The relationship between alliance, therapist orienting patient to affect, and outcome: A longitudinal approach

Johan Anda Aronsen

Thesis submitted for the Professional program in Clinical Psychology

The Department of Psychology
UNIVERSITY OF OSLO
April 2013
Abstract

Author: Johan Anda Aronsen
Supervisors: Postdoctoral Research Fellow Pål G. Ulvenes and Professor II Asle Hoffart
Title: The relationship between alliance, therapist orienting patient to affect, and outcome: A longitudinal approach

Objective: This paper investigates the relationship between alliance, therapist orienting the patient to affect, and outcome, as indicated by sense of self, in two treatments, cognitive therapy (CT) and short term dynamic psychotherapy (STDP), for patients diagnosed with cluster C personality disorder. We hypothesized that: 1) therapist orienting for affect will predict sense of self in the following session, 2) alliance will predict the development of sense of self in the following session, and 3) the interaction of therapist orienting for affect and the alliance will predict sense of self in the following session. Method: Forty-six cases (23 CT and 23 STDP) were assessed using the Achievement of Therapeutic Objectives Scale (ATOS) and the Psychotherapy Process Q-sort (PQS), which provided measures on alliance, therapist affect orientation and sense of self from session to session for all cases. Multilevel models were employed to explore the hypotheses of this study on the within-person level of effects. Results: There were no main effects on the within-person level of therapist orienting for affect and alliance on predicting sense of self. However, a significant interaction effect was found on the within-person level between alliance and therapist actions on predicting sense of self. Conclusions: This study indicates that orienting the patient to affect should be done in parallel to ensuring a sound alliance. This may have clinically relevant implications by offering directions for the timing of interventions aimed at orienting the patient to affect.
The relationship between alliance, therapist orienting patient to affect, and outcome: A longitudinal approach

http://www.duo.uio.no

Trykk: Reprosentralen, Universitetet i Oslo
Acknowledgements

Four years ago I had the pleasure of joining the very energetic, inspiring and including environment at the Research Institute, Modum Bad. I am truly grateful to have been given the opportunity to contribute in the Process Mapping study. Coding over 100 videotaped therapy sessions using the instruments ATOS and PQS has been invaluable for my professional development. I would like to thank Leigh McCullough who sadly passed away 7th of June 2012. You were the one introducing me to the field of psychotherapy research, and I will always remember you for generously sharing your knowledge, as well as for your glowing enthusiasm and warmth for those around you. Rest in peace, Leigh.

I would like to express my gratitude to my friend and supervisor Pål G. Ulvenes for his dedication, patient sharing of knowledge (especially on the subject of multilevel models), and seemingly inexhaustible supply of intriguing ideas and research hypotheses. To my other supervisor, Asle Hoffart, thank you for your investment in this project, for always finding time to help - often on very short notice, and for guiding me and the project safely to shore. I would like to thank Bruce E. Wampold for having an open door when we ran into obstacles in the syntax and for giving feedback on his overall impression of the thesis. My good friend Alexander Nissen, thank you for taking the time to proofread in between our battles on the tennis court.

On a more personal level, I would like to thank family and friends for the support and feedback they have given me, especially Kåre Anda Aronsen, Ingrid Lundestad and Kjetil Bremer. Finally, a loving hug to my beloved Siril for always being there for me.
Table of Contents

1 Introduction .................................................................................................................. 1
   1.1 Specific and common factors ................................................................................. 3
   1.2 The alliance ........................................................................................................... 4
       1.2.1 Definition ......................................................................................................... 4
       1.2.2 The alliance – some controversies and challenges ........................................... 5
   1.3 Affect regulation ..................................................................................................... 7
   1.4 Sense of self ........................................................................................................... 8
   1.5 The aim of the present study .................................................................................. 9

2 Method ......................................................................................................................... 11
   2.1 Procedures ............................................................................................................. 11
       2.1.1 Data material .................................................................................................... 11
       2.1.2 Patients ............................................................................................................ 11
       2.1.3 Therapists and Treatment ............................................................................... 11
   2.2 Instruments ........................................................................................................... 12
       2.2.1 Psychotherapy Process Q-sort ......................................................................... 12
       2.2.2 Therapist affect orientation ............................................................................. 13
       2.2.3 Alliance measure from the PQS ..................................................................... 13
       2.2.4 Achievement of Therapeutic Objectives Scale (ATOS) and ......................... 14
           Sense of Self as outcome measure ...................................................................... 14
       2.2.5 Raters and rating procedure .......................................................................... 15
   2.3 Data analysis .......................................................................................................... 16

3 Results ......................................................................................................................... 18

4 Discussion .................................................................................................................... 21
   4.1 Alliance, therapist actions, and outcome ............................................................... 21
   4.2 Limitations and suggestions for future research .................................................... 24
       4.2.1 Limitations ....................................................................................................... 24
       4.2.2 Suggestions for future research ...................................................................... 24

5 Conclusions and clinical implications ......................................................................... 25

References ...................................................................................................................... 26
1 Introduction

The enterprise of psychotherapy is constantly evolving. It has fostered an estimate of more than 400 distinct theories of counseling and psychotherapy, and the number is growing (Corsini & Wedding, 2008). To navigate in this jungle can be a true challenge. The research produced to highlight the benefits of therapy has without much debate, concluded - that yes, the positive effects of treatment given through psychotherapy are highly significant (Ablon, Levy, & Katzenstein, 2006; Lambert & Ogles, 2004; Wampold, 2001, 2007, 2010a). This question is settled, psychotherapy works - but how does change come about? The factors producing these benefits have been and are continuously being examined, but it is not straightforward to paint a clear picture of the accumulating evidence on the perennial pursuit for the mechanism of change in psychotherapy. This introduction will address some central and extensively researched elements of the therapeutic process that are specifically relevant for the current paper.

Today, the most frequently researched aspect of the therapeutic relationship is incontrovertibly the alliance (Norcross, 2010). This construct goes by several names, e.g.: therapeutic alliance, working alliance, or simply, the alliance.¹ The alliance–outcome relationship looms large as one of the most robust relationships in psychotherapy research, and is evident across different types of treatments (Wampold, 2001). The body of research amassed on this subject is substantial, as demonstrated in recent meta-analytic reviews (e.g. Flückiger, Del Re, Wampold, Symonds, & Horvath, 2012; Horvath, Del Re, Flückiger, & Symonds, 2011). How the alliance produces its benefits is less well understood, and the lack of knowledge on the potential interactional effects between alliance and specific factors (Hoffart, Borge, Sexton, Clark, & Wampold, 2012), highlights the growing need for research on how and why change is brought about in psychotherapy treatment (Kazdin, 2009). Along these lines, the present paper will investigate potential mechanisms of change in a longitudinal design, more specifically: how therapist orienting patient to affect work together with alliance to produce outcome. The patients’ sense of self is used as an outcome variable. This study meets many of the requirements stressed by Kazdin (2009). There is a timeline in that symptom change (sense of self), therapists affect orientation and alliance are measured

¹ In this thesis the term alliance will be used, with the exception of when referring to Bordin’s (1979) construct, the working alliance.
from the start and throughout the therapies from session to session. Assessment on a session-by-session basis permits the evaluation of variables of change and symptom reduction and considers individual differences in the course of these changes (Kazdin, 2009).

Multiple theories in psychology either implicitly or explicitly focus on within-person processes (Curran & Bauer, 2011). The measures in this study are collected at multiple points in time from multiple individuals, and thus contain information of what is referred to as between- and within-person effects simultaneously (Raudenbush & Bryk, 2002). This makes it possible to investigate the data at both these levels of effects (i.e., disentangling between- and within-person effects). Some key features of multilevel models make them suitable for testing the hypotheses of this study: they take into account the hierarchical characteristics of therapy data (repeated assessments nested within patients), and they permit between- and within-components of the variables to be modeled (Baldwin et al., 2007). Indeed, an important benefit of longitudinal research is that it allows for testing hypotheses at multiple levels of analysis simultaneously (see Hofer & Sliwinski, 2006). The separation of between- and within-person effects has statistical as well as conceptual importance, in that relations at the between-person level do not necessarily mirror the relations within persons and vice versa (Molenaar & Campbell, 2009). Between-person relationships refer to the existence of interindividual variation (i.e., differences), and are applied to capture how individual differences on one variable is related to individual differences on another variable (this level of analysis is also usually labeled as level 2, or the macro level of analysis) (Curran, Howard, Lane, & MacCallum, 2012). Within-person relationships refer to the existence of intraindividual variation when measured repeatedly over time, which reflects how a person varies from his or her own baseline or typical level, and thus aims to capture how variation relative to a person’s own baseline is related across variables, regardless of the baseline values per se (this level of analysis is also usually labeled as level 1, or the micro level of analysis) (Curran et al., 2012).
1.1 Specific and common factors

Before we move on to take a closer look at the alliance, this section will illuminate the landscape in which the alliance unfolds in the research field, and provide an overview of one of the most vigorous and longest-lasting debates in the field of psychotherapy research.

Saul Rosenzweig introduced the “Dodo Bird Verdict” in his now seminal article of 1936: “Some implicit common factors in diverse methods of psychotherapy”, which maintains that all therapies are winners - common factors accounts for the apparent efficacy of existing psychotherapies. The Dodo bird is alive and well. Wampold headlines (2001): “The Dodo bird was smarter than we have been led to believe” (p.72), but this view is still controversial (e.g. DeRubeis, Brotman, & Gibbons, 2005; Budd & Hughes, 2009), and others have even argued for the Dodo bird’s extinction (Beutler, 2002). The Dodo bird took flight with the appearance of one of the first outcome meta-reviews to show that all bona fide therapies are equally effective (Luborsky, Singer, & Luborsky, 1975), and there have since been widely accepted claims that the differences in outcome between various therapeutic approaches are small or non-significant (see Lambert & Ogles, 2004, for a thorough review). “Bluntly put, the existence of specific psychological treatments for specific disorders is a myth” (Hubble, Duncan, Miller, & Wampold, 2010, p. 28). Though thousands of efficacy studies over the past 40 years have failed to aggregate a sound evidence base for the notion of the pre-eminence of one theory over another (Elkins, 2012), parallel to the vast aggregation of research giving support for the common factors as primary determinants for the mechanisms of change, the field may be described as split into two camps. The lasting debate concerning the relative merits of common factors, represented by one camp (Wampold, 2001), and specific factors, represented by the other camp (DeRubeis et al., 2005), is still prominent. Common pertains to more incidental shared curative ingredients of a treatment (e.g., expectancy for improvement; alliance), while specific pertains to benefits produced by the specific ingredients (e.g., techniques such as interpretations in dynamic therapies; exposure in behavioral therapies) (Wampold, 2001). Tschacher, Junghan and Pfammatter (2012) stress that significant relations to outcome have been shown for both perspectives, and consequently, a dichotomy of common versus specific factors has not received empirical support, though comparative meta-analytic reviews have demonstrated that specific factors have limited unique effects (e.g., Lambert & Ogles, 2004; Benish, Imel, & Wampold, 2008).
Wampold and Budge (2012) also argues that this distinction between common and specific factors is false in that a treatment is dependent on specific therapeutic ingredients, and that these specific ingredients cannot be delivered without the common factors. “The process of psychotherapy is guided by theory – without theory, there is no psychotherapy” (Wampold, 2010a, p. 108). Different types of patients require different relationships and treatments, so the question is more how to adapt psychotherapy to the particulars of the individual patient according to generalities identified by research, thereby relating common factors and specific factors to each other so that they can provide favorable outcome for a specific patient (Norcross & Wampold, 2011). Indeed, this study will seek to illuminate this through the examination of the relationship between alliance and therapist orienting to affect in the process of promoting change.

1.2 The alliance

1.2.1 Definition

Horvath et al. (2011) point to two important aspects that can be drawn from the fact that there exists a lack of precise consensual definition of the alliance construct. It has, on the one hand, made it easier for clinicians and researchers of diverse theoretical frameworks to implement the term within their specific conceptualization of the therapy. But on the other hand, reflecting the diversity in the definition and conceptualization of the alliance construct, a number of different alliance measures have been developed – alliance measures that can be said to de facto define what the researchers mean by the term “alliance”. Consequently, although the instruments can provide an overview of key generic alliance features and there exist central shared aspects across many measures on alliance (Hatcher & Barends, 2006), there are important differences among authors about the meaning of the term alliance (e.g., Horvath et al., 2011).

Currently, although there is no specific agreed upon definition of alliance, Hilsenroth, Peters and Ackerman (2004) remind us that most conceptualizations of the alliance are in part based on the work of Bordin (1979), as becomes evident when examining relevant literature. Bordin (1979) provided an eclectic conceptualization of the alliance, the working alliance, making it generalizable to various forms of psychotherapy, and offers the most robust definition of alliance today (Hatcher & Barends, 2006). Essentially, this definition emphasizes the
emergent quality of the collaborative relationship between patient and therapist, consisting of an emotional bond as well as agreements on the goals (i.e., what the client’s struggles are and how to resolve them) and about the tasks (i.e., what steps will be taken to achieve the goals) of therapy (Hatcher & Barends, 2006). This pantheoretical definition enables researchers to study the relationship between the alliance and outcome within a number of therapies (Baldwin, Wampold, & Imel, 2007). In a recent meta-analysis of the alliance-outcome relationship, Horvath et al. (2011) found that the overall aggregate relation between the alliance and treatment outcome was $r = .275$, indicating that this relation accounts for approximately 7,5% of the variance in treatment outcomes.

1.2.2 The alliance – some controversies and challenges

The concept of the alliance has been controversial from the beginning of its operationalization (Safran & Muran, 2006). One of the challenges when investigating the relationship between alliance and outcome, is that the alliance (as well as other common factors), cannot be manipulated experimentally, and consequently attributions of causality with outcome are challenging to establish (Wampold, 2010b). DeRubeis et al. (2005) argue that equivalence in outcome does not imply that the same mechanisms produce the outcomes, and that the alliance is not critical to outcome. Consequently, the specific factors of psychotherapies may be substantially more potent than is widely believed. They identified four potential origins for variability in the alliance, each of which may be related to outcome: (a) The therapist’s contribution to the formation of good alliances, (b) the notion that good clients form good alliances, (c) a match between therapist and patient that catalyzes the process, or that (d) the change in symptoms is brought about before the alliance is measured (the alliance measured after say session 4, is a result of early symptom relief, see also Barber, Connoly, Crits-Christoph, Gladis and Siqueland (2000)). Aiming to separate therapist and patient variability in the alliance, Baldwin et al. (2007) explored these various sources by modeling the relationship of alliance and outcome both within and between therapists (as well as the interaction). They found that therapists, who on average formed better alliances with their patients, had better outcomes than therapists that were less able to form alliances with their patients. Furthermore, it appeared that patients contribution to the alliance was not related to outcome; patients forming a better alliance with a particular therapist did not have more favorable outcomes than did patients who formed a poorer alliance with the same therapist. An interaction effect between patient and therapist was not evident, which thus
disconcerts the matching effect. Finally, this study did not render support for the suggestion that the alliance is a confound of early gains. This evidence suggests that the therapist’s contribution (as one of the tenets of the common factor model) is more crucial than the patient’s contribution to the alliance-outcome correlation, a claim also supported by Del Re, Flückiger, Horvath, Symonds and Wampold (2012) in their restricted-maximum likelihood meta-analysis of therapists’ effects in the therapeutic alliance-outcome relationship. In fact “available evidence documents that the therapist is the most robust predictor of outcome of any factor ever studied” (Hubble et al., 2010, p. 38).

Theoretically, the three components of the alliance may affect outcome differently. The alliance may be conceptualized as an “active ingredient”, in methodological sense a direct effect (the alliance is by itself therapeutic), or as a “facilitative” factor with a methodologically speaking indirect effect (the alliance assists the progress of other aspects of therapy positively related to outcome) (Hoffart et al., 2012). When investigating the alliance (as well as other potent and potentially potent factors of change in psychotherapy), it is crucial to keep these methodological issues in mind as they help clarify how the mechanisms of change work, and not least of all how they relate to one another. As an illustration of this, the therapeutic bond, as a component of the alliance, has been shown to operate differently in CT and STDP (Ulvenes et al., 2012). Thus, the notion of the alliance as a strictly common factor may be fallacious.

Hatcher and Barends (2006) argue that the alliance is in danger of floating away from its tenuous theoretical foundations, and that the contradictory findings in research on alliance in therapy outcome when it comes to the role of specific factors versus common factors, show that there exists a lack of clarity in conceptualizing the bonds between relationship, alliance, technique and outcome. When technique engages clients in purposive work the alliance becomes actualized; alliance is a way to characterize activity, and cannot happen without technique. They argue that alliance is at a different conceptual level than the components of therapy, i.e. that it is not a component itself. In order to establish agreements about the tasks and on the goals of therapy, the alliance is dependent on the delivery of a particular treatment (Wampold, 2010a). Safran and Muran (2006) question if the concept of the alliance has outlived its usefulness. They believe that the sustained interest in the alliance, partly can be accounted for by a paradigm shift in many therapeutic traditions in that they to a greater extent emphasize the relationship between therapist and patient. While the vast majority of
earlier research on alliance had its origins from psychodynamic oriented therapies, more recent studies include all orientations (Lambert & Ogles, 2004). There is a call for developing a clearer definition of the alliance construct (Horvath, 2006). As long as there exist significant differences among theorists, clinicians and researchers in terms of what the alliance is, the window for reaching a wider consensus on what it does, narrows.

This very brief overview reflects the multitude of common factors and the alliance in specific, as well as the need for further investigation of the relationships between the active ingredients producing the benefits in psychotherapy.

### 1.3 Affect regulation

Over the past two decades there has been an acceleration of research into affective phenomena (Schore, 2012). Emotions are, according to Frijda (1986), the processes of assessing the world in terms of one’s own needs and thereby engaging in behaviors with the surroundings. The experience of emotions, as well as the ability to regulate them, starts developing in infancy (Thompson, 1990), and affects are seen as a primary motivating force (Tomkins, 1995). Furthermore, emotions are universal and can be recognized cross culturally through facial expressions (Ekman, 1992). Gross (2002) underscores the importance of emotions to how people function; “how we regulate our emotions matter: Our well-being is inextricably linked to our emotions” (p. 281). Problems of affect regulation have been shown to be associated with psychopathology (e.g., Davidson, 2000; Gross, 1998; Gross & Levenson, 1997; Schore, 2003; Southam-Gerow & Kendall, 2002; Zlotnick, Spirito, & Pearlstein, 1997). A related construct also assumed to be in the center of psychological functioning and evident to be a predictor of change is “affect integration”, which refers to the processes of functionally integrating affect in cognition, motivation and behavior (Solbakken, Hansen, Havik, & Monsen, 2012; Solbakken, Hansen, & Monsen, 2011). It is thus not surprising that emotional distress is what usually brings clients to therapy, and that affects have a central role in many different schools of therapy (Whelton, 2004). Whelton (2004) also reminds us that “it is worth remembering as well that the bedrock of all therapy is the development of a relationship and emotional responsiveness is at the heart of this unique form of personal and professional intimacy” (p. 67).
Gross and Thompson (2011) state that the topic of emotion regulation has become increasingly popular in psychology and allied fields, but that great enthusiasm has surpassed theoretical advances, and consequently that there exists a lack of clarity about what is even meant by “emotion regulation”. Furthermore, they evaluate “affect regulation” as a broader construct, encompassing (among other things) the four overlapping aspects: (a) coping, (b) emotion regulation, (c) mood regulation, and (d) psychological defense. Coping has its primary focus on decreasing negative affect; emotion regulation is “a process by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998, p. 275); mood regulation and repair involves a longer temporal aspect than emotion regulation and is more concerned with adjusting emotion experience than emotion behavior; and defenses (usually automatic and unconscious) have their focus on the regulation of sexual or aggressive impulses and their associated negative emotion experience, particularly anxiety. This paints a complex picture of which constructs affect regulation includes, but the key features seem to be that it is a system of both extrinsic and intrinsic processes that monitor, evaluate, and modify affective reactions, thereby allowing the person to engage and find its way in different situations and contexts. This is also underscored by McCullough et al. (2003), in that the adaptive affective expression is the ability to integrate and balance affects in accordance with the persons experience as well as the situational context. Not focusing on the function the affect serves in a specific context can dilute its relation to outcome (Greenberg, 2008).

1.4 Sense of self

Ideas and concepts around the notion of affect and self abound and have a very rich history in philosophy and psychology (Fonagy, Gergely, Jurist, & Target, 2004). The self has never been presented as a static construct (Harter, 2012), and the link between affects and the self is important, as most affective states implicate the self, and one of the most significant intrapersonal functions that the self serves is the regulation of affect (Markus & Wurf, 1987). The term ‘self’ is vague and has been used ambiguously throughout the literature (Baumeister, 1998). Bergner and Holmes (2000) view the concept of the self as the individual’s summary formulation of his or her status, wherein status refers to the “overall conception of one’s place or position in relation to all of the elements in one’s world, including oneself” (p. 37). Thus, the fundamental about self-concept is that it serves you with
a position in the scheme of things, rather than being a mere summary of facts about oneself. Indeed, a broad range of psychopathology is associated with an inadequate development of self-perception (Bergner and Holmes, 2000).

Sense of self can be said to be a description of the individuals’ degree of self-compassion and self-acceptance. Neff (2003) defined self-compassion as the ability of “being touched by and open to one’s own suffering, not avoiding or disconnecting from it, [and] generating the desire to alleviate one’s suffering and to heal oneself with kindness” (p. 87). It has been showed to be a significant predictor of positive affect, happiness, and optimism (Neff & Vonk, 2009). Moreover, higher self-compassion is linked to greater psychological well-being and serves as a protector against acute stressors (Neff, Kirkpatrick, & Rude, 2007). Self-acceptance involves regarding and treating oneself as care-worthy, significant, understandable, and competent (see Bergner & Homes, 2000). Furthermore, self-acceptance is essential for mental health (Chamberlain & Haaga, 2001), and the lack of the ability to accept oneself can result in a variety of emotional difficulties (Carson & Leanger, 2006).

1.5 The aim of the present study

The alliance is a potent common factor in psychotherapy, and affect regulation plays a significant role for an individual’s mental health. This leads us to ask how these interact with one another to generate improvement in therapy. The aim of this study is to examine the relationship between the alliance, therapist actions in terms of orienting the patient to affect, and outcome, as indicated by sense of self, in two treatments, short-term dynamic psychotherapy (STDP) and cognitive therapy (CT), for patients diagnosed with cluster C personality disorder. The nature of the data in this study allows investigation of both between- and within-person effects. Consequently, this study will investigate a patient standing in any particular session relative to their own baseline for either sense of self or alliance (within-person effect), as well as the standing of one patients therapy process relative to other patients processes (between-person effect). The processes are expected to be similar for CT and STDP, but potential differences will be explored.
The cluster C patient group is interesting for investigating these phenomena as one of the essentials of the diagnosis is the patient’s difficulty with experiencing and expressing affect, as well as interacting in adaptive close interpersonal relationships (Ulvenes et al., 2012).

The study explores the following hypotheses:

1. Therapist orienting for affect will predict sense of self in the following session
2. Alliance will predict the development of sense of self in the following session, and
3. The interaction of therapist orienting for affect and the alliance will predict sense of self in the following session.
2 Method

2.1 Procedures

2.1.1 Data material
Psychotherapy sessions from a previously conducted randomized clinical trial (RCT), which compared STDP and CT for patients diagnosed with cluster C personality disorder were used in the study (see Svartberg, Stiles & Seltzer, 2004 for more details). In this study, the two patient groups were equal on all outcome measures (SCL-90-R, Inventory of Interpersonal Problems and the Millon Clinical Multiaxial Inventory, respectively), and they showed significant improvement on all measures during treatment (Svartberg et al., 2004).

2.1.2 Patients
In this RCT there were a total of 50 patients, with 25 in each treatment. All patients met criteria for one or more Diagnostic and Statistical Manual of Mental Disorders–III–R cluster C personality disorder or self-defeating personality disorder (using the Structured Clinical Interview for DSM-III-R, SCID-II), and did not meet criteria for any other axis II disorder. Additional exclusion criteria were current substance abuse or dependence, current or past psychotic disorder, organic brain disorder and other serious physical illness, current eating disorder, active suicidal behavior, refusal to discontinue other active treatments, and refusal to have therapy sessions videotaped. Between the treatment conditions there were no significant differences in the measured patient characteristics. Due to poor quality of video recordings for three patients, and one patient missing alliance data, 46 patients of the total 50 patients in the RCT were included (23 patients for STDP and 23 patients for CT). For demographic details, refer to Table 1.

2.1.3 Therapists and Treatment
The STDP and CT treatments were given on the basis of treatment manuals (McCullough Vaillant, 1997; Beck & Freeman, 1990, respectively). The patients were randomly assigned to receive 40 weekly sessions of either STDP or CT. All were videotaped and lasted 50 minutes. Monitoring treatment competence and adherence to the manual was done during the weekly supervision activities. The therapists were given adequate feedback from the clinical
supervisor on how to improve the treatment in accordance with the treatment manual. Before treating patients enrolled in the RCT, all therapists treated at least one patient as a training exercise. No cases were excluded as a result of adherence or low level of treatment competence (Svartberg et al., 2004).

Two independent raters used the inventory of therapeutic strategies to assess treatment integrity, plus assessment of homework and agenda setting. The two raters were reliable ($r > .65$; range = 0.65–0.83; $M = 0.73$), and two-tailed tests proved the two treatments to differ in the degree of importance given to defense work, transference work (STDP emphasized more), supportive strategies, agenda setting, and homework (CT emphasized more). The emphasis was equally strong between the two treatments for work enhancing strategies (Svartberg et al., 2004).

The STDP therapists were five clinical psychologists and three psychiatrists with a mean of 9.2 years of clinical experience (SD = 3.6), all but one working full time. All STDP therapists were trained in the STDP model and received 2-day seminars twice annually, and weekly 2-hour video-based peer supervision meetings with L. McCullough (Svartberg et al., 2004). The CT therapists were six clinical psychologists with a mean of 11.2 years of clinical experience (SD = 4.3), with one exception, all working full time. All CT therapists were trained in the CT model through 2-hour video-based peer supervision, and twice annually, supervision seminars with visiting CT experts such as A. Freeman, J. Beck, and J. Young (Svartberg et al., 2004).

### 2.2 Instruments

#### 2.2.1 Psychotherapy Process Q-sort

The 100-item Psychotherapy Process Q-Sort (PQS) (Jones, 1985) is an observer-rated instrument, developed in a form suitable for quantitative analysis and comparison, designed to broadly describe psychotherapy process at the level of an individual psychotherapy session. The PQS was developed pantheoretically to assess therapist actions valued across therapies, making it especially advantageous for comparing the process of different therapies (Jones, Hall, & Parke, 1991; Lambert & Hill, 2004). It encompasses three fundamental aspects of the therapeutic process, and the items refer to: (1) attitude, specific behavior and
explicative experiences of the patient, (2) actions and attitudes of the therapist, and (3) the nature of the interaction between patient and therapist, the environment and atmosphere of the session (Sirigatti, 2004). The 100 clinically relevant items describe an entire psychotherapy session, thereby allowing raters to judge the gradually unfolding of events and meanings, and to study the sessions for verifications of alternative conceptualizations. In the PQS each of the 100 items are sorted on a continuum according to their salience. The set conforms to a normal distribution, and consequently each score can only be given a fixed amount of times for every session, with 5, 8, 12, 16, 18, 16, 12, 8, and 5 items in categories 1-9 (1 = very uncharacteristic of the session, 5 = neutral or irrelevant, and 9 = very characteristic of the session). This requires the raters to make multiple evaluations among items, and thereby attenuates the influence of response sets and the occurrence of either negative or positive halo effects (Block, 1961).

Validity and reliability of the PQS has been shown through a number of studies and treatment samples (Jones et al., 1991). Several studies have shown that the interrater reliability across all items is satisfactory (alpha range from 0.83 to 0.89), as well as for the calculation of interrater reliability for single items (alpha range from 0.50 to 0.95). There exists convincing evidence for the discriminant and construct validity of PQS (Jones, Cumming, & Horowitz, 1988; Jones, Krupnick, & Kerig, 1987; Jones & Pulos, 1993; Lingiardi, Colli, Gentile, & Tanzilli, 2011; see also Ablon & Jones, 1999).

2.2.2 Therapist affect orientation
Ulvenes et al. (2013) theoretically identified and extracted 9 items from the PQS to assess the therapists’ affect orientation, and composed a scale referred to as the “Therapist Affect Orientation” scale (TAO) (for the 9 items, see Table 2). The items included are thus based on the therapist’s actions that focus on the affect of the patient, and take a more fine-grained look at the treatment process. The Cronbach’s alpha for the scale was 0.75 for the 46 patients.

2.2.3 Alliance measure from the PQS
Price and Jones (1998) found three PQS factors to be associated with alliance when assessed by observer ratings on the California Psychotherapy Alliance Scales (CALPAS). The CALPAS contains 24 items sorted in four scales (Patient Working Capacity, Patient Commitment, Working Strategy Consensus, and Therapist Understanding and Involvement).
These scales are intended to reflect the elements composing the alliance, and are believed to paint a picture of the overall alliance (Ackerman & Hilsenroth, 2003). The PQS factors extracted in the study by Price and Jones (1998) were named: Therapist Countertransference, Patient Commitment, and Patient-Therapist Interaction. Multiple regression analysis with scales constructed from these showed that the Patient-Therapist Interaction predicted alliance ratings, while the other two aspects did not account for any significant additional variance in the alliance ratings. They concluded that the Patient-Therapist Interaction plays a defining role in the alliance construct (for the 8 PQS items composing this factor, see Table 3). The items seem to reflect the extent to which the therapist and patient are communicating; the patient feels understood, the patient understands what the therapist communicates, the patient is accepting of and open to what the therapist offers, and both work collaboratively. Thus, it can be said to capture the client and therapist’s joint effort to address the client’s struggles: the therapist and patient agreement about the tasks in therapy, the therapist and patient agreement on the goals in therapy, and the bond between the therapist and patient. A measure on the alliance based on the PQS provides measures of the alliance for every session for all the patients included in this study.

In the present study, this alliance measure was validated against the Helping Alliance Questionnaire (HAQ; Luborsky, Crits-Cristoph, Alexander, Margolis, & Cohen, 1983), which was designed to be a pantheoretical measure of the therapeutic alliance. The HAQ was measured at session 4, and in this session, a Pearson’s r correlation of .592 (p<.001) between the HAQ and the alliance measure used in this study was found.

2.2.4 Achievement of Therapeutic Objectives Scale (ATOS) and Sense of Self as outcome measure

ATOS is a psychotherapy rating system that aims to measure in session observed patient behavior related to objectives in therapy. The ATOS contains seven subscales: insight, motivation, activating affect, inhibiting affects, new learning, sense of self, and sense of others. These subscales were written in a theory neutral language and represent generally accepted common factors. The scales have been used to monitor patients’ progress receiving treatment with various theoretical orientations (Valen, Ryum, Svarberg, Stiles, & McCullough, 2011). For the complete scale, refer to Berggraf, Ulvenes, Wampold, Hoffart and McCullough (2012). Each rating is based on a 1-100 scale divided into ten-points levels,
and operational definitions have their base in observational behaviors. The ratings are of videotaped sessions of psychotherapy, and for every ten minutes in the scored session, four of the scales are rated (insight, motivation, activating affects, and inhibiting affects). The three remaining scales (new learning, sense of self, and sense of others) are rated at the end of session. The scales have their origin in the degree of adaptive behavior, and all ratings should be drawn from clear observational data.

For the purpose of this study, the sense of self-scale from the ATOS was used as a measure of outcome. This scale aims to capture the patients’ adaptive view of themselves. The psychometric properties of the ATOS have been shown to be adequate (Berggraff et al., 2012; McCullough et al., 2003; Valen et al., 2011). The main components of this scale are: (1) degree of experience of self compassion, self care, or value as a human being, (2) degree of adaptive pride in positive qualities (not defensive pridefullness or grandiosity), and (3) degree of ability to compassionately acknowledge and accept one’s limitations or realistic negative qualities of the self. It thus describes the individuals’ degree of self-compassion and self-acceptance, thereby arising from already substantiated psychological constructs (elaborated in the introduction of this thesis). In summary, the sense of sense scale can be said to capture important aspects in the process of resolving the patient’s struggles.

2.2.5 Raters and rating procedure
In this study, the PQS was rated by 25 students who were enrolled in a clinical master’s degree program in psychology from three different universities in Norway. They had studied from six months to four years and had none or only a small degree of clinical experience. The raters followed a 2-day seminar, which included practical exercises and theoretical introduction given by two expert raters. After attending the seminar, the students practiced on their own using stimulus videotapes that had previously been rated by experts. Afterword they sent their scores to expert raters, who gave feedback on the raters’ performance. To determine raters’ reliability, a Pearson’s $r$ was calculated as a correlation between the expert score and the rater’s score. To qualify for the study, raters had to rate five sessions with a Pearson’s $r$ of at least 0.5. The mean to reach reliability on PQS was 17 hours for student raters (range, 10–26). Of the 50 raters that initially started, 25 reached the criterion reliability level and wanted to participate in the study. The scores produced by the raters were dependable, based on sample of ratings and determined by a generalizability analysis (G-
coefficient of 0.97; see Ulvenes, Berggraf, Wampold, Hoffart, & McCullough, 2012, for more details). For the ATOS, the students attended a three-day seminar, in which they were given practical exercises (with completion of all subscales) and theoretical introductions by expert raters. In group discussions, each student reported scores and provided their rationale for giving them. Expert raters provided feedback to the students, and finally the students were given tests where scores were compared to expert raters scores. Through intraclass correlations (ICC) calculated after each session on the ratings recorded up to that point, the students were given immediate feedback on their work. The limit for reaching reliability was set to an ICC of 0.7 or above for ten consecutive rated segments. To achieve reliability on the ATOS, the students used a mean of 29 hours (range 18-40 hours).

2.3 Data analysis

In the present data set, data from sessions are nested within patients, and a series of multilevel mixed models were employed to examine the influence of affect orientation, alliance, and their interaction on the patients’ sense of self in the following session. These models can take account of, and adjust for, the interdependence of the repeated measures within patients that is common in multilevel longitudinal data. The different levels address both the effect of the patients or therapists standing on a variable relative to other patients or therapists, and the effect of the patients or therapists standing relative to one self. Repeated measurements allow a prediction of the patient or therapist standing on a variable for every measurement point. The difference between the expected value on a variable at any given measurement point and the patient or therapist actual score for that session, informs us on the standing of the individual relative to their typical or expected level. The simultaneous focus on between- and within-person processes requires a disaggregation of the accompanying components of change in the time varying variable. In this study the separation of the effects followed the recommendations by Curran and Bauer (2011). This relationship can either be characterized by a fixed effect of time, or by both a fixed and random effect of time, and it is important to investigate which of these parameters apply in the current study. As both predictors (the TAO and the alliance measure) were characterized by a random and fixed effect of time the statistical centering method of detrending was employed.
Intercept at session one was used as the between-person effect for alliance and TAO, and the residuals from regression analyses with TAO or alliance respectively as outcome and time as predictor as the within-person effect. Because the residual variance did not increase over time, homoscedastic models were used for all analysis. In this study, the best model fit was found using an Auto-regressive Integrated Moving Average (ARIMA) model (covariance structure) and variance components that estimate the contribution of each random effect to the variance of the outcome variable. For all models session one was given a value of zero in the model so that the intercept was the level of the variable at the first session of therapy. All models presented below used session as a predictor in addition to any other predictors to control for the effect of time. Both fixed and random effects were investigated. The missing data in the dataset is not due to the values of any particular variable in the dataset, and as such the missing values are treated as missing completely at random. The SPSS 20.0.0 program was used to analyze the mixed models.
3 Results

The following 7 models were employed to investigate the hypotheses of this study:

Model 1: Analyzing Sense of Self over Sessions

The first model had session as predictor and sense of self as outcome, and was run to determine how sense of self developed over time (see Table 4. for results). The model found a significant effect of the fixed effects for intercept (p< .001) and slope (p< .001). The results indicate that patients mean level of sense of self in session 1 is 38.61, and that this value increased as therapy progressed (.20 units per session). For the random effects the model also found a significant variability among the intercepts (p< .001), indicating that patients come to therapy with different levels of sense of self. The model did not indicate a significant variability in slopes (p=.203), which suggests that differences in development in the patients’ sense of self may be due to chance.

Random slopes were therefore excluded from the remaining models when testing the hypotheses set forth in the paper.

Model 2: Analyzing the Within-effect of TAO as a Predictor of Sense of Self

The next model was fitted with sense of self as outcome and the within-person component of TAO as predictor. The model did not find a significant within-person effect of TAO (p=.310), indicating that therapists affect orientation alone did not predict the patients sense of self in the following session.

Model 3: Analyzing the Within-effect of Alliance as a Predictor of Sense of Self

In this model the within-person component of alliance was added as predictor. Here, no significant within-person effect of alliance (p=.771) was found, which indicates that sense of self in the following session was not predicted by the within-person component of alliance alone. In other words, if the alliance in a particular session was higher or lower than what was predicted, this did not predict sense of self in the following session.

Model 4: Analyzing the Interaction of the Within-effect of TAO and the Within-effect of Alliance on Sense of Self
Model 4 examined the relation of the within-person component of TAO, the within-person component of alliance, and the interaction term of within-person component of TAO and within-person component of alliance. Sense of self was used as outcome measure. The interaction effect was significant (p=.012), which indicates that the within-person component of TAO and the within-person component of alliance together produces an increase in sense of self in the following session. That is, when both the therapist orients the patient more toward affect than what is predicted, and the alliance is better than what is predicted for a particular session, the sense of self is higher in the subsequent session.

To examine the effect of the between-person effects of alliance and TAO, a series of models investigating their predictive values were run (see Table 5. for results):

**Model 5: Analyzing the Between-effect of TAO on Sense of Self**

Model 5 investigated the between-person component of TAO on sense of self. The model did not find a significant main effect for the between-person component of TAO (p=613), thus the level of a therapist orienting a particular patient toward affect relative to how other therapists oriented patients to affect, did not predict the patients mean level of sense of self over the course of therapy.

**Model 6: Analyzing the Between-effect of Alliance on the Sense of Self**

Model 6 examined the between-person component of alliance on sense of self. A significant between-person main effect of alliance (p=.011) was found. This indicates that the quality of the alliance in a particular patient-therapist relationship relative to the quality of the alliance in other patient-therapist relationships, predicted the patients mean level of sense of self over the course of therapy.

**Model 7: Analyzing the Interaction of the Between-effect of TAO and the Between-effect of Alliance on Sense of Self**

The final model used sense of self as outcome measure, and investigated the relation of the between-person component of TAO, the between-person component of alliance, and the interaction term of between-person component of TAO and between-person component of alliance. The interaction effect was not significant (p=297), meaning that the joint effect of (a) the level of a therapist orienting a particular patient toward affect relative to how other therapists oriented patients to affect, with (b) the quality of the alliance in a particular patient-
therapist relationship relative to the quality of the alliance in other patient-therapist relationships, did not predict the patients mean level of sense of self over the course of therapy.

Several models that did not increase the understanding of the hypotheses investigated were tested but left out of the result section. These models tested for the effect of therapy (i.e., STDP and CT), of phase of therapy (i.e., early vs. late in therapy) and cross level interactions (i.e., initial level of TAO or alliance predicted within person processes).
4 Discussion

4.1 Alliance, therapist actions, and outcome

This study helps us understand how the common factor alliance and therapist actions in terms of orienting the patient to affect, work together to produce favorable outcomes in therapy. The hypotheses that therapist orienting for affect would predict sense of self in the following session, and that the alliance would predict the development of sense of self in the following session, were not supported in the analyses of this study.

As expected, sense of self was found to increase as the therapy progressed, supporting its use as a valid outcome measure. A significant interaction of therapist orienting for affect and the alliance in predicting sense of self in the following session was found. This informs us that when both the therapist orients the patient more toward affect than what is predicted, and the alliance is better than what is predicted for a particular session, the sense of self is higher in the subsequent session. This finding is interesting in that it provides us with information on timing of affect orienting interventions in therapy. It may indicate that if a sound alliance is present, the focus on affect will be less threatening and thus have a positive impact on the development of the patient’s sense of self. There were no interactions with treatment, suggesting that the relationships were the same in the two treatments. Thus, what seems important is how the patient handles the therapist’s orienting to affect. From the analysis we can also conclude that the quality of the alliance in a particular patient-therapist relationship relative to the quality of the alliance in other patient-therapist relationships, predicted the patients mean level of sense of self over the course of therapy.

Diener, Hilsenroth and Weinberger (2007) found in their meta-analysis that therapist facilitation of affect was positively associated with improvement in treatment. Moreover, they hypothesized that this relationship most likely exists independently of the influence of other factors. The current study did not lend support for this notion, as no main effect of therapist orienting for affect on outcome was found. The interactional effect between therapist orienting for affect and the alliance found in the present study indicates that the quality of the alliance should be taken into account when orienting the patient toward affect,
i.e., the affect facilitations relation to outcome does not seem to be independent of other factors. In their review of therapists’ characteristics and techniques positively impacting the alliance, Ackerman and Hilsenroth (2003) found facilitation of affect expression to positively influence the development and maintenance of the alliance. Although the current study investigates a different relationship between these two variables, keeping their finding in mind parallel to the results of the present study can be valuable for therapists utilizing interventions aiming to orient the patient to affect.

Research confirms the therapeutic importance of the general utility of patient-affective experience and expressions (e.g., Hill, Helms, Spiegel, & Tichenor, 1988; Hilsenroth, Ackerman, Blagys, Baity, & Mooney, 2003). Moreover, McCullough et al. (1991) found interventions followed by patient affect to be positively related to outcome, and a negative association between interventions followed by patient-defensive response (i.e., patients try to avoid difficult issues) and outcome. This leads us to ask if there is a connection between therapists orienting to affect in the absence of a sound alliance and defensive responses coming to the surface. If this is the case, defensive behavior could be moderated by paying closer attention to the quality of the alliance when focusing on affective material in therapy.

Ulvenes et al. (2013) investigated how the therapist’s affect orientation and the patient’s sense of self, as well as their interaction, contributed to the patient’s experience of affect in the session. They found that the relationship between therapist’s affect orienting interventions and a patient’s affective reaction is dependent on fluctuations in the patient’s sense of self. It was evident that patients who had a higher sense of self than when starting therapy, were able to respond more affectively than their usual response, when the therapist oriented them to affect. Moreover, the results indicated that the more the therapist orients the patient toward affect, relative to the general level for that patient, the more the patient will experience affect. This relationship was shown to be moderated by the patients’ sense of self, and Ulvenes et al. (2013) concluded that: 1) the therapist should orient to affect when sense of self is relatively high, 2) the therapist should aim to develop the patient’s sense of self, increasing patient’s capacity to experience affect in session, 3) if the therapist orients patients toward affect, but the patient does not respond affectively, the therapist should ask him or herself why the response was not as expected. Relating these findings to the results of the current study underscores the importance of monitoring the patient’s response to interventions. The relationship between sense of self and affects is synergistic and the accompanying processes
highly interwoven (McCullough Vaillant, 1997). Affects are a fundamental aspect of a person’s sense of self (McCullough et al., 2003), and orienting the patient to affect parallel to ensuring a sound alliance could benefit the process of strengthening the patient’s sense of self, thereby making the patient more prone to affect orienting interventions.

From the focus of this study it seems that the general utility of facilitating affect promotes change in the patient’s sense of self when interacting with a sufficient alliance. It thus informs us under what circumstances it is advisable to utilize facilitation of affect. In extension of this, the process may benefit from regularly monitoring the alliance and resolve therapeutic ruptures (Safran & Muran, 2000; Baldwin et al., 2007). Ackerman and Hilsenroth (2003) point out “that the research identifying the therapists significant contributions to the development and maintenance of the alliance are similar to the features identified in the identification and repair of ruptures in the alliance” (p. 29). Indeed, research has found that improving therapist’s skills in both creating an alliance and repairing ruptures is effective (Crits-Cristoph et al., 2006; Safran & Muran, 2000; Safran, Muran, Samstag, & Stevens, 2002). This has relevance for the present study, in that the skills related to developing and maintaining a sound therapeutic relationship would benefit the process of orienting the patient to affect. The importance of the context (here, the alliance) has also been found to be evident for the more general activity referred to as exploratory strategies (e.g., Bowlby, 2005; Gaston & Ring, 1992; Horowitz, Marmor, Weiss, DeWitt, & Rosenbaum, 1984). Smith-Hansen, Levy, Seybert, Erhardt and Ablon (2012) call for a continuation of the open-minded investigations of the therapy process through the neutral language of the PQS. The present study contributes with the specification of interventions through the closer examination of the theoretically extracted items from the PQS concerning the therapist orienting for affect. Alliance and interventions are “two sides of the same coin” (Horvath, 2001, p. 307). The relationship between the common factor alliance and interventions in terms of orienting the patient to affect found in this study, sheds light upon the importance of relating common factors and specific factors to each other so that they can provide favorable outcome in therapy.
4.2 Limitations and suggestions for future research

4.2.1 Limitations
There are a number of limitations to this study. First, the patient group can be classified as fairly homogeneous, both when it comes to defining diagnostic features for patients diagnosed with cluster C personality disorder, as well as generalizability in terms of ethnic diversity. Second, there was only one measure for each of the variables, which makes it unclear whether these results will generalize to other measures for these variables. Third, the variables in this study were measured on entire therapy sessions, but they may vary within sessions, which could render information on a more detailed process level. Fourth, as noted by Perry, Banon and Ianni (1999), it is advised to include both observer-rated and self-report measures. However, this study only has the strength of observer-rated measures, and elements of the nuances occurring in the alliance within the interior of the treatment room may consequently have been lost. Fifth, the number of patients per therapist did not allow exploration of potential therapist effect (it might be that therapists differ in their general level of orienting to affect). Finally, a central limitation of the present study is that the alliance measure does not capture all the elements that more robustly validated measures do.

Notwithstanding these limitations, the study indicates that emphasis on affect should be placed in parallel to securing a sound alliance, and may have clinically relevant implications by offering directions for therapists who aim to orient their patients to affect.

4.2.2 Suggestions for future research
This study has found an important relationship between orienting patient to affect, alliance, and sense of self. Further examination of these preliminary effects from different vantage points is warranted. More specifically, future research should investigate this and associated relationships using other measures, therapeutic orientations, and disorders. Such research may serve to further our understanding on the dynamics of an affect focus in therapy.
5 Conclusions and clinical implications

Among the common factors, the alliance has through decades of research been identified as an important and consistent contributor to outcome. Investigating how the alliance relates to other factors in promoting change becomes important in the continuous pursuit of finding what works in therapy. Adaptive affect regulation is inextricably linked to our well-being, and interventions that orient the patient to affect aim to promote the patient’s capacity to engage and find its way in different situations and contexts. Moreover, affects are intimately connected to an individual’s sense of self. This study examined the relationship between alliance, therapist orienting patient to affect, and outcome as measured by the patient’s sense of self. The longitudinal nature of the data in the present study allowed for testing the hypothesis set forth on both between- and within-person levels of effect, which is valuable since relations on these levels do not necessarily mirror each other. No main effects of therapist orienting for affect and alliance on predicting sense of self on the within-person level were found. However, an interaction effect between alliance and therapist orienting for affect was evident on the within-person level in predicting sense of self. This indicates that the joint effect of alliance and therapist orienting patient to affect is related to an increase in the patient’s sense of self.

These findings suggest that therapists need to capitalize on facilitating affect when an alliance of sufficient quality is present, thereby underscoring what it stressed by many researchers and clinicians, namely the importance of monitoring alliance throughout therapy. In this sense the results may help clinicians who use elements of affect facilitation to work more flexibly and effectively with their clients. Furthermore, the association found in this study could be relevant for all therapeutic pursuits, since clinicians from all theoretical backgrounds must forge a path in therapy through a sea of client affect, and perhaps should be particularly attuned to securing an affiliative atmosphere when affects that are difficult to contain come to surface.
References


Ulvenes, P. G., Berggraf, L., Stiles, T. C., McCullough, L., Hoffart, A., & Wampold, B. E.
(2013). *Orienting patient to affect, sense of self, and the activation of affect over the course of psychotherapy.* Manuscript submitted for publication.


Appendix
Table 1

Demographic and Clinical Characteristics of Patients Who Received Either CT or STDP

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>STDP patients (N = 23)</th>
<th>CT patients (N = 23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>33.5</td>
<td>34.3</td>
</tr>
<tr>
<td>Female Sex</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Employed</td>
<td>14</td>
<td>18</td>
</tr>
</tbody>
</table>

**Axis I diagnosis**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>STDP patients</th>
<th>CT patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depression, Current episode</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Major Depression, Previous episode</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Panic disorder(^b)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Agoraphobia(^c)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Social Phobia</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Obsessive-compulsive disorder</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Generalized anxiety disorder</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Somatization disorder</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>No diagnosis</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**Axis II disorder\(^d\)**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>STDP patients</th>
<th>CT patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidant personality disorder</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Obsessive-compulsive personality disorder</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Dependent personality disorder</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Passive-aggressive personality disorder</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Self defeating personality disorder</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>More than one personality disorder</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

\(^a\)Treatment groups did not differ significantly on any characteristic. \(^b\)With or without agoraphobia. \(^c\)Without history of panic disorder. \(^d\)Patients may have received more than one axis II disorder.
Table 2

**PQS Items Included in Therapist Affect Orientation Scale**

<table>
<thead>
<tr>
<th>PQS Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 2</td>
<td>Therapist draws attention to patient’s non-verbal behavior, e.g. body posture, gestures, tone of voice.</td>
</tr>
<tr>
<td>Item 6</td>
<td>Therapist is sensitive to the patient’s feelings, attuned to the patient; emphatic.</td>
</tr>
<tr>
<td>Item 9*</td>
<td>Therapist is distant, aloof (vs. responsive and affectively involved).</td>
</tr>
<tr>
<td>Item 22</td>
<td>Therapist focuses on patient’s feelings of guilt.</td>
</tr>
<tr>
<td>Item 36</td>
<td>Therapist points out patient’s attempts to ward off awareness of threatening information or feelings.</td>
</tr>
<tr>
<td>Item 50</td>
<td>Therapist draws attention to feelings regarded by the patient as unacceptable (e.g. anger, envy, or excitement).</td>
</tr>
<tr>
<td>Item 67</td>
<td>Therapist draws the patient’s attention to wishes, feelings, or ideas that may not be in awareness.</td>
</tr>
<tr>
<td>Item 79</td>
<td>Therapist comments on changes in patient’s mood or affect that occur during the hour.</td>
</tr>
<tr>
<td>Item 80</td>
<td>Therapist emphasises patient feelings in order to help him or her experience them more deeply.</td>
</tr>
</tbody>
</table>

*Item 9 was reversed*
Table 3

*PQS Items Included in the Patient-Therapist Interaction Factor*

<table>
<thead>
<tr>
<th>PQS item</th>
<th>Description</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 44</td>
<td>Patient feels wary or suspicious (vs. trusting and secure).</td>
<td>.78</td>
</tr>
<tr>
<td>Item 14</td>
<td>Patient does not feel understood by therapist.</td>
<td>.76</td>
</tr>
<tr>
<td>Item 1</td>
<td>Patient verbalizes negative feelings (e.g., criticism, hostility) toward therapist (vs. makes approving or admiring remarks).</td>
<td>.73</td>
</tr>
<tr>
<td>Item 49</td>
<td>Patient experiences ambivalent or conflicted feelings about therapist.</td>
<td>.69</td>
</tr>
<tr>
<td>(Item 45</td>
<td>Therapist adopts a supportive stance.</td>
<td>—.65</td>
</tr>
<tr>
<td>Item 42</td>
<td>Patient rejects (vs. accepts) therapist’s comments and observations.</td>
<td>.62</td>
</tr>
<tr>
<td>Item 5</td>
<td>Patient has difficulty understanding therapist’s comments.</td>
<td>.60</td>
</tr>
<tr>
<td>Item 39</td>
<td>There is a competitive quality to the realtionship.</td>
<td>.55</td>
</tr>
</tbody>
</table>

Mean = 6.57, SD = 1.20, Cronbach’s alpha coefficient = .89; Mean interitem correlation = .53
Table 4

*Fixed Effects Estimates (Top) and Covariance Parameters Estimates (Bottom) for Models of TAO, Alliance and Sense of Self over Sessions.*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Model 1:</th>
<th>Model 2:</th>
<th>Model 3:</th>
<th>Model 4:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of Self</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>session</th>
<th>TAO</th>
<th>Alliance</th>
<th>interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>38.61***</td>
<td>38.60***</td>
<td>38.60***</td>
<td>38.74***</td>
</tr>
<tr>
<td>(1.64)</td>
<td>(1.64)</td>
<td>(1.64)</td>
<td>(1.63)</td>
<td></td>
</tr>
<tr>
<td>Session</td>
<td>0.20***</td>
<td>0.20***</td>
<td>0.20***</td>
<td>0.20***</td>
</tr>
<tr>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
</tr>
</tbody>
</table>

**Within-person Effects**

**(Level 1)**

<table>
<thead>
<tr>
<th>TAO</th>
<th>0.38</th>
<th>0.36</th>
<th>0.62</th>
</tr>
</thead>
<tbody>
<tr>
<td>(0.38)</td>
<td>(0.38)</td>
<td>(0.40)</td>
<td></td>
</tr>
<tr>
<td>Alliance</td>
<td>-0.12</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>(0.43)</td>
<td>(0.44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>1.26*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.50)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Covariance Parameters</th>
<th>Intercept</th>
<th>ARMA11 rho</th>
<th>ARMA11 phi</th>
<th>-2*log likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>64.89***</td>
<td>0.84***</td>
<td>0.50***</td>
<td>5549.494</td>
<td></td>
</tr>
<tr>
<td>(17.83)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.94***</td>
<td>0.84***</td>
<td>0.50***</td>
<td>5548.572</td>
<td></td>
</tr>
<tr>
<td>(17.86)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.82***</td>
<td>0.84***</td>
<td>0.50***</td>
<td>5548.347</td>
<td></td>
</tr>
<tr>
<td>(17.88)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.30***</td>
<td>0.84***</td>
<td>0.49***</td>
<td>5541.613</td>
<td></td>
</tr>
<tr>
<td>(17.67)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Standard error in parenthesis, *p<.05, **p<.01, ***p<.001.
Table 5

**Fixed Effects Estimates (Top) and Covariance Parameters Estimates (Bottom) for Models of TAO, Alliance and Sense of Self over Sessions.**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Model 5:</th>
<th>Model 6:</th>
<th>Model 7:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of Self</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TAO,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Variable</td>
<td>TAO</td>
<td>Alliance</td>
<td>interaction</td>
</tr>
<tr>
<td>Intercept</td>
<td>42.57***</td>
<td>15.76</td>
<td>59.56</td>
</tr>
<tr>
<td></td>
<td>(7.94)</td>
<td>(12.52)</td>
<td>(49.01)</td>
</tr>
<tr>
<td>Session</td>
<td>0.20***</td>
<td>0.20***</td>
<td>0.21***</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Between-person Effects (Level 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAO</td>
<td>-0.69</td>
<td>-10.17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.35)</td>
<td>(8.97)</td>
<td></td>
</tr>
<tr>
<td>Alliance</td>
<td>-5.27*</td>
<td>2.52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.00)</td>
<td>(7.73)</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>-1.48</td>
<td></td>
<td>(1.41)</td>
</tr>
</tbody>
</table>

**Covariance Parameters**

<table>
<thead>
<tr>
<th></th>
<th>Model 5:</th>
<th>Model 6:</th>
<th>Model 7:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>66.33***</td>
<td>55.81***</td>
<td>56.34**</td>
</tr>
<tr>
<td></td>
<td>(18.25)</td>
<td>(16.03)</td>
<td>(16.43)</td>
</tr>
<tr>
<td>ARMA11 rho</td>
<td>0.84***</td>
<td>0.84***</td>
<td>0.84***</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>ARMA11 phi</td>
<td>0.49***</td>
<td>0.49***</td>
<td>0.49***</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>-2*log likelihood</td>
<td>5546.798</td>
<td>5539.610</td>
<td>5533.225</td>
</tr>
</tbody>
</table>

*Note: Standard error in paranthesis, *p<.05, **p<.01, ***p<.001.*