orientation assessed the TFP Rating of Adherence and Competence Scale (Clarkin et al., 1999) or the SFT Therapy Adherence and Competence Scale for BPD (Young, Arntz, & Giesen-Bloo, 2006). Both instruments consist of VAS- and Likert-scale items and have an identical cutoff score ≥ 60 . Fifty-six TFP tapes and 77 SFT tapes of the second and/or sixth trimester were rated (intraclass correlation coefficients [ICCs] over 21 TFP and 20 SFT tapes that were rated twice). Only an average of 7.5% of time (median 4%) was spent on non-TFP techniques in TFP, and in SFT no non-SFT techniques were observed. The median competence/quality level of applying TFP was 65.60 (ICC = 0.73) and of applying SFT was 85.67 (ICC = 0.69). The global competence rating median of the TFP therapists was 65.00 (ICC = 0.70) and of the SFT therapists 73.00 (ICC = 0.78).

Measures

Borderline Personality Disorder Severity Index (BPDSI-IV). The primary outcome measure, the BPDSI-IV, is a *DSM-IV* BPD criteria-based semistructured interview and forms a quantitative index of the current severity and frequency of specific BPD symptoms (Arntz et al., 2003). The interview covers a period of 3 months, is suitable for use as a treatment outcome measure, and shows excellent (interrater) reliability, validity, and sensitivity to change. The internal consistency of the BPDSI-IV in the current study was .83.

Working Alliance Inventory (WAI). The WAI (Horvath & Greenberg, 1989) is one of the most commonly used and extensively validated measures of the alliance. It is pantheoretical, moderately correlated with other measures of the alliance, and has been found to predict therapy outcome in numerous studies (Martin et al., 2000; Orlinsky et al., 2004). The Dutch version of the WAI consists of three subscales of 12 items each, rated on a 5-point instead of a 7-point Likert-type scale ranging from 1 (never) to 5 (always). The subscales based on Bordin's (1979) working alliance theory address agreement about the goals of therapy, agreement about the tasks of therapy, and the bond between the client and therapist. Patients completed the patient form (WAI-P) measuring the contribution of the therapist to the alliance as perceived by the patient, and therapists completed the therapist form (WAI-T), in which they rated the contribution of the patient to the alliance. Because of the high intercorrelations among subscales (WAI-P range = .69-.88; WAI-T range = .67-.89), subscale mean scores were added together to derive a global score. A higher score on the WAI indicates a higher quality of the working alliance. In the present study, the internal consistency of the WAI-P was .94 and of the WAI-T was .95.

Difficult Doctor–Patient Relationship Questionnaire—Ten Item Version (DDPRQ-10). The DDPRQ (Hahn, Thompson, Stern, Budner, & Wills, 1990) is a self-report questionnaire that aims to measure the extent to which patients are experienced as frustrating or difficult in the therapeutic relationship by their doctor or therapist and as provoking levels of distress that transcend the expected and accepted level of difficulty. Of the DDPRQ-10, five items are about the therapist's subjective experience (e.g., "Do you find yourself secretly hoping that this patient will not return?"), four are quasi-objective questions about the patient's behavior (e.g., "How time consuming is caring for this patient?"), and one item about symptoms combines elements of the patient's behavior and the therapist's subjective response (i.e., "To what extent are you frustrated by this patient's vague complaints?"). The items are answered on a 6-point Likert-type scale ranging from 1 (*not at all*) to 6 (*a great deal*). The DDPRQ was shown to be a reliable and practical instrument in the physician–patient relationship. Difficult patients have been found to be characterized by psychosomatic symptoms, personality disorder, and Axis I (major) psychopathology, and most had more than one of these characteristics (Hahn et al., 1996; Hahn, Thompson, Wills, Stern, & Budner, 1994). The total score of the DDPRQ equals the mean of the 10 items. A higher score indicates a higher level of therapist frustration. The internal consistency of the DDPRQ in the current study was .79.

Young Schema Questionnaire (YSQ). The YSQ is a 205-item self-report questionnaire developed to measure 16 core beliefs or early maladaptive schemas (Young, 1994). The items are answered on a 6-point Likert-type scale ranging from 1 (totally inapplicable to me) to 6 (describes me perfectly). The 16 core beliefs are (1) abandonment/instability, (2) defectiveness/shame, (3) emotional deprivation, (4) mistrust/abuse, (5) social isolation, (6) dependence/incompetence, (7) vulnerability to harm and illness, (8) enmeshment, (9) failure to achieve, (10) social undesirability, (11) entitlement/grandiosity, (12) insufficient self-control/selfdiscipline, (13) self-sacrifice, (14) subjugation, (15) emotional inhibition, and (16) unrelenting standards. Schmidt, Joiner, Young, and Telch (1995) studied the YSQ in American patient and student samples, and in the patient sample a 15-factor solution closely matching the rationally derived scales was found. The internal consistency of the subscales is sufficient to good (Stopa, Thorne, Waters, & Preston, 2001; Waller, Meyer, & Ohanian, 2001), and findings support the discriminant validity of the YSQ, suggesting that patients with different psychiatric diagnoses can be differentiated on the basis of their core beliefs (Stopa et al., 2001; Waller et al., 2001; Waller, Shah, Ohanian, & Elliott, 2001). Moreover, Rijkeboer, van den Bergh, and van den Bout (2005) reported adequate rank-order stability and a high sensitivity of the Dutch YSQ and its subscales in predicting the presence or absence of psychopathology in a clinical and nonclinical sample. Item mean scores were calculated for each scale. A higher score on a scale indicates a higher endorsement of dysfunctional core beliefs. Subscale mean scores were summed up to derive a global score for dysfunctional core beliefs. Internal consistencies of the YSQ subscales in the present study varied from .77 to .94 in the therapist sample and from .78 to .93 in the patient sample.

Inventory of Personality Organization (IPO). The 90-item IPO consists of three primary clinical and two secondary interpersonal relations scales. The IPO items have a 5-point Likert-type scale ranging from 1 (never true) to 5 (always true). The three primary clinical scales relevant to the central dimensions of Kernberg's personality organization model (i.e., Reality Testing, 13 items; Identity Diffusion, 17 items; and Primitive Psychological Defenses, 14 items) have been psychometrically investigated. These scales display adequate internal consistency and good testretest reliability. Each of the scales is associated with increased negative affect, aggressive dyscontrol, and dysphoria as well as lower levels of positive affect consistent with Kernberg's model of borderline personality organization. Moreover, the Reality Testing scale is closely related to various measures of psychotic-like phenomena (Lenzenweger, Clarkin, Kernberg, & Foelsch, 2001). The two secondary interpersonal relations scales are also relevant for borderline character pathology (i.e., Pathological Object Relations, 38 items; and Superego Pathology, 12 items). Item mean scores were calculated for each subscale. A higher score on a scale indicates a higher level of this pathological personality characteristic. Subscale mean scores were added together to derive a global score for impairments in personality organization. Internal consistencies of the IPO subscales in the current study varied from .72 to .88 in the therapist sample and from .76 to .93 in the patient sample.

Statistical Analyses

A BPDSI-IV-based power analysis indicated that 45 patients per group are needed to detect a 22% versus 50% recovery difference between two groups by means of survival analysis (two-sided significance level of 5% and a power of 80%; see Giesen-Bloo et al., 2006, for more details). Differences in the quality and development of the therapeutic alliance between treatment conditions were analyzed with a 2 (group) \times 3 (time) mixed factorial design with repeated measures on the second factor.

Because in previous research a clinical cutoff score of 15 discriminated between BPD patients and nonpatient control participants (Arntz et al., 2003), with a sensitivity of 1 and specificity of 0.97, the recovery criterion was therefore defined as a BPDSI-IV score of less than 15 and maintenance of this score until the last assessment. A second success criterion was the Jacobson and Truax reliable change index (Jacobson & Truax, 1991). For the BPDSI-IV, reliable change was achieved when a reduction of at least 11.70 was achieved. By using logistic regression analyses, we investigated to what extent early treatment WAI-P, WAI-T, and DDPRQ scores predicted these two outcome criteria above and independent of pretreatment BPDSI scores and treatment condition. To detect time to dropout, survival analyses were conducted by using a proportional hazard approach to survival analysis (Cox regression) with dropout as the dependent variable and pretreatment BPDSI, treatment condition, and early treatment process variables as independent variables.

To determine whether early to midtreatment changes in process variables predicted mid- to late treatment changes in outcome, cross-lagged correlations among residualized change scores were calculated (Finkel, 1995). When a correlation between early process changes and later outcome changes was statistically significant, hierarchical regression analyses were performed to test whether early process changes still predicted later outcome changes after controlling for autocorrelations (i.e., the correlations between early and late process changes) and synchronous correlations (i.e., the correlations between early process and early outcome changes; cf., Burns, Kubilus, Bruehl, & Harden, 2003; Evon & Burns, 2004). Regressions were also used to determine the inverse association.

Differences between therapists and patients in the profile of cognitive schemas or personality organization were analyzed according to Cronbach and Gleser (1953). Therapist–patient difference values were computed by using YSQ or IPO subscale scores corrected for elevation and scatter. The D^2 statistic represents the sum of the squared differences on the subscales of the YSQ or IPO. The larger the obtained value, the greater the degree of dissimilarity between therapist and patient. To test the causal model linking dissimilarity in pathological personality characteristics, development of the therapeutic alliance, and outcome, we used the analytic strategy as recommended by Baron and Kenny (1986).

Statistical analyses were performed in the intention-to-treat and the completers sample. An intention-to-treat approach was applied, either by using the last clinical endpoint during the 3-year treatment period or by using the last clinical endpoint carried forward for trend analyses. Missing data were substituted with a lastobservation-carried-forward method. In addition, a completers analysis was performed. All tests were interpreted with a significance level of 5%. The Statistical Package for Social Sciences, Version 11.0 for Windows, was used for all analyses.

Results

Characteristics of Participants

Of the 88 randomized patients, 86 patients were included in the analysis of the randomized controlled trial comparing SFT and TFP (Giesen-Bloo et al., 2006). Eight patients in TFP compared with none in SFT terminated treatment prematurely between pretreatment and the first repeated assessment after 3 months (Fisher's exact test, p < .01). In 2 patients, it did not prove to be possible to agree on a treatment contract, which in TFP is considered to be a prerequisite for starting treatment, and in 1 patient TFP was contraindicated according to the subjective evaluation of the therapist. Five other patients dropped out in the first 3 months of treatment after completing treatment contracting. Although no patients' WAI-P scores of the 5 dropouts from TFP in this period are available, therapists' WAI-T and DDPRQ have been collected. Compared with patients still in treatment at early treatment (n =57), the quality of the therapeutic alliance on the WAI-T was rated as significantly lower (M = 8.4, SD = 1.1 vs. M = 10.7, SD =1.3), t(60) = 3.67, p < .01, and these patients were also rated as significantly more irritating and frustrating in the therapeutic relationship on the DDPRQ (M = 3.5, SD = 0.9 vs. M = 2.8, SD =(0.7), t(60) = 2.14, p < .05.

Table 1 gives an overview of the biographical and clinical characteristics of the 78 patients in early treatment that constitute the intention-to-treat sample of the present study. Chi-square analyses and *t* tests for independent samples revealed no significant differences with respect to biographical and clinical characteristics between the 34 patients in the TFP and 44 patients in the SFT condition (all ps > .1).

Forty-four therapists (21 in TFP and 23 in SFT) participated in the randomized controlled trial. Three therapists held doctoral degrees, 37 therapists held master's degrees, and 4 therapists held bachelor's degrees with postgraduate training. All therapists had prior therapy experience in the associated therapeutic orientation and clinical experience in treating patients with a borderline personality disorder. The ratio of male to female therapists was 1:1. Thirty-two therapists were clinical psychologists, 7 were psychiatrists and 5 were social workers or psychiatric nurses with an advanced psychotherapeutic training. Thirteen therapists treated 1 patient, 28 therapists treated 2 patients, and 3 therapists treated 3 patients of the present intention-to-treat sample (n = 78). Of the 44 therapists participating in the multicenter-randomized trial, 30 (68.2%; 13 in TFP and 17 in SFT) also gave their informed consent to participate in the present subsidiary study on the therapeutic alliance in the treatment of borderline personality disorder and were willing to answer both the YSQ and IPO concerning their own personality characteristics and the WAI-T and DDPRQ with

Table 1

Biographical and Clinical Characteristics (Theoretical Ranges Between Parentheses)

		focuther	ema- ised apy 44)	Transference- focused psychotherapy (n = 34)	
Variable		М	SD	М	SD
Age		31.7	8.9	29.4	6.5
BPDSI (0-90)		33.1	7.1	35.4	9.1
n Axis I diagnoses		2.9	1.5	2.4	1.7
n Axis II diagnoses included	l BPD	2.1 1.2		2.1	1.3
YSQ global score (16–96)		53.5	11.9	58.8	12.2
IPO global score (5–25)		12.8	3.1	13.8	2.6
Variable	n	9	6	n	%
Gender					
Women	40	90	.9	32	94.1
Men	4	9.1		2	5.9
Education					
Graduate/professional	6	13	.6	2	9.5
College graduate	3	6	.8	6	16.7
Some college	17	38	.6	14	33.4
High school graduate	5	11	.4	6	23.7
Grades 7–11	13	29	.6	6	16.7

Note. BPDSI = Borderline Personality Disorder (BPD) Severity Index; YSQ = Young Schema Questionnaire; IPO = Inventory of Personality.

respect to the patients they were treating. Chi-square analyses revealed no significant differences in gender, professional background, therapy condition, or number of patients in treatment (all ps > .1) between these therapists and the remaining 14 therapists.

These 30 therapists rated the therapeutic alliance of the 57 patients who they treated with SFT or TFP (73.1% of the intention-to-treat sample of 78 patients). Chi-square analyses and *t* tests for independent samples revealed no significant differences with respect to biographical and clinical characteristics, WAI-P scores, and BPDSI scores between these 57 patients versus the 29 patients who were treated by the other 14 therapists and for whom no therapist ratings are available (all ps > .1).

Of the 78 patients with early WAI-P scores and still in treatment at mid- and late treatment, data on the middle and late alliance were available for 66 (100.0%) and 52 (98.1%) patients, respectively. Of the 57 patients with early alliance ratings by the therapist and still in treatment at mid- and late treatment, WAI-T and DDPRQ scores of the middle and late alliance were available for 42 (85.7%) and 33 (86.8%) of the patients at mid- and late treatment.

Early to Mid- to Late Treatment Changes

Table 2 summarizes early, mid-, and late treatment values for the process and outcome variables. In analyzing BPDSI scores (n = 78), a significant effect for time, F(1, 76) = 41.54, p < .001, was found. Planned comparisons revealed that BPDSI scores changed significantly from early to midtreatment and also from mid- to late treatment. No significant effect for group or significant Group \times Time interaction was observed. Table 2

	a Luie 17ei	umeni ve	uues jor 1	Tocess und	i Ouicome	variables	(Incorence	ui Kunge	s beiween	1 urenine	363)	
	Schema-focused therapy (SFT)					Transference-focused psychotherapy (TFP)						
	Ea	rly	N	lid	L	ate	Ear	rly	М	id	La	ate
Variable	М	SD	М	SD	М	SD	М	SD	М	SD	М	SD
BPDSI ^a (0-90)	27.4	9.5	21.3	11.1	18.5	11.6	29.2	7.9	24.5	9.7	22.7	12.1
WAI-P ^a (3–15)	11.0	1.5	11.5	1.6	11.5	1.7	10.2	1.9	10.4	1.8	10.7	2.0
WAI-T ^b (3–15)	11.1	1.2	11.0	1.2	11.2	1.4	10.1	1.4	10.1	1.5	10.0	1.5
DDPRQ ^b (1-6)	2.6	0.6	2.6	0.7	2.4	0.8	3.0	0.7	3.3	0.7	3.3	0.8

Early-, Mid-, and Late Treatment Values for Process and Outcome Variables (Theoretical Ranges Between Parentheses)

Note. Early = early treatment; Mid = midtreatment; Late = late treatment; BPDSI = Borderline Personality Disorder Severity Index; WAI-P = Working Alliance Inventory–Patient Version; WAI-T = Working Alliance Inventory–Therapist Version; DDPRQ = Difficult Doctor–Patient Relationship Questionnaire.

a n = 78 (44 in SFT and 34 in TFP).

 $^{b} n = 57$ (35 in SFT and 22 in TFP).

In analyzing WAI-P scores (n = 78), a significant effect for group, F(1, 76) = 6.00, p < .05, and time, F(1, 76) = 7.15, p < .01, was found. Planned comparisons showed that WAI-P scores changed significantly from early to late treatment. No significant effect for the Group × Time interaction was observed. In analyzing WAI-T scores (n = 57), only a significant effect for group, F(1, 55) = 9.23, p < .01, was observed. No significant main effect for time or Group × Time interaction was observed. In analyzing DDPRQ scores (n = 57), a significant effect for group, F(1, 55) = 15.25, p < .001, and significant Group × Time interaction, F(1, 55) = 15.25, p < .001, and significant Group × Time interaction, F(1, 55) = 6.32, p < .05, was observed. No significant main effect for time was observed.

Overall, these results suggested that the quality of the therapeutic alliance is rated higher in SFT than in TFP by therapists as well as by patients. Moreover, the quality of the therapeutic alliance as rated by the patient increases in the course of treatment irrespective of treatment condition, whereas therapist frustration decreased in SFT but increased in TFP.¹

To determine whether the differences in WAI-P, WAI-T, and DDPRQ scores between treatment conditions may be due to clinical improvement as achieved in the first 3 months of treatment, first baseline BPDSI scores at the start of treatment were regressed to 3-months early treatment scores to form residualized change scores. Next, early treatment WAI and DDPRQ scores were analyzed with one-way analyses of variance with residualized BPDSI change scores as a covariate. Also, after statistically controlling for any changes in BPDSI scores between baseline and early treatment, the differences between conditions in WAI-P scores, F(1, 75) = 3.94, p < .05; WAI-T scores, F(1, 54) = 8.54, p < .01; and DDPRQ scores, F(1, 54) = 5.57, p < .05, between SFT and TFP remained statistically significant.

Prediction of 3-Year Outcome by Early Treatment Process Variables

At the 13th assessment 3 years after the start of treatment, 20 of the 44 patients in SFT (45.5%) and 10 of the 34 patients in TFP (29.4%) reached the BPDSI recovery criterion (a score on the BPDSI of less than 15). With respect to the reliable change index (a change of at least 11.70 on the BPDSI), 29 of the 44 patients in SFT (65.9%) and 17 of the 34 patients in TFP (50.0%) reached this criterion after 3 years of treatment. Chi-square analyses revealed no significant association of treatment condition with either the BPDSI recovery or reliable change criterion (all p values > .10). Table 3 gives an overview of the WAI-P, WAI-T, and DDPRQ scores at early treatment of patients divided on the basis of reaching the BPDSI recovery or reliable change criterion.

With separate logistic regression analyses using the BPDSI recovery or reliable change criterion as dependent variables and BPDSI pretreatment scores, treatment condition, and early treatment process scores as independent variables, neither early treatment patients' ratings (WAI-P scores) nor early treatment therapists' ratings of the therapeutic alliance (WAI-T and DDPRQ scores) were predictive of clinical improvement after 3 years of treatment. However, WAI-P scores were predictive of both the BPDSI recovery criterion, Wald = 4.489, p < .05, odds ratio = 1.386, 95% confidence interval (CI) = 1.025-1.874; and the reliable change criterion, Wald = 3.886, p < .05, odds ratio = 1.359, 95% CI = 1.002-1.843, while controlling only for BPDSI pretreatment scores. Apparently, patients' early treatment alliance ratings are no longer predictive of clinical improvement after inclusion of treatment condition into the prediction model because of the significant association of WAI-P scores with treatment condition.

Furthermore, it was investigated whether premature treatment termination was related to the quality of the therapeutic alliance at early treatment. From early treatment (after 3 months) to midtreatment (after 15 months), 12 patients dropped out of treatment (7 in TFP and 5 in SFT). In the period between midtreatment and late treatment (after 33 months), a further 13 patients dropped out (6 in

¹ Because in the present study most of the therapists had more than 1 patient, any differences between scores of patients from different therapist pools may be due in part to differences between therapists (Crits-Christoph & Mintz, 1991). For this reason, we conducted separate analyses at the group level and the individual level (Kenny & La Voie, 1985). Adjusted scores were calculated for each treatment condition separately. Because in the present study only 31 of the 44 therapists had more than 1 patient in treatment, data of only 65 patients could be partitioned into these two components. Subsequent analyses yielded the same results except that in the analyses of WAI-T scores at the individual level also a significant effect for time (p < .01) emerged.

Table 3

Ratings of the Therapeutic Alliance at Early Treatment of Recovered Versus Not-Recovered and Reliably Changed Versus Not-Reliably Changed Patients (Theoretical Ranges Between Parentheses)

	Not-rec	overed	Recovered		
Variable	М	SD	М	SD	
WAI-P ^a (3–15)	10.4	1.8	11.2	1.4	
WAI-T ^b (3–15)	10.7	1.4	10.7	1.3	
DDPRQ ^b (1–6)	2.8	1.7	2.7	0.6	
	Non-Ro Char	2	Reliably Changed		
	М	SD	М	SD	
WAI-P ^c (3–15)	10.2	1.8	11.0	1.6	
WAI-T ^d (3-15)	10.5	1.3	10.9	1.4	
$DDPRO^{d}$ (1-6)	2.8	0.7	2.7	0.6	

Note. WAI-P = Working Alliance Inventory–Patient Version; WAI-T = Working Alliance Inventory–Therapist Version; DDPRQ = Difficult Doctor–Patient Relationship Questionnaire.

^a n = 78 (48 not-recovered vs. 30 recovered).

^b n = 57 (35 not-recovered vs. 22 recovered).

 $^{c}n = 78$ (32 not-reliably changed vs. 46 reliably changed).

d n = 57 (26 not-reliably changed vs. 31 reliably changed).

TFP and 7 in SFT). No patient committed suicide. There was no significant association of treatment condition with dropout rate in this particular treatment period. Separate Cox regression analyses with BPDSI pretreatment scores, treatment condition, and early treatment process scores as independent variables revealed a significant effect for early treatment WAI-P scores (n = 78), Wald = 4.379, p < .05, Hazard ratio = 0.775, 95% CI = 0.610-0.984. Moreover, especially therapists' early treatment WAI-T and DDPRQ scores (n = 57) proved to be predictive for time to dropout: WAI-T, Wald = 8.171, p < .01, Hazard ratio = 0.551, 95% CI = 0.367-0.829; and DDPRQ, Wald = 11.134, p < .001, Hazard ratio = 3.133, 95% CI = 1.602-6.129. Overall, these results suggest that time to dropout is dependent on the quality of the therapeutic alliance as perceived by patient or therapist as early as 3 months after the start of therapy over and above the effect of pretreatment BPDSI scores and treatment condition.

Zero-Order Correlations for Early to Midtreatment and Mid- to Late Treatment Change Scores

For each process (WAI-P, WAI-T, and DDPRQ) and outcome variable (BPDSI), early treatment scores were regressed on midtreatment scores, and midtreatment scores were regressed on late treatment scores to form early to midtreatment and mid- to late treatment residualized chance scores. As in previous studies of process and outcome changes in panel designs (Burns et al., 2003; Evon & Burns, 2004), changes among the process and outcome variables at different time periods (i.e., autocorrelations) were nonsignificant, suggesting that early treatment changes with respect to these factors were unrelated to their corresponding late treatment changes. Synchronous correlations showed that changes in process and outcome factors during the same time period were also in many cases nonsignificantly related, with only one significant association of early to midtreatment changes in DDPRQ scores with early to midtreatment changes in BPDSI scores, r(57) = .31, p < .05. These results suggest that variations because of autocorrelation or synchronous correlations will not substantially affect cross-lagged associations.

Cross-lagged correlations demonstrated that early to mid-WAI-P was significantly related to mid- to late BPDSI, r(78) = -.34, p < .01, whereas early to mid-BPDSI was not significantly related to mid- to late WAI-P, r(78) = .11, *ns*. On the other hand, early to mid-WAI-T and DDPRQ were not related to mid- to late BPDSI, whereas the converse correlations were also nonsignificant.

Testing Cross-Lagged Associations With Hierarchical Multiple Regressions

Hierarchical regressions were performed to analyze whether early to mid-WAI-P change scores remained a significant predictor of mid- to late treatment BPDSI change scores when variance because of early to midtreatment changes on the BPDSI and midto late treatment changes on the WAI-P were controlled (Finkel, 1995). For mid- to late BPDSI, pre- to mid-WAI-P did emerge as a significant predictor also after controlling for the other change scores and treatment condition, $F_{change}(1, 73) = 11.701$, p < .001. In testing the converse lagged association, no significant associations were observed (see Table 4).

Relationship of Patient–Therapist Dissimilarity to Changes on Process and Outcome Variables

By using t tests for independent groups, no significant differences in early maladaptive schema (YSQ) and personality organi-

Table 4

Summary of Hierarchical Regression Analyses: Cross-Lagged Regressions for Working Alliance Inventory–Patient Version (n = 78)

Variable	В	SE B	R^2	ΔR^2 of step					
Mid- to late BPDSI									
Step 1									
Condition	080	.217							
Early to mid-BPDSI	120	.109							
Mid- to late WAI-P	201	.107							
Step 2			.044	.044					
Early to mid-WAI-P	376	.110	.176*	.132*					
	Mid- to la	te WAI-P							
Step 1									
Condition	080	.231							
Early to mid-WAI-P	166	.125							
Mid- to late BPDSI	228	.122	.062	.062					
Step 2									
Early to mid-BPDSI	.060	.116	.066	.004					

Note. Variables are residualized change scores. Early to mid = early to mid-treatment; Mid- to late = mid- to late treatment; BPDSI = Borderline Personality Disorder Severity Index; WAI-P = Working Alliance Inventory—Patient Version.

 $p^* p < .01.$

zation (IPO) global scores between therapists (n = 17) from the SFT condition and TFP condition (n = 13) were found. Also, D^2 YSQ and IPO dissimilarity scores of therapist–patient dyads in SFT (n = 35) did not differ from those in the TFP condition (n = 22; all p values > .1).

Descriptively, therapist–patient YSQ dissimilarity scores were found to range from 15.6 to 309.0 (M = 55.9; SD = 47.3) and IPO dissimilarity scores from 2.7 to 90.1 (M = 17.5; SD = 17.0). Because of positive skewness, both dissimilarity measures were log transformed for further statistical analyses, resulting in a quasinormal distribution of both dissimilarity measures with adequate skewness (< 1).

First, we investigated whether dissimilarity between therapist and patient in YSQ or IPO predicted the development of the therapeutic alliance between early to midtreatment by using simple regression coefficients of D^2 YSQ or IPO dissimilarity scores on early to mid-WAI and DDPRQ scores. Both YSQ dissimilarity scores, r(57) = .26, p < .05, and IPO dissimilarity scores, r(57) =.30, p < .05, were positively and significantly associated with early to midtreatment changes on the WAI-P. The associations of YSQ and IPO dissimilarity scores with early to mid- changes on the WAI-T and DDPRQ were all nonsignificant (all p values > .1).

Next, it was investigated whether D^2 YSQ or IPO dissimilarity scores predicted early to mid- changes on the WAI and DDPRQ in addition to and independent of treatment condition and the absolute levels of endorsement of early maladaptive schemas by patients or the patients' personality organization. By using multiple regression analyses with patients' total YSQ scores and condition forced into the equation in the first step, we found that YSQ dissimilarity scores had a positive and significant semipartial correlation, r(57) = .30, p < .05, with early to mid-WAI-P scores, $F_{change}(1, 53) = 5.33$, p < .05. IPO dissimilarity scores also had a positive and significant correlation, r(57) = .32, p < .05, with early to mid-WAI-P, $F_{change}(1, 53) = 5.934$, p < .05. The associations of YSQ and IPO dissimilarity scores with early to midchanges on the WAI-T and DDPRQ were all nonsignificant (all pvalue > .1).

Next, evidence for a direct effect of therapist-patient dissimilarity on early to midtreatment and mid- to late treatment changes on outcome measures was investigated. None of the simple regression coefficients of D^2 YSQ or IPO dissimilarity on early to midtreatment and mid- to late BPDSI scores proved to be significant. *t* tests for independent groups also failed to show any significant differences between dropouts (n = 19) and treatment completers (n = 38) with respect to YSQ and IPO dissimilarity scores (p > .1).

These results indicate that a higher degree of dissimilarity in maladaptive schemas or personality organization between therapists and patients is associated with the development of a better therapeutic alliance from the patient's and not the therapist's point of view irrespective of treatment condition or the patients' absolute endorsement of maladaptive schemas or global level of personality organization.

Completers Analyses

It was investigated whether the results of the analyses in the completers sample (n = 53) were comparable with those in the intention-to-treat sample (n = 78). The results of the analyses of

early to mid- to late treatment changes, cross-lagged associations of changes on process and outcome measures, and the influence of patient-therapist similarity to changes on process and outcome variables essentially yielded the same significant results.

Discussion

This study had four aims. Firstly, it was hypothesized that the quality of the therapeutic alliance would be rated higher in SFT than in TFP. Consistent with previous studies in Axis I disorders (e.g., Raue et al., 1997) this hypothesis was supported both with respect to patients' and therapists' ratings of the therapeutic alliance. Furthermore, it was observed that the quality of the therapeutic alliance as rated by the patient increased in the course of treatment irrespective of treatment condition, whereas therapist frustration decreased in SFT but increased in TFP. These results indicate that the rating of the alliance reflecting the overall quality of experiences and feelings during a large number of therapy sessions clearly differs between treatment conditions. The higher ratings in SFT possibly reflect the effort in SFT to connect to the patient by adapting an unthreatening and supportive attitude and to develop mutual trust and positive regard (Beck et al., 1990, 2004; Young et al., 2003). Using a schema mode model might help to increase sympathy with the BPD patient, as most dysfunctional behaviors are understood as stemming from unfortunate early life experiences (Young et al., 2003). In contrast, TFP with a contract phase that by its working out might introduce an unnecessarily defensive and adverse tone to the therapy and in which (negative) transference manifestations are interpreted without the use of explicit supportive interventions possibly pressurizes the therapeutic alliance (Gunderson, 2000) and even results in growing therapist frustration in the course of therapy.

Secondly, it was expected that a lower quality of the therapeutic alliance at early treatment would predict premature treatment termination and outcome. This expectation was partly corroborated as available therapists' ratings of the alliance were associated with early dropout in TFP during the first 3 months of treatment and both patients' and therapists' ratings of the therapeutic alliance after 3 months of treatment were found to predict time to dropout in the remaining treatment period in TFP and SFT. These results support the contention that compared with TFP the therapeutic alliance in SFT may not only be different but also more therapeutic at least in the first phase of therapy. The finding that, compared with SFT, significantly more patients terminated TFP prematurely (Giesen-Bloo et al., 2006) may partly be accounted for by the quality of the therapeutic alliance. As has also been stressed by Linehan and colleagues, part of the dropout rate arises from the effect on the therapist of working with difficult patients. Both therapist and patient distress possibly can be reduced by shifting therapist interpretations of patient behavior from hostile to friendly (Shearin & Linehan, 1992). Possibly, the first stages of TFP in which fragmented and partial aggressive self and object representations are activated and interpreted by the therapist pose too high demands on the beginning therapeutic alliance for a substantial proportion of patients with a borderline personality disorder.

Thirdly, it was hypothesized that growth of the therapeutic alliance during the first year of therapy represents an important therapeutic mechanism by which a later reduction of borderline personality disorder pathology is facilitated. The study results

corroborated this hypothesis with respect to an enhanced quality of the therapeutic alliance as experienced by the patient. This result enlarges our understanding of the causal role of the therapeutic alliance in the treatment of different psychiatric disorders. Some previous studies investigating relationships among alliance and outcome changes in different periods of therapy seem to suggest that growth of the alliance may be a mere epiphenomenon of treatment gain (e.g., Evon & Burns, 2004; Klein et al., 2003; Tang & DeRubeis, 1999). However, it is conceivable that in structured, manualized, and short-term treatments of many Axis I disorders a collaborative therapeutic relationship is readily accomplished with relatively few complications masking the fact that such a relationship is a necessary precondition to treatment. Of note is that in most treatment studies in Axis I disorders, ratings of the quality of the alliance with the WAI are generally high, possibly restricting associations with other variables because of restriction of range. Although the somewhat different answering format of the WAI in the present study precludes a direct comparison with previous studies, the ratings of the alliance in the present study in patients with borderline personality disorder, although positive, seem somewhat lower, possibly allowing the discovery of relationships with other variables, such as treatment condition, premature termination, and subsequent improvement. In the more semistructured and long-term treatment of Axis II disorders, the development and maintenance of the therapeutic alliance constitutes a central issue of therapy and may constitute a central curing mechanism (Orlinsky et al., 2004). Consequently, attaining this goal will affect therapy outcome. It seems worthwhile to continue research into the intertwined and sequential relationships between alliance and client's improvement during treatment in patient samples in which the establishment of the therapeutic alliance is not always readily accomplished (such as Axis II disorders but also Axis I disorders like addictive behavior or medically unexplained somatic symptoms).

The last aim of this study was to test whether dissimilarity in pathological personality characteristics between therapists and patients would facilitate the development of the therapeutic alliance and indirectly affect therapy outcome. Although dissimilarity in pathological personality characteristics directly influenced the growth of the therapeutic alliance as rated by the patient, it showed no relationship with outcome.

These results show that it is fruitful to study the impact of therapists' variables in a relational or interpersonal context (Beutler et al., 2004) and also that differentiating between (in)direct effects on process or outcome can yield a more balanced view of the causal network in which the alliance–outcome link is embedded (cf., Hilliard, Henry, & Strup, 2000). The present findings are in accordance with the presupposition of clinicians from various theoretical orientations that therapists must be able to preserve a neutral part of their mind that is able to accurately monitor and analyze their reactions provoked by schema activation or projective identification.

Taken together, our study results seem to suggest that the therapeutic alliance constitutes an important common factor in the psychotherapeutic change process partly influenced by therapist–patient dissimilarity in personality profile. However, this does not imply that the therapeutic alliance is a "necessary and sufficient" component of change in the treatment of borderline personality disorder. Clear alliance differences between treatments indicate

that the quality of the alliance is affected by the nature of treatment. Apparently, factors specific to a particular approach influence the quality of the alliance, and SFT with its emphasis on the "necessary and sufficient conditions" as identified by the clientcentered school produces a better alliance according to the ratings of both therapists and patients. In addition, the magnitude of the consistent and positive association of alliance with outcome is relatively modest as in most previous studies (Martin et al., 2000; Orlinsky et al., 2004). It is extremely unlikely that any single process or mechanism will adequately explain most of the variance in outcome. So, the causal role of the alliance does not rule out the possible role of other common factors (such as mitigation of isolation) or variables unique for a particular treatment approach (such as developing more healthy schemas or enhancing reality orientation).

There are at least two reasons to think that the current data deserve serious consideration. First, we used a *DSM-IV* criteriabased semistructured interview for BPD with good psychometric properties as a primary outcome measure instead of relying on a self-report measure (Arntz et al., 2003). Second, data on the quality and development of the therapeutic alliance were collected in the course of a randomized clinical trial of intensive long-term SFT and TFP in a rather large and clinically representative group of BPD patients (Giesen-Bloo et al., 2006).

At least three limitations of this study merit consideration. First, the 12- and 18-months treatment lags probably are too extended to accurately detect the timing of process and outcome changes. Collapsing across a 12-month treatment period and then trying to relate process and outcome changes to changes collapsed across the following 18 months of treatment may have diluted or obscured the actual effects of the therapeutic alliance on outcome or vice versa. In future research, it may be advisable to adapt shorter time lags to analyze the precise sequence of process and outcome changes (Orlinsky et al., 2004; Tang & DeRubeis, 1999). Second, also the results of cross-lagged panel design analyses remain correlational and preclude definitive conclusions about the direction of causality (Finkel, 1995). Third, because 8 of the 86 patients included in the randomized controlled trial prematurely terminated TFP treatment between pretreatment and the first assessment of the therapeutic relationship after 3 months, the significantly greater efficacy of SFT compared with TFP (Giesen-Bloo et al., 2006) could not be demonstrated in the present study in 78 patients because of reduced statistical power and noninclusion of these 8 nonresponders all from the TFP condition. Consequently, no complete mediational analysis (Baron & Kenny, 1986) could be performed to investigate whether the superior efficacy of SFT is mediated by differences in the quality of the therapeutic relationship between treatment conditions.

In sum, results provide support for the assertion that type of treatment differentially affects the quality and development of the therapeutic alliance and that dropout rate and clinical outcome can be partly accounted for by the quality of the therapeutic alliance. Especially ratings of the therapeutic alliance by therapists at early treatment are predictive of dropout, whereas growth of the therapeutic alliance as experienced by patients in the first part of therapy seems to predict subsequent symptom reduction. These results suggest that the therapeutic relationship and specific techniques interact with and influence one another and may serve to facilitate change processes underlying clinical improvement (Goldfried & Davila, 2005). Further research is needed to help us better understand the parameters associated with the role of technique and relationship in fostering general principles of change in the treatment of patients with borderline personality disorder.

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