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# EFFECTS OF MOTIVE-ORIENTED RELATIONSHIP IN BORDERLINE PERSONALITY DISORDER

Effects of Motive-Oriented Therapeutic Relationship in Early-Phase Treatment of Borderline Personality Disorder : A Pilot Study of a Randomized Trial

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Effects of Motive-Oriented Therapeutic Relationship in Early-Phase Treatment of Borderline  
Personality Disorder: A Pilot Study of a Randomized Trial

Abstract

Motive-Oriented Therapeutic Relationship (MOTR, also called Complementary Therapeutic Relationship) was postulated to be a particularly helpful therapeutic ingredient in the early-phase treatment of patients with Personality Disorders, in particular Borderline Personality Disorder (BPD). The present pilot study of randomized controlled trial using an add-on design aims to investigate the effects of MOTR in early-phase treatment (up to session 10) with BPD patients on therapeutic alliance, session impact and outcome. In total,  $N = 25$  patients participated in the study. BPD patients were randomly allocated to a manual-based investigation process in ten sessions or to the same investigation process infused with MOTR. Adherence ratings were performed and yielded satisfactory results. The results suggested a specific effectiveness of MOTR on the interpersonal problem area, on the quality of the therapeutic alliance and the quality of the therapeutic relationship, as rated by the patient. These results may have important clinical implications for the early-phase treatment of patients presenting with BPD.

Key-Words : Borderline Personality Disorder; Motive-Oriented Therapeutic Relationship;  
Plan Analysis; Randomized Controlled Trial (RCT); Outcome; Therapeutic Alliance

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### Introduction

It appears that therapist responsiveness to patients' in-session interactional behavior is a major problem in psychotherapy outcome studies, in particular in studies using therapy manuals (Stiles, Honos-Webb & Surko, 1998; Stiles, 2009; see also Caspar & Grosse Holtforth, 2009). These authors underline the implication of the dialogical nature of psychotherapy: both interaction partners tend to influence each other on a moment-by-moment basis, sometimes unwillingly. Consequently, shorter or longer moments of therapist non-adherence to the prescribed techniques in the manual may appear.

### Borderline Personality Disorder: A Case in Point

The psychotherapy treatment of patients with Borderline Personality Disorder (BPD) represents a particular challenge in this regard. This diagnostic category of patients is known for being associated with particular difficulties in interpersonal and intimate relationships (APA, 1994; Barnow, Stopsack, Grabe, Meinke, Spitzer, Kronmüller, & Sieswierda, 2009; Benjamin, 2003; Bohus, 2002; Drapeau & Perry, 2004, 2009; Ruiz, Pincus, & Bedics, 1999; Stern, Herron, Primavera, & Kakuma, 1997), including in the interaction with the therapist, along with counter-transference issues (Gunderson, Frank, Ronningstam, Wachter, Lynch, & Wolf, 1989; Spinhoven, Giesen-Bloo, van Dyck, Kooiman, & Arntz, 2007; Yeomans, Selzer, & Clarkin, 1993). These interpersonal difficulties may partially explain the high level of drop-outs, observed even in modern manual-based treatments. In fact, drop-out varies between 18% and 30% across studies implying Dialectical-Behavior Therapy (DBT) and Transference-Focused Psychotherapy (TFP), to name but two (Gunderson & Links, 2008). While these early-in-process interactional features are an important source of information concerning the patient's core relational issues, the ways that these patients enter into the therapeutic

relationship may at times represent a challenge for the therapist: for example, when the latter is aiming at constructively handling counter-transference issues facing a patient who tries very hard to show the therapist his/her ineffectiveness. In order to do that, the patient may heavily criticize the therapist's technique or may refuse to collaborate. According to Weiss, Sampson et al. (1986), such behavior in specific patients who assume – based on their experiences with primary caretakers - that they are unloveable and prone to be left at any time may have a test value for the patient. If the therapist is able to stand the criticism and remains empathic and proactive in the critical situation, he passes the patient's test aiming at clarifying if the therapist – from the patient's perspective - is any better than everyone else (in particular primary caretakers). However, if the therapist gets angry at the patient and tries to respond and argue on the content level by insisting the treatment is highly effective, or if s/he decides to ignore the criticism and not to respond at all, s/he may fail the test. Consequently, the patient may remain convinced that the therapist is no better than everyone else, in particular primary caretakers, and may quit therapy early in treatment.

When treating patients with BPD, drop-out rates may be lowered still more, by acknowledging the limitations of the manual-based treatments and by implementing more individualized therapist attitudes. Specific relational techniques were prescribed by the manuals, such as validation and acceptance in the context of DBT, in order to enhance the quality of the patient's way of entering the relationship with the therapist (Linehan, 1993 ; Lieb, Linehan, Schmahl, Zanarini, & Bohus, 2004; Bohus, 2002). Yeomans, Clarkin and Kernberg (1999; Yeomans, Selzer, & Clarkin, 1993) proposed, in the context of TFP, to focus on the negative contents projected onto the therapist and on the elaboration of a treatment contract starting right at the beginning of treatment. The limitations of these manual-based procedures focusing on relationship stakes have already been cited (Stiles et al., 1998). So how may these interactional problems be addressed from the perspective of therapist

responsiveness to the patient's in-session verbal and non-verbal behavior, with the aim of increasing retention in the early-phase treatment of BPD ?

#### Plan Analysis and Motive-Oriented Therapeutic Relationship as Therapy Ingredients

One operationalization of the notion of responsiveness, compatible with the test concept explained earlier, is put forward by Grawe and Caspar (Caspar, 2007) in the form of Plan Analysis, an integrative method serving case conceptualization and the ensuing relational-technique variable of the motive-oriented therapeutic relationship (MOTR). Plan Analysis (PA; Caspar, 2007; Caspar & Berger, in press) is based on the works by Grawe and Dziewas (Grawe, 1980). The notion of "Plan", as purpose or motive "behind" an observed behavior or experience, has been investigated and validated, with slightly different definitions, within psychoanalytic theory (Sampson, Weiss et al., 1986), as well as within Grawe's integrative concept of psychological psychotherapy (Grawe, 1998; Caspar, 2007); these contributions tend to confirm the empirical and clinical value of the Plan concept. The main focus of Plan Analysis according to Caspar is the *instrumentality* of behavior and experience: based on the patient's verbal, and in particular non-verbal, behavior, which are manifest in- and between sessions, the therapist makes inferences about the implied Plans and motives, answering the question «Which conscious or unconscious purpose could underlie a particular aspect of an individual's behavior or experience?» (Caspar, 2007, p. 251). The individual results to this question are depicted in a graphical form as a Plan structure. This graph depicts the hypothetical motives and Plans "behind" the observed behaviors and experiences, as well as the links between these behaviors, Plans and motives. Prototypical Plan structures based on aggregated individual qualitative analyses exist, for example, for Borderline Personality Disorder (Ansmann, 2002, Berthoud et al., submitted) and Bipolar Affective Disorder (Kramer, Berger, & Caspar, 2009). Based on Plan Analysis, the therapist defines and implements in an individualized way the therapeutic relationship offer for a

specific patient, the Motive-Oriented Therapeutic Relationship (MOTR; formerly also called complementary therapeutic relationship; Grawe, 1992; Caspar, 2007; Caspar & Ecker, 2008). The relational-technique principle of MOTR is to assure the patient that therapy will provide the means to satisfy the patient's basic needs or motives within the limits of the therapeutic relationship, without reinforcing problematic Plans, behaviors or experiences. For the patient, it is therefore no longer necessary to use his/her problematic means to attain his/her motives or goals, if these goals are satisfied within the therapeutic relationship. The latter is the case by using MOTR in a proactive way. Since the structure of motives is highly individual, the relationship offer must be constructed differently for each patient, based on the information collected in the PA. The use of Plans and motives in the construction of an adequate therapeutic attitude is a unique feature of MOTR, as opposed to interpersonal theory which defines complementarity in a way that does not take into account the motives «behind» the interpersonal behaviors (Kiesler, 1982). Clinical examples of therapist's attitudes consistent with MOTR may be found in Berthoud et al. (submitted), Caspar (2007), Caspar et al. (2005), Caspar and Berger (in press), Caspar and Ecker (2008), Kramer (2009) and Kramer et al. (2010).

#### Previous findings on Motive-Oriented Therapeutic Relationship

In a naturalistic study conducted by Grawe, Caspar and Ambühl (1990), two treatment forms based on PA (individual and group psychotherapy) were compared to two treatment forms which are not based on PA (cognitive-behavioral and humanistic psychotherapy) for patients with various psychiatric disorders. Comparable effectiveness was found for several outcome coefficients, but treatment retention was significantly greater in treatments based on PA (Grawe et al., 1990). On the process-level, more therapist flexibility was found in PA-treatments, a feature particularly relevant in the treatment of BPD (Smith, Barrett, Benjamin, & Barber, 2006). The effects of Plan Analysis on therapist interaction competencies were

investigated by means of an experimental study in psychosomatic medical training (Schmitt, Kammerer, & Holtmann, 2003). The results indicate that the trainees, advanced medical students, were able in the end of their training to describe the patients' non-verbal behavior more precisely and to link it cogently to the patient's basic needs. Moreover, the students were able to reflect more thoroughly on their emotional implication when facing a patient, *i.e.*, their own insecurity or rejecting tendencies, and to conceive these reactions as part of their own personal history and, finally, to link these reactions with the patients' unconscious interpersonal Plans and motives. Such productive management of counter-transferential issues was reported to be useful in the treatment of BPD (Gunderson & Links, 2008). Finally, several studies have shown links between MOTR as a relational-technique variable and therapeutic outcome. Moderate associations between this individualized therapeutic relationship and outcome were found. Caspar, Grossmann, Unmüßig, and Schramm (2005) have shown that in particular the non-verbal component of the MOTR – the quality of the moment-by-moment non-verbal complementarity to the client's Plans activated in session or the therapist's convincing way of assuring the client that his/her activated specific motives were not threatened in therapy - was related to the therapeutic outcome in a sample of inpatient interpersonal psychotherapy for depression. In this study, the verbal component of MOTR was not related to outcome. Finally, comparing a sample presenting with depression to a sample with depression with co-morbid PD, Kramer, et al. (submitted) found similar results to Caspar et al. (2005), but only for the sample with co-morbid PD.

Using a prescriptive approach to the MOTR-variable as operationalization of the therapist responsiveness concept, the aim of the present pilot study is to measure MOTR's impact on outcome and process variables in the early-phase treatment of a small sample of BPD patients. Our hypotheses were as follows: (1) Early-phase treatment with MOTR for BPD produces better outcome, in particular fewer drop-outs, compared to early-phase

treatment as usual (TAU). (2) Early-phase treatment with MOTR for BPD produces higher quality alliance processes, as they unfold over time, compared to early-phase TAU. (3) Early-phase treatment with MOTR for BPD produces a higher quality of patient's in-session experience, compared to early-phase TAU.

## Method

### *Participants*

#### Patients

Out of 29 eligible outpatients,  $N = 25$  individuals (MOTR:  $n = 11$ ; CONTR:  $n = 14$ ) took part in the present Randomized Controlled Trial (RCT), four refused to participate (see Figure 1). Inclusion criteria were a main diagnosis of Borderline Personality Disorder (BPD; APA, 1994), being between 18 to 60 years old and speaking French; exclusion criteria were an organic disorder or a persistent substance abuse/dependence which might affect brain function (memory, level of consciousness, cognitive abilities) and a psychotic disorder implying pronounced break in reality testing (chronic or intermittent), such as schizophrenia, delusional disorder, bipolar affective disorder I, an acute risk of suicide or severe cognitive impairment. DSM-IV diagnoses of BPD were established using the Structured Clinical Interview for DSM-IV (SCID-II; First, Spitzer, Williams, & Gibbons, 2004); reliability of the DSM-IV axis II diagnoses was satisfactory ( $\kappa = .76$ ). These analyses were done on independent ratings of video-taped SCID-II diagnostic interviews on randomly chosen 20% (5) of all included patients. Co-morbid psychiatric disorders (assessed by the MINI for axis I, Lecrubier, Sheehan, Weiller, Amorim, Bonora, et al., 1997, and assessed by the SCID-II for axis II) are shown in Table 1, for each treatment condition. The patients' mean age was 30.72 years ( $SD = 10.59$ ; range 19-55); 77% were female. These variables are presented in Table 1 for each treatment condition.

#### Therapists

In total,  $N = 8$  therapists were involved in the early-phase treatment of the patients included in the study. The therapists were trained at the outset of the study, and as an ongoing process during the study in the psychodynamic model by Gunderson and Links (2006; see under treatment condition 1). They had between 3 and 5 years of resident training in psychodynamic psychotherapy, as well as in psychiatric clinical management. The supervisors had received formal training in psychodynamic psychotherapy and specific training in clinical management of patients with BPD according to Gunderson and Links (2006). All the therapists were involved in both treatment conditions. All of the treatments were supervised at least twice over the course of the process, the first supervision session taking place right after the intake session, the second in the second half of the process. The therapists received the same amount of supervision in both conditions, given by a psychotherapist and psychiatrist for group 1 and a psychologist with specific training in Plan Analysis/MOTR concepts for group 2.

#### *Treatment conditions*

The present pilot study is a two-group randomized controlled add-on effectiveness design (group 1: CONTR; group 2: CONTR plus MOTR, thereafter referred to as MOTR). Allocation to group was made after inclusion of the patient in the study. Assessments using questionnaires were done by an independent research assistant. The study was approved by the Ethics Committee of the Psychiatric Department involved. All patients gave written consent for the data to be used for research. Thus, the design was conceived in accordance to the criteria defined by Chambless and Hollon (1998) with regard to the quality of Randomized Controlled Trials (RCTs). Randomization was performed by blocks of 10 subjects, using a computer-based program; allocation was done by an independent researcher.

*Condition 1: Control (CONTR)*

In condition 1, a 10-session early-phase treatment as usual (TAU) for patients presenting with BPD followed a manual-based psychiatric and psychotherapeutic approach (Gunderson & Links, 2008). The imperatives of the manual are (1) Establishment of reliable psychiatric diagnoses, including co-morbidities and other problem areas, and communication of this information to the patient, (2) Establishment of psychiatric anamnesis, (3) Identification of the main problems to be treated and establishment of treatment focus, (4) Definition of short-term objectives and general enhancement of motivation, (5) Identification of and dealing with treatment-interfering problems, (6) Formulation of relational interpretations of core conflictual themes. One session per week was given; if necessary, short-term inpatient treatment was organized, as was adjunct pharmacotherapy. In order to counter-balance the increased time investment in condition 2, the therapists in condition 1 filled in a summary form on the patient's symptoms and problems.

*Condition 2: Motive-Oriented Therapeutic Relationship (MOTR)*

The MOTR condition differs from the CONTR condition, described above, in that a full Plan Analysis and MOTR are added to the CONTR condition; no summary form on the patient's symptoms and problems was filled in. The duration, contents and objectives of the MOTR-based treatments were exactly the same as in the CONTR condition; MOTR "infuses" the process from session 2 to 10; no sessions were added. MOTR is implemented after the intake session which serves the therapist as data for the establishment of the PA and the ensuing MOTR.

*Instruments*

*Plan Analysis and Motive-Oriented Therapeutic Relationship scale* (MOTR; Caspar, et al., 2005; Caspar, 2007). The application of Plan Analysis and the MOTR scale was used to check therapist adherence to MOTR in the MOTR condition and their non-adherence to

MOTR in the CONTR condition. The MOTR scale ranges from -3 (anti-complementary) to +3 (complementary). The raters were unaware of the treatment condition. The procedure follows Caspar and Grosse Holtforth (2009): (1) Plan Analysis (Inter-rater reliability checks following the procedure described by Caspar, Wirtz and Spiegelhalder, submitted, and Kramer, Berger and Caspar, 2009); (2) MOTR rating (Inter-rater reliability checks following the procedure described by Caspar et al., 2005). The cut-off score for the MOTR condition was defined as MOTR = 1.0, any MOTR processes below were to be excluded; cut-off for the CONTR condition was MOTR = 1.0; any CONTR processes above the cut-off were to be excluded. French versions of the scales and procedures are available and were successfully applied by Kramer et al. (submitted).

*Outcome Questionnaire – 45.2* (OQ-45; Lambert et al., 2004). This self-report questionnaire comprises 45 items aiming at assessing psychotherapeutic results, including a global score and three sub-scale scores: symptomatic level, interpersonal relationships and social role. It has been translated and validated in French (Emond, Savard, Lalande, Boisvert, Boutin, & Simard, 2004). This questionnaire was given at intake, after session 4 and 7, and at discharge; in case of missing values, the last observation point was carried forward. Primary outcome was measured using this questionnaire at discharge of the 10-session process. Residual gain score were computed by taking into account the symptom level at intake. Cronbach's alpha for the current sample was  $\alpha = .85$ .

*Drop-out* was defined as any patient who decided, after his/her presence in sessions 1 and 2, to discontinue the treatment, without this decision being negotiated with the therapist. Since the intake was non-specific to the condition, we defined drop-out after session 2, which becomes the first session when the MOTR (non-MOTR) was applied.

*Working Alliance Inventory – Short Form* (WAI-short version; Horvath & Greenberg, 1989; French validation by Corbière, Bisson, Lauzon, & Richard, 2006). This self-report

questionnaire comprises 12 items and assesses the different dimensions of therapeutic alliance, the bond between patient and therapist, the agreement on therapy aims and tasks.

This questionnaire is filled in by the patient and the therapist at the end of each session.

Cronbach's alpha for the current sample was  $\alpha = .90$ .

*Bern Post-Session Report 2000* (BPSR-P; Flückiger, Regli, Zwahlen, Hostettler, & Caspar, 2010). This self-report questionnaire measures the therapeutic impact of a specific therapy session on a patient, using a Likert-type scale. Analyses on an item-basis revealed statistically and clinically significant differences in favor of treatments based on Plan Analysis (Grawe et al., 1990). A short-version of 24 items based on Grawe's (1998) generic model of mechanisms of change in psychotherapy was translated into French by two of the co-authors (TB and FC). It assesses the following basic dimensions: 1) resource activation I: positive control experiences; 2) resource activation II: positive self-esteem experiences; 3) positive attachment experiences in the therapy; 4) a positive therapeutic relationship; 5) problem actuation; 6) positive experience in mastery of problems and 7) positive experience of clarification. This questionnaire is filled in by the patient at the end of each session.

Cronbach's alpha of the current sample was  $\alpha = .80$ .

### *Procedure*

Immediately after session 1, all included patients were randomized to a condition, either MOTR or CONTR. The preparation of sealed envelopes containing information on the condition for each subject was done by an independent researcher. All intake sessions were video-taped. At the end of the intake interview, the patients met with the program-related researcher who explained the research program to them. The patient had the opportunity to ask questions and, upon approval, signed the informed consent, after which the sealed envelope containing the information on the treatment condition was opened; the information on the treatment condition was given to the patient. After each session, the patient filled in the

WAI and BPRS-P questionnaires and the therapist filled in the WAI questionnaire. All the remaining sessions were tape-recorded and the diagnostic assessment was video-taped.

Finally, after this 10-session process, the patient is either oriented towards a symptom-focused treatment program (*i.e.*, psychiatric stabilization, group therapy focused on emotion regulation) or towards a psychotherapeutic treatment program (*i.e.*, dialectical-behavioral, transference-focused, clarification-oriented). The current study only focuses on the effects during the early-phase treatment up to session 10. No follow-up is included in this study.

#### *Data Analytic Strategy*

Hypothesis (1): Univariate ANOVA was used for the computation of between-group differences on the dependent variable of primary outcome (treatment response on OQ-45 after 10 sessions; reporting of effect size based on actual means). Similarly, an univariate ANOVA was used for the computation of between-group differences on drop-out rate. Hypothesis (2): A series of *t*-tests comparing means, as function of group, was conducted, based on actual means of the therapeutic alliance. In order to address limitations of the averaging of alliance scores and taking into account the alliance progression over time and the inherent inter-dependency in the data set (Castonguay, Constantino, & Grosse Holtforth, 2006), a two-level Hierarchical Linear Model (HLM; Bryk & Raudenbush, 1987) was used. The dependent variable was the therapeutic alliance (patient and therapist ratings), fixed factor was the condition, on level 1 were the sessions, on level 2 the patients (Level 1:  $\gamma_{ij} = \beta_{0j} * (\text{session}) + \beta_{1j} + \varepsilon$ ; Level 2:  $\beta_{0j} = \gamma_{00} + \mu_{0j}$ ;  $\beta_{1j} = \gamma_{10} + \gamma_{11} * (\text{group}) + u_{1j}$ ). This method of taking into account the session-by-session change of alliance over time is a particularly promising research leap forward (Kramer, de Roten, Beretta, Michel, & Despland, 2008; Stiles, & Goldsmith, 2010). Hypothesis (3): Similar to (2), a between-group comparison of actual means was complemented by a two-level Hierarchical Linear Model (HLM). The dependent variables were the sub-scales of the BPRS-P, the fixed factor was the condition, on level 1

were the sessions, on level 2 the patients (Level 1:  $\gamma_{ij} = \beta_{0j}*(\text{session}) + \beta_{1j} + \varepsilon$ ; Level 2:  $\beta_{0j} = \gamma_{00} + \mu_{0j}$ ;  $\beta_{1j} = \gamma_{10} + \gamma_{11}*(\text{group}) + u_{1j}$ ). Bonferroni's correction was applied where necessary.

## Results

### *Preliminary analyses*

Socio-demographic variables, *i.e.*, age and gender, were tested with regard to between-group differences using non-parametric statistics. An independent samples Mann Whitney test revealed an equal distribution of females in both groups ( $U = 58.00$ ;  $p = .20$ ; see Table 1). Similarly, as shown in Table 1, an independent samples *t*-test showed no age differences between the groups ( $t(1, 23) = -.23$ ;  $p = .82$ ). No between-group difference was found comparing the general symptomatology (OQ-45 scores) at intake (Table 1). Co-morbidity was comparable between groups.

A randomly chosen session for each patient was analyzed using the PA-MOTR procedure described earlier. On average, therapists in the CONTR condition had MOTR-ratings of 0.25 (SD = .23; range: -1.89 – 0.94); thus, no cases needed to be excluded from the CONTR condition. On average, therapists in the MOTR condition had MOTR-ratings of 2.09 (SD = .41; range 1.12 – 2.54); therefore, no cases needed to be excluded from the MOTR condition.

Reliability checks were done on 10% ( $n = 1$  randomly chosen case per condition). With regard to the Plan Analysis, the total correspondence coefficients between two independent raters were 63% and 62%. With regard to the MOTR-ratings, Spearman rank correlations between the ratings of two independent raters were .71 and .79 for the entire scale. These reliability checks of the adherence ratings were considered sufficient. Thus, the data on therapist adherence was deemed trustworthy.

*Outcome*

Therapeutic outcome measured using residual gains on the OQ-45 questionnaire between intake and discharge did not show an overall effect ( $F(1, 23) = 1.28$ ;  $p = .21$ ). However, on the sub-scale level, the domain of interpersonal problems assessed using the OQ-45 was significant ( $F(1, 23) = 4.53$ ;  $p < .05$ ), which indicates that the reduction of interpersonal problems is larger in the MOTR condition than in the CONTR condition. No other sub-scale was significant in the between-group comparison. With regard to the drop-out rate, the MOTR condition had significantly fewer drop-outs (2; 18%), compared to the CONTR condition (8; 57%) ( $Z(1, 23) = 47.00$ ;  $p = .05$ ).

*Therapeutic alliance and patients' in-session experiences*

The process analyses were carried out on a restricted sample of  $n = 20$  patients ( $n = 10$  in the CONTR condition;  $n = 10$  in the MOTR condition), due to missing values (related to early terminations) of 5 individuals having completed too few sessions to be taken into account. Comparing actual means yielded a significant difference favoring MOTR for the patient's ratings of therapeutic alliance ( $t(1, 19) = 1.30$ ;  $p = .05$ ;  $ES = .51$ ), but no difference was found for the therapist's rating of therapeutic alliance ( $t(1, 19) = .97$ ;  $p = .25$ ;  $ES = .32$ ). Comparing the groups with regard to the slope of steady increase in the level of therapeutic alliance over the course of the ten sessions, we found a group effect on the patients' rating of alliance ( $T = 2.19$ ;  $p = .02$ ), whereas no effect was found for the therapists' rating of alliance ( $T = 1.04$ ;  $p = .21$ ). This means that the patients receiving the MOTR-treatments rated that the therapeutic alliance was better and increased more strongly, compared to the CONTR-treatments.

With respect to the patient's in-session experience, comparing actual means between the groups did not yield any significant difference. In addition, a similar analysis as before, focusing on the slope of the variable over time, revealed one sub-scale to be significant: the

quality of the therapeutic relationship, as rated by the patient, increased more strongly over the course of the MOTR-treatment, compared to the CONTR condition ( $T = 2.09$ ;  $p = .04$ ). All the other sub-scales of the BPSR-P did not differ between the groups with regard to the slope over time.

### Discussion

The results of the Motive-Oriented Therapeutic Relationship (MOTR) - as an operationalization of the responsiveness concept – are consistent with the hypothesis of a differential impact of this relational-technique variable on the interpersonal level in patients presenting with BPD. Even if these results underline the relevance of our hypotheses, we need to be very cautious in the interpretation of the results, as the number of observation per cell is small for all statistical analyses.

This pilot study showed an excellent feasibility of an add-on RCT design on an individualized responsiveness procedure, implemented in early-phase treatment for Borderline Personality Disorder. The setting, a real-practice context, assures high external validity, while at the same time maximizing internal validity by using the RCT design, including adherence checks and regular supervision of the therapists by experts in the methods implemented.

If similar results were to be found on larger samples, using the same methodology, the clinical relevance of MOTR and PA in early-phase treatment for BPD would be empirically confirmed, as postulated by psychiatric and psychotherapeutic guidelines on the treatment of PD, and in particular BPD (Gaebel & Falkai, 2009; Herpertz, 2008). This individualized and differentiated therapeutic attitude may well lead to fewer early drop-outs and lower levels of interpersonal problems, as they emerge in the therapeutic relationship; these problems can potentially interfere with productive therapeutic work (Linehan, 1993; Sachse, 2003), as well as more constructive alliance perceptions, as they evolve over the course of treatment. If our results were to be confirmed on larger samples, MOTR could be an important ingredient able

to enhance the quality of the therapeutic alliance, known to mediate outcome (Martin, Garske, & Davis, 2000). This is true in particular for treatments of patients presenting with BPD or drug-abuse undergoing DBT which includes structured skills training, where the therapeutic alliance has shown to be a better mediator of outcome than the increase in skill competencies of the patients, even when early change in these competencies was partialled out (Whalley, 2010). We need to acknowledge that the high drop out rate in the control condition came as a surprise to us; our rate is clearly above the numbers reported in the literature on the same manualized intervention (McMain et al., 2009 reported 37% of drop outs in one year). In further add-on studies on the same variables, a specific check of the therapist's adherence to Gunderson and Links' (2008) manual seems necessary. Assessment of process-variables, therapeutic alliance and patient's in-session experience, as they evolve over the course of treatment, is another strong aspect of the present study. For the BPSR-P, however, we failed to confirm a between-group difference on means; only the extrapolated slope was significant. This result may underline the importance of multiple measurement points over time. Such an effect may be overlooked when comparing actual means (see also Kramer et al., 2009).

An intriguing point in our study may be to meet the criteria, by using MOTR, for responsiveness at the same as presenting excellent therapist adherence. In manual-based treatments, this state of affairs is generally difficult to imagine, since a responsive therapist attitude may result in momentary non-adherence to the treatment protocol (Stiles, 2009). However, our pattern of results on high responsiveness along with high adherence to MOTR is consistent with models that are based on the aptitude-treatment-interaction principle (ATI, Cronbach, & Snow, 1977, cited by Caspar & Grosse Holtforth, 2009), meaning the therapist intervention does not have the same impact on each patient at each moment of therapy. This principle implies a fundamentally flexible therapist attitude. BPD symptomatology tends to fluctuate on a moment-by-moment basis, thus, the therapist needs tools, such as PA and

MOTR, to (1) conceptualize these fluctuations on the levels of the in-session process, as well as the hypothesized patient's intra-psychic structure and the therapist needs to (2) be able to respond in a constructive manner to these fluctuations (Caspar, 2008; Caspar & Berger, in press).

The present study being an add-on RCT design, we need to underline several implications for further research and practice. MOTR, as investigated in the early-process treatment of BPD, is not an independent treatment form, but rather a relational-technique ingredient, that may be added systematically to different types of evidence-based treatments. Theoretically, MOTR adds an individualized, moment-by-moment process-oriented perspective to manual-based treatments and, thus, optimally resolves the methodological problem of therapist responsiveness (Stiles, et al., 1998). Furthermore, MOTR as an integrative procedure is independent from a specific therapy school and a promising add-on variable in several established treatments, including interpersonal (Caspar et al., 2005) psychodynamic (Kramer et al., submitted) and cognitive-behavioral (Kramer, 2009a/b; Kramer et al., 2010). But as such, it is probably insufficient for producing therapeutic change, as suggested by our findings. A creative, individual-based combination of technical variables (Linehan, Davison, Lynch, & Sanderson, 2006) with relational-technique variables (Smith, Barrett, Benjamin, & Barber, 2006) may be able to produce optimal outcome.

Several limitations of the present pilot study, apart from its small sample size, need to be acknowledged. The fact that the same therapists were included in both treatment groups controls for therapist effects. However, it creates well-known biases, which may have effects on the between-group comparisons, both in terms of possible overestimation of the effects, *i.e.*, possible low therapist engagement in the process in the CONTR condition, as well as in terms of underestimation of the effects, *i.e.*, possible generalization of therapist's MOTR technical competencies to the CONTR condition. Whereas the independent variable of MOTR

was well-controlled in both groups by using adherence-ratings as presented, we did not apply adherence ratings to the general components of the manual by Gunderson and Links (2006); in particular, the high drop out rate in the CONTR condition - above the results reported by McMain et al. (2009) - questions the therapist adherence to the Gunderson and Links manual. We also need to concede that the present results may not apply to the same extent to all BPD-specific and particularly responsive psychotherapy treatment forms. Co-morbidity in the sample was rather low, which was in line with the specialized treatment offer of the outpatient clinic where the study took place. Finally, no specific outcome measure for BPD symptoms was used.

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PERSONALITY DISORDER

Table 1

Socio-demographic characteristics of the patients as a function of group ( $N = 25$ )

Variables	Group		<i>U/t</i>	<i>p</i> -value
	CONTR ( $n = 14$ )	MOTR ( $n = 11$ )		
Gender % female	81.81	57.14	58.00 <sup>1</sup>	.20
Mean Age (SD)	31.27(8.21)	30.29 (12.43)	-.23 <sup>2</sup>	.82
OQ-45 Total	89.07(16.67)	95.82(22.70)	-.86 <sup>2</sup>	.40
-Symptoms	50.79(12.90)	54.55(15.13)	-.67 <sup>2</sup>	.51
-Interpersonal Problems	23.14(3.48)	24.82(3.95)	-1.13 <sup>2</sup>	.27
-Social Role	15.14(3.52)	16.45(4.93)	-.78 <sup>2</sup>	.45
Co-morbidity				
Axis I:				
Panic disorder	1	0		
Agoraphobia	0	1		
Alcohol abuse	1	1		
Major depression	2	1		
Bulimia	0	1		
Anorexia	0	1		
Somatoform disorder	1	0		
Axis II:				
% per patient				
Paranoid	1	0		
Schizoid	0	1		
% Medication	86	82		

*Note.* CONTR: Control group; MOTR: Group Motive-Oriented Therapeutic Relationship.

<sup>1</sup> Independent Samples Mann Whitney *U* Test

<sup>2</sup> Independent Samples *t*-Test (df: 23)

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PERSONALITY DISORDER

Table 2

Therapeutic outcome (residual gains based on actual means) as a function of group ( $N = 25$ )

Outcome variables	Group		$F(1, 23)$	ES
	CONTR ( $n = 14$ )	MOTR ( $n = 11$ )		
OQ-Total	-5.14 (10.58)	-11.91 (15.76)	1.28	.52
-Symptoms	-4.00 (8.66)	-7.18 (11.19)	.64	.32
-Interpersonal Problems	-.71 (2.16)	-3.18 (3.60)	4.53*	.86
-Social Role	-.43 (3.23)	-1.81 (3.93)	.76	.38

*Note.* Negative numbers indicate symptom reduction; control for level of symptoms at intake.

CONTR : Control group; MOTR: Group Motive-Oriented Therapeutic Relationship; OQ :

Outcome Questionnaire – 45.2.; ES: Effect size (Cohen's  $d$ ). Bonferroni's correction applied.

\*  $p < .05$

Table 3

Process variables over the course of treatment, as a function of group, using Hierarchical

Linear Modelling ( $N = 20$ )

Group as fixed effect	Coefficient SE	<i>T</i> -ratio	<i>p</i> -value
<b>WAI</b>			
Patient	.87 (.13)	2.19	.02
Therapist	.70 (.67)	1.04	.31
<b>BPSR-P</b>			
Resource activation I	.04 (.32)	.12	.91
Resource activation II	.17 (.28)	.61	.55
Attachment	.47 (.32)	1.46	.16
Therapeutic relationship	.59 (.29)	2.05	.04
Problem actuation	.32 (.35)	.92	.37
Mastery	.22 (.27)	.82	.42
Clarification	.22 (.30)	.74	.47

*Note.*  $df = 19$ .

Figure 1. Flow chart of the research procedure

