

AFFECTIVE COMMUNICATION AS A MECHANISM OF CHANGE IN THE
TREATMENT OF BORDERLINE PERSONALITY DISORDER

by

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A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of
the requirements for the degree of Doctor of Philosophy,
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ABSTRACT

Affective Communication as a Mechanism of Change in the Treatment for Borderline
Personality Disorder

by

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This study examined the presence of an affective communication created between patient and therapist that allows for a dyadic process of symbolization in psychotherapy. The expression of affect is one of many channels by which patients communicate their internal world to the therapist, and due to impairments in object representations patients with borderline personality disorder (BPD) may unconsciously communicate their internal experience through affect. This “affective communication” allows the therapist to use his/her own internal structures to give organization and meaning to the unsymbolized affect and give it back to the patient in a more symbolic form. The present study is part of a recent randomized controlled trial comparing Transference Focused Psychotherapy (TFP) to a psychodynamic supportive psychotherapy (SPT) and dialectic behavioral therapy (DBT) for patients with BPD. Therapists from the three treatments completed questionnaires focusing on the therapist’s experience of an affective communication in the treatment. It was demonstrated 1) that the construct of affective communication can be reliably assessed by therapists of various treatment modalities, 2) that the construct of affective communication relates in predicted ways to similar

constructs, and 3) that the affective communication created between therapist and patients with BPD in the initial stages of treatment predicted aspects of the course and outcome of a twelve month treatment. Specifically, it was found that patients stayed in treatment longer when therapists experienced their patients and themselves as enlivened and emotionally-present in the treatment. Overall, the relationship between affective communication and symptom change during treatment was not strong, with decreased negative affect predicting some indicators of symptom change. However, this construct may have a greater impact on structural change within the patient; affective communication variables were found to predict change in reflective function (RF) in patients treated in TFP but not SPT or DBT, with findings indicating that there is an optimal level of engagement and affect within which change in RF occurs. Affective communication is hypothesized to be of particular relevance to TFP due to that treatment's explicit effort to promote mentalization in the context of heightened affect in the attachment relationship with the therapist.

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CHAPTER ONE: INTRODUCTION

Patients with Borderline Personality Disorder (BPD) represent a heterogeneous group, yet little is known about the factors that differentially contribute to change in these patients through psychotherapy. The identification of variables that predict positive outcome in psychotherapy is particularly relevant to this patient group because they tend to have poor prognoses in therapy, drop out of psychotherapy at high rates, and are experienced by therapists as difficult to treat (McGlashan, 1986; Stone, 1993).

The expression of affect is one of many channels by which the patient communicates his/her internal world to the therapist (Kernberg, 1984). Due to impairments in the internalization of representations of self in emotion-laden interactions with others, the internal worlds of patients with BPD are characterized by unsymbolized affect-laden mental representations that may be unconsciously communicated to the therapist through the patient's affective experience. This affective communication provides the therapist with a road to understanding the patient's unsymbolized experience, allowing the therapist to use his/her own internal structures to give organization and meaning to the unsymbolized affect and give it back to the patient in a more tolerable symbolic form. Change in psychotherapy for patients with BPD can therefore be understood in the context of an affective communication between the patient and the therapist that allows for the symbolization of what previously could not be represented but only felt intersubjectively.

The present study is part of a recent randomized controlled trial comparing a manualized psychodynamic treatment called Transference Focused Psychotherapy (TFP)

to a psychodynamically-oriented supportive psychotherapy (SPT) and dialectic behavioral therapy (DBT) for patients with BPD (Clarkin et al., 2004). This study will examine affective communication as a mechanism of change during the course of one year of treatment for patients with BPD. The therapists from the three treatments will be asked to fill out self-report questionnaires on each patient they treated in the study. These questionnaires will focus on the therapist's experience of the patient's capacity to arouse an affective experience in the therapy, imbue language with affect-laden language and images, and engage the therapist's attention and curiosity. It is expected that these indicators of an "affective communication" created between the patient and therapist will predict the course and outcome of a one year treatment.

CHAPTER TWO: LITERATURE REVIEW

In recent years there has been an increasing emphasis on identifying characteristics of patients that predict positive outcomes in psychotherapy (Clarkin & Levy, 2003). This literature acknowledges that a patient may enter a treatment with an array of qualities not captured by his or her diagnosis that influence treatment outcome. Further, patients have characteristics independent of their diagnosis that may impede or facilitate the treatment process, or that may lead to the patient benefiting from one type of treatment over another, and as a result the primary research question has shifted from what type of therapy works “best” to what type of therapy or intervention is most effective for what type of individual with what difficulties (Roth & Fonagy, 1996). This shift is exemplified by aptitude by treatment interaction (ATI) research, which examines the interaction between various treatments or treatment conditions and patient variables (Clarkin & Levy, 2003).

The identification of patient variables is particularly relevant to the treatment of Borderline Personality Disorder (BPD) because patients with BPD are quite a heterogeneous group in terms of both clinical functioning and outcome in treatment. Clarkin and colleagues (2004) note that because of the polythetic nature of the DSM-IV symptom criteria for BPD, patients may vary in important ways in terms of their symptom picture (i.e. presence of suicidality, identity disturbance) and yet each meet criteria for the disorder. They cite Zanarini and colleagues’ (2003) research indicating a lack of diagnostic stability over time for BPD; patients with BPD tend to vary over time in terms of the DSM-IV symptom criteria met, while their levels of work and social

functioning tend to remain stable over time. Further, Kernberg (1984) has noted that the presence of co-morbid personality pathology may influence one's expectations of success in treatment, such as BPD patients co-morbid with narcissism or antisocial personality disorder, who tend to have worse prognoses. He also highlights that patient characteristics independent of diagnosis may negatively affect treatment. For example, a patient whose characterological sadism is ego-syntonic may find the aggression expended towards the therapist so gratifying that it leaves little desire to change. Taken together, this indicates that patients with BPD may share the same diagnostic criteria but have a wide array of characteristics that differentially impact their outcome in psychotherapy.

Few studies have examined the effectiveness of different types of psychotherapy for patients with BPD in randomized control trials, and of these studies little is known about patient variables that predict outcome (Clarkin et al., 2004). Clarkin and colleagues (2004) note that, excluding studies of personality disorders without a clearly delineated borderline cohort, only two types of treatment have empirically demonstrated effectiveness in treating patients with BPD: a behavioral treatment called Dialectical Behavior Therapy (DBT; Linehan et al., 1991; Linehan et al., 1999) and a psychodynamic therapy called Mentalization-Based Treatment (MBT; Bateman & Fonagy, 1999, 2004). While these studies demonstrate that patients with BPD treated in their respective psychotherapies show improvements at the level of symptomatology, very little is known about the characteristics that contribute to change in these patients. This study will attempt to bridge that gap in the literature.

Clinical Features of Borderline Personality Disorder

BPD is a serious, chronic psychiatric illness that constitutes approximately 2% of the general population, 10% of patients seen in outpatient settings, and 20% of patients seen in inpatient settings (APA, 2000). Further, 30% to 60% of patient groups with personality disorders are diagnosed with BPD. It is estimated that up to 75% of patients with BPD engage in suicidal and parasuicidal behavior (Clarkin et al., 1983; McGlashan, 1986; Stone, 1993).

Patients with BPD are often characterized by intense affects, stormy relationships, and impulsive behaviors (APA, 2000). Due to their high reactivity to environmental stimuli, patients with BPD often experience dramatic and short-lived shifts in their mood, alternating between experiences of euphoria, depression, anxiety, and nervousness (Loranger, 1995). Patients with BPD often experience intolerable feelings of emptiness that they attempt to fill with impulsive and self-damaging behaviors, such as substance use, risky sexual behavior, uncontrolled spending, or binge eating. Further, patients with BPD often exhibit recurrent suicidal behaviors, gestures, or threats. Under intense stress patients with BPD may exhibit transient dissociative or paranoid symptoms.

The interpersonal relationships of patients with BPD are often stormy and unstable, with shifts between idealizing and denigrating the other person (APA, 2000). This may be accompanied by intense displays of anger, including tantrums, physical fights, and throwing or breaking objects (Loranger, 1995). Patients with BPD often experience intense fears of loss that may lead to frantic behaviors to avoid abandonment. These patients often experience an unstable sense of self identity or self-image, and as a result they often report a lack of clarity with regard to future goals, the types of friends

and relationships they should have, what they believe to be right and wrong, and what they can expect from their own behavior.

Although psychotherapy is generally acknowledged as the treatment of choice for patients with BPD, they are often experienced as quite difficult to treat (Kaplan & Sadock, 1998; Linehan et al., 2000). Patients with BPD tend to evoke more anger and irritation as well as less empathy, liking, and nurturance in the therapist than depressed or schizophrenic patients (Brody & Farber, 1996). These patients tend to drop out of psychotherapy at high rates and symptoms often return (McGlashan, 1986; Stone, 1993). Further, findings regarding the responsiveness of patients with BPD to pharmacotherapy have been inconsistent (Soloff, 2000). Therefore the identification of variables that predict positive outcome in psychotherapy is particularly relevant to this patient group.

Affect and the Etiology of Borderline Pathology

Many theories of the etiology of BPD emphasize disruptions in the internalization, symbolization, and regulation of affects as fundamental to the development of borderline pathology (Kernberg, 1975; Fonagy et al., 2002). In Kernberg's (1975, 1984) developmental model, he describes the infant as organizing his/her early experiences on the basis of its affective quality. During peak affect states, interactions between self and other are internalized in the form of affect-laden self and object representations; such as positive states in which the child feels merged with the mother in a soothing and loving experience, and negative states in which the child feels trapped in a frustrated and hate-filled experience (Mitchell & Black, 1995). While initially these polarized affective experiences of feelings of love and hate towards the

same object are kept separate, through development the infant is able to integrate these disparate self-object representations linked by affect into representations of whole objects in which these contradictory affects can be tolerated.

For Kernberg (1975, 1984), the development of borderline pathology originates in the inability to integrate these polarized affective experiences. If the child experiences an abundance of destructive and hateful affect states that threaten to overwhelm the weak early ego, these conflicting self-object representations linked by affect will be kept separate in order to protect the integrity of the positive, loving affect representations. As a result the individual is left with dichotomous representations of self and other. This would manifest in an individual with borderline pathology as a lack of a coherent identity of self in relation to others. Because of this diffuse, unstable sense of self, such individuals are often confused about their goals and their values, and experience a sense of emptiness and meaninglessness due to their lack of core identity. Without the internalization of a permanent and consistent other, such individuals continually experience a fear of abandonment.

Further, individuals with borderline pathology may experience their hateful affect states as too intolerable to consciously feel and continually threaten to overwhelm the integrity of the positive, loving affect states. Rather than locate these intolerable affects within the self, such individuals may project these affects onto the other. However, by evoking these intolerable affects in the other, such individuals may in turn feel the need to attack or control the dangerous affects that the other now possesses. As a result, the interpersonal relationships of individuals with borderline pathology are often characterized by fluctuations between dichotomous experiences of idealized love in

which there is a desire to be completely merged with the other and hateful denigration in which there is a desire to maintain complete separation from the other.

Fonagy and his colleagues (Fonagy et al., 2002; Bateman and Fonagy, 2004) argue that much of borderline pathology can be understood as a failure to mentalize and symbolize affect states in the context of attachment relationships. Like Kernberg, they tie borderline pathology to the early affective experience of the child by noting that the child's establishment of affect regulation originates in the parent's capacity to recognize and respond to the affective states of the child. In mirroring the child's affect state with markedness and contingency, the parent allows the child to develop a secondary representation of its primary affect states. By "marking" the child's affect through mirroring back to the child an exaggerated version of the affect, the parent gives back a metabolized version of the affect. This signals to the child that the mirrored affect is a representation of the child's affect and not the affect itself, allowing the child to differentiate his/her own affect from the parent's affect. By mirroring the child's affect with congruent affect, the parent provides the child with the experience of finding his/her own primary affect state in the facial expression of the parent. Through marked and contingent mirroring, the parent creates meaning out of the child's meaningless sensations, which Bion (1961) referred to as an "alpha function." This allows the child to symbolically represent his/her affective experience in a manner that transcends the immediacy of primary affect states and allows for a differentiation between one's affects and the affects of others.

Fonagy and colleagues (2002) contend that many features of borderline pathology can be understood as originating in a failure to develop secondary

representations of primary affect states in an attachment context. Without an experience of marked and congruent mirroring, the child may experience a lack of differentiation between the mother's affect state and the self state. This may manifest in individuals with borderline pathology through impairment in the ability to view self and others as separate and whole beings, as well as the ability to comprehend the internal states of self and others. Further, if the affect state of the parent does not map onto the child's own affective experience, the child may nonetheless internalize the parent's incongruent projections, including identifications of the self as bad, aggressive, malevolent, and destructive, which creates in the child an alien experience of self. Only by either merging with the goodness in the other, or projecting the alien aspects of self onto the other, can the individual achieve a sense of continuity within the self. This may manifest in individuals with borderline pathology through interpersonal relationships characterized an oscillation between a desire to be completely merged with the other in an idealized love and a view of the other filled with the individual's aggressive, malevolent, and destructive projections.

Affect, Symbolization and Theories of Change in Psychotherapy

One of the predominant theories of change in psychoanalytically-oriented psychotherapy, particularly with regard to more disturbed patients and patients organized at the borderline level, focuses on the movement from the discharge of impulses to the symbolization of affects (Freedman & Berzofsky, 1995). Due to impairments in the internalization of representations of self in emotion-laden interactions with others, the internal worlds of patients with BPD are characterized by unsymbolized affect-laden

mental representations that may be unconsciously communicated to the therapist through the patient's affective experience. The therapist functions as a container and eventual translator of the patient's unconscious affective experience into more symbolic representations of affect (Kernberg, 1975; Fonagy et al., 2002).

When the patient is filled with painful affects and self states that are too intolerable to experience consciously, rather than locate these affects within the self, the patient projects these affects onto the therapist (Kernberg, 1975; Fonagy et al., 2002). Due to the contagious nature of affect, the therapist is likely to identify with, experience, and possibly enact the feelings that the patient is evoking (Westen and Gabbard, 2002). The therapist may experience him/herself as filled with intense feelings, thoughts, images, and fantasies that over time the therapist can come to identify and eventually verbalize to the patient. In doing so, the therapist provides an alpha-function to the patient's affect; the therapist metabolizes the affect, gives organization and meaning to it, and gives it back to the patient in a more tolerable form. The patient may identify with the therapist's capacity to organize and represent affect states, allowing the patient to eventually move from solely discharging affect states to symbolizing affect states (Bion, 1961; Freedman and Berzofsky, 1995).

Freedman and Berzofsky (1995) argue that in some patients there is a quality to their language that indicates a greater capacity to use the therapeutic relationship to move from the discharge of impulses to the symbolization of affects. They note that difficult patients (i.e. borderline and schizophrenic patients) differ greatly in terms of the nature of what is communicated to the therapist in the transference, and differentiate between talking and "language deployed in the service of a communicated wish...a wish to impart

inner objects – the introjects – into the consciousness of the listening analyst and therapist as object” (p. 366), the latter being indicative of a “communicated transference.”

Freedman and Berzofsky (1995) define the communicated transference as a product of the patient’s ability to represent his/her experience symbolically. This communicated transference manifests in the patient’s capacity to present a rich and coherent narrative in which feelings are put into words, and ambivalence is tolerated. The therapist in turn feels enlivened by the patient and experiences the richness of his/her language as filled with imagery and affect. In contrast, patients that do not symbolize their experience in this manner tend to provide narratives that are often disorganized or difficult to follow, barren, and deplete of affect and imagery. The therapist may therefore feel disengaged and deadened by the patient, and as a result the therapist may experience boredom, sleepiness, and tendency to watch the clock more than with other patients. They note that the patient’s capacity to symbolize his/her experience in the form of the communicated transference is not a function of the patient’s diagnosis or level of functioning.

Freedman and Berzofsky’s (1995) concept of a communicated transference is an integration of theories of transference and multiple code theory (Bucci, 1997). Bucci’s multiple code theory describes the parallel processing of symbolic and subsymbolic information. She contrasts subsymbolic processing, which is characterized by the representation of affects through bodily and visceral experience, with symbolic processing, which is characterized by the representation of affects through language in the form of specific memories and dreams. During symbolic processing there is a high level of referential activity whereby language is connected to imagery and emotional

experience. In an example of referential activity, Bucci (1997) draws a parallel to a reader's experience of being drawn into a story. As the reader engages the narrative, pictures and fantasized sensory images come to mind. In a similar fashion, if a patient were to use language that is imagistic during a session, the therapist would feel enlivened as images and associations were evoked in the therapist. This experience would reflect the multiple sensory and information neural networks operating in parallel to create a vividness to the patient's narrative.

Implicit in the theories of both Freedman and Berzofsky (1995) and Bucci (1997) is the notion that the presence of a symbolizing capacity allows the patient to better utilize psychotherapy through evoking meanings in the therapist that can then be translated back to the patient in an effort to better articulate the patient's experience. However, there seems to be two constructs conflated in the concept of a communicated transference, namely the capacity to communicate one's experience to another in a symbolic form and the capacity to express affect in a manner that engages and enlivens the other. The former, the capacity to symbolically represent one's experience, may indicate the presence of a symbolizing capacity in the patient, as indicated by the capacity to present a coherent and cohesive narrative. However, it seems that the latter, the capacity to affectively engage the other, could be understood independently of the patient's symbolizing capacity. In fact, an affective communication to the therapist may be conceptualized as an expression of that which cannot be symbolized.

Affect is one of many channels by which the patient communicates his/her internal world to the therapist (Kernberg, 1984). When a patient arouses an affective experience in psychotherapy, he/she may be unconsciously communicating his/her

unsymbolized affect-laden introjects to the therapist. This affect will not only engage the therapist's attention and curiosity, but also the "good enough" therapist will then be able to use this affective communication as a road to understanding the patient's unsymbolized affective experience. In providing an "alpha function" to the patient's unsymbolized experience, the therapist uses of his/her own internal structures to metabolize the unsymbolized affect, give organization and meaning to it, and give it back to the patient in a more tolerable symbolic form (Bion, 1961). Therefore, rather than conceptualizing change in psychotherapy in the context of the patient's symbolizing capacity alone, change can be better understood as stemming from the presence of an affective communication between the patient and the therapist that allows for the symbolization of what previously could not be represented but only felt intersubjectively.

It would therefore follow that the presence of an "affective communication" created between the patient and therapist that allows for a dyadic process of symbolization would predict positive outcome in treatment. It is expected that patients with borderline personality disorder who arouses an affective experience in the therapy, who imbue their language with affect-laden language and images, and whose affect engages the therapist's attention and curiosity are expected to show greater retention in treatment and greater changes in symptomatology through treatment.

The Present Study

The present study examines initial data on a self-report measure for therapists evaluating an affective communication created between the patient and therapist. The primary aims of this study are 1) to demonstrate that the construct of affective

communication can be reliably assessed by therapists of various of the treatment modalities, 2) to establish the validity of the affective communication self-report measure by demonstrating the internal consistency of its factor structure and demonstrating its strong relationship to other measures of similar constructs, 3) to evaluate whether the therapist's experience of an affective communication created between themselves and their BPD patients in the initial stages of treatment predicts the course and outcome of a twelve month treatment. Specifically, affective communication factors representing therapists experiencing themselves and their patients feeling enlivened and emotionally-present in the treatment, as opposed to therapists experiencing the treatment as predominated by either overwhelming negative affect or the absence of any affective experience, are expected to predict whether and how long patients stay in treatment as well as behavioral change (i.e. symptomatology) and structural change (i.e. coherence and mentalization) during the twelve month treatment.

CHAPTER THREE: METHOD

Patients

The patients being evaluated in the present study are part of The Personality Disorders Institute/Borderline Personality Disorder Research Foundation randomized controlled trial (RCT) comparing a manualized psychodynamic treatment called Transference Focused Psychotherapy (TFP), a psychodynamically-oriented supportive psychotherapy (SPT), and Dialectic Behavioral Therapy (DBT), for patients with borderline personality disorder (Clarkin et al., 2004).

Patients were referred to the RCT from outpatient, inpatient, and day treatment clinics within the New York Presbyterian – Weill Cornell Medical College system. The patients were assessed using structured diagnostic interviews, including the International Personality Disorder Examination (IPDE; Loranger, 1995), as well as self-report measures assessing suicidal and parasuicidal behavior, number and length of hospitalizations, and other use of medical, psychiatric, and social services. Social functioning was assessed across multiple domains; including work, family, friends, and romantic relationships. Patients were also assessed using semi-structured interviews of early attachment relationships and object representations: the Adult Attachment Interview (AAI) and the Object Representation Inventory (ORI). To meet criteria for the RCT, patients must have met at least five of the nine DSM-IV criteria for BPD, must not have met criteria for schizophrenia or any psychotic disorders, bipolar disorder, organic pathology, or mental retardation, and have been between the ages of 18 and 50.

Ninety BPD patients met criteria for the RCT study and were randomized to one

of the three treatment cells for a one-year treatment: Transference Focused Psychotherapy, Supportive Psychotherapy, or Dialectic Behavioral Therapy. Each treatment cell (TFP, SPT, and DBT) was assigned 30 patients, but the cells differed in terms of the number of therapists as well as the number of cases that each therapist carried. The four DBT therapists carried between three and ten patients each, the seven SPT therapists carried between three and five patients each, and the nine TFP therapists carried between one and seven patients each. Patients were assessed upon admission and reassessed after 4, 8, 12, and 20 months of treatment.

Therapists

In the present study, therapists from the three treatments were contacted by letter and asked to participate in a study in which they would be asked to retrospectively fill out self-report questionnaires on the patients treated in the RCT. Eighteen of the 20 therapists in the RCT study were invited to participate; one therapist (who treated one patient) was excluded because her patient met criteria for a psychotic disorder, and one therapist (who treated two patients) was deceased prior to the beginning of this study.

The questionnaire packet filled out by the therapists required approximately one hour to fill out for each patient, and therapists were offered an honorarium of \$100 per questionnaire for their time. As it had been a number of years since some of the therapists had treated these patients (average of 5 years since the treatment initiated), therapists were provided brief descriptions of the patients to help re-familiarize them with these individuals and the treatment. Therapists were also instructed to review process notes, work product, and/or file regarding this patient prior to completing the

questionnaires. They were asked to focus their attention on notes pertaining to the first 4 months of treatment, as this was the period of time they were most often asked to recall.

All 18 therapists signed consent forms agreeing to participate in the study.

Therapists were given the option of completing the questionnaires on paper or online; three chose to participate online, and the rest received and returned their questionnaires by mail. Of the 18 therapists only 13 were able to complete the questionnaires within the timeframe allotted by the researchers. Four DBT therapists completed questionnaires on 25 patients, five SPT therapists completed questionnaires on 20 patients, and four TFP therapists completed questionnaires on 13 patients.

All therapists in the study had experience in treating patients with Borderline Personality Disorder in their treatment modality. During the study all therapists received group supervision with the members of their treatment cell. The therapists videotaped all sessions, which were then presented at weekly supervisory meetings. The therapists were judged to be competent and adherent to the treatment manual through supervisory ratings.

Measures

Therapist Measures:

Therapists completed many questionnaires regarding their treatment with these patients in particular, as well as their attitudes towards their chosen treatment modality in general. Only those measures relevant to the present study are reported here.

Affective Communication Questionnaire. (ACQ; Meehan, 2004) The ACQ, developed by the author, is a 28-item self-report measure that asks therapists to rate their

patients in terms of the degree to which they felt enlivened and engaged by the patient, the nature of the affect experienced in sessions with the patients, and the degree to which the patient imbued his/her language with affect. Therapists were asked to rate what was typical of their interactions with their patients during the first 4 months of the treatment.

The measure, developed through an iterative construct validity approach, was derived from the item content of measures assessing similar constructs as well as content obtained from clinical and theoretical writing, most notably the concept of a communicated transference described by Freedman and Berzofsky (1995). Items were written using experience-near language (e.g. “I find it engaging to work with this patient”), as opposed to using theoretical terms in order to make the items accessible to therapists of disparate treatment modalities and theoretical orientations. These items were then reviewed by experienced clinicians to refine the items both in terms of language-usage and to ensure the items captured the breadth of the construct being assessed. (See Appendix 1 for the measure.)

Affect Regulation and Experience Q-sort, Questionnaire Version (AREQ-QV; Westen et al., 1997, Conklin et al., 2006) The AREQ-QV is a 98-item self-report measure that asks therapists to rate their patients along multiple dimensions of affective experience and affect regulation. Therapists were asked to rate what was typical of their patient’s affect during the first 4 months of the treatment.

Countertransference Questionnaire. (CTQ; Zittel & Westen, 2003; Betan et. al., 2005) The Countertransference Questionnaire is a 79-item self-report measure that asks

therapists to rate their patients in terms of the emotional and countertransferential reactions evoked in the therapist during the treatment. Therapists were asked to rate what was typical of their countertransference patterns during the first 4 months of the treatment.

Maslach Burnout Inventory-Therapist Version. (MBI-T; Linehan et al., 2000)

The MBI-T is a 22-item self-report measure that asks therapists to rate feelings of burnout in working with their patients. This measure was adapted by Linehan and colleagues (2000) from the MBI developed by Maslach and colleagues (1986) to assess experiences of burnout in one's profession, including emotional exhaustion, depersonalization, and negative attitudes. The present version of the measure has been altered to assess the therapist's attitudes towards a particular patient rather than the therapist's experience of working with patients in general. Therapists were asked to rate what was typical of their feelings of burnout throughout the treatment.

Psychotherapy Relationship Questionnaire. (PRQ; Westen, 2000; Bradley et. al., 2005) The Psychotherapy Relationship Questionnaire is a 90-item self-report measure that asks therapists to rate the thoughts, feelings, and behaviors expressed by their patients in order to characterize the pattern of transference in the therapeutic relationship. Therapists were asked to rate what was typical of transference patterns with their patients during the first 4 months of the treatment.

Working Alliance Inventory, Therapist Version (WAI-T; Horvath & Greenberg,

1989) The WAI-T is a 36-item self-report measure that asks therapists to assess three general domains of therapeutic alliance: agreement on goals, tasks, and bond formation. Therapists were asked to rate what was typical of their alliance during the first 4 months of the treatment.

Patient Outcome Measures:

The following outcome measures were collected as part of the larger RCT study as part of a diagnostic and symptom assessment utilizing structured diagnostic interviews as well as self-report measures. Patient assessments upon admission and after 12 months of treatment will be utilized in this study.

International Personality Disorder Examination. (IPDE; Loranger, 1995) The IPDE is a structured interview assessing symptoms of personality disorders corresponding to the DSM-IV diagnostic system.

Global Assessment of Functioning (GAF; American Psychiatric Association, 2000) The GAF scale, measured from 0-100, is a standard indicator broadly measuring psychological, social, and occupational functioning.

Social Adjustment Scale. (SAS; Weissman, 1993) The SAS is a structured interview used to assess social functioning across multiple dimensions at work, family, friends, and romantic relationships.

Overt Aggression Scale Modified for Outpatients. (OAS-M; Coccaro, 1991) The OAS-M is a structured interview assessing experiences with anger, irritability and assaultive behaviors directed against both self and others.

Beck Depression Inventory (BDI; Beck et. al., 1996) The BDI is a 21-item self-report measure of depressive symptoms.

Patient Structural Change Measures:

Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985). The Adult Attachment Interview is a semi-structured clinical interview designed to elicit thoughts, feelings and memories about early attachment experiences, and to assess the individual's state of mind or internal working model with regard to early attachment relationships. The AAI is transcribed verbatim and coded using subscales ratings. This study focused on the narrative coherence subscale of the AAI, which has been found to be the best predictor of attachment security, $r = .96$, $p < .001$ (Waters, Treboux, Fyffe, & Crowell, 2001). Raters were blind to all identifying characteristics of the subjects, and reliability was established with different raters coding a subset of each others transcripts ($n = 22$, $ICC = .88$).

Reflective Functioning (RF; Fonagy et al., 1998). The AAI was also scored with the Reflective Function (RF) Scale, an 11-point scale that evaluates the quality of mentalization in the context of attachment relationships. Passages are rated on a scale of -1 (negative RF, concrete, totally barren of mentalization or grossly distorting of the

mental states of others) to 9, (exceptional RF, complex, elaborate or original reasoning about mental states), and these scores are then aggregated to provide an overall score for the transcript. Raters were blind to all identifying characteristics of the subjects, and reliability was established with different raters coding a subset of each others transcripts (n= 26, ICC=.86).

CHAPTER FOUR: RESULTS

Sample Characteristics

The therapist participants included 4 DBT therapists completing questionnaires on 25 patients (43.1% of total patients), 5 SPT therapists completing questionnaires on 20 patients (34.5% of total patients), and 4 TFP therapists completing questionnaires on 13 patients (22.4% of total patients).

The 58 patients rated in this study included 52 (89.7%) women and 6 (10.3%) men. The patients had a mean age of 31.02 years ($SD=8.01$). The patients were 67.2% Caucasian, 5.2% African-American, 10.3% Hispanic, 5.2% Asian, and 12.1% were of mixed or other race. No significant differences were found between this subset of 58 patients and the 32 patients not evaluated in terms of age, gender, or ethnicity.

At the start of treatment these 58 patients had an average Global Assessment of Functioning (GAF; APA, 1987) score of 50.17 ($SD=9.89$). The patients were diagnostically assessed for personality pathology using the IPDE (Loranger, 1995); 56 patients (96.6%) met criteria for Borderline Personality Disorder (PD), 14 patients (24.1%) met criteria for Paranoid PD, 2 patients (3.4%) met criteria for Schizoid PD, 3 patients (5.2%) met criteria for Schizotypal PD, 12 patients (20.7%) met criteria for Antisocial PD, 12 patients (20.7%) met criteria for Histrionic PD, 8 patients (13.8%) met criteria for Narcissistic PD, 20 patients (34.5%) met criteria for Avoidant PD, 8 patients (13.8%) met criteria for Dependent PD, 7 patients (12.1%) met criteria for Obsessive-Compulsive PD. Patients were diagnosed with a mean of 2.52 Axis II diagnoses ($SD=1.08$). No significant differences were found between this subset of 58 patients and

the 32 patients not evaluated in terms of initial GAF score ($t = -.40, p < .69$), number of criteria met for BPD ($t = 1.12, p < .27$), or mean number of Axis II diagnoses ($t = .685, p < .50$).

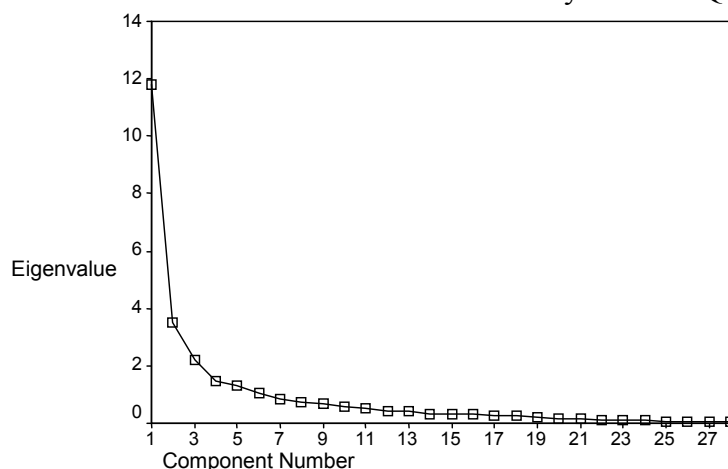
Patients were treated for a mean of 8.71 months ($SD = 4.13$). Of the 58 patients evaluated, 37 patients (63.8%) completed the twelve months of treatment, while 21 patients (36.2%) dropped out of treatment. No significant differences were found between this subset of 37 completer patients and the 21 patients who dropped out of treatment in terms of initial number of criteria met for BPD ($t = -.26, p < .79$), or mean number of Axis II diagnoses ($t = -1.42, p < .16$). There were not enough initial GAF scores available on the 21 patients who did not complete treatment to evaluate between group differences.

Factor Analysis of ACQ Measure

To identify the factor structure of the Affective Communication Questionnaire (ACQ), a principal component factor analysis with varimax rotation was conducted on the questionnaire items. Analysis of sampling adequacy (Kaiser-Meyer-Olkin) indicates a relative compact pattern of correlations (0.82), and analysis of sphericity indicates a strong relationship between the items ($df = 378, p < .000$), both of which are strong indicators that factor analysis is appropriate for this measure. Six main factors emerged using Kaiser's criteria of eigenvalues greater than 1, accounting for 76.22% of the variance in scores. However, scree testing indicated a break between the third and fourth factors, and another break between the fifth and six factors (see Table 1). Due to the lack of interpretability and low internal consistency of the sixth factor, and the strong

interpretability and internal consistency of the first five factors, a five-factor solution was retained.

Table 1: Scree Plot for Factor Analysis of ACQ



The five-factor solution accounted for 72.40% of the variance in scores, and the high internal consistency of the five factors as assessed by Chronbach's alpha indicates that they represent cohesive constructs. Appendix 2 displays the rotated component factor structure of the ACQ with the item loadings on each factor. In order to determine if an item would be included in a factor, items with loadings of 0.40 or more were included in the reliability analysis of that factor, even if that item had a higher loading on another factor. From these items mean factor scores were calculated.

Factor 1: Enlivened

The first factor included 8 items representing therapists experiencing their patients and themselves as feeling *enlivened* in the treatment ($\alpha = .920$); this includes items indicating the therapists' experience of the patient and themselves as very enlivened and

emotionally present in sessions, each finding the therapeutic work stimulating and energizing, and each finding that thoughts and emotions evoked in the treatment resonate with them after sessions.

Factor 2: Disengaged

The second factor included 8 items representing therapists experiencing their patients and themselves as each feeling disengaged from the treatment ($\alpha = .916$); this includes items indicating the therapist experiencing boredom and difficulty being fully present with the patient during sessions, and the therapist experiencing the patient as withdrawn and hard to connect with.

Factor 3: Barren Emotion

The third factor included 7 items representing the therapist experiencing the patient's presentation as *emotionally barren* in the treatment ($\alpha = .902$); this includes items indicating the therapist's experience of the patient's language as stagnant, repetitive, and monotonous, as well as the therapist's experience of the patient's emotional presentation as flat or devoid of the affect that might be appropriate to the content of the speech.

Factor 4: Negative Affect

The fourth factor included 5 items representing the therapist experiencing a predominance of *negative affect* in the treatment ($\alpha = .815$); this includes items indicating the therapist experiencing the patient's emotional presentation as limited to angry,

frustrated emotions, as well as the therapist experiencing predominantly negative affect while sitting with the patient.

Factor 5: Full Range of Emotion

The fifth factor included 6 items representing the therapist experiencing the patient as presenting in treatment with a *full range of emotion* ($\alpha = .861$); this includes items indicating the therapist experienced the patient's language as full of emotion and the patient presenting with a full range of affect.

Correlation between Factors on the ACQ

Table 2 displays the relationship between the factors on the ACQ; each of the factors was found to be significantly correlated with one another, although Factor 4 (Negative Affect) was found to have a weaker correlation relative to the other factors.

Table 2: Correlation between ACQ Factors

	Factor 1: Enlivened	Factor 2: Disengaged	Factor 3: Barren Emot	Factor 4: Neg Affect	Factor 5: Full Range
Factor 1: Enlivened	-	-.664(**)	-.621(**)	-.287(*)	.735(**)
Factor 2: Disengaged		-	.828(**)	.545(**)	-.722(**)
Factor 3: Barren Emotion			-	.508(**)	-.704(**)
Factor 4: Negative Affect				-	-.557(**)
Factor 5: Full Range					-

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The fact that many of these correlations are quite strong indicates that these factors are interrelated, and therefore independence cannot be assumed among these

factors. On a theoretical level the dependence between our factors is not of concern, and in fact would be expected given the strong relationship observed clinically between expressed affect and feeling engaged in a particular treatment. Nevertheless, these factors were subject to principal component factor analysis to determine if there was a factor structure underlying these five categories. One factor with an eigenvalues greater than 1 emerged, and therefore the five-factor solution was retained.

Measuring Construct Validity of the ACQ: Nomological Network

Cronbach and Meehl (1955) have argued that the construct validity of a measure must be demonstrated in the context of a nomological network by demonstrating the relationship of that measure to other measures of similar constructs. Therefore the factor scores of the ACQ will be correlated with the therapist's experience of constructs that are predicted to strongly relate to the presence of an affective communication in the treatment; transference and countertransference patterns in the treatment, the affect regulation and affective experience of the patient, an experience of burnout in the therapist, and the working alliance in the treatment.

Countertransference Questionnaire (CTQ)

To identify the factor structure of the Countertransference Questionnaire, a principal component factor analysis with varimax rotation was conducted on the items. Seventeen main factors with eigenvalues greater than 1 emerged, however scree testing indicated a substantial break between the eighth and ninth factors. An eight-factor solution is also consistent with Westen and colleagues' (Betan et al., 2005) finding of an

eight-factor solution on this measure (on a clinical sample not exclusively personality disordered). However, low internal consistency ($\alpha = .205$) and a lack of interpretability of the eighth factor led to its being excluded. Thus, a seven-factor solution was retained; Appendix 3 displays the rotated component factor structure with an abbreviated list of the item loadings on each factor.

The first Factor included 22 items representing therapist countertransference marked by feeling criticized and devalued by the patient (i.e. "I feel unappreciated by him/her," "I feel dismissed or devalued," "I feel criticized by him/her"). The second factor included 15 items representing therapist countertransference marked by feeling overwhelmed and fearful of the patient (i.e. "S/he frightens me," "I feel overwhelmed by his/her strong emotions," "I feel anxious working with him/her"). The third factor consisted of 10 items representing therapist countertransference marked by feeling nurturant and protective of the patient (i.e. "I feel like I want to protect him/her," "I feel nurturant toward him/her," "I have warm, almost parental feelings toward him/her").

The fourth factor consisted of 12 items representing therapist countertransference marked by feelings of helplessness and hopelessness in the treatment (i.e. "I feel I am failing to help him/her or I worry that I won't be able to help him/her," "I feel hopeless working with him/her"). The fifth factor consisted of 10 items representing therapist countertransference marked by angry enactments and experiences of feeling disorganized by the patient (i.e. "More than with most patients, I feel like I've been pulled into things that I didn't realize until after the session was over," "I regret things I have said to him/her."). The sixth factor consisted of 5 items representing therapist countertransference marked by sexualization that was disorganizing to the therapist (i.e.

“I feel sexual tension in the room,” “His/her sexual feelings toward me make me anxious or uncomfortable,” “I feel confused in sessions with him/her”). The seventh factor consisted of 2 items representing therapist countertransference marked by boredom on the part of the therapist (i.e. “I feel bored in sessions with him/her,” “My mind often wanders to things other than what s/he is talking about”).

As can be seen in Table 3, the CTQ factors were found correlate with many of the ACQ factors in predicted directions. Of note, countertransference marked by feeling overwhelmed and fearful was found to correlate with therapists experiencing their patients and themselves as more enlivened by the treatment, more engaged, and with a less barren affective presentation in the treatment. This finding is noteworthy because it indicates that feeling engaged in and enlivened by the treatment does necessarily reflect having a positive countertransferential experience of the patient.

Table 3: Correlation between ACQ Factors and CTQ Factors

	ACQ F1: Enlivened	ACQ F2: Disengaged	ACQ F3: Barren Emotion	ACQ F4: Neg Affect	ACQ F5: Full Range
CTQ F1: Criticized	-.169	.410(**)	.343(**)	.631(**)	-.250
CTQ F2: Fearful	.430(**)	-.273(*)	-.295(*)	.164	.173
CTQ F3: Nurturant	.297(*)	-.105	-.019	-.200	.321(*)
CTQ F4: Helpless	-.322(*)	.290(*)	.432(**)	.499(**)	-.314(*)
CTQ F5: Enactment	.224	.101	.177	.087	-.007
CTQ F6: Sexualized	.087	.280(*)	.192	.105	-.172
CTQ F7: Boredom	-.498(**)	.564(**)	.309(*)	.138	-.460(**)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

However, countertransference marked by feeling helpless in and hopeless about the treatment correlated with therapists experiencing their patients and themselves as less

enlivened by the treatment, less engaged in treatment, with increased barren and negative affect, and a more restricted range of affect in the treatment. This finding is also noteworthy because it indicates that while a therapist feeling fearful of the patient's strong affect does not lead to feeling less engaged in or enlivened by the treatment; feeling deskilled and ineffective in the treatment does.

Interestingly, sexualized countertransference was found to correlate with therapists experiencing their patients and themselves as disengaged from the treatment. This raises the question of whether therapists may defensively modulate their sexualized feelings by disengaging from the patient.

Psychotherapy Relationship Questionnaire (PRQ)

To identify the factor structure of the Psychotherapy Relationship Questionnaire, a principal component factor analysis with varimax rotation was conducted on the PRQ items. Twelve main factors with eigenvalues greater than 1 emerged, however scree testing indicated a substantial break between the seventh and eighth. Further, a seven-factor solution is more consistent with Westen and colleagues' (Bradley et al., 2005) finding of a five-factor solution on this measure (on a clinical sample not exclusively personality disordered). Thus, a seven-factor solution was retained; Appendix 4 displays the rotated component factor structure with an abbreviated list of the item loadings on each factor.

The first factor included 18 items representing the therapist's experience of the patient's transference as marked by feeling angry and critical towards the therapist (i.e. "S/he is oppositional; tends to disagree with the therapist's approach, comments,

suggestions, etc.”). The second factor included 11 items representing the therapist’s experience of the patient’s transference as marked by positive feelings towards the therapist and a feeling of commitment to treatment (i.e. “S/he feels helped by the therapist,” “S/he idealizes the therapist”). The third factor consisted of 8 items representing the therapist’s experience of the patient’s transference as marked by an entitled and narcissistic stance (i.e. “S/he behaves in ways that seem entitled, such as a lower fee than is warranted by his/her income.”).

The fourth factor consisted of 7 items representing the therapist’s experience of the patient’s transference as marked by counterdependency on the therapist (i.e. “S/he tries hard not to be, or feel, needy or dependent in therapy”). The fifth factor consisted of 4 items representing the therapist’s experience of the patient’s transference as marked by sexual feelings and attraction to the therapist (i.e. “S/he tries hard not to feel, or admit feeling, sexually attracted to the therapist”). The sixth factor consisted of 6 items representing the therapist’s experience of the patient’s transference as marked by an over-involved curiosity in the therapist (i.e. “S/he is overly interested in, or concerned about, the therapist’s relationship with other patients”). The seventh factor consisted of 2 items representing the therapist’s experience of the patient’s transference as marked by placing the therapist in a parentified or overly-directive role (i.e. “S/he appears comfortable in a child-like role in therapy; tends to draw parent-like responses from the therapist”).

As can be seen in Table 4, the PRQ factors were found correlate with many of the ACQ factors in predicted directions. As expected, therapists experiencing their patients’ transference as positive correlated with therapists experiencing their patients and themselves as more enlivened and engaged in the treatment. Interestingly there was a

trend towards therapists experiencing their patients' transference as marked by a sense of entitlement correlating with therapists experiencing their patients and themselves as more enlivened by the treatment. This finding again suggests that feeling more enlivened by treatment does not occur exclusively in therapeutic relationships with a positive transference, but rather may be characteristic of "approach-oriented" relational patterns, as opposed to patterns marked by avoidance.

Table 4: Correlation between ACQ Factors and PRQ Factors

	ACQ F1: Enlivened	ACQ F2: Disengaged	ACQ F3: Barren Emotion	ACQ F4: Neg Affect	ACQ F5: Full Range
PRQ F1: Angry	.034	.227	.131	.486(**)	-.012
PRQ F2: Positive	.689(**)	-.384(**)	-.394(**)	-.443(**)	.475(**)
PRQ F3: Entitled	.260(+)	-.115	.016	.294(*)	-.066
PRQ F4: Counterdep	-.058	.158	.260(+)	.142	-.087
PRQ F5: Sexualized	-.008	.252(+)	.165	.088	-.269(*)
PRQ F6: Overinvolved	.113	.090	.002	.091	.067
PRQ F7: Parental	-.023	.135	.188	.062	-.031

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

+ Correlation is a trend at the 0.10 level.

Also of note was that therapists experiencing their patients' transference as sexualized correlated with therapists experiencing their patients and themselves as presenting with a less full range of affect in the treatment, and there was a trend towards feeling less engaged in treatment. This again suggests that therapists may defensively modulate sexualized feelings in the treatment by disengaging from the patient.

Thus while "approach-oriented" relational styles that include positive affect as well as angry, anxious, and fearful affect may engage the therapist and enliven the treatment, a sexualized "approach-oriented" relational style may have the opposite impact

in that it may leave the therapist feeling helpless and ineffectual and as a result less engaged in and enlivened by the treatment.

Affect Regulation and Experience Q-sort, Questionnaire Version (AREQ)

To identify the factor structure of the Affect Regulation and Experience Questionnaire, a principal component factor analysis with varimax rotation was conducted on the AREQ items. Twenty-four main factors with eigenvalues greater than 1 emerged, however scree testing indicated a substantial break between the eighth and ninth factors. Further, an eight-factor solution is more consistent with Westen and colleagues' (Conklin et al., 2006) finding of a nine-factor solution on this measure (on a clinical sample not exclusively personality disordered). Thus, an eight-factor solution was retained; Appendix 5 displays the rotated component factor structure with an abbreviated list of the item loadings on each factor.

The first factor included 29 items representing the therapist's experience of the patient's affect regulation style as marked by externalizing defenses (i.e. "S/he tends to blame others for own mistakes or misdeeds"). The second factor included 11 items representing the therapist's experience of the patient's affect regulation style as marked by avoidant defenses (i.e. "S/he tends to remain passive in the face of conflict or distress; avoids taking action to cope with difficult situations"). The third factor consisted of 11 items representing the therapist's experience of the patient's affect regulation style as marked by adaptive defenses (i.e. "S/he tends to cope with distress by seeking out information and knowledge"). The fourth factor consisted of 12 items representing the therapist's experience of the patient's affect regulation style as marked by intense

negative affect (i.e. “S/he has panic attacks accompanied by strong physiological responses”).

The fifth factor consisted of 7 items representing the therapist’s experience of the patient’s affect regulation style as marked by an intense, predominantly positive full range of affect (i.e. “S/he tends to feel pleasant emotions (happiness, joy, excitement, etc.) intensely”). The sixth factor consisted of 7 items representing the therapist’s experience of the patient’s affect regulation style as marked by obsessive defenses (i.e. “S/he tends to become anxious when daily routines are altered”). The seventh factor consisted of 6 items representing the therapist’s experience of the patient’s affect regulation style as marked by dissociation and disorganization (i.e. “S/he tends to dissociate when distressed, e.g., to feel like s/he has left his/her body”). The eighth factor consisted of 6 items representing the therapist’s experience of the patient’s affect regulation style as marked by self-destructive and self-injurious behaviors (i.e. “S/he behaves in manifestly self-destructive ways when upset, e.g., fast driving, wrist cutting”).

As can be seen in Table 5, the AREQ factors were found correlate with many of the ACQ factors; with the affect-oriented variables on the ACQ (barren emotion, negative affect, full range of emotion) relating to the affective experiences and regulation styles in predicted directions, although interestingly an affective experience marked by self-destructive and self-injurious behaviors was not correlated with any of the ACQ factors.

As expected, therapists experiencing their patients’ affective presentation as intense and predominantly positive was correlated with therapists experiencing their patients and themselves as more enlivened and engaged treatment and evidencing a fuller range of affect. Therapists experiencing their patients and themselves as more enlivened

by the treatment also correlated with therapists experiencing their patients as exhibiting an adaptive defensive style of regulating affect, and there was a trend towards correlation with an experience of the patient as exhibiting predominantly obsessive defenses. However, a therapists experiencing their patients' affective presentation as characterized by intense negative affect was correlated therapists experiencing their patients and themselves as more disengaged from treatment, and there was a trend towards feeling disengaged correlating with the presence of an affective experience marked by dissociation and disorganization. Taken together, this may indicate that therapists experiencing their patients and themselves as more enlivened by and engaged in treatment may be more strongly associated with a therapist's experience of the patient as exhibiting less primitive defensive styles of regulating emotions.

Table 5: Correlation between ACQ Factors and AREQ Factors

	ACQ F1: Enlivened	ACQ F2: Disengaged	ACQ F3: Barren Emotion	ACQ F4: Neg Affect	ACQ F5: Full Range
AREQ F1: Externalize	.117	.130	.214	.610(**)	-.136
AREQ F2: Avoidant	-.186	.097	.105	.248(+)	-.222
AREQ F3: Adaptive	.461(**)	-.212	-.165	-.267(*)	.180
AREQ F4: Negative	-.047	.325(*)	.177	.312(*)	-.245(+)
AREQ F5: Intense	.481(**)	-.437(**)	-.611(**)	-.245(+)	.643(**)
AREQ F6: Obsessive	.249	-.205	-.018	-.159	.266(*)
AREQ F7: Dissociative	-.117	.260(+)	.257(+)	.175	-.054
AREQ F8: Self-destruct	-.107	-.088	.040	.015	.011

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

+ Correlation is a trend at the 0.10 level.

Maslach Burnout Inventory-Therapist Version

To identify the factor structure of the Maslach Burnout Inventory, a principal

component factor analysis with varimax rotation was conducted on the MBI items. Five main factors with eigenvalues greater than 1 emerged, and scree testing was consistent with a five-factor solution; Appendix 6 displays the rotated component factor structure with the item loadings on each factor. In order to determine if an item would be included in a factor, items with loadings of 0.40 or more were included in the reliability analysis of that factor, even if that item had a higher loading on another factor. From these items mean factor scores were calculated.

The first factor included 10 items representing therapists feeling emotionally strained by the patient (i.e. “Working with this patient is really a strain for me”). The second factor included 6 items representing therapists feeling a sense of excitement and personal accomplishment in working with the patient (i.e. “I feel very energetic with this patient”). The third factor consisted of 5 items representing therapists feeling interpersonal distance from the patient (i.e. “I feel I treat this patient as if he/she was an impersonal object”). The fourth factor consisted of 3 items representing therapists feeling callous towards the patient (i.e. “I don't really care what happens to this patient”). The fifth factor consisted of 2 items representing therapists feeling effective in working with the patient (i.e. “I deal very effectively with the problems of this patient”).

Due to the often similar interpretability of items between the factors, these factors were then subject to principal component factor analysis with varimax rotation to determine if there was a factor structure underlying these five categories. Two main factors with eigenvalues greater than 1 emerged, and the strong interpretability and internal consistency of the factors was consistent with a two-factor solution. Further, the two-factor solution is more consistent with Linehan and colleagues’ (2000) finding of a

three-factor solution on this measure (emotional exhaustion, depersonalization, and personal accomplishment). As can be seen in Table 6, in the current sample's factor solution two dimensions emerged, personal accomplishment and emotional exhaustion, while the items Linehan identifies as depersonalization were found to be distributed along these two dimensions (in both the two-factor and five-factor solutions).

Table 6: Factor Loadings on Rotated Component Matrix for MBI Factors

	Personal Accomplishment: Factor 1	Emotional Exhaustion: Factor 2
Positive	.898	
Effective	.811	
Callous	-.767	.417
Strain		.938
Distance		.903

As can be seen in Table 7, the two MBI factors were found correlate with many of the ACQ factors in predicted directions. As expected, therapists experiencing a sense of personal accomplishment significantly correlated with therapists experiencing their patients and themselves as participating in a more enlivened, engaged, and emotionally rich treatment. Therapists feeling emotionally exhausted in the treatment were significantly correlated with therapists experiencing a predominance of negative affect, barren emotion, and a feeling of disengagement in the treatment.

Table 7: Correlation between ACQ Factors and MBI Factors

	ACQ F1: Enlivened	ACQ F2: Disengaged	ACQ F3: Barren Emot	ACQ F4: Neg Affect	ACQ F5: Full Range
F1: Personal Accomplishment	.648(**)	-.470(**)	-.407(**)	-.382(**)	.687(**)
F2: Emotional Exhaustion	.066	.288(*)	.273(*)	.742(**)	-.149

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Working Alliance Inventory, Therapist Version

To identify the factor structure of the Working Alliance Inventory, a principal component factor analysis with varimax rotation was conducted on the WAI items. Six main factors with eigenvalues greater than 1 emerged. However, the poor interpretability and internal consistency of the fifth and sixth factors led to their exclusion. Thus, a four-factor solution was retained; Appendix 7 displays the rotated component factor structure with the item loadings on each factor.

The first factor included 24 items representing the therapist viewing the patient as confident in the treatment in general and their therapist in particular (i.e. “My patient has confidence in therapy and his/her therapist”). The second factor included 7 items representing therapists feeling that they disagree with their patient as to the purpose and goal of the treatment (i.e. “The patient and I have different ideas on what his/her real problems are”). The third factor consisted of 7 items representing therapists feeling that they and the patient are making accomplishments in the treatment (i.e. “I feel that things we are doing in therapy will help the patient to accomplish the changes that s/he desires”). The fourth factor consisted of 4 items representing therapists feeling a sense of respect and appreciation for the patient (i.e. “I respect the patient even when he/she does things that I do not approve of”).

As can be seen in Table 8, the WAI factors were found correlate with many of the ACQ factors in predicted directions. As expected, therapists who experienced their patients as confident in the treatment significantly correlated with therapists experiencing their patients and themselves as participating in a more enlivened, engaged, and emotionally rich treatment. Similarly, treatments in which therapists felt a sense of

accomplishment and effectiveness significantly correlated with therapists experiencing their patients and themselves as less disengaged in the treatment, with reduced negative affect, and a fuller range of affect. Treatments in which therapists felt that they disagreed with their patient as to goals significantly correlated with therapists experiencing a predominance of negative affect in the treatment. Interestingly, therapists experiencing a feeling of respect for the patient did not correlate with any of the ACQ factors.

Table 8: Correlation between ACQ Factors and WAI Factors

	ACQ F1: Enlivened	ACQ F2: Disengaged	ACQ F3: Barren Emot	ACQ F4: Neg Affect	ACQ F5: Full Range
WAI F1: Confidence	.580(**)	-.390(**)	-.367(**)	-.240 (†)	.393(**)
WAI F2: Disagree	.009	.216	.193	.441(**)	-.117
WAI F3: Accomplish	.176	-.286(*)	-.133	-.329(*)	.485(**)
WAI F4: Respect	.209	-.131	-.178	-.181	.163

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

† Correlation is a trend at the 0.10 level.

Treatment Group Differences on ACQ

Table 9 displays the Analysis of Variance with Post Hoc testing (LSD) for differences between treatment groups on ACQ factors. Findings indicate that DBT therapists were found to report feeling less *enlivened* in the treatment as compared to TFP and SPT therapists. In addition, TFP therapists were found to report more *negative affect* in the treatment than DBT therapists, and there was a trend towards TFP therapists reporting more *negative affect* in the treatment than SPT therapists. No other between group differences was found on the ACQ factors.

No differences between treatment groups were found in terms of the number of

months patients were seen in treatment ($F=.45, p < .63$). Given that DBT therapists reported feeling less *enlivened*, this finding indicates that how *enlivened* a therapist reports feeling cannot be viewed as a proxy for a retrospective assessment of how long the patient stayed in treatment, a finding that will be elaborated upon in the discussion.

Table 9: Analysis of Variance of Treatment Group Differences on ACQ

	1- TFP (n=13)		2- DBT (n=23)		3- SPT (n=20)		F	Sig.	Post hoc
	Mean	SD	Mean	SD	Mean	SD			
F1: Enlivened	2.75	0.68	2.03	0.84	2.98	0.94	7.37	.00**	1>2*, 3>2*
F2: Disengaged	2.33	0.58	2.17	0.94	2.14	0.99	0.19	.83	
F3: Barren Emot	2.98	0.89	2.66	0.89	2.55	1.17	0.75	.48	
F4: Neg Affect	3.42	0.83	2.66	0.94	2.83	0.78	3.28	.05*	1>2*, 1>3 ⁺
F5: Full Range	2.58	0.73	2.78	0.90	2.94	0.94	0.66	.52	

** Significant at the 0.01 level.

* Significant at the 0.05 level.

⁺ Trend at the 0.10 level.

ACQ and Course of Treatment

Table 10 displays the independent sample T-tests conducted to assess whether patients who completed 12 months of treatment differed from patients who dropped out of treatment in terms of the ACQ factors.

Table 10: Independent T-test of ACQ Factors with Completer and Drop-out Patients

	Completer (n=37)		Drop-out (n=19)		t (df)	Sig.
	Mean	SD	Mean	SD		
Factor 1: Enlivened	2.81	.87	2.00	.82	3.37 (54)	.00**
Factor 2: Disengaged	2.08	.87	2.41	.87	-1.34 (54)	.19
Factor 3: Barren Emotion	2.51	1.05	3.06	.78	-2.03 (54)	.05*
Factor 4: Negative Affect	2.78	.94	3.12	.92	-1.32 (54)	.19
Factor 5: Full Range	2.97	.92	2.43	.66	2.26 (54)	.03*

** Significant at the 0.01 level.

* Significant at the 0.05 level.

Completers were found to be in treatments that their therapists rated as significantly more *enlivened*, evidencing less *barren emotion*, and a *fuller range of emotions* in the first 4 months of treatment as compared to drop-out patients.

In order to identify the ACQ factors predicting course of treatment, a hierarchical multiple regression was performed predicting the number of months a patient remained in treatment. When all ACQ factors were entered into the regression equation, it was found that the factor of *enlivened* significantly predicted number of months in treatment. However, stepwise inclusion revealed a more complex model; it was found that therapists experiencing their patients and themselves as feeling more *enlivened* and less *negative affect* significantly predicted number of months in treatment, and surprisingly there was a trend towards more *disengaged* predicting number of months in treatment. As can be seen in Table 11, there is a trend towards this model predicting a greater percentage of the variance, accounting for 19.8% of the variance in this sample.

Table 11: Multiple Regression of ACQ Factors Predicting Months in Treatment

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>	R^2	ΔR^2	sr^2
<i>Step 1</i>								
F1: Enlivened	1.41	.56	.32	2.50	.02*	.104	.104	.02*
<i>Step 2</i>								
F1: Enlivened	1.12	.58	.26	1.93	.06 ⁺	.153	.050	.08 ⁺
F4: Negative Affect	-1.06	.60	-.23	-1.77	.08 ⁺			
<i>Step 3</i>								
F1: Enlivened	1.91	.73	.44	2.60	.01*	.198	.045	.09 ⁺
F2: Disengaged	1.52	.89	.33	1.70	.09 ⁺			
F4: Negative Affect	-1.64	.68	-.36	-2.41	.02*			

* Significant at the 0.05 level.

⁺ Trend at the 0.10 level.

ACQ and Outcome of Treatment

Analysis of the subset of 37 patients who completed 12 months of treatment focused on changes in symptomatology at the end of 12 months of therapy, controlling for the patient's initial level of functioning.

Social Adjustment Scale

In order to identify the ACQ factors predicting outcome of treatment, a hierarchical multiple regression was performed predicting change in social adjustment. It was found that therapists experiencing less *negative affect* in the treatment significantly predicted positive change in SAS during 12 months of treatment. As can be seen in Table 12 (with decreased SAS score indicating positive change), the addition of the factor *negative affect* in this model predicts a significantly greater percentage of the variance as compared to SAS at Time 1 alone, accounting for 33.3% of the variance in this sample.

Table 12: Multiple Regression of ACQ Factors Predicting Change in SAS

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>	R^2	ΔR^2	sr^2
<i>Step 1</i>								
SAS Time 1	.52	.19	.44	2.73	.01**	.193	.193	.01**
<i>Step 2</i>								
SAS Time 1	.49	.18	.41	2.75	.01**	.333	.139	.02*
F4: Negative Affect	.59	.24	.37	2.50	.02*			

** Significant at the 0.01 level.

* Significant at the 0.05 level.

Global Assessment of Functioning

In order to identify the ACQ factors predicting outcome of treatment, a hierarchical multiple regression was also performed predicting change in global assessment of functioning. It was found that no ACQ factors significantly predicting change in GAF score during 12 months of treatment. There was a trend towards therapists experiencing less *negative affect* in the treatment predicting change in GAF score when *full emotion* was included in the equation as a non-significant controlling variable. However, as can be seen in Table 13, given the fact that the addition of the factor *negative affect* in this model does not predict a significantly greater percentage of the variance, this finding should be viewed cautiously.

Table 13: Multiple Regression of ACQ Factors Predicting Change in GAF

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>	R^2	ΔR^2	sr^2
<i>Step 1</i>								
GAF Time 1	.57	.19	.47	2.97	.01**	.221	.221	.01**
<i>Step 2</i>								
GAF Time 1	.51	.19	.42	2.64	.01**	.274	.053	.15
F4: Negative Affect	-3.16	2.14	-.24	-1.48	.15			
<i>Step 3</i>								
GAF Time 1	.54	.19	.45	2.80	.01**	.312	.038	.22
F4: Negative Affect	-5.36	2.74	-.40	-1.96	.06 ⁺			
F5: Full Range	-3.51	2.77	-.26	-1.27	.22			

** Significant at the 0.01 level.

* Significant at the 0.05 level.

⁺ Trend at the 0.10 level.

Beck Depression Inventory

No ACQ factors significantly predicting change on the BDI during 12 months of treatment using multiple regression analysis with backward removal.

Overt Aggression Scale Modified for Outpatients

The OASM assesses anger and irritability along multiple dimensions (aggression, suicidality, state anger, and trait anger), each of which shall be analyzed separately.

No ACQ factors significantly predicting change in the OASM aggression score or suicidality score during 12 months of treatment using hierarchical multiple regression analysis.

Hierarchical multiple regression analysis indicated that therapists experiencing their patients and themselves as presenting with a more *full range of emotion*, and surprisingly more *barren emotion* significantly predicted change in State Anger during 12 months of treatment. As can be seen in Table 14, the addition of the factors *barren emotion* and *full range of emotion* in this model predicts a significantly greater percentage of the variance as compared to State Anger at Time 1 alone, accounting for 47.6% of the variance in this sample.

Table 14: Multiple Regression of ACQ Factors Predicting Change in State Anger

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>	R^2	ΔR^2	sr^2
<i>Step 1</i>								
State Anger Time 1	.44	.14	.49	3.11	.00**	.238	.238	.00**
<i>Step 2</i>								
State Anger Time 1	.44	.14	.49	3.20	.00**	2.96	.058	.13
F3: Barren Emotion	1.36	.87	.24	1.57	.13			
<i>Step 3</i>								
State Anger Time 1	.50	.12	.55	4.04	.00**	.476	.180	.00**
F3: Barren Emotion	4.94	1.36	.87	3.62	.00**			
F5: Full Range	4.91	1.55	.76	3.16	.00**			

** Significant at the 0.01 level.

However, no ACQ factors significantly predicting change on the Trait Anger during 12 months of treatment using hierarchical multiple regression analysis.

ACQ and Structural Change

Analysis of the subset of 37 patients who completed 12 months of treatment also focused on ACQ factors predicting structural change in patients at the end of 12 months of therapy, specifically change in the patient's narrative coherence and mentalizing capacity on the AAI.

No ACQ factors significantly predicted change in narrative coherence on the AAI during 12 months of treatment using hierarchical multiple regression analysis.

As can be seen in Table 15, hierarchical multiple regression analysis indicated that there was trend towards the factor *negative affect* predicting change in RF during 12 months of treatment.

Table 15: Multiple Regression of ACQ Factors Predicting Change in RF

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>	R^2	ΔR^2	sr^2
<i>Step 1</i>								
RF Time 1	.20	.24	.14	.83	.41	.020	.020	.41
<i>Step 2</i>								
F4: Negative Affect	-.47	.26	-.30	-1.80	.08 ⁺	.09	.09	.08 ⁺

⁺ Trend at the 0.10 level.

A previous study identified that significant changes in narrative coherence and RF were found as a function of treatment, with changes in narrative coherence and RF on the AAI found in TFP but not SPT and DBT (Levy, Meehan et al., 2006), and therefore

hierarchical multiple regression was also performed with ACQ factors predicting change in coherence and RF as a function of treatment. These findings should be viewed cautiously in light of the small number of subjects in each treatment cell.

No ACQ factors significantly predicted change in narrative coherence on the AAI in any of the three treatment cells during 12 months of treatment using hierarchical multiple regression analysis.

It was found that no ACQ factors significantly predicted change in RF during 12 months of treatment for patients in SPT and DBT (as expected given no overall change in RF in these cells). However, as can be seen in Table 16, therapists experiencing their patients and themselves as presenting with less *barren emotion* and less *negative affect*, and surprisingly feeling more *disengaged* significantly predicted change in RF during 12 months of treatment, accounting for 99.4% of the variance in this sample. However, given the small size of this sample (n=7) this finding should be viewed cautiously; it would be important to replicate this finding in a larger sample.

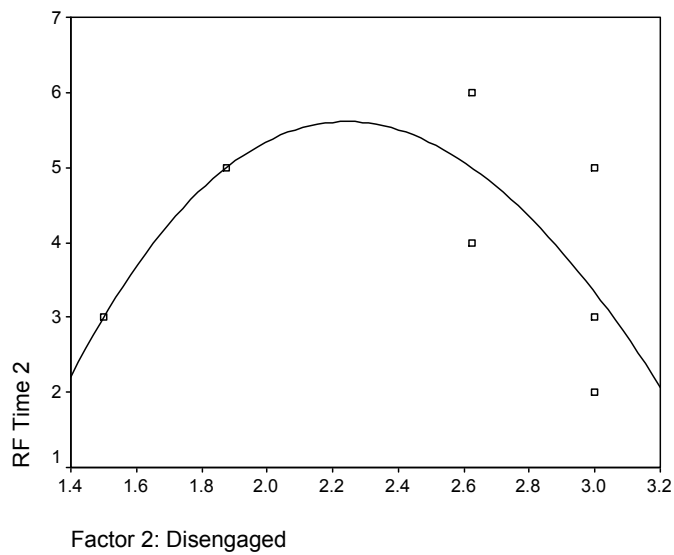
Table 16: Multiple Regression of ACQ Factors Predicting Change in RF for TFP

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>Sig.</i>	<i>R</i> ²	ΔR^2	<i>sr</i> ²
<i>Step 1</i>								
RF Time 1	-.50	.38	-.47	-1.31	.24	.222	.222	.239
<i>Step 2</i>								
RF Time 1	-.47	.05	-.44	-9.71	.00**	.994	.772	.00**
F2: Disengaged	3.38	.30	1.49	11.36	.00**			
F3: Barren Emotion	-2.09	.17	-1.36	-12.17	.00**			
F4: Negative Affect	-1.84	.11	-1.09	-16.76	.00**			

** Significant at the 0.01 level.

Given the fact that it was predicted that therapists experiencing their patients and themselves as less *disengaged* would predict positive change in RF, the data points were graphed using a histogram to better understand this finding. As can be seen in Table 17, there is a curvilinear relationship between the factor *disengaged* and change in RF, a finding that shall be elaborated upon in the discussion.

Table 17: Histogram of RF Time 2 with Disengaged Factor



CHAPTER FIVE: DISCUSSION

Assessing the Construct

The present study examined initial data on a self-report measure for therapists evaluating the affective communication created between the patient and therapist during the initial stages of treatment. The first aim of this study was to evaluate the construct of affective communication by showing it to have coherent dimensions and a strong relationship to similar constructs. The second aim of this study was to demonstrate that the construct of affective communication could be reliably assessed by therapists, and that these assessments could predict the course and outcome of treatment for patients with BPD.

Five factors were identified on the Affective Communication Questionnaire with high internal consistency indicating that they represent cohesive constructs: *enlivened*, *disengaged*, *barren emotion*, *negative affect*, and *full range of emotion*. The interpretability and theoretical consistency of the factors indicate that they are good indicators of the degree to which therapists experience themselves and their patients as stimulated, energized, and emotionally resonating with each other in the treatment, as opposed to bored, not fully present and/or experiencing predominantly negative affect during sessions. These factors also indicate the degree to which therapists experience the language and affective presentation in the treatment as full of emotion, as opposed to an affective experience that can be characterized as monotonous, withdrawn, hard to connect with, angry, and frustrated.

In comparing the construct of affective communication to similar constructs (such

as transference, countertransference, affect regulation, alliance, and burnout) a more complex picture of the relational patterns within this affective communication emerged. Therapists indicated that feeling enlivened by treatment does not occur exclusively in therapeutic relationships that are predominated by positive transference and countertransference, but rather, as expected, transference and countertransference patterns marked by intense and at times overwhelming affect regardless of that affect's valence draws both the patient and therapist into an interchange that feels very "live in the here and now".

However, findings did not simply indicate that more affect in the treatment correlates with feeling more enlivened in the treatment. Therapists whose countertransferential experience of the patient left them feeling helpless, ineffective in treating the patient, and deskilled by the patient was associated with feeling less enlivened by and engaged in treatment. Sexualized transference and countertransference patterns were associated with feeling more disengaged from the treatment, which may indicate that sexual feelings in the therapeutic relationship also leave the therapist feeling helpless and deskilled, and therapists may defensively modulate their sexualized feelings by disengaging from the patient.

The impact of sexual feelings in the therapeutic relationship may also relate to the finding that therapists experiencing their patients and themselves as more enlivened in the treatment was associated with therapists experiencing the patients as exhibiting less primitive defensive styles of regulating emotions. The nature of sexualized transference and countertransference patterns in patients with BPD is often characterized by highly primitive, regressed, pre-Oedipal level affect and fantasy (Kernberg, 1984). It may be the

case that while more Oedipal-level experiences of sexuality in the therapeutic relationship would enliven and enrich the treatment, the regressive nature of the sexuality evoked in and by these patients may be unnerving to the therapist and leave him/her feeling helpless. Future research attempting to replicate these findings on a non-personality disordered sample would be needed to further explore this question. Future research should also explore the impact of patient's and therapist's gender on these processes.

One unexpected finding was that DBT therapists reported feeling less enlivened in treatment, although this finding should be viewed cautiously in light of the small number of subjects in each treatment cell. Given that the focus of DBT is on supporting and bolstering "effective" functioning on the part of the patient, it would reason that DBT therapists would feel less enlivened by the "ineffective" behaviors and emotional displays of patients with BPD during the initial stage of treatment. In contrast, dynamic clinicians, with their focus on identifying and exploring maladaptive object relational patterns within the treatment may feel enlivened by these same "ineffective" behaviors and emotional display. Future research with larger samples of therapists of varying orientations should further explore this question.

One criticism that could be leveled against therapists making retrospective assessments of the affect quality and level of engagement in treatment is that this could be viewed as a proxy for how long the patient stayed in treatment (in that the longer a patient stayed in treatment the more likely the therapist is to recall the therapeutic relationship as predominated by an emotional connection). However, given the fact that the DBT therapists indicated feeling less enlivened in their treatments, and given that

there were no differences between treatment groups in terms of number of months in treatment, this finding speaks against that argument. However, future research should make these assessments during the treatment to reduce any bias associated with making retrospective assessments.

Affective Communication and Change in Treatment

With regard to the impact of affective communication on the course and outcome of treatment, patients who completed twelve months of treatment were associated with therapists experiencing their patients and themselves as significantly more enlivened by the treatment, and with less barren emotion and a fuller range of emotions in the first 4 months of treatment, as compared to patients who dropped out of treatment. Further, the number of months a patient stayed in treatment was predicted by therapists experiencing their patients and themselves as feeling more enlivened by the treatment and a with less negative affect in the treatment. Taken together, this indicates that the presence of an affective communication created between patient and therapist strongly contributes to patients with BPD staying in treatment, which is an important finding considering that patients with BPD tend to drop out of psychotherapy at high rates (McGlashan, 1986; Stone, 1993).

Overall a weak relationship was found between affective communication and change in treatment outcome variables with regard to symptom and behavioral change. However, it must be noted that the smaller group of patients who finished treatment were a selected sample in that they had a reasonably high level of engagement in order to endure twelve months of intensive therapy. The factor of negative affect was most often

associated with change in outcome, with less negative affect in the treatment predicting positive change in social functioning, and a trend toward change in global functioning.

However, the relationship between affective communication and reflective functioning indicates that affective communication may have a greater impact on internal structural change within the patient that is not represented by manifest symptom reduction. While a weak negative relationship was found between therapist experience of negative affect in the treatment and positive change in reflective functioning across treatment groups, affective communication variables were found to quite powerfully predict change in patients treated in TFP but not SPT or DBT. It was found that in TFP treatment that therapists experiencing their patients and themselves as presenting with less barren emotion and less negative affect, and surprisingly feeling more disengaged, significantly predicted change in reflective functioning during the 12 months of treatment. Findings from the first two factors indicate that there is an optimal level of affect in treatment (not predominated by either barren emotion or negative affect) within which this change occurs. Further, a histogram of the relationship between reflective functioning and the factor of disengaged indicates that these variables have a curvilinear relationship, which suggests that there is an optimal level of engagement within which change in reflective functioning occurs.

The fact that affective communication variables were found to predict structural change in patients treated in TFP but not SPT and DBT may indicate that affective communication provides different therapeutic functions in different treatments. In SPT and DBT, the affective communication created between patient and therapist may provide a holding function for the patient, in which each feels mutually engaged in and

committed to the treatment, leading to greater retention. However, in TFP, the affective communication created between patient and therapist may be functioning very differently; the TFP therapists may be employing this affect-based engagement to reflect on and give organization and meaning to the patient's unsymbolized affective experience. The implications of how an affective communication created between patient and therapist may be differentially functioning in various treatments will be further explored.

Implications of Findings

Theoretical Implications

To further understand the differential impact of affective communication and change in reflective functioning as a function of treatment, it is important to consider Fonagy and Bateman's theory of the mechanisms of change that allow for increased mentalization in the treatment of BPD. As previously described, Fonagy and colleagues (2002, 2006) contend that many features of borderline pathology can be understood as originating in inadequate development of representations of affect states in the context of early attachment relationships, leading to instability of the self, impairment in the ability to mentalize the internal states of self and others, and relationships characterized by an oscillation between a desire to be merged with the idealized other and a desire to attack the other with one's aggressive, malevolent, and destructive projections.

Based on this, Fonagy and Bateman (2006) conceptualize BPD symptomatology in terms of two neural systems underlying the formation and maintenance of these processes: 1) the shared neural pathways underlying the attachment and reward systems, and 2) the neural pathways underlying interpersonal relatedness and mentalization. They

note that, contrary to theoretical assumptions, the neural systems underlying the mentalization and attachment are not only separate but also may also have a mutually inhibiting impact on one another.

Bateman and Fonagy (2006) conceptualize the impulsivity characteristic of patients with BPD in terms of “hypersensitivity” of the attachment system due to the fact that specific neural circuitry (specifically the mesocorticolimbic dopaminergic pathway) underlying the reward system (i.e. delay of gratification, anticipation and evaluation of reward) has also been implicated in the attachment system (i.e. maternal and romantic pair bond formation). They conceptualize the problems in interpersonal functioning characteristic of patients with BPD (i.e. impairment in evaluation of emotion-related stimuli and the ability to mentalize the internal states of self and others) as sharing a second set of common neural pathways (specifically the prefrontal and temporal cortices). They cite early evidence that the activation of the attachment system deactivates this second neural system, leading to inhibition of the evaluation and mentalization of the social context and any corresponding negative affect.

Fonagy and Bateman (2006) argue that these mutually inhibitory neural systems are likely adaptive in early development, in which a disillusionment of boundaries between mother and child may facilitate the forming a secure attachment. However, in the case of patients with BPD who have developed a “hypersensitive” attachment system, when the attachment system is activated in an interpersonal relationship the reciprocal inhibition of the second neural system may lead to a decoupling of the mentalization of the social and emotional evaluations in that relationship, leading to vacillating affect states and inappropriate interpersonal boundaries. Thus patients with BPD are not

conceptualized as having a general deficit in symbolization (i.e. concreteness of thinking), but rather the capacity to symbolize and mentalize is inhibited by the heightened affect experienced in an attachment context.

As a result, they argue that change occurs in the treatment of patients with BPD through orienting the patient to reflect on his/her mental states (thoughts and feelings) in the context of activation of the attachment system. Through the relationship with the therapist, the attachment system and corresponding emotions are activated, and the task for the therapist becomes to engage the patient around mentalizing his/her affective-relational experience with a level of intensity that does not overwhelm this neural system and reciprocally inhibit the mentalizing process, thereby allowing these two systems to mutually influence and modify each other.

The model presented for a mechanism of change that allows for increased mentalization in the treatment of BPD has implications for how different types of treatment may differentially impact BPD symptomatology. Fonagy and Bateman (2006) note that while DBT therapists may facilitate a mentalizing stance in treatment through the practice of mindfulness, such mentalization is often not tied specifically to the heightened affect experienced through activation of the attachment system. As a result the therapeutic function of the simultaneous activation of the systems underlying mentalization and attachment is not consistently promoted. However, DBT has been consistently shown to reduce BPD symptomatology (Linehan et al., 1991, 1999), which may be due to DBT's strong focus on reducing impulsivity through interventions designed to alter the underlying reward system. Further, they speculate that such interventions may indirectly affect the "hypersensitivity" of the attachment system due to

the shared neural pathways underlying the attachment and reward systems.

Supportive psychotherapy (SPT) is assumed to more directly target the “hypersensitivity” of the attachment system in patients with BPD by strengthening a sense of safety and comfort within the attachment relationship created in the treatment. Due to the shared neural pathways underlying the attachment and reward systems, supportive therapy may indirectly lead to a reduction in impulsivity. However, as in DBT, because supportive therapy does not emphasize making explicit efforts to encourage the patient to take a mentalizing stance towards emotions evoked in the attachment relationship, the therapeutic function of the simultaneous activation of the systems underlying mentalization and attachment is not consistently promoted.

Fonagy and Bateman (2006) note that TFP would likely most closely approximate this mechanism of change in that TFP makes explicit efforts to have the patient reflect on his or her mental states (thoughts and feelings) as they are evoked in the context of heightened affect of the therapeutic (attachment) relationship. Similarly, the proponents of TFP (Levy, Clarkin et al., 2006) argue that more “bids for reflective function” are made in TFP as compared to SPT and DBT. Because TFP explicitly promotes the simultaneous activation of the systems underlying mentalization and attachment, it is expected that these systems would mutually influence and modify each other, leading not only to change in the attachment and reward systems but also to increased mentalization.

Findings from the current study provide some preliminary support for this notion. A previous study of the present sample identified significant changes in reflective function during the 12 months of treatment for patients treated in TFP but not SPT and DBT (Levy, Meehan, et al., 2006). In the current study it was found that treatments in

which there was an optimal level of affect (not predominated by either barren emotion or negative affect) and an optimal level of engagement significantly predicted this change in reflective functioning; and it is within this optimal level of affective communication that patient and therapist may reflect on, give meaning to, and symbolize these emotions.

The notion of an optimal level of engagement in treatment stands in contrast to clinical encounters in which patient and therapist each feel disengaged from one another, or conversely clinical encounters in which patient and therapist become over-involved with one another in a manner that is hypothesized to prevent patient and therapist from stepping back and reflecting upon the process occurring between them. The role of the therapist in providing an optimal level of engagement in treatment may be related to clinical writing on the concept of technical neutrality (Kernberg, 1984; Mitchell & Black, 1995).

The notion of an optimal level of affect in treatment stands in contrast to clinical encounters in which the patient's attachment system becomes overwhelmed by strong affect (i.e. negative affect) and inhibits mentalization, or conversely the patient presents an intellectualized understanding of his or her emotions without such emotions being concurrently evoked within the treatment (i.e. barren emotion). The role of the therapist in providing an optimal level of affect in treatment may be related to infant research on the importance of the parent's capacity to provide a homeostatic function to the affective state of her child. (Tronick & Weinberg, 1997)

The mechanism of change that occurs in affective communication could be understood as requiring the mentalized affectivity described by Jurist (2005; Fonagy et al., 2002); the process by which one reflects on one's affect state while feeling and

experiencing that affect state. Jurist differentiates an intellectualized reflection on one's emotions from mentalized affectivity, which involves the mentalization of affective-cognitive structures as they are being evoked in the present. By reflecting on the patient's emotions in the context of their activation in the attachment system, the patient and therapist co-create an experience of "playing" with affects without enacting them in a manner that threatens to overwhelm the attachment system and inhibit mentalization. This approach furthers a concept of affect regulation as modulation of an optimal level of affect in which there is neither a predominance of overwhelming (negative) affect nor a dearth of affect, as opposed to the more limited view of affect regulation as containing and sublimating negative affect (Jurist, 2005).

However, this is not to say that the therapist should work towards preventing negative affect from emerging in the treatment, but rather that the therapist should focus on allowing negative affect to emerge while trying to prevent it from overwhelming the patient and inhibiting reflective functioning. The role of negative affect in treatment may be more complicated than the findings from the current study suggest, as it could be argued that allowing, and even promoting, a modulated expression of negative affect while encouraging the patient to reflect on this emotion would help move the patient towards greater integration and mentalization of affect states. Further, there is no reason to assume that the predominance of negative affect is the only type of affect that can threaten to overwhelm the patient and inhibit mentalization. Clinically it can be observed that patients may become overwhelmed by too much positive affect and become withdrawn, shut down, or even try to undo such emotion in response. Therefore it seems that the focus of treatment should be to promote and maintain an optimal level of

intensity of affect, as opposed to a particular valence of affect.

Further, we might expect that the therapist's task of moving the patient towards an optimal level of intensity of affect would differ as a function of the patient's type of personality pathology. Whereas as a therapist treating a patient with predominantly histrionic or borderline features may focus on helping the patient to modulate and reduce the intensity of emotions so as to not overwhelm the attachment system, the focus for a patient with predominantly schizoid or obsessive features may be to stir up and evoke strong emotions to ensure the presence of sufficiently heightened affect in the context of the attachment system.

Whereas Fonagy and Bateman (2006) identify change occurring within the neural structures of the patient, the genesis of this change is found in the affective-cognitive structures co-created by patient and therapist. The work of Enrico Jones (2000, 2001) provides a solid foundation of empirical support for such "interactional structures," or patterns of mutual influence created between patient and therapist. This research demonstrates that therapeutic change occurs through the experiencing, reflecting on, and interpreting of these interactional structures co-created in the context of the therapeutic (attachment) relationship, thus bridging the gap between debates regarding whether therapeutic action occurs through mutative aspects the relationship or through insight derived from the interpreting of the patient's experience. Jones (2000) notes that "in this model, insight and relationship have complementary roles, since psychological knowledge of the self can develop only in the context of a relationship where the therapist endeavors to understand the mind of the patient through the medium of their interaction." (p. 467)

The concept of interactional structures created between patient and therapist suggests that an equally essential focus on treatment may involve the therapist maintaining an optimal level of intensity of affect within him or herself. It must be remembered that the neural systems underlying the mentalization and attachment also apply to the therapist, and that while the therapist's attachment system is presumably not as "hyperactive" as patients with BPD, the intensity of affect often evoked within the therapist by this patient population leaves the therapist susceptible to becoming overwhelmed, thus inhibiting the therapist's reflective capacities. This inhibition of the systems underlying mentalization may in part explain the occurrence of enactments by otherwise reflective therapists, as well as the negative impact of a patient evoking overwhelming feelings of helplessness and disorganization in the therapist. Conversely, the therapist's capacity to tolerate overwhelming affect and maintain his/her mentalizing capacity in the face of such affect is what likely allows the therapist to then use his/her own internal structures to give organization and meaning to the patient's unmodulated affect and reflect it back to the patient in a more tolerable symbolic form.

The findings from this study, as well as review of the literature from which the implications of these findings are drawn, indicate that the original conceptualization of an affective communication needs to be refined in five important ways.

First, it had originally be proposed that the degree to which patients with BPD aroused an affective experience in the therapy, imbued their language with affect-laden language and images, and affectively engaged the therapist's attention and curiosity would predict change in treatment. However, findings from this study did not simply

indicate that more emotion and engagement in the treatment correlates with better course and outcome of treatment, but rather that there is an optimal level of affect and engagement within which the patient can reflect on mental states, with enough affect to engage patient and therapist in the therapeutic (attachment) relationship, but not too much affect leading to inhibition of this reflective process. Further, it seems that the intensity of affect, as opposed to the valence of affect, is of particular importance.

Second, this optimal level of affect and engagement is a necessary but not sufficient component of the affective communication created between patient and therapist. While this optimal level of affect in the treatment may enhance the patient and therapist each feeling mutually engaged in and committed to the treatment, leading to greater retention in treatment, the added component of making explicit bids for the patient to reflect on his her mental states in the context of this optimal level of affect is what promotes increased mentalization and symbolization.

Third, while the construct of an affective communication had originally been conceptualized as a patient variable, this construct may be better conceptualized as an “interactional structure” co-created between patient and therapist (Jones, 2001).

Fourth, while it had been expected that affective communication would provide the same therapeutic function across treatment types, findings indicate that this construct may be of particular relevance to treatments that promote mentalization and bids for reflection in the context of heightened affect in the attachment relationship with the therapist (i.e. TFP and mentalization-based treatment).

Fifth, while it had been expected that affective communication would be specifically tied to symptom change, it may be more likely that there may be multiple

therapeutic paths to arrive at symptom change (i.e. targeting the reward system, the hypersensitivity of the attachment system), but that affective communication may uniquely contribute to internal structural change in treatments that promote increased mentalization. While the effect of such structural change may not be reflected in greater overall symptom change in the course of one year of treatment, it is expected that such structural change would lead to greater long-term retention of symptom reduction.

Clinical Implications

To illustrate the clinical implications of affective communication as underlying a mechanism of change specific to TFP, a previously published clinical illustration of two patients with BPD treated in a preliminary investigation of the Personality Disorders Institute/Borderline Personality Disorder Research Foundation randomized controlled trial (RCT) will be highlighted. Diamond, Stovall-McClough, Clarkin, and Levy (2003) presented the treatments of two patients with BPD, each of whom was treated by the same therapist using TFP. The treatments were assessed by a semi-structured interview of both patient and therapist (Patient-Therapist Adult Attachment Interview), and findings from those interviews suggest the clinical relevance of the development of an affective communication created between patient and therapist to the process and outcome of treatment in TFP.

The first patient, Nicole, was described as a provocative woman whose early stage of treatment was characterized by “dramatic and self-destructive enactments” such as attempting to climb in the therapist’s lap, undress the therapist or herself, and self-mutilate in the presence of the therapist. With regard to the therapist’s experience of this

patient, he said, “This ‘fiery’ patient ‘pulls for a kind of involvement’,” and then used the adjectives of “intense, ambivalent, scary, gratifying, and fun” to describe her (p. 247). The therapist was noted to go on to describe her in quite reflective, complex, and emotionally rich terms.

In contrast, the second patient, Carol was described as being committed to treatment in terms of regular attendance and punctuality, however she was noted to engage the therapist with a “superficial, limited, and self-protective stance” (p. 250). She described the therapist as “professional, controlled, understanding, and concerned” but said their relationship was “not that personal.” With regard to the therapist’s experience of this patient, he reported having “difficulty staying emotionally engaged” with the patient, “had no fantasies about her, and rarely thought about her outside of sessions.” Further, the therapist was noted to conceptualize the patient in uncharacteristically unreflective terms. The therapist was noted to use the adjectives of “distant, rigid, formal, cold, and superficial” to describe the patient, which interestingly paralleled the adjective that the patient used to describe her own parents.

Diamond and colleagues (2003) note that this parallel in adjective choice may indicate that “a projective process was at work wherein the therapist had come to mirror directly her internal world in ways that did not contain or modify it” (p. 251). Absent from the treatment with Carol was the presence of any heightened affect in the attachment relationship with the therapist. As a result her treatment seems to have been characterized by a direct mirroring without metabolization of her affect states, which would be necessary for the therapist to reflect back those affect states to the patient in a contingent but marked (dissimilar) form (Diamond et al., 2003; Fonagy et al., 2002).

In contrast, in the “fiery” treatment of Nicole seems to have been predominated by overwhelming negative affect. However, the fact that the therapist also described patient as “gratifying and fun” and was able to describe her in quite reflective terms indicates that this affect did not overwhelm and inhibit the therapist’s mentalizing capacity, which likely allowed the therapist to then use his own internal structures to give organization and meaning to the patient’s unmodulated affect and reflect it back to her in a more tolerable symbolic form. This again suggests that the capacity for mentalization and reflection, both on the part of patient *and* therapist, in the context of heightened affect in the attachment relationship acts as a mechanism of structural change within the patient.

Also of note, the therapist was described by Diamond and colleagues (2003) as having vacillated in his descriptions of Nicole between at times evidencing a rich, coherent narrative while “at other times he appeared to retreat from a full exploration of the patient’s feelings, thoughts, and intentions” and seemed to create an “objective, intellectualized persona from which to relate to her, perhaps in order to be able to stay with her in therapy” (p. 247). This may again suggest that there is an optimal level of engagement within which patient and therapist can reflect on, give meaning to, and symbolize the patient’s experience. While the treatment with Carol seems to have been predominated by them each feeling disengaged from one another, the treatment with Nicole seems to evidence a sufficient level of engagement without the therapist becoming over-involved with the patient. In fact, it may be this disengaged aspect of an otherwise intense and enlivened treatment that allows the therapist to step back and reflecting upon the process occurring between them.

Interestingly, both patients described by Diamond and colleagues (2003) evidenced symptomatic change through the course of one-year of treatment, though Nicole chose to continue treatment with this therapist thereafter while Carol did not. This again indicates that there may be multiple therapeutic paths that result in symptom change, and therefore the presence of an affective communication may not have a direct effect on manifest symptom reduction. However, the presence of an affective communication in treatment may uniquely contribute structural change within the patient that would be expected to lead to greater long-term change in clinical functioning.

Research Implications

This study contributes to an emerging literature on clinician-report research methods (Westen and Weinberger, 2004). These findings demonstrate that the affective communication created between patient and therapist can be reliably assessed by therapists, regardless of treatment modality, using a brief and psychometrically sophisticated self-report measure.

This study also contributes to an emerging literature on using quantitative research methods to demonstrate the validity of psychoanalytic constructs in psychotherapy (Betan et. al., 2005; Bradley et al, 2005). A subset of analytic writers has argued that each therapeutic dyad is incomparable and therefore not subjectable to quantitative analysis (see Fonagy, 2000 for a summation of and rebuttal to that argument). While the affective, transference, and countertransference nature of each therapeutic relationship is indeed a unique phenomenon co-created between patient and therapist, the findings from this study suggest that general relationship patterns that

emerge in treatment can be identified and characterized by therapists to predict independent measures of the course and outcome of treatment.

The relationship demonstrated between therapist ratings of affective communication and these independent measures of course and outcome of treatment are of particular significance because they do not rely on the memory or perception of the therapist, but rather indicates that the therapist's subjective experience can be linked to objective aspects of the treatment.

Limitations and Future Directions

The limitations to this study that indicate future areas of study fall into two general categories; therapist characteristics and memory biases impacting the assessment of affective communication, and the limitations of statistical analysis on a small sample to assess the construct of affective communication.

With regard to the first limitation, because the therapists are often being asked to rate characteristics of their patients, it is difficult to tease out patient variables from therapist variables. While the construct of an affective communication was compared to independent measures of patient functioning, there is no independent assessment of therapist characteristics that might impact the outcome of treatment in this study. As the work of Dozier and colleagues (Dozier et al., 1994; Bernier & Dozier, 2002) suggests, the attachment style of the patient may interact with the attachment style of the therapist, yet this study does not include a method of assessing the relative impact of the therapist's attachment style or personality organization on the patient's functioning or change in treatment.

Without a method of assessing therapist characteristics, it is difficult to assess the degree to which the therapists in this study are a selected sample. Each of the therapists in this study has been chosen based on his/her experience in working with patients with BPD. A therapist who finds working with patients with BPD gratifying must presumably be comfortable working with intense affect, both coming from the patient and within oneself. Therefore the therapist's own level of comfort with intense affect may be an important therapist characteristic not captured in this study.

Therapists in this study were asked to make retrospective assessments of their patients, which creates a number of limitations. Such assessments rely on heavily on the memory of the therapists to recall a treatment of about 5 years prior, and although therapists were provided with a brief description of the patient and also asked to review their notes from the initial stages of treatment, their memory of these treatments are fallible and subject to change over time.

Further, the therapists were asked to recall the initial stages of treatment with their patients. However, their memory of the early stages of treatment may have been influenced by their memory of what had occurred during the later stages of treatment. This may have also created a hindsight bias in that therapists may be more inclined to see the patients who completed treatment with them as more engaged during the initial stage of treatment while seeing the patients who dropped out as less engaged. However, the correlations with independent outcome measures, as well as group differences between the DBT and dynamic treatment cells indicates that such assessments cannot simply be viewed as a proxy for such a hindsight bias. However, future research should make these assessments during the treatment to reduce any hindsight bias. Future research could also

have an outside observer watching a videotape of the treatment rate the affective communication between the observed dyad.

The second limitation of this study concerns the use of factor analysis on a small sample to assess the construct of affective communication. There are a number of standards suggested for adequate sample size in factor analysis, most related to either overall sample size or number of variables in the measure to be factored (Field, 2005). With regard to sample size, most statisticians agree that having 300 subjects or more represents a strong sample, 100 subjects or more is adequate, and 50 subjects is the bare minimum needed to consider factor analysis. Some statisticians suggest having a minimum of 5 to 10 participants per variable in the measure. While this sample size just meets the first standard, it falls short of the second standard.

However, Field (2005) notes that more recent analyses indicate that adequacy of sample size should be determined by the results of the factor analysis; specifically if communalities of the factors tend to be above .60 then a sample size of fewer than 100 may be considered perfectly adequate. As can be seen from the factor loadings on rotated component matrix for the ACQ (see Appendix 2) the communalities tended to be quite high, indicating an adequate sample size for this measure. Nonetheless, problems associated with small sample size should be considered.

A small sample may contribute to instability in the factor solution and raises the possibility that in a larger sample the factor structure of the measure would look different. However, in the present study the strong internal consistency and clear interpretability of the factor structure contraindicates the possibility of having arrived at an arbitrary factor solution. Future research with a larger sample would be necessary to demonstrate the

stability of the five-factor solution found in the present study.

It should also be noted that this measure was assessed in a personality disordered sample, it is therefore unclear if this factor structure would replicate in a more neurotic-level patient population, or whether the construct of an affective communication is as relevant to treatment course and outcome in a non-personality disordered patient population. Future research with a less pathological sample would be needed to assess this question.

The small sample in this study also contributed to low power in the regression analyses utilized, making it difficult to detect significant differences. This consideration is of particular importance in the outcome analyses that only included 37 patients, and therefore those results should be viewed cautiously and should be replicated with a larger sample before strong conclusions could be drawn from these findings.

Conclusion

This study examined the presence of an affective communication created between the patient and therapist that allows for a dyadic process of symbolization in psychotherapy. It was demonstrated 1) that the construct of affective communication can be reliably assessed by therapists of various treatment modalities, 2) that the construct of affective communication relates in predicted ways to similar constructs such as transference, countertransference, affect regulation, alliance, and burnout, and 3) that the affective communication created between therapist and patients with BPD in the initial stages of treatment predicted aspects of the course and outcome of a twelve month treatment.

Specifically, it was found that patients stayed in treatment longer when the treatment was characterized by therapists experiencing their patients and themselves as enlivened and emotionally-present in the treatment. Overall, the relationship between affective communication and change in symptomatology during the twelve month treatment was not strong, with decreased negative affect predicting some indicators of symptoms change. However, the relationship between affective communication and increased RF indicates that affective communication may have a greater impact on internal structural change within the patient.

Affective communication variables were found to quite powerfully predict change in RF in patients treated in TFP but not SPT or DBT, with findings indicating that there is an optimal level of engagement and affect within which change in reflective functioning occurs. The construct of affective communication is hypothesized to be of particular relevance to TFP due to that treatment's explicit effort to promote mentalization and bids for reflection in the context of heightened affect in the attachment relationship with the therapist.

APPENDIX

Appendix 1: Patient-Therapist Questionnaire (ACQ)

The statements below describe a number of ways patients can be experienced by the clinician during sessions. Please rate the following items on the extent to which they are true of you in your work with your patient, where **1=not true at all**, **3=somewhat true**, and **5=very true**. If you have seen your patient for over 6 months, base your responses on *the last six months of treatment*. If you continued with your patient beyond the year of his/her involvement in the study, base your responses on the last six months of the year that they were *in the study*. Do not worry if your responses appear inconsistent, since clinicians often have multiple responses to the same patient.

	Not True		Very True	
1. I often experience the patient's descriptions of events as full of emotion.	1	2	3	4 5
2. I find it engaging to work with this patient.	1	2	3	4 5
3. I find it hard to give this patient my full attention.	1	2	3	4 5
4. I often experience the patient's language as stagnant.	1	2	3	4 5
5. I often experience this patient as showing very little emotion, even when describing what sound like very emotional events.	1	2	3	4 5
6. I often find that this patient's expression of feelings is limited to angry, frustrated feelings.	1	2	3	4 5
7. I often experience this patient as energized during sessions.	1	2	3	4 5
8. I find that this patient brings a full range of emotions to sessions.	1	2	3	4 5
9. I find that this patient tends to stir up mostly negative feelings in me.	1	2	3	4 5
10. I often feel bored during sessions with this patient.	1	2	3	4 5
11. I often experience the patient as withdrawn and hard to connect with during sessions.	1	2	3	4 5
12. I often experience the patient's language as barren.	1	2	3	4 5
13. My mind often wanders to things other than what this patient is talking.	1	2	3	4 5
14. I don't feel fully enlivened with this patient during sessions.	1	2	3	4 5
15. I find that this patient is expressive of both loving and hating feelings.	1	2	3	4 5
16. I often experience this patient as emotionally constricted.	1	2	3	4 5
17. I often feel that my comments have little resonance with this patient.	1	2	3	4 5
18. I notice this patient often referring back to emotionally meaningful moments in previous sessions.	1	2	3	4 5
19. I find that this patient tends to stir up warm, positive feelings as well as frustrated, angry feelings.	1	2	3	4 5
20. I often have difficulty remembering what happened in the last session with this patient.	1	2	3	4 5
21. I experience this patient as very emotionally present in sessions.	1	2	3	4 5
22. I tend to think about this patient quite a bit in-between our sessions.	1	2	3	4 5
23. I find this patient stimulating to work with.	1	2	3	4 5
24. The things this patient says tend to stick with me well after our sessions.	1	2	3	4 5
25. I often experience the patient's language as repetitive and monotonous.	1	2	3	4 5
26. I find that my relationship with the patient feels very "live" and in the here and now during sessions.	1	2	3	4 5
27. I find that this patient brings mostly negative emotions to sessions.	1	2	3	4 5
28. I find this patient difficult to engage during sessions.	1	2	3	4 5

Appendix 2: Factor Loadings on Rotated Component Matrix for ACQ

	1	2	3	4	5	6
FACTOR 1: Enlivened						
18. I notice this patient often referring back to emotionally meaningful moments in previous sessions.	.815					
24. The things this patient says tend to stick with me well after our sessions.	.794					
22. I tend to think about this patient quite a bit in-between our sessions.	.788					
23. I find this patient stimulating to work with.	.733					
7. I often experience this patient as energized during sessions.	.724					
26. I find that my relationship with the patient feels very 'live' and in the here and now during sessions.	.665		-.414			
FACTOR 2: Disengaged						
3. I find it hard to give this patient my full attention.		.878				
13. My mind often wanders to things other than what this patient is talking.		.821				
14. I don't feel fully enlivened with this patient during sessions.		.704				
11. I often experience the patient as withdrawn and hard to connect with during sessions.		.616				
10. I often feel bored during sessions with this patient.		.615				
28. I find this patient difficult to engage during sessions.		.522		.445		
FACTOR 3: Barren Emotion						
4. I often experience the patient's language as stagnant.			.868			
12. I often experience the patient's language as barren.			.851			
17. I often feel that my comments have little resonance with this patient.			.711			
5. I often experience this patient as showing very little emotion, even when describing what sound like very emotional events.			.616			
25. I often experience the patient's language as repetitive and monotonous.		.474	.539			

Appendix 2 (contd)

FACTOR 4: Negative Affect						
27. I find that this patient brings mostly negative emotions to sessions.				.876		
6. I often find that this patient's expression of feelings is limited to angry, frustrated feelings.				.708		
9. I find that this patient tends to stir up mostly negative feelings in me.				.684		-.489
15. I find that this patient is expressive of both loving and hating feelings.				-.609	.421	
FACTOR 5: Full Range						
1. I often experience the patient's descriptions of events as full of emotion.					.819	
8. I find that this patient brings a full range of emotions to sessions.					.665	
16. I often experience this patient as emotionally constricted.			.471		-.550	
21. I experience this patient as very emotionally present in sessions.	.483				.540	
2. I find it engaging to work with this patient.	.403			-.409	.454	
FACTOR 6: (Excluded)						
19. I find that this patient tends to stir up warm, positive feelings in me as well as frustrated, angry feelings.						.721
20. I often have difficulty remembering what happened in the last session with this patient.		.486				.637

Appendix 3: Factor Loadings on Rotated Component Matrix for CTQ

	1	2	3	4	5	6	7
FACTOR 1: Criticized/Devalued							
6. I feel dismissed or devalued.	.845						
63. I feel unappreciated by him/her.	.833						
33. I feel used or manipulated by him/her.	.814						
12. I feel criticized by him/her.	.799						
46. I feel mistreated or abused by him/her.	.792						
27. I get enraged at him/her.	.744						
39. I have to stop myself from saying or doing something aggressive or critical.	.704						
8. I feel annoyed in sessions with him/her.	.701						
2. At times I dislike him/her.	.696						
24. I feel guilty about my feelings toward her	.688						
57. I feel resentful working with him/her.	.685						
38. I feel interchangeable -- that I could be anyone to him/her.	.602						
15. I feel angry at him/her.	.598						
FACTOR 2: Overwhelmed/Fearful							
26. I feel overwhelmed by his/her strong emotions.		.853					
66. I worry about him/her after sessions more than other patients.		.827					
30. I feel anxious working with him/her.		.776					
35. S/he frightens me.		.745					
60. When checking my messages, I feel anxiety or dread that one will be from her.		.684					
29. She stirs up strong feelings in me.		.646					
73. I find myself discussing him/her more with colleagues than my other patients.		.623					
13. I dread sessions with him/her.		.588					
69. I do things for him/her, or go the extra mile for him/her, in ways that I don't do for other patients.		.580					
FACTOR 3: Nurturant/Protective							
47. I feel nurturant toward him/her.			.859				
42. I feel like I want to protect him/her.			.829				
64. I have warm, almost parental feelings toward him/her.			.766				
49. I feel sad in sessions with him/her.			.711				
21. I wish I could give him/her what others never could.			.708				
14. I feel angry at people in his/her life.			.677				
4. I feel compassion for him/her.			.673				

Appendix 3 (contd)

40. I feel like I understand him/her.			.647				
19. I look forward to sessions with him/her.			.568				
FACTOR 4: Helpless/Hopeless							
31. I feel I am failing to help him/her or I worry that I won't be able to help him/her.				.739			
52. I feel hopeless working with him/her.				.690			
68. I feel less successful helping him/her than other patients.				.686			
1. I am very hopeful about the gains s/he is making or will likely make in treatment.				-.650			
65. I like him/her very much.				-.611			
53. I feel pleased or satisfied after sessions with him/her.				-.567			
59. I feel like my hands have been tied or that I have been put in an impossible bind.				.560			
74. S/he is one of my favorite patients.				-.558			
FACTOR 5: Angry Enactments							
44. I feel like I'm being mean or cruel to her.					.829		
43. I regret things I have said to him/her.					.727		
77. More than with most patients, I feel like I've been pulled into things that I didn't realize until after the session					.653		
75. I watch the clock with him/her more than with my other patients.					.610		
76. I self-disclose more about my personal life with him/her than with my other patients.					.606		
67. I end sessions overtime with him/her more than with my other patients.					.587		
78. I begin sessions late with him/her more than with my other patients.					.571		
48. I lose my temper with him/her.					.565		
FACTOR 6: Sexualized							
61. I feel sexual tension in the room.						.684	
32. His/her sexual feelings toward me make me anxious or uncomfortable.						.662	
10. I feel confused in sessions with him/her.						.570	
17. I feel sexually attracted to him/her.						.542	
FACTOR 7: Bored							
16. I feel bored in sessions with him/her.							.801
25. My mind often wanders to things other than what s/he is talking about.							.627

Note: Only items with loadings above .55 are listed in the current table

Appendix 4: Factor Loadings on Rotated Component Matrix for PTQ

	1	2	3	4	5	6	7
FACTOR 1: Angry/Critical							
4. S/he feels angry toward the therapist	.878						
2. S/he feels critical of the therapist	.805						
13. S/he is oppositional; tends to disagree with the therapist's approach, comments, suggestions, etc.	.754						
17. S/he feels mistreated or abused by the therapist	.710						
21. S/he voices concerns that the therapist is not doing enough to help	.699						
28. S/he is provocative; tends to set up situations in which the therapist feels angry, attacked, or provoked	.668						
37. S/he plays the therapist off against another person (e.g., a parent, spouse, or other therapist)	.654						
18. S/he feels like the therapist doesn't care	.648						
20. S/he feels criticized by the therapist	.629						
8. S/he is dismissive or devaluing toward the therapist	.615						
FACTOR 2: Positive/Committed							
15. S/he works hard in therapy		.875					
11. S/he feels nurtured by the therapist		.813					
45. S/he has difficulty committing to therapy; always seems to have 'one foot out the door'		-.796					
23. S/he idealizes the therapist		.790					
19. S/he feels fond of, or loving toward the therapist		.777					
1. S/he feels helped by the therapist		.744					
26. S/he is indifferent toward the therapist; expresses little feeling toward the therapist, either overtly or covertly		-.696					
25. S/he feels protective of the therapist; worries about hurting him/her		.660					
49. S/he talks openly and self-reflectively about the therapy relationship		.634					
9. S/he seems to maintain distance from the therapist; tries to keep at arm's length		-.602					

Appendix 4 (contd)

55. S/he is overly interested in, or concerned about, the therapist's relationship with other patients						.672	
39. S/he spends considerable time wondering or fantasizing about the therapist's spouse, partner, relationships.						.662	
35. S/he vacillates between considerable involvement/investment in the therapy and thoughts of quitting						.649	
FACTOR 7: Parental							
46. S/he appears comfortable in a child-like role in therapy; tends to draw parent-like responses from the therapist							.848
47. S/he pulls for the therapist to be directive; wants the therapist to tell him/her what to do							.788

Note: Only items with loadings above .60 are listed in the current table

Appendix 5: Factor Loadings on Rotated Component Matrix for AREQ

	1	2	3	4	5	6	7	8
FACTOR 1: Externalizing Defenses								
87. S/he tends to blame others for own mistakes or misdeeds	.854							
62. S/he tends to devalue some people, seeing them as 'all bad,' to the exclusion of any virtues	.835							
46. When distressed, he/she tends to try to control others	.796							
53. S/he tends to see own unacceptable feelings or impulses in others instead of in him/herself	.789							
31. S/he has difficulty seeing other people's perspective when emotions get strong	.774							
15. S/he tends to feel disgusted with people or situations	.773							
59. S/he is unable to admit to flaws or imperfections	.762							
16. S/he tends to be angry or hostile (whether or not this is consciously acknowledged)	.752							
84. S/he tends to feel envious	.688							
76. S/he tends to lash out at others when distressed	.658							
44. S/he tends to deny responsibility for his/her own problems	.654							
39. S/he tends to distort beliefs substantially to fit the way s/he wants to see reality	.632							
43. S/he tends to deal with helplessness or distress by believing s/he has unrealistic power or influence	.632							
91. S/he tends to deal with upsetting realities by denying that they exist	.620							
FACTOR 2: Avoidant defenses								
93. S/he tends to remain passive in the face of conflict or distress; avoids taking action to cope with difficult situations		.784						
71. S/he tends to remain at home or restrict travel or activities to escape distress		.682						

Appendix 5 (contd)

57. S/he appears to sleep excessively to escape distress			.678					
52. S/he tends to avoid discomfort by keeping people at a distance			.669					
34. S/he tends to give up easily when faced with difficult or frustrating circumstances			.650					
40. S/he tends to withdraw into fantasy to avoid distressing situations or relationships			.606					
FACTOR 3: Adaptive defenses								
64. S/he tends to use humor in a defensive way, to avoid unpleasant feelings			.795					
17. S/he tends to cope with distress by seeking out information and knowledge			.723					
95. S/he is able to use fantasy and daydreams in appropriate and enriching ways			.672					
24. S/he uses stress reduction methods (e.g., meditation) effectively to cope with distress			.648					
45. S/he has the ability to reflect and postpone action until emotions are calm			.616					
32. S/he is able to see the humor in difficult situations			.601					
FACTOR 4: Intense Negative Affect								
67. S/he tends to feel sad or unhappy				.688				
3. S/he tends to feel anxious				.631				
7. S/he has panic attacks accompanied by strong physiological responses				.578				
12. S/he is able to use self-talk (e.g., 'it's going to be okay,' 'it doesn't really matter') to cope effectively with emotional distress				-.559				
54. S/he tends to respond flexibly to challenging or stressful situations				-.551				
11. S/he can plunge into deep despair that lasts for several weeks				.549				

Appendix 5 (contd)

FACTOR 5: Intense/full range								
18. S/he tends to feel excited/energized					.689			
20. S/he tends to feel pleasant emotions (happiness, joy, excitement, etc.) intensely					.676			
37. S/he is able to experience a full range of emotions					.585			
14. S/he tends to feel unpleasant emotions (sadness, anxiety, guilt, etc.) intensely					.582			
21. S/he tends to show very little emotion					-.574			
FACTOR 6: Obsessive defenses								
63. S/he tends to become anxious when daily routines are altered						.585		
90. S/he tends to ruminate or dwell on concerns when distressed						.577		
61. S/he tends to restrict food intake to regulate emotional distress						.566		
30. S/he has little capacity to delay gratification						-.556		
FACTOR 7: Dissociative/disorganized								
56. S/he tends to dissociate when distressed (e.g., to feel like s/he has left his/her body)							.666	
82. When distressed, he/she tends to vacillate between clinging to others and pushing them away							.599	
68. S/he can think of upsetting ideas or memories but does not feel the attendant emotion							.524	
FACTOR 8: Self-destructive								
96. S/he tends to make suicide attempts or threaten suicide when distressed								.584
48. S/he behaves in manifestly self-destructive ways when upset (e.g., fast driving, wrist cutting)								.513

Note: Only items with loadings above .55 are listed in the current table on factors with more than 5 items

Appendix 6: Factor Loadings on Rotated Component Matrix for MBI

	1	2	3	4	5
FACTOR 1: Strain					
8) I feel burned out from working with this patient.	.903				
6) Working with this patient is really a strain for me.	.873				
16) Working with this patient directly puts too much stress on me.	.845				
2) I feel emotionally used up after working with this patient.	.806				
3) I feel fatigued when I get up in the morning and have to face another day of working with this patient.	.786				
1) I feel emotionally drained from working with this patient.	.779		.463		
11) I worry that working with this patient is hardening me emotionally.	.715				
14) I feel I'm working too hard with this patient.	.636				
20) I feel like I'm at the end of my rope with this patient.	.583				
13) I feel frustrated by working with this patient.	.516				
FACTOR 2: Positive					
12) I feel very energetic with this patient.		.913			
18) I feel exhilarated after working closely with this patient.		.837			
9) I feel I'm positively influencing this patient' lives through my working with him/her.		.816		-.429	
19) I have accomplished many worthwhile things working with this patient.		.804			
4) I can easily understand how this patient feels about things.		.752			
7) I deal very effectively with the problems of this patient.		.624			.425

Appendix 6 (contd)

FACTOR 3: Distance					
22) I feel this patient blames me for some of his/her problems.			.814		
17) I can easily create a relaxed atmosphere with this patient.			-.647		
5) I feel I treat this patient as if he/she was an impersonal object.			.609		
FACTOR 4: Callous					
15) I don't really care what happens to this patient.				.751	
10) I've become more callous toward this patient since I started working with him/her.			.514	.539	
FACTOR 5: Effective					
21) When working with this patient, I deal with emotional problems very calmly.					.870

Appendix 7: Factor Loadings on Rotated Component Matrix for WAI

	1	2	3	4	5	6
FACTOR 1: Confident						
35. My patient has confidence in therapy and his/her therapist	.889					
43. My patient is confident that our efforts will lead to change	.886					
38. My patient is confident that our efforts will lead to change	.879					
42. My patient has confidence in therapy and therapist	.877					
37. My patient views therapy as important	.834					
40. The patient and I both feel confident about the usefulness of our activity in therapy	.824					
9. I believe he/she likes me	.773					
41. As a result of these sessions, the patient is clearer as to how he/she might be able to change	.746					
36. My patient is willing to make sacrifices for therapy, for example, regarding time and money	.742					
39. My patient is committed to go through the therapy process to completion	.727					
2. As a result of these sessions the patient is clearer as to how he/she might be able to change	.725					
3. The current goals of these sessions are important for each of us	.718					
44. My patient is committed to go through the therapy process to completion	.713					
1. We are working towards mutually agreed upon goals	.713					
4. We agree on what is important for him/her to work on	.691					
6. We have established a good understanding of the kind of changes that would be good for him/her	.688					
27. My patient self-observes his/her behaviors	.684				.415	
29. My patient and I agree about the kind of changes to make	.677					
5. The patient and I have a common perception of his/her goals	.669					
28. My patient and I agree on salient themes	.653					
26. My patient deepens exploration of salient themes	.653				.511	
8. The patient and I respect each other	.629					
25. My patient explores his/her own contributions to problems	.615					
19. I am confident in my ability to help the patient	.471					

Appendix 7 (contd)

FACTOR 2: Disagree						
15. I sense a need to clarify the purpose of our session(s) for him/her		.826				
16. The patient and I have different ideas on what his/her real problems are		.813				
18. He/she finds what we are doing in therapy confusing		.807				
17. The things that we are doing in therapy don't make sense to the patient		.751				
13. I have some disagreement with the patient about the goals of these sessions		.736				
23. I find what the patient and I are doing in therapy is unrelated to his/her concerns		.677				
14. The patient is frustrated by what I am asking him/her to do in therapy		.624				-.535
FACTOR 3: Accomplish						
30. My interventions are tactful and well-timed			.747			
32. I feel committed to helping my patient and confident in the treatment			.707			
24. I believe that the time the patient and I are spending together is not spent efficiently			-.707			
21. I feel that things we are doing in therapy will help the patient to accomplish the changes that s/he desires			.676			
31. I could remain non-judgmental and regard my patient positively			.623			
22. I have doubts about what we are trying to accomplish in therapy			-.595			
33. I am able to understand my patient's suffering and internal world			.585			
FACTOR 4: Respect						
10. My relationship with the patient is important to me	.539			.700		
12. I am genuinely concerned for the patient's welfare	.450			.652		
11. I respect the patient even when he/she does things that I do not approve of	.554			.635		
7. I appreciate the patient as a person	.526			.579		
FACTOR 6: (Excluded)						
34. At times I have difficulties keeping my patient's best interests as my chief concern						-.732
20. I have some concerns about the outcomes of these sessions						.521

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