



Transference focused psychotherapy: Development of a psychodynamic treatment for severe personality disorders

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Abstract

The Borderline Psychotherapy Research Project at New York Presbyterian Hospital-Weill Cornell Medical Center, headed by Drs Otto Kernberg and John Clarkin has developed and tested a treatment for Borderline Personality Disorder called Transference Focused Psychotherapy. The theory, development and empirical research for the treatment are discussed. A pre-post study and a comparison to treatment as usual both showed promising results. The structure of the randomized controlled trial that is currently underway is also discussed.

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1. Introduction

In the second half of the 20th century, psychoanalysis lagged behind other psychological orientations in generating empirical research [1]. The once-revolutionary methods of psychological investigation introduced by psychoanalysis, namely free association and interpretation, had not been supplemented with other experimental methods. At the same time, across the broader field of psychology, the emphasis on empirically validated psychotherapies increased ([2], see [3] for a critique of this approach), widening the research gap between psychodynamically oriented psychotherapies and other treatments. However, in recent years, psychodynamic psychotherapy has begun a culture change. A growing number of psychodynamic researchers are now applying methods that were once thought to be an awkward fit with psychodynamic therapy. Although overall as a field psychodynamic psychotherapy has a long way to go in order to catch up to other treatment modalities like cognitive-behavioral therapy, major efforts have been made in instrument development,

the manualization of therapies, and process and outcome studies [4–9]. There is also increasing dialogue with other fields, such as neurobiology, reflecting sophisticated attempts to link a psychodynamic understanding of pathology and treatment to physiological underpinnings. In this article we discuss our own efforts in the study of psychodynamic psychotherapy and utilize our own research as an example of the strides being made in this area as well as highlighting important issues and developments in the field.

Since the early 1980's, the Borderline Psychotherapy Research Project at New York Presbyterian Hospital-Weill Cornell Medical Center, headed by Drs Otto Kernberg and John Clarkin, has been systematizing and investigating an object relations treatment of borderline patients. As part of this project, we have developed a manualized [10–12], modified psychodynamic treatment for patients with borderline personality disorder called Transference Focused Psychotherapy (TFP).

TFP is a structured psychodynamic treatment based on Otto Kernberg's object relations model [13]. Kernberg's model focuses on the development of mental representations that are derived through the internalization of attachment relationships with caregivers. For Kernberg, the degree of differentiation and integration of these representations of self and others, along with their affective valence, constitutes personality organization. Borderline

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113 personality can be thought of as a severely disturbed level of
 114 personality organization, characterized by the use of
 115 primitive defenses (e.g. splitting, projective identification,
 116 dissociation), identity diffusion, and deficits in reality
 117 testing.

118 The major goals of TFP are better behavioral control,
 119 increased affect regulation, more intimate and gratifying
 120 relationships, and the ability to pursue life goals. This is
 121 hypothesized to be accomplished through the development
 122 of integrated self and object representations, the modifi-
 123 cation of primitive defensive operations and the resolution
 124 of identity diffusion that perpetuates the fragmentation of
 125 the patient’s internal representational world. Thus, in
 126 contrast to therapies that focus on the short-term treatment
 127 of symptoms, the treatment we are developing has the
 128 ambitious goal of not just changing symptoms, but changing
 129 the personality organization which is the context of the
 130 symptoms.

131 We were intent on developing a new treatment—not just
 132 using existing psychodynamic treatments—that effectively
 133 targets borderline pathology. In that process, we have
 134 utilized both the wisdom of the psychodynamic community,
 135 advances in object relations theory, attachment theory, and
 136 developmental theory and data on the maturation of
 137 attention, effortful control and emerging sense of self and
 138 others. Our orientation combines theory, clinical experi-
 139 ence, research findings, and the reformulation of the
 140 treatment in response to new data.

141
 142
 143 **2. Matching the treatment to borderline pathology**
 144

145 It seems obvious that the treatment should be focused on
 146 the pathology in question. This presupposes detailed
 147 knowledge of the pathology, in terms of phenomenology,
 148 etiology, mechanisms of action, and course. If one is
 149 psychodynamically oriented, it includes hypotheses about
 150 the patients inner life, including representations of self and
 151 others, and motivations for interpersonal behavior. We
 152 utilized the growing information on the borderline pathol-
 153 ogy, including cognition [18], temperament [19,20], and
 154 ways of attaching to others [21], in adapting an object
 155 relations treatment for borderlines in a number of ways.

156 The borderline patient is identity diffused and has
 157 difficulty structuring her own impulses and goals. Often
 158 the patient begins treatment with self-destructive behaviors
 159 (e.g. self-cutting, suicidal attempts, living in destructive
 160 relationships, engaging in risky sex) that lack control and
 161 healthy *self-interest*. In order to contain these destructive
 162 impulses, TFP begins with a verbal contract that is
 163 articulated by the therapist, and negotiated with the patient.
 164 The contract spells out in detail the responsibilities and
 165 obligations of therapist and the patient if the therapy is to
 166 proceed. In addition, the therapist, using the prior history of
 167 the patient, anticipates the individual patient’s threats to self
 168 and the treatment and how that would be handled in TFP.

The patient is treated in a context that fosters growing
 attachment between therapist and patient, and this is done
 by scheduling two sessions per week. Only with the
 intensity of two sessions a week does the patient grow in
 attachment, usually not just positive, to the therapist, and
 this situation (analogous to that between mother and child)
 provides an opportunity for the patient to learn affect
 regulation and effortful control in the interrelational context
 of another who is concerned but not interfering (i.e. operates
 from a stance of neutrality). Learning must occur in the
 immediacy of the moment. The focus of TFP is not on the
 past, but on the present interaction between therapist and
 patient. Often patients bring up their past, seen as the cause
 of their current victimized situation, but TFP redirects the
 focus to the present.

184 Interactions with others are the final common pathway of
 185 affect dysregulation in the borderline patient. It is
 186 interactions with others, either via mental representations
 187 and/or in actual interaction, which lead borderline patients
 188 to depression, despair, and suicidal behavior. TFP is focused
 189 on the immediate interactions between therapist and patient.
 190 TFP uses clarification, confrontation, and interpretations in
 191 the here-and-now interaction to bring the patient’s attention
 192 to her representations of self and the therapist (and others),
 193 to amplify those representations, to represent parts of self
 194 that were repressed and split off in a highly defensive way,
 195 and to articulate them over time in a fuller and more
 196 coherent manner. Transcripts of TFP sessions suggest that
 197 the therapy often goes from much verbalization on the
 198 therapist’s part and little from the patient at the beginning of
 199 treatment, to growing articulation by the patient, a
 200 transformation of impulsive action into reflective and richer
 201 conceptions of self and others.

202 It is especially in ‘hot’ emotional interactions that
 203 borderline patients both incorporate split off conceptions
 204 of self and others, and play them out in the here and now
 205 interaction with the therapist. TFP provides a safe (guided
 206 by the treatment contract) opportunity in which the patient
 207 can both experience these intense emotional interactions,
 208 and begin to accept unwanted affects and integrate them into
 209 a more coherence sense of self that is acceptable and does
 210 not necessitate self-destruction.
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212
 213 **3. Development of a treatment manual**
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215 A critical component of psychotherapy research is a
 216 manual that describes in written form a psychotherapeutic
 217 treatment in enough detail that clinicians at various sites can
 218 administer the same (see [14] this issue, [15]). The
 219 standardization typically imposed by using psychotherapy
 220 manuals reduces outcome variation that is due to therapist
 221 differences, making it easier to draw valid inferences about
 222 treatment differences. Thus, a large number of psychother-
 223 apy treatment manuals were written, describing cognitive-
 224 behavioral, interpersonal and psychodynamic treatments

delivered in brief therapy, often focused on a very specific patient population homogeneous for a specific symptom complex (e.g. depression).

Insofar as the TFP manual standardizes the treatment, it is similar to other published manuals, but in other ways, the manual is quite different. Because the TFP treatment goes beyond a brief duration of some 12–15 sessions, it is impossible to describe and proscribe in detail what will happen in each session. To the degree that one is treating more disturbed patients who often act rather than verbalize, and are more inclined to disrupt the flow of the session, uniformity gives way to many unexpected moments between patient and therapist. We fully acknowledge that in long treatment with borderline patients many unexpected and unanticipated events will arise, events for which no treatment manual can specify what the therapist should do. Therefore, ours is a treatment manual that describes *principles of intervention*, and does not pretend nor aspire to cover every conceivable event between patient and therapist or the exact order in which treatment will proceed. The principles of intervention guide the therapist, as opposed to manuals in which the actions of the therapist are predetermined session by session. The principles of TFP are embodied in the strategies, tactics, and techniques.

The written description of TFP was generated by a simultaneous dual process of articulating the principles of the treatment, combined with viewing many hours of video tapes of senior clinicians engaging in the psychodynamic treatment with BPD patients. This dual process was iterative, and enabled the authors to refine the principles of the treatment at the same time as we accumulated clinical illustrations of how the principles were utilized in somewhat unique situations with different individual patients.

The resulting treatment manual [10] combines the principles of treatment with clinical illustrations. Pedagogically, this means that one always proceeds from the general to the specific, from principle to application, from theory to practice. The manual describes the elements of the treatment (strategies, tactics and techniques), across early, mid, and late phases. We have also written about the contract setting process in TFP [16] and about the typical complications in the treatment [17].

4. Teaching the treatment

The written manual is only one aspect of the training tools and procedures that we have developed in our efforts to teach TFP to mental health professionals. We set out to improve the teaching and monitoring of TFP. In the traditional method of teaching psychotherapy, therapists write process notes that are reviewed by supervisors. This method has certain pedagogical advantages, but we were interested in a more direct assessment of the psychotherapy process. Therefore, we utilized video-taped sessions, with review and discussion by our clinical research group.

Over time, the use of the video tapes contributed to articulating the treatment in a written manual, and the development of rating scales to assess therapist adherence and competence.

Videotapes of actual treatment sessions conducted by senior clinicians provide trainees an opportunity to see the treatment modeled, rather than simply described. It has been our experience over more than 20 years that the videotaping quickly becomes an accepted part of the treatment. The patients accept the taping with little concern, and the therapists who have difficulty initially with the procedure gradually become accustomed to it as they grow more comfortable in revealing their work to colleagues.

A library of videotapes of senior clinicians conducting TFP, both effectively and at times with difficulty and mistakes, provides an important model for those learning TFP. We have also developed a library of videotapes of trainees who demonstrate growing expertise in the treatment. Watching the elegance of the work of senior clinicians should be tempered with the reality of watching their colleagues whose skills are developing.

Group supervision in which one therapist plays parts of the video tape of a recent session, with frequent breaks and discussion with a supervisor is at the heart of the training. Especially helpful is the articulation of the dominant transference theme by the supervisor with suggestions for interpretative strategies for the next session. The application of these suggestions in the next session can be pursued in following supervisory sessions. Supervisory attention and detail are helped by the use of a supervisor's rating scale that quantifies the therapist's adherence and competence in the individual session. The ratings are always open and shared with the trainee in order to be specific about areas needing change and development, as well as describing areas of improvement and excellence.

5. Preliminary research on TFP

Once the treatment was manualized and taught to our therapists, we were prepared to begin the initial study of pre-post effects [5]. In 1994, we received a National Institute of Mental Health (NIMH) treatment development grant (*Treatment Development for Borderline Personality Disorder Project*, John F. Clarkin, PI) in order to continue the development of a treatment manual for TFP, a methodology for teaching and supervising TFP, and tools for assessing therapist adherence and competence in the delivery of the treatment. To generate initial effect sizes, NIMH also funded treatment for a small study group of BPD patients over a 1-year period.

For this phase, participants were recruited from all treatment settings (i.e. inpatient, day hospital, and outpatient clinics) within the New York-Presbyterian Hospital—Weill Cornell Medical Center, Westchester Division. Women between the ages of 18 and 50 who met criteria for BPD

with at least two incidents of suicidal or self-injurious behavior in the last 5 years, who did not meet criteria for schizophrenia, bipolar disorder, delusional disorder, organic pathology, and/or mental retardation were admitted to the study. In total, 32 patients were evaluated and met the study inclusion criteria. Nine individuals declined participation. Of the 23 patients that entered the study, seventeen completed the planned 1-year of treatment. They were assessed at baseline, 4, 8, and 12 months with a variety of interview and self-report measures.

All therapists (senior therapists to postdoctoral trainees) selected for this phase of the study were judged by independent supervisory ratings to be both competent and adherent to the TFP manual. Three senior supervisors rated the therapists for TFP adherence and competence. Throughout the study all therapists were supervised on a weekly basis by Dr Otto Kernberg and at least one other senior clinician (A. Appelbaum, F. Yeomans, and M. Stone).

The 1-year attrition rate was 26% and no patient committed suicide. Two patients dropped out early in the treatment after 4 months, and two dropped out after 8 months of treatment. Two other participants were administratively discharged due to protocol violations (e.g. refusal to be videotaped or refusal to terminate from existing treatments). These results compare well with other treatments for BPD: Linehan, Armstrong, Suarez, Allmon, and Heard [22] had 16.7% drop out, and one suicide (4%); Stevenson and Meares' study [23] had a 16% drop out rate; and Bateman and Fonagy's study [4] had 21% drop out. None of the treatment completers deteriorated or were adversely affected by the treatment. Therefore, it appears that TFP is well-tolerated.

6. Pre-post psychotherapy changes

We analyzed outcomes in a set of parasuicidal variables that included the number of parasuicide attempts, the medical risk of all attempts, and the average resulting physical condition after the attempts. For this set of variables, the overall multivariate model was significant for the completer group and approached significance for the intent-to-treat group ($P < 0.06$). In both the intent-to-treat and completer analyses, there was a significant decrease in the average medical risk of parasuicidal acts and an improvement in the average physical condition following these acts.

We also examined the patients' service use in the year prior to TFP treatment as compared to the use of services during the year of treatment. For both the intent-to-treat and completer groups, there was a significant reduction in the number of hospitalizations, and a decrease in the number of days hospitalized that approached significance ($P < 0.06$).

We also examined the number of subjects no longer meeting DSM-IV criteria for BPD after twelve months of

treatment. In our study, 52.9% of subjects no longer met criteria for BPD after one year of twice-weekly outpatient treatment. This rate compares quite well with that found by others. Stevenson and Meares [23] found that 30% of patients in their treatment study no longer met criteria for DSM-III BPD at a one-year follow-up. Perry, Banon, and Ianni [24] note that naturalistic follow-up studies of patients with BPD yield an estimated recovery rate of only 3.7% per year and four active treatment studies for mixed personality disorders (with 53% having borderline personality disorder) produced a recovery rate of 25.8% per year.

Given the relative infrequency of suicidal acts, suicidal behavior was not a primary measure of outcome in this study.

Overall, the major finding in this study is that patients with borderline personality disorder who were treated with TFP showed marked reductions in the severity of parasuicidal behaviors, and fewer emergency room visits, hospitalizations, and days hospitalized. The effect sizes were large and no less than those demonstrated for other BPD treatments [4, 22, 25]. Although we were encouraged by these results, we were aware of the inherent limitations in the study's design—namely that the improvements may have been attributable to the effects of time, rather than the treatment itself. Without a comparison group, it was impossible to eliminate this possibility. In order to address this limitation, we designed a study to examine patients treated with TFP's as compared to patients treated in other modalities.

7. Comparison study

We compared the results of patients diagnosed with BPD and treated with TFP to the results of a group of borderline patients who received one year of treatment as usual (TAU) in the same setting and system [26]. Significant differences between the TFP-treated group and the TAU group would greatly increase confidence in the benefits of TFP and support the undertaking of a randomized controlled trial of the treatment.

Participants continued to be recruited from all treatment settings within NYPH. In addition to the data previously collected on the participants in the pre-post study, we collected data from nine additional patients for the TFP condition. The additional nine patients were treated with TFP in accordance with the same methodology as the original group of seventeen. In addition to these 26 patients in the TFP condition, a comparison group of 17 women diagnosed with BPD was later identified as a treatment as usual group. The participants for the comparison group were initially assessed as part of evaluations provided by the Personality Disorder Institute for various reasons (e.g. clinical purposes or as part of other ongoing studies, etc.). There were no significant differences between the treatment group and the comparison group in terms of demographic or diagnostic variables, severity of Axis II BPD

449 symptomatology, baseline emergency room visits, hospi-
 450 talizations, days hospitalized, or GAF scores.

451 Of the 17 patients in the comparison group, six patients
 452 entered once-weekly individual psychotherapy (three with
 453 private therapists affiliated with Cornell and three with
 454 therapists working in the NYPH Outpatient Department),
 455 seven patients entered treatment in a NYPH day program
 456 (five in Dialectical Behavioral Therapy, one in psychody-
 457 namic, and one who spent 6 months in psychodynamic and
 458 6 months in DBT), and four patients were in and out of
 459 various treatments both at NYPH and outside the Cornell
 460 system. None of the TAU patients were discharged from the
 461 out-patient department. Individual psychotherapy was
 462 provided at the NYPH for all but two TAU participants.
 463 Both patients in psychotherapy outside NYPH’s out-patient
 464 department were seen by therapists trained and with clinical
 465 appointments at Cornell Medical College. Overall, the TAU
 466 therapists represented a multidisciplinary group of thera-
 467 pists whose experience level generally falls somewhere
 468 between the first and second cohorts of therapists in the
 469 experimental condition.

470 The retention–attrition rate of the original seventeen TFP
 471 patients is discussed previously. None of the additional nine
 472 TFP patients, and none of the seventeen TAU patients,
 473 dropped out. Overall, of the 32 patients who completed the
 474 treatment contract and started TFP, six did not complete the
 475 1-year treatment (23.1%). No patient suicided.

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 477
 478
 479 **8. Comparison study results**

480
 481 We examined the percent of patients with psychiatric ER
 482 visits and psychiatric hospitalizations within each group
 483 (TFP vs. TAU) as a function of time (baseline and end of
 484 treatment). For the TFP treated group, 20 (76.9%) of the
 485 26 patients visited the ER in the year prior to treatment but
 486 only seven (26.9%) had ER visits during the treatment year.
 487 This difference was significant. For the comparison group,
 488 13 (76.4%) of patients had ER visits in the year prior to
 489 evaluation and 14 (82.4%) had ER visits during the year
 490 period that followed. This difference was not significant.
 491 Additionally, the difference between the TFP and TAU
 492 was not significant at baseline but was significant at the end
 493 of treatment.

494 With regard to the percent of subjects hospitalized, for
 495 the TFP treated group, 20 (76.9%) of the 26 patients were
 496 hospitalized in the year prior to treatment but only nine
 497 (34.6%) were hospitalized during the treatment year. This
 498 difference was significant. Whereas for the comparison
 499 group, 14 (82.4%) of patients were hospitalized in the year
 500 prior to evaluation and 11 (68.8%) were hospitalized during
 501 the year period that followed, a non-significant change.
 502 Again, the difference between the TFP and TAU groups was
 503 not significant at baseline but was significant at the end of
 504 treatment. Significant differences between the two

505 treatments were evident in both the intent-to-treat group
 506 as well as the completers.

507 With respect to global functioning, there was a
 508 significant time by treatment group interaction—patients
 509 who completed TFP treatment showed an increase in global
 510 functioning whereas the TAU group did not. With regard to
 511 BPD criteria, we were only able to compare the TFP treated
 512 group and the TAU group at baseline and examine change in
 513 the TFP treated group because the participants in the TAU
 514 condition were not given diagnostic interviews at the end of
 515 the treatment year. Independent *t*-test analysis revealed that
 516 the mean number of BPD criteria met were not significantly
 517 different between the two groups at Time 1 (baseline). A
 518 paired *t*-test revealed the decrease in the number of criteria
 519 met in the TFP treated group was significant from baseline
 520 to 1-year time point for both intent-to-treat and completer
 521 analyses.

522 All of the within-subjects and between-subject effect
 523 sizes for the TFP treated participants indicated favorable
 524 change. The within-subject effect sizes ranged from 0.73 to
 525 3.06 for the TFP-treated participants, with an average effect
 526 size of 1.19, placing. This effect size is in the high end of the
 527 large range as defined by Cohen [27]. In contrast, four of the
 528 eight within-subject effect sizes for the TAU group
 529 indicated deterioration, with the two positive effect sizes
 530 for number of psychiatric hospitalizations (for intent-to-
 531 treat and completer analyses, respectively) falling in the low
 532 end of the medium range. The between subject effect size
 533 ranged from 0.48 to 1.87, with an average effect sizes of
 534 1.08. This effect size is also in the large range [27].

535 Although our study was not specifically designed to
 536 examine cost-effectiveness, and without data on the exact
 537 cost savings between the year prior and the treatment year,
 538 the dramatic reduction in service utilization in terms of ER
 539 visits, hospitalizations, and length of stays in the hospital
 540 suggests a substantial cost savings associated with our
 541 treatment. Even estimating a conservative \$1000 per day for
 542 inpatient treatment, the TFP-treated group would have
 543 utilized \$1,000,000 less during the treatment year than in the
 544 year prior to treatment, whereas the TAU group utilized
 545 more services during the treatment year than in the year
 546 prior.

547 The major finding in this study is that BPD patients
 548 treated with TFP showed marked reductions in emergency
 549 room visits, hospitalizations, days hospitalized, as well as
 550 increases in global functioning as compared to the
 551 treatment-as-usual cohort. Both within group and between
 552 group effect sizes were large and no less than those
 553 demonstrated for outpatient DBT, inpatient DBT, and a
 554 psychodynamic day treatment [4,22,28].

555 Given the comparison with a relevant study group, the
 556 findings of this study are an advance over our previous
 557 findings and suggest the value of further research on TFP.
 558 Nevertheless, the lack of randomization in the design limits
 559 the conclusions about efficacy. A randomized clinical trial
 560

561 of TFP would constitute a more stringent test of the efficacy
562 of this treatment.

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564
565 **9. Randomized clinical trial**

566 Encouraged by the positive results obtained in the
567 comparison study, we are embarked on a randomized
568 clinical trial of TFP [7]. The primary purpose of the study is
569 to compare the efficacy of TFP to an active treatment and a
570 control. A cognitive–behavioral treatment called Dialectical
571 Behavior Therapy (DBT) [29], which has received prelimi-
572 nary empirical support for its effectiveness, was selected as
573 the active comparison treatment. The mechanisms of
574 change in these two treatments are conceived in very
575 different ways. DBT is hypothesized to operate through the
576 learning of emotion-regulation skills in the validating
577 environment of the treatment [29]. TFP is hypothesized to
578 operate through the integration of conflicted, affect–laden
579 conceptions of self and others via the understanding of these
580 working models as they are actualized in the here-and-now
581 relationship with the therapist. A third treatment, supportive
582 treatment [30], was used in contrast to these two active
583 treatments as a control for attention and support.

584 This treatment study of BPD patients is unique and goes
585 beyond existing treatment studies in a number of ways:
586 [1] this is the first BPD treatment study to include males;
587 [2] this study includes not only borderlines with suicidal
588 behavior, but all who meet the diagnosis; [3] this is the first
589 study to compare two forms of active treatment to a
590 supportive treatment; [4] therapists are not located at a
591 university clinic or hospital but in their private offices in the
592 community; [5] medication is carefully delivered, when
593 needed, by an algorithm; patients with and without
594 medication provide a contrast in the data analysis, [6]
595 outcome measures involve not only symptom change, but
596 also changes in organization of the personality at the
597 psychological and neurocognitive levels.

598 The BPD patients were recruited from the New York
599 City and adjacent Westchester County, referred by private
600 practitioners, clinics, family members and self-referred.
601 They are males and females between the ages of 18 and 50.
602 Patients with comorbid schizophrenia, schizoaffective
603 disorder, bipolar disorder, delusional disorder, and/or
604 delirium, dementia, and amnesic and other cognitive
605 disorders were *excluded* because of the influence of brain
606 pathology and thought disorder on the ability to provide
607 meaningful self-report data and complicated response to
608 treatment. In addition, patients with substance dependence
609 were excluded, although substance abuse was not an
610 excluding factor. We include patients with other comorbid
611 Axis I disorders, as issues of comorbidity across time with
612 these Axis I disorders are a focus of investigation.

613 Patients were assessed with a number of semi-structured
614 interviews and self-report instruments to establish the
615 diagnosis. Assessment instruments were chosen to reflect
616

617 important domains that might show change in treatment
618 such as symptoms, behaviors, attention, positive and
619 negative affect, affect regulation, work and social function-
620 ing, identity and identity diffusion.

621 Patients were also assessed using neurocognitive tasks
622 known to tap executive functioning and attention. A
623 subgroup of patients underwent functional imaging (fMRI)
624 prior to and following one year of treatment. Upon
625 completing the assessment, patients were randomized to
626 one of the three treatment conditions for one-year outpatient
627 treatment.

628 We interviewed 207 individuals for at least one
629 evaluation session. Of these 207, 109 were eligible for
630 randomization. Of the 109 eligible for randomization,
631 90 were randomized to treatment. There were no differences
632 in terms of demographics, diagnostic data, and severity of
633 psychopathology between those randomized to treatment
634 and those not.

635 Patients were randomized to one of the three treatment
636 conditions for one-year outpatient treatment. The three
637 treatments were delivered with attention to preserving the
638 integrity of each treatment under investigation. Therapists
639 in each of the three treatment conditions were selected based
640 on prior demonstration of competence in the treatment. In
641 order to ensure on-going therapist adherence and compe-
642 tence, all treatments were supervised on a weekly basis by
643 experts in each treatment. Barbara Stanley, PhD, an
644 acknowledged expert in DBT and NIMH-funded researcher
645 in this area, is the supervisor for DBT. Otto Kernberg, a
646 psychoanalyst of international stature, is the supervisor of
647 TFP. Ann Appelbaum, expert therapist, is supervisor of the
648 supportive treatment.

649
650
651 **10. Domains of outcome**

652 The domains of outcome in a psychotherapy study are
653 determined by the goal of the treatment (what patient
654 changes does the therapy intend), and the hypothesized
655 mechanisms of change (predictors, mediators, and mod-
656 erators). Thus, in our ongoing treatment study we assess the
657 influence of treatment in reference to the central tempera-
658 mental features of negative affect (i.e. lowered negative
659 affect) and effortful control (i.e. increased effortful con-
660 trol/constraint), in addition to the changes in the BPD Axis
661 II criteria themselves. The advantage of assessing change in
662 these two key temperamental dimensions is their close
663 relationship to underlying neurobehavioral systems of the
664 organism on the one hand, and their obvious impact on
665 everyday functioning on the other. We postulate that a
666 decrease in negative affect (or change in the balance of
667 positive and negative affect) and an increase in effortful
668 control would be features of any successful treatment of
669 BPD patients. Focus on these variables provides a context in
670 which we can judge the relative success of different types of
671 psychosocial treatment. It also provides us with a unique
672

opportunity to determine if there are specific gains that maintain or accrue with each of the three treatments. For example, there may be notable gains associated with one of the three treatments in one area of psychosocial functioning, which are themselves seen in correlation with changes in negative affect or effortful control. We also assess the third crucial variable of conceptualization of self and others, as it is through the conceptualization of the interpersonal world that the individual controls and modulates affect.

The variables of primary interest in this study were assessed at four time points, namely at baseline, 4-months, 8-months, and 12-months (termination of treatment). Thus, each study subject will have been measured on the same variables at roughly the same intervals at four points in time.

11. Preliminary results

All psychotherapy sessions have been completed, and data are currently being analyzed. Some preliminary analysis has been completed on three assessment measures - Reflective Function (RF), coherence, and attachment [31]. Preliminary findings indicate that RF increased most dramatically for the TFP-treated group, but did not change significantly in either the DBT or supportive treatment groups. Coherence increased significantly for all three groups. Overall, there was a significant change among patients in terms of attachment style. At baseline, 92% of patients were judged to be insecure in their attachment, and only 8% were judged secure. At 12-months, only 64% of patients were judged insecure, while the number of secure patients increased to 36%. This difference is significant at the $P < 0.03$ level. A change in unresolved/resolved status with regard to trauma or loss was also clear. At baseline, 36% of patients met criteria for an Unresolved attachment classification. By 12-months, the percentage had dropped to 9%, a change that is significant at the $P < 0.004$ level. The data have not been analyzed by treatment group yet, so differences among treatments have not been determined.

12. Conclusion

Accumulating evidence indicates that Transference Focused Psychotherapy may be an effective treatment for Borderline Personality Disorder. As more data from the RCT is assessed, we will have a better understanding of how the treatment performs under more stringent experimental conditions. Because the RCT better controls for unmeasured variables through randomization, and offers controls for attention and support, and compares TFP to an already established, well-delivered, alternative treatment, its outcome will be a strong indicator of the treatment's efficacy and effectiveness. In addition to assessment of outcome, the RCT has also generated process-outcome studies designed to assess the hypothesized mechanisms of action in TFP that

results in the changes seen in these patients [32]. Additionally, in the future, evaluating the long-term effectiveness through 2-, 3-, and 5-year follow-up data is crucial to establish the long-term significance of a treatment for a chronic disorder [3].

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