PSYCHOMETRIC PROPERTIES OF THE RUPTURE RESOLUTION QUESTIONNAIRE (RRQ)

by

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ABSTRACT

This study examined the psychometric properties of the Rupture Resolution Questionnaire (RRQ), a patient-rated self-report measure that assesses the presence of experiences associated with the process of alliance rupture resolution, and, as such, is hypothesized to constitute a measure of the therapeutic alliance as negotiation. The study found the RRQ to be a soundly reliable instrument with an adequate internal consistency (Cronbach’s alpha = .87). Concurrent validity was established by examining the relationship between the RRQ and various measures of psychotherapy process. The RRQ was shown to be positively related to patient and therapist ratings of session helpfulness, depth of therapeutic exploration and strength of the therapeutic alliance as measured by the WAI. Predictive validity was examined by analyzing the relationships between the RRQ and patient- and therapist-rated measures of the global outcome of treatment. The RRQ was found to be a significant predictor of the improvement in the patient’s overall level of functioning (as rated by therapist), a significant predictor of the decrease in severity of patient’s interpersonal problems (as rated by therapist) and a significant predictor of the decrease in the severity of symptoms (as rated by patient). The correlation coefficients were in the medium range (.28-.41). In addition, the RRQ was found to make a unique and significant contribution above and beyond the WAI to predicting the improvement in interpersonal functioning as rated by therapist. Overall, the results of this study support the reliability and the construct validity of the RRQ, and suggest that this measure is a potentially useful instrument for future research on psychotherapy process and outcome.
In loving memory of my father
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INTRODUCTION

More than one hundred years have passed since “the talking cure” was introduced as a treatment for psychological problems. At present, as many as 250 different types of psychotherapy have been identified (Herink, 1980). Considerable scientific effort over the last sixty years has been spent to determine whether psychotherapy, in general, is effective, and if so, what factors underlie the mechanism of change. With the growing demand of the health care system and the public in general for accountability, there has been a continuous pressure on the mental health field to provide empirical support for the treatments we offer to our patients. This gave rise to the initiatives of the American Psychological association and American Psychiatric Association to formulate practice guidelines and identify empirically-supported interventions and treatments. The focus of these efforts has been on high quality comparative outcome studies on techniques or brand-name therapies for single categorical disorders while the therapeutic relationship has been ignored or addressed only vaguely (Norcross, 2002). However, quantitative reviews and meta-analyses of psychotherapy outcome literature consistently reveal that specific techniques account for only 5% to 15% of the outcome variance (Norcross, 2002). Moreover, technical interventions do not exist in the abstract, they are applied in a context of patient-therapist relationship, that is, techniques and interventions are relational acts (Safran & Muran, 2002) and the therapist as a person is a central agent of change (Lambert & Okiishi, 1997). Therefore, empirical investigation of the therapeutic
relationship and attempts to discover elements and factors that make this relationship effective are essential and relevant to clinical practice.

Psychotherapy research over the last several decades found the therapeutic alliance to be one of the most important elements of the therapeutic relationship. The therapeutic alliance has been consistently shown to be a robust predictor of positive outcome (e.g., Horvath & Bedi, 2002). Building and maintaining good therapeutic alliance appears to be essential for a success of treatment. At the same time, ruptures in the alliance have been conceptualized as important change events and have become a subject of empirical investigation (e.g., Safran, Muran, Samstag, & Stevens, 2002).

The literature review which follows will discuss the existing body of literature on the therapeutic alliance, including the history of the concept, measurement of the alliance, empirical research on the relationship between the alliance and outcome, the concept of the ruptures in the alliance and the research on the ruptures and their resolution. Then, the recent reconceptualization of the alliance as negotiation and its implications for future research will be discussed, followed by a statement of purpose and a list of the hypotheses that are addressed by the current study.

The general aim of this study is to explore the psychometric properties of the patient self-report measure (Rupture Resolution Questionnaire) assessing the resolution of the ruptures in the therapeutic alliance and to establish it as a measure of the therapeutic alliance as negotiation.
CHAPTER I
LITERATURE REVIEW

1.1 Overview of Psychotherapy Research

Although scientific investigations of psychotherapy effectiveness began as early as the 1920s, increasingly empirically valid and methodologically sound psychotherapy research flourished in the second half of the 20th century. Stimulated by the controversial article of Eysenck, who after a review of 24 studies concluded that psychotherapy was not effective (Garfield & Bergin, 1994), research initially focused on the efficacy of psychotherapy. The advance of meta-analytical techniques allowed researchers to examine multiple empirical studies conducted with thousands of patients having a variety of psychological problems treated by various therapeutic techniques. Multiple comprehensive reviews of outcome research have come to one basic conclusion: psychotherapy, in general, has been shown to be effective (Bergin & Lambert, 1978; Hoglund, 1999; Lambert & Barley, 2002; Lambert & Bergin, 1994). Furthermore, psychotherapies have effects beyond those of spontaneous remission and of a variety of no-treatment controls: the average treated person is better off than 80 percent of untreated control subjects (Lambert & Bergin, 1994). The effect sizes produced in psychotherapy are as large as or larger than those produced by a variety of medical interventions (e.g., medication). Finally, according to Lambert and Bergin (1994), these findings cannot be
“explained away” by reference to methodological weaknesses in the data reviewed or to the reviewing methods” (p.149).

Psychotherapy outcome research has also examined the effectiveness of various types of psychotherapy in treating the broad spectrum of anxiety and depression disorders, and interpersonal problems. Numerous reviews of empirical studies comparing a wide range of psychotherapies have found no significant difference between their effectiveness (Lambert & Barley, 2002; Lambert & Bergin, 1994). Although a small but consistent advantage for cognitive and behavioral techniques over dynamic and humanistic approaches has been found by some meta-analytic reviews of literature (e.g., Dobson, 1989; Shapiro & Shapiro, 1982; Svartberg & Stiles, 1991), it has been argued that these results can be attributed to methodological artifacts (Lambert & Barley, 2002; Lambert & Bergin, 1994). Most recently, Lambert and Ogles (cited in Lambert & Barley, 2002) examined more than 50 meta-analytic reviews of outcome research. They concluded that “while statistically significant differences can sometimes be found favoring the superiority of one treatment over another, these differences are not so large that their practical effects are noteworthy” (p.19). It should be mentioned, however, that a few specialized techniques have shown superiority with some specific diagnostic categories (e.g., exposure treatment with specific phobic disorders, response prevention for obsessive-compulsive disorders) (Lambert, 1992).

The prevailing explanation of the general finding of the equivalence in outcome among highly diverse therapies is the existence of the “common” or “non-specific” factors that are present in all forms of therapy and lead to positive change (Lambert &
Bergin, 1994). Examples of common factors include therapist’s empathy, warmth, acceptance, patient’s trust and feeling of being understood, and the therapeutic alliance. Although there is substantive evidence that common factors account for a significant amount of patient’s improvement in psychotherapy (Lambert & Barley, 2002; Lambert & Bergin, 1994), the common factors model of change has been critiqued by authors who emphasize that the specific techniques cannot be separated from the interpersonal nature of a therapeutic encounter (Butler and Strupp, 1986; Safran, 2003). According to Butler and Strupp (1986), “techniques gain their meaning and, in turn, their effectiveness from the particular interaction of the individuals involved” (p.33) and psychotherapy is the “systematic use of a human relationship for therapeutic purposes” (p.36). Whether one adheres to the common factors model of change or to the more complex view of therapeutic process outlined by Butler and Strupp, one thing is clear: the therapeutic relationship is vital in contributing to the success of treatment.

Considerable research efforts have been devoted to studying numerous variables involved in building a successful therapeutic relationship. One of the most important factors emerging both from the outcome studies and psychotherapy process research is the therapeutic alliance.

1.2 Theory and Empirical Research on the Therapeutic Alliance

This section will review the theoretical conceptualization of the therapeutic alliance (also known as working alliance, helping alliance or simply alliance), measuring the alliance, and the empirical research on the alliance.
1.2.1 Conceptualization of the alliance

The concept of the alliance begins its history in the early psychoanalytic literature. It was Freud who first suggested the necessity of making patient an active “collaborator” in the analytic process (Breuer & Freud, 1955). Freud was primarily concerned with the transferential unconscious-based aspects of the relationship between patient and analyst, however, he proposed the existence of the “unobjectionable positive transference” (Freud, 1940) which should not be analyzed since it provides the patient with the motivation necessary for reality-based collaboration with an analyst in order to conquer unconscious fear and rejection of exploring repressed material. Although Freud considered the resolution of transference neurosis the main instrument of change, he also acknowledged the role of analyst’s friendliness and affection as “the vehicle of success in psychoanalysis” (Freud, 1912).

Sterba (1934), building on Freud’s structural model, coined a term “ego alliance” to reflect a “split in the [patient’s] ego” between its observant and participant functions. This split allows the patient to use his rational, reality-based elements of the ego to ally with the therapist in order to self-observe and accomplish therapeutic tasks.

Zetzel (1956), crediting the term to Bibring, distinguished between the therapeutic alliance and transference neurosis, arguing that the patient’s capacity to build the alliance depends on the early developmental experiences which result in his or her ability to form a stable trusting relationship. Zetzel insisted that if the patient lacks this ability in the beginning of treatment, the therapist needs to respond to the patient’s “basic needs and anxieties” (1966, p.100) and create a supportive relationship before attempting the
analysis proper (i.e., interpretation of unconscious conflicts). Essentially, Zetzel was the first who conceptualized the alliance as having a direct impact on the effectiveness of therapy.

Greenson (1967) continued to clarify the difference between the transferential aspects of the therapeutic relationship and a real relationship between patient and therapist, including undistorted perceptions, authentic trust and respect. Greenson distinguished between the working alliance, the ability of patient and therapist to work together on the tasks of analysis, and the therapeutic alliance, which refers to the capacity of the therapeutic dyad to form a personal bond.

The concept of the alliance, with its emphasis on the importance of the development of trust, as it emerged from the theoretical developments described above allowed the practitioners of psychoanalysis to be more flexible in terms of technique and to depart from the traditional classical ideals of abstinence and neutrality. However, the psychoanalysis continued to believe that the core mechanism of change was insight, whereas the alliance was a necessary but not sufficient condition for change (Safran, 2003).

From a different theoretical perspective, Rogers (1951, 1957), although not using the term alliance, posited the quality of the therapeutic relationship as both necessary and sufficient condition for clinical change. He conceptualized the therapeutic relationship as a set of therapist-offered conditions, such as empathy, unconditional positive regard, and congruency. However, Rogers attributed the key responsibility for forging the therapeutic relationship to the therapist and did not address the role of the patient in this process.
During the 1970s, with the advance of the empirical investigations of the therapeutic process, the concept of the alliance ceased to be the feature of purely psychoanalytic discourse and started to become a more general construct applicable to various types of treatment. Although working from the psychodynamic perspective, Luborsky (1976) provided a description of the alliance that fits therapeutic process in general. He proposed that the alliance developed in two phases. Early in treatment (i.e., Type I), the alliance involves the patient’s belief that treatment would be helpful and that the therapist is providing a supportive, warm and caring relationship. This creates condition in which the treatment can be undertaken. Later in treatment, (i.e., Type II) the alliance is based on a “sense of working together in a joint struggle against what is impeding the patient” (p. 94). Thus it involves the patient’s faith in the therapeutic process itself, commitment to some of the concepts underlying the therapy (e.g., the source of the problems), and an experience of collaboration with the therapist.

In his seminal contribution, Bordin (1979, 1994) offered a transtheoretical reformulation of the alliance concept. Building on Greenson’s concepts of the real relationship and the alliance and reflecting Rogers’ ideas of facilitative conditions, he suggested that the alliance consists of three interdependent components: tasks, goals and bond. The tasks refer to specific activities that patient and therapist will engage in the course of treatment in order to facilitate the desired change. These activities will differ depending on the modality of treatment (e.g., keeping an automatic thoughts record in cognitive-behavioral therapy, “two chairs” exercise in the Gestalt therapy, or free association in the classical psychoanalysis). The goals are the desired outcomes that are
the targets of the treatment. The bond refers to the affective quality of the patient-therapist relationship and includes feelings of mutual trust and respect, liking and confidence. According to Bordin (1994), the bond “grows out of [patient’s and therapist’s] experience of association in a shared activity.” (p.16) All three components of the alliance influence each other in an ongoing fashion during the course of treatment. That is, the ability to agree on goals and tasks of therapy contributes to patient’s feelings of being understood and respected, and the sense of the mutual trust within the therapeutic dyad. In reverse, the positive feelings (i.e., the bond) allow patient and therapist to successfully negotiate the agreement on goals and tasks.

Several authors have highlighted the significance of Bordin’s conceptualization of the alliance to the psychotherapy theory, research and practice (Constantino, Castonguay, & Schut, 2002; Horvath & Luborsky, 1993; Safran & Muran, 2000). First, his transtheoretical conceptualization allowed the concept of the alliance to spread to other than psychoanalytic therapeutic traditions. According to Wolfe and Goldfried (1988), the alliance became the “quintessential integrative variable” spanning all forms of treatment modalities, including experiential (e.g., Watson & Greenberg, 1995), cognitive-behavioral (e.g., Arnow, 1995; Goldfried & Castonguay, 1993; Newman, 1998; Raue & Goldfried, 1994), couples and family therapy (e.g., Rait, 1995, 1998) and group therapy (e.g., Mackenzie, 1998). Second, Bordin’s formulation offered an alternative to the traditional dichotomy between technical and relational factors in psychotherapy by emphasizing that these two aspects are not separate but interdependent elements of therapy. Finally, building on Bordin’s model and his suggestion that “the element of
negotiation is an integral part of alliance building” (Bordin, 1994, p.15) and looking at the construct of the alliance from the relational perspective, Muran and Safran (Safran & Muran, 1996, 2000; Safran, 2003) have recently offered a reconceptualization of alliance as negotiation. This reconceptualization will be discussed in detail in a separate section of this paper.

1.2.2 Measuring the alliance

As Horvath and Bedi (2002) have pointed out, much of our knowledge about the alliance derives from the empirical studies which define the alliance by the instruments used to measure it. That is, the measures of the alliance “contribute to the definition of the construct” (p.39). Currently there are more than 24 different alliance measures in use by the psychotherapy researchers (Horvath & Bedi, 2002). There are several important families of instruments specifically designed to measure the alliance that are used in the majority of empirical studies (Horvath, 1994; Horvath & Bedi, 2002; Martin, Garske, & Davis, 2000).

The Penn scales were developed by Luborsky and his colleagues (HAcs; Luborsky, 1976; HAr; Luborsky, Crits-Christoph, Alexander, Margolis, & Cohen, 1983; HAs; Luborsky, McLellan, Woody, O’Brien, & Auerbach, 1985) at the Penn Psychotherapy Project to empirically test Luborsky’s (1976) psychodynamic conceptualization of the Type I and Type II helping alliances. These instruments assess two dimensions of the alliance: (1) a warm, supportive, accepting relationship, and (2) patient’s experience of collaboration and participation with the therapist in working
toward the goals of the treatment. Luborsky and colleagues created the Penn scales that rate the alliance from patients’, therapists’, and independent observers’ perspective.

The Vanderbilt scales (VPPS; Gomes-Schwartz, 1978; O’Malley, Suh, & Strupp, 1983; VTAS; Hartley & Strupp, 1983) were developed by Strupp and his colleagues to measure the process dimensions of the Vanderbilt I project. The original 80-item Vanderbilt Psychotherapy Process Scale (VPPS) was an observer-rated measure of therapist-patient relationship and the psychotherapy process. It was later refined to contain 44 items that specifically measure the alliance (Vanderbilt Therapeutic Alliance Scale. The alliance components in these measures include Patient’s Participation, Patient’s Exploration, Patient Motivation, Patient’s Acceptance of Responsibilities, Therapist’s Warmth and Friendliness, and Negative Collaboration.

The California-Toronto scales include the instruments developed over time by researchers from the University of Toronto and the Langley Porter Psychiatric Institute in San Francisco. The Therapeutic Alliance Rating Scale (TARS; Marziali, Marmar, & Krupnick, 1981; Marziali, 1984) was guided by the psychodynamic conceptualization of the alliance and combined items from other scales (the VPPS, the VTAS and the HAcS). It focuses mostly on the affective dimensions of the alliance and measures its four components: Patient’s Positive Contribution, Patient’s Negative Contribution, Therapist’s Positive Contribution and Therapist’s Negative Contribution. The most recent meta-analysis of the studies on the alliance and outcome (Martin, Garske, & Davis, 2000) found that the TARS did not significantly correlate with the outcome. The authors advise against using this measure for future studies interested in the association between the
alliance and outcome. The California researchers revised the TARS based on factor analytic studies and created the California Therapeutic Alliance Rating Scale (CALTARS; Marmar, Weiss, & Gaston, 1989). A subsequent revision resulted in creating the California Psychotherapy Alliance Scales (CALPAS; Gaston & Marmar, 1994). The current CALPAS assess four aspects of the alliance as conceptualized by Gaston (1990): (1) the Patient Working Capacity scale reflects patient’s ego strength and his or her capacity to work purposefully in therapy, (2) the working alliance is assessed by the Patient Commitment scale, (2) the therapist’s contribution to the alliance is measured by the Therapist Understanding and Involvement scale, and (4) the Working Strategy Consensus scale reflects the collaborative agreement between the patient and the therapist on the treatment goals and tasks. The CALPAS offers versions that are rated by patients, therapists, and independent observers.

The Working Alliance Inventory (WAI: Horvath & Greenberg, 1989) was developed to measure Bordin’s (1979) transtheoretical model of the alliance as consisting of three components: the bond, the agreement on goals, and the agreement on tasks. To allow measurement of the alliance from different perspectives, Horvath and colleagues developed patient-, therapist-, and independent observer-rated versions of the WAI. A shortened 12-item version of the WAI was also developed (Tracey & Kokotovic, 1989). Subsequent studies (Tracey & Kokotovic, 1989) suggested that the WAI appears to be measuring one General Alliance Factor, as well as the three specific alliance factors of Task, Goal, and Bond. However, there is also evidence that patients make relatively little distinction between the task and the goal dimensions of the scale (Hatcher & Barends,
1996), while therapist are more able to make distinctions among these dimensions (Kivlighan & Shaugnessy, 1995).

Several studies that compared different alliance measures (the CALPAS, the Penn, the VTAS, and the WAI) reported that all instruments demonstrated high internal consistency and good interrater reliability (Tichenor & Hill, 1989; Fenton, Cecero, Nich, Frankforter, Carroll, (2001). The recent meta-analysis of the alliance literature (Martín, Garske, & Davis, 2000) reported the overall average reliability of the alliance scales based on various estimation methods to be .79 (n = 93, SD = .16). When interrater reliability was used, the average reliability was .77 (n = 33, SD = .15), whereas when Cronbach’s alpha was reported, the average alliance scale reliability was .87 (n = 44, SD = .10). Horvath and Bedi (2002) summarized the existing findings regarding the overlap between different instruments and reported medium to high (ranging from .34 to .87) intercorrelations between various measures of the alliance. Horvath and Bedi (2002) also report that factor analytic examination of the most popular measures indicates three underlying factors present, to varying degrees, in all measures: “personal bonds, energetic involvement in treatment (collaborative work), and collaboration/agreement on the direction (goal) and substance (tasks) of treatment.” However, it does not appear that each scale measures the identical construct. Although each instrument reflects the core dimensions, they also assess some features of the relationship that other measures do not.
1.2.3 The Empirical Research on the Alliance

Numerous studies examining the relationship between the strength of the alliance and the outcome of treatment have been conducted over the last twenty years. These studies use different instruments to measure the alliance and the outcome, span over the variety of psychiatric disorders (e.g., depression, personality disorders, substance abuse) and various treatment modalities (e.g., psychodynamic, behavioral, cognitive). The advance of the meta-analytical methods allows us to integrate the vast empirical evidence and to identify patterns in the literature. Several meta-analytic reviews of the alliance literature (Horvath & Bedi, 2002; Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000) have provided evidence linking the quality of the alliance to the treatment outcome. Horvath and Symonds (1991) found an overall effect size of .26 between the alliance and outcome based on 24 studies. Martin, Garske, and Davis (2000) reviewed 79 studies and reported a slightly smaller effect size of .22. Most recently, Horvath and Bedi (2002) located ten additional studies published after Martin and colleagues conducted their review and presented their results based on 89 studies. Across all these studies, the average relation between the alliance and outcome was .21 and the median effect size was .25 (Horvath & Bedi, 2002). Although, as Horvath and Bedi pointed out, the magnitude of this relation may not appear very impressive, according to Wampold (2001, cited in Horvath & Bedi, 2002, p.61), “the impact of the alliance across studies is far in excess of the outcome variance that can be accounted for by techniques.”

Whereas the earlier analyses of the alliance studies suggested that the client-rated alliance was a better predictor of the outcome than the therapist-rated alliance, and that
the therapists’ ratings showed poor correlations with the patients’ (Horvath & Symonds, 1991), some more recent studies indicate that therapists’ assessment of the alliance becomes a better predictor of outcome later in therapy (Kivlighan & Shaugnessy, 1995). Some researchers found that ratings of the alliance from the independent observer perspective have significant correlations with outcome, while both patient and therapist ratings were not as predictive (Fenton, Cecero, Nich, Frankforter, & Carroll, 2001). Horvath and Bedi (2002) reported that patient- and observer-rated alliance have a similar relation to outcome (regardless of the source of outcome ratings), while therapist-rated alliance and outcome are somewhat less related. Horvath and Bedi (2002), along with other researchers (Hatcher, Barens, Hansell, & Gutfreund, 1995; Marmar, Horowitz, Weiss, and Marziali, 1986; Tichenor & Hill, 1989) pointed out that each rater’s view of the alliance reflects a qualitatively different aspect of it and provides unique information about the therapeutic relationship. It is, therefore, important to continue studying the alliance from all perspectives.

One of the issues that has been discussed over the years in alliance literature is the possible role of a “halo effect,” that is the exaggerated relations between the alliance and the outcome due to the fact that both the alliance and the outcome are rated by the same participants. Horvath and Bedi (2002) concurred with the conclusions of others (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000) in finding no difference between the effect sizes based on the “same-source” alliance and outcome ratings and the effect sizes based on studies with different sources of the alliance and outcome assessment.
The relationship between alliance-ratings at different points in treatment and the final outcome has been investigated by many researchers. Horvath and Symonds (1991) found that the early and late alliance measures predict outcome better than the alliance assessments obtained in the middle phase of treatment or the alliance averaged across treatment. According to Horvath and Bedi (2002), subsequent investigations confirmed this trend. There is substantial empirical evidence that establishing a strong alliance early in therapy is paramount to the success of treatment and that the alliance measured between the third and fifth sessions is a consistent predictor of final therapy outcome (Horvath & Bedi, 2002). Moreover, the strength of the alliance after the first session has been shown to be a good predictor of dropout from treatment (Kokotovic & Tracey, 1990; Tryon & Kane, 1995). These findings also speak against the suggestion that the relation between alliance and outcome is merely an artifact and a by-product of treatment gains (Horvath & Luborsky, 1993).

Several researchers attempted to investigate the development of the alliance over the course of treatment. Gelso and Carter (1994) suggested that the alliance in successful treatment follows a curvilinear trajectory: initially established strong alliance deteriorates during the middle phase of treatment due to therapist’s increasing challenge to patient’s dysfunctional relational schemas, and improves again toward the end of treatment. The empirical evidence in support of this hypothesis is mixed. Some studies found that the alliance remains stable across the time (Bachelor & Salame, 2000; Krupnick et al., 1996), while others found evidence for the linear growth (Kivlighan & Shaughnessy, 1995). Kivlighan and Shaughnessy (2000) examined the development of the alliance across four
sessions of counseling and discovered three patterns of alliance development: stable alliance, linear alliance growth and quadratic alliance growth. A pattern of quadratic alliance development was associated with greater improvement on outcome measures when compared to other patterns of alliance development. Tracey and Ray (1984) also found that this quadratic trend differentiated good from poor outcome cases with the good ones showing the high-low-high trajectory. Although not finding the support for the cyclical model of alliance development for patients and therapist on a group level, Bachelor and Salame (2000) indicated that individual therapists' and patients’ perceptions of various aspects of the alliance showed variation over one time period or another. They concluded that “single assessments of many facets of the participants’ perceptions of the relationship cannot be assumed to be representative of their perceptions throughout the course of therapy” (p.49). The evidence for the dynamic, labile nature of the alliance comes from the longitudinal case studies of more and less successful therapies (Golden & Robbins, 1990; Horvath & Marx, 1990). These studies found high-low-high pattern of alliance development in good outcome cases and suggested that the course of the alliance in a successful therapy is characterized by a series of ruptures and repairs. The next section of this paper will review the literature on the alliance ruptures and rupture resolution in detail.

1.3 Ruptures in Therapeutic Alliance and their Resolution

Although the concept of ruptures in therapeutic alliance (also called strains, breaches, tears in the alliance) is relatively new, working through impasses or difficulties
in therapeutic relationship has long been considered pivotal in the process of therapeutic change (Safran & Muran, 2000; Wallner Samstag, Muran, & Safran, 2004). In psychoanalytic theory, working through patient’s resistance, which was initially seen as an impediment to the analytic process, eventually was conceptualized as the core mechanism of change by the ego psychological school (Bordin, 1994; Safran & Muran, 2000). According to Kohut (1984), empathic failures on the part of a therapist are not only inevitable in the course of the therapeutic process but are, in fact, ascribed a central role in the process of change. Therapist’s ability to attend to empathic failures by validation of patient’s subjective experience and affective attunement results in patient’s internalizing these “therapist’s selfobject functions” and patient’s capacity to tolerate disappointments and developing a cohesive sense of self. Alexander and French (1946, cited in Safran, 1993a) suggested than change takes place though the corrective emotional experience which the therapist provides by behaving differently from the patient’s parents in a conflict situation and thus disconfirming patient’s expectations and beliefs about interpersonal relations. A similar concept was proposed and empirically tested by Weiss, Sampson and their colleagues from the Mount Zion Psychotherapy Research Group (1986) who theorized that people’s problems result from the pathogenic beliefs about interpersonal relationships. These pathogenic beliefs (e.g., that anger will lead to retaliation or that dependence will lead to abandonment) originated as a result of interactions with significant others in the past. According to Weiss and colleagues (1986), the process of disconfirming the patient’s pathogenic believes constitutes a central mechanism of change, and patients unconsciously submit therapist to “transference tests”
in order to disconfirm these beliefs. Their empirical studies showed that the
disconfirmation of pathogenic beliefs is related to both immediate (i.e., in session) and
ultimate outcome (Weiss et al., 1986).

The concept of the alliance rupture overlaps to a certain degree with the above
mentioned concepts of resistance, empathic failure, countertransference enactment
(Safran & Muran, 1996, 2000). However, the concept of the alliance rupture “has a
certain heuristic value because of its link to current psychotherapy research and because
of its transtheoretical status” (Safran & Muran, 1996). It is understood to be a function of
both patient and therapist contribution which further distinguishes if from other
definitions of therapeuetic impasses that put responsibility for its development on either
patient (e.g., resistance, transference test) or therapist (e.g., empathic failure,
countertransference reaction) (Safran, 1993a; Safran & Muran, 1996; Wallner Samstag,
Muran, & Safran, 2004).

The alliance rupture is broadly defined as tension, breakdown or deterioration in
the relationship between patient and therapist, or as a negative shift or fluctuation in the
quality of the existing alliance or an ongoing problem establishing one (Safran, 1993b;
Safran & Muran, 1996; Safran, Muran, Samstag, & Stevens, 2002; Safran, Crocker,
McMain, & Murray, 1990; Wallner Samstag, Muran, & Safran, 2004). They can be also
described as “breaches in relatedness” (Safran, 1993a) or “emotional disconnection”
between patient and therapist (Wallner Samstag, Muran, & Safran, 2004). The alliance
ruptures vary in intensity and duration from minor tension which can go unnoticed even
by a skilled therapist to major problems in communication that, if unresolved, can lead to
premature termination or negative outcome (Safran, Crocker, McMain, & Murray, 1990; Safran, Muran, Samstag, & Stevens, 2002). Ruptures can occur during different phases of treatment and with various frequencies.

Bordin (1994) awarded central importance to the dynamics of strains in the alliance during the process of therapeutic change. Safran and his colleagues have discussed at length, from both theoretical and empirical perspectives, the importance of investigating alliance ruptures (Safran, 1993a; Safran, 1993b; Safran & Muran, 1996; Safran & Muran, 2000; Safran, Muran, Samstag, & Stevens, 2002; Safran, Crocker, McMain, & Murray, 1990). They suggested that alliance ruptures inevitably occur in the course of treatment and can provide a valuable opportunity for therapeutic change. Safran (1993b) outlined three factors that make alliance ruptures “important therapeutic junctures.” First of all, negative patient-therapist interactions in which therapists respond to patients’ hostile communications with similarly hostile communications have been shown to result in poor outcome and treatment failure (Strupp, 1980). Second, ruptures provide the therapist with an opportunity to explore patients’ expectations and beliefs that constitute their core dysfunctional interpersonal schema, since they often emerge when therapist unwittingly participates in maladaptive interpersonal cycles. Finally, the exploration and resolution of the ruptures can provide the patient with a corrective emotional experience and can modify their dysfunctional interpersonal schemas.

Ruptures in therapeutic alliance have only recently become a subject of rigorous empirical investigation. Safran, Muran, Samstag, and Stevens (2002) reviewed the existing research related to the alliance ruptures and outlined several emerging trends.
First of all, it appears that patients often avoid revealing their negative feelings about therapists and therapy process (Rennie, 1994; Regan & Hill, 1992; Hill, Thompson, Cogar, & Denman, 1993) while even experienced therapists are unable to detect problems in the relationship with patients (Regan & Hill, 1992; Hill, Thompson, Cogar, & Denman, 1993). Two studies conducted retrospective analyses of therapeutic impasses from patients’ (Rhodes, Hill, Thompson, and Elliott, 1994) and therapists’ (Hill, Nutt-Williams, Heaton, Thompson, and Rhodes, 1996) perspectives. The first study showed that when misunderstandings occurred in a context of poor therapeutic relationship and patients were not able to assert their negative feelings about being misunderstood, they eventually quit therapy. On the other hand, when the misunderstanding occurred in a context of good relationship, patients were willing to openly confront their therapists about their negative feelings, and patients and therapists engaged in a mutual repair process over some period of time, the misunderstandings were resolved which led to an enhanced relationship with the therapist and to patient’s growth. The second study conducted a qualitative analysis of therapists’ recollection of ruptures that led to unilateral termination. The study showed that patients did not reveal their dissatisfaction until they prematurely terminated, and therapists reported that they were not aware of any problems in the relationship until patients quit therapy.

Second, even when therapists become aware of ruptures in the alliance, they find it difficult to address them in a way leading to their repair and improvement in the alliance. In fact, they may unwittingly contribute to further deterioration of the relationship and to poor outcome of treatment. Several studies (Castonguay, Goldfried,
Wiser, Raue, & Hayes, 1996; Critchfield, Henry, Castonguay, & Borcovec, 1999; Piper, Azim, Joyce, & McCallum, 1991; Piper, Ogrodniczuk, Joyce, McCallum, Rosie, O’Kelly, & Steinberg, 1999) found that in poor outcome cases, therapists, confronted with ruptures in the alliance, attempted to address them by increasing adherence to the treatment model (i.e., challenging distorted cognitions in the CBT modality or transference interpretations in psychodynamic therapy). Critchfield and colleagues (1999, cited in Constantino, Castonguay, & Schut, 2002) used the Structural Analysis of Social Behavior, a well-established measure of interpersonal process, to examine the differences in the nature of therapeutic relationship between cases with good outcome, declining outcome (high level of functioning at termination but a low level at 12-month follow-up) and poor outcome (low level of functioning at both termination and follow-up) in cognitive-behavioral therapy for generalized anxiety disorder. They found that patients in the declining and poor outcome groups showed higher level of control toward therapists. Therapists in the poor outcome group responded to this behavior with the increased attempts to control the session, thus engaging in a power struggle and a vicious cycle of negative interpersonal process, as opposed to therapists in the declining outcome group who granted patients more interpersonal distance. These findings are similar to those of the Vanderbilt studies which also used the SASB to measure the interpersonal process (Henry & Strupp, 1994; Strupp, 1993). Strupp and colleagues found that the interpersonal process associated with poor outcome was characterized by negative complementarity (interpersonally disaffiliative communications) and higher evidence of therapists’ hostile control. Therapists in the Vanderbilt II study who underwent extensive training in a
manualized form of psychodynamic treatment specifically focused on patient-therapist relationship and managing maladaptive interpersonal patterns, however, showed more negative disaffiliative process and became more authoritarian and defensive, despite exhibiting good adherence to the model. In fact, as mentioned before, it appears that, faced with the difficulties in therapeutic relationship, therapists increased rigid adherence to the model which negatively affected the alliance and outcome.

Several small sample qualitative studies attempted to investigate factors that contribute to the resolution of the alliance ruptures. Foreman and Marmar (1985) selected six patients who initially displayed poor alliance out of a sample of 52 patients undergoing short-term dynamic psychotherapy of bereavement. Of these patients, three had improved alliance over the course of treatment and had good outcome, while the other three did not improve alliance and had poor outcome. The researchers found that the alliance improved when therapists directly addressed patient’s defenses, guilt and expectation of punishment, patient’s negative feelings toward the therapist, and linked the problematic feeling in relation to therapist with patient’s defenses. When therapists’ interventions failed to directly address problems in the relationship, the alliance did not improve.

Lansford (1986) specifically studied weakening and repairs in the alliance by looking at six cases in short-term psychotherapy. Independent raters assessed the effectiveness in repairing weakened alliance by observing segments of sessions and were able to predict outcome based on the degree of successful resolution of ruptures. She also found that when patients initiated addressing problems in the relationship and worked
with therapists to repair weakened alliance, it resulted in the highest patients' alliance ratings. Lansford emphasized the role of addressing strains in the alliance during the process of change by stating that "if weakenings [in the alliance] were successfully repaired and resolved, then one could say that the person had been able...to change what was most painful or difficult in his or her life" (p. 366).

The most extensive and detailed empirical investigation of the ruptures in therapeutic alliance and the process of their resolution has been undertaken by a group of researchers at the Brief Psychotherapy Research Program (Muran, 2002; Safran & Muran, 1996; Safran & Muran, 2000; Safran, Muran, Samstag, & Stevens, 2002; Safran, Crocker, McMain, & Murray, 1990). Their approach to the study of the alliance ruptures was guided by the task analytic paradigm for the psychotherapy research (Rice & Greenberg, 1984; Safran, Greenberg, & Rice, 1988). Task analysis integrates qualitative and quantitative analytic procedures in order to develop a model of the change process for a particular psychotherapy event. According to Safran and his colleagues (Safran, Muran, Samstag, 1994), the main principle of the task analysis is an "ongoing oscillation between theory building and empirical analysis" (p.227). Thus, the model of the resolution process is initially developed based on theory and refined through the intensive analysis of single cases by identifying recurring patterns of change. In the second stage, the model is empirically tested using group data by determining whether the presence of the patterns described in the model differentiates between rupture resolution and nonresolution events. In the third stage, treatment interventions are developed and refined based on the findings of the previous two stages. Finally, the efficacy of treatment
interventions is evaluated which at the same time represents a model verification and a treatment outcome study (Safran & Muran, 1996; Safran, Muran, Samstag, & Stevens, 2002).

The preliminary model of the rupture resolution was based on psychodynamic and interpersonal theory (Safran, Muran, & Samstag, 1994) and included several stages. First, the patient reenacts with the therapist his or her characteristic maladaptive interpersonal pattern (e.g., anticipating abandonment patient withdraws). The therapist unwittingly responds in a complementary fashion, thus contributing to the dysfunctional interpersonal cycle (e.g., reacting to patient’s withdrawal, the therapist becomes bored, unresponsive or frustrated). In the next stages, the therapist becomes aware of his role in the enactment and begins disembedding from the negative process by metacommunicating to the patient about the current interaction, exploring patient’s experience of it in the “here and now” and by accepting his or her responsibility for contributing to the interaction.

This preliminary model was first subjected to an informal empirical investigation by careful and intensive qualitative analysis of the rupture events in 15 psychotherapy sessions selected from a pool of 29 cases treated for depression and anxiety disorders with an integrated cognitive-interpersonal approach (Safran, Crocker, McMain, & Murray, 1990). The rupture events were selected based on patients’ and therapists’ postsession scores on six questions from the WAI (Horvath & Greenberg, 1986). Patients and therapists rated each third of the session (i.e., beginning, middle and end) on six alliance questions. Sessions where both patient and therapist indicated significant deterioration of alliance in the middle part of the session relative to the alliance in the
beginning and to the improved alliance in the end of the sessions were reasoned to represent rupture events which were resolved. The researchers distinguished seven different rupture markers because of their recurrent emergence in the sample of rupture events: (1) overt expression of negative sentiments; (2) indirect communication of negative sentiments or hostility (e.g., sarcasm, passive-aggressive behavior); (3) disagreement about the goals or tasks of therapy; (4) superficial compliance; (5) avoidance maneuvers (e.g., changing a topic, ignoring therapist’s remarks); (6) self-esteem – enhancing operations; (7) nonresponsiveness to intervention (Safran, Crocker, McMain, & Murray, 1990). Subsequently, these seven rupture categories were grouped into two major types: confrontation ruptures and withdrawal ruptures (Safran, Muran, & Samstag, 1994). A confrontation rupture is characterized by an aggressive and accusatory statement of resentment or dissatisfaction in regard to the therapist or some aspect of the therapy process. A withdrawal rupture is characterized by patient disengaging from the therapist, some aspect of the therapy process or from his or her own internal experience. Recently, Wallner Samstag, Muran, and Safran (2004) attempted to distinguish confrontation ruptures, where patients expressed anger in an indirect and hostile and controlling manner from patient’s direct expression of negative feelings towards the therapist and open exploration of these emotions. As a result, the concept of confrontation ruptures was further refined to include two subcategories: (a) attacking and blaming the therapist, and (b) manipulating the therapist.

The preliminary model of the rupture resolution was adjusted based on comparison to actual observations of the rupture events from the selected sessions. The
proposed model (Stage-Process Model I) included four stages: (1) attending to the rupture marker, (2) exploring the rupture experience, (3) exploring the avoidance, and (4) exploring the interpersonal schema (Safran, Crocker, McMain, & Murray, 1990; Safran, Muran, & Samstag, 1994; Safran & Muran, 1996). This model was tested based on a new sample from the original pool of 29 cases using four rupture resolution and three nonresolution sessions that were selected according to the above described criteria (Safran, Muran, & Samstag, 1994). Several measures of psychotherapy process such as the Structural Analysis of Social Behavior (SASB; Benjamin, 1974), the Experiencing Scales (EXP; Klein, Mathieu-Coughlan, Kiesler, 1986), and the Client Vocal Quality Scales (CVQ; Rice & Kerr, 1986) were applied in order to operationalize various dimensions of the model components. The results of the study provided evidence of a higher frequency of model components in the four rupture resolution sessions compared to three nonresolution sessions. However, stage 4 (exploration of interpersonal schema) was only found in two of the four resolution sessions which led to eliminating this stage from the model and substituting it with a stage called “self-assertion” (i.e., patient directly expresses his or her needs or feelings toward the therapist in a manner that involves the acceptance of responsibility for them in a non-demanding and non-blaming fashion). The refined model was named Stage-Process Model II (Safran, Muran, Samstag, & Stevens, 2002).

Stage-Process Model II was subjected to a formal empirical analysis (Safran & Muran, 1996). In order to evaluate how well the revised model described the data set on which it was developed, the original four resolution sessions were compared to four
nonresolution sessions from the same patients. In addition, a replication study was conducted with a new data set containing six sessions (three resolution and three non-resolution) from three new cases treated by three different therapists. Sequential analyses were applied to both data sets in order to confirm the hypothesized sequences of resolution stages and find out the extent to which these sequences would emerge in nonresolution sessions. Overall, the results of these studies provided support to the presence of hypothesized components of the Stage-Process Model II in resolution sessions and demonstrated statistically significant differences between resolution and nonresolution sessions (Safran & Muran, 1996).

Qualitative analysis of the new cases as a part of the above mentioned replication study led to the further revision of the model (Safran & Muran, 1996). The four stages of rupture resolution proposed in the Stage-Process Model II were retained but stage four (self-assertion) was reconceptualized using the Core Confictual Relationship Theme (CCRT; Luborsky & Crits-Christoph, 1988). The CCRT views patient's relational patterns as consisting of three components: (1) wish, or what the individual wants or needs from the other; (2) response of the other; and (3) response of the self. It was observed that stage four of the resolution processed is expressed differently in withdrawal and confrontation ruptures, and does not necessarily take form of self-asserting negative feelings. However, it appears to involve the expression of the patient's underlying wish/need (e.g., need for agency or need for nurturance). Thus, stage four was reconceptualized as the Emergence of the Wish/Need (Stage-Process Model III) (Safran, Muran, Samstag, & Stevens, 2002).
In the course of the development of the model of rupture resolution described above, Safran and his colleagues (Muran, 2002; Safran, Muran, Samstag, & Stevens, 2002) created a self-report measure for identifying ruptures in the alliance and rupture resolution events and establishing their relationship to overall outcome. The post-session questionnaire (PSQ) is completed by both patient and therapist after each psychotherapy session. It includes direct questions about the presence of a rupture in the alliance (“Did you experience any problem or tension in your relationship with your therapist/patient during the session?”) and their resolution (“To what degree do you feel this problem was resolved by the end of the session?” [rated on a 5-point scale]), as well as the Rupture Resolution Questionnaire specifically designed to identify the presence of experiences hypothesized to be associated with the rupture resolution process (RRQ; Winkelman, Safran, & Muran, 1996). This measure will be discussed in more detail below. Several studies (see Muran, 2002 for a review) demonstrated the psychometric properties of the PSQ, including its ability to detect ruptures and rupture resolution, as well as its predictive validity.

The proposed model of the rupture resolution was further investigated through a series of studies that examined the efficacy of Brief Relational Therapy (Safran & Muran, 2000), a short-term treatment which integrates principles of rupture resolution with elements of relational psychoanalysis, humanistic/experiential psychotherapy and contemporary theories on cognition and emotion (Safran, Muran, Samstag, & Stevens, 2002). A treatment study of 128 personality disordered patients compared the BRT, short-term psychodynamic and cognitive-behavioral treatments (Muran & Safran, 2003).
Although all three treatments were equally effective for patients who completed treatment, the BRT was significantly more superior to the other two modalities based on the dropout rates. Another study attempted to evaluate the efficacy of the BRT with patients who have difficulties establishing therapeutic alliance and are at risk for premature termination (Safran & Muran, 2002). 59 patients were randomly assigned to either the psychodynamic or CBT treatment model. Patients were monitored early in treatment to identify those who were having difficulties establishing an alliance with their therapists and were at risk for dropout. These patients were offered to be reassigned to a therapist from another treatment condition: either to BRT or to the control for their previous treatment (i.e., patients who were treated in the CBT modality were transferred to the psychodynamic treatment, whereas patients from the psychodynamic treatment were switched to the CBT). Of the 59 patients in the study, 18 (31%) met criteria for a switch and were offered an opportunity to be reassigned. Ten patients agreed to be transferred to another treatment modality. Of the five patients assigned to the BRT, three completed treatment with good outcome, one moved out of state after completing midphase (with good outcome), and one dropped out. Of the five patients transferred to the control conditions, all five dropped out. Although the sample size in this study was small, it provided preliminary evidence to the superiority of the treatment which employs interventions specifically geared to rupture resolution for patients who have difficulties establishing and maintaining the therapeutic alliance and are, therefore, at risk for poor outcome and dropout.
1.4 Reconceptualizing the Alliance

Building on Bordin’s (1979; 1994) transtheoretical tri-partite model of alliance, contemporary relational psychoanalytic thinking (Benjamin, 1988; Mitchell) and their empirical research on alliance ruptures and their resolution, Safran and Muran (2000; 2001; Safran, 2003; Safran, Muran, Samstag, & Stevens, 2002) have proposed a reconceptualization of the alliance as an “ongoing process of intersubjective negotiation, that is, the negotiation of the respective needs of two independent subjects” (Safran & Muran, 2001, p.165). As discussed above, three dimensions of the alliance outlined by Bordin (bond, tasks and goals) are interdependent and influence each other in an ongoing fashion. When disagreements about therapeutic tasks and goals arise, a strong preexisting bond between patient and therapist allows them to constructively negotiate the problem. On the other hand, successful resolution of the rupture through negotiation between different perspectives enhances patient’s feelings of trust and provides patient with an experience of authentic relatedness (Safran, 1993a). Furthermore, in the process of a constructive negotiation with a therapist patient develops a capacity to negotiate the needs of the self versus the needs of the others which, according to Safran and Muran (Safran, Muran, Samstag, & Stevens, 2002) constitutes an “ongoing challenge of human existence” (p.236).

Safran and his colleagues (Safran, 2003; Safran, Muran, Samstag, & Stevens, 2002) emphasize that negotiation of therapeutic tasks and goals is a ubiquitous phenomenon in psychotherapy occurring both explicitly and implicitly (out of conscious awareness of participants). However, when there is a rupture in the alliance the process of
negotiation itself becomes the most salient feature of the change-producing therapeutic process. Safran and colleagues (Safran, Muran, Samstag, & Stevens, 2002) also point out that this process should not be aimed at superficial agreement and compliance but rather reflect a “genuine confrontation between individuals with conflicting views, needs, or agendas” (p. 236).

There is limited empirical research on the construct of the alliance as negotiation. The pioneering effort belongs to Winkelman, Safran, and Muran (1996) who developed a self-report measure, the Rupture Resolution Questionnaire, to identify the presence of experiences hypothesized to be associated with the process of rupture resolution. The RRQ can be construed as a measure of alliance as negotiation. Unlike most measures of the alliance described in the previous section, which focus on the agreement between patient and therapist, the RRQ focuses on experiences associated and resulting from the constructive negotiation of conflict between them. Initially, 68 items and 9 underlying theoretical dimensions were generated by a team of psychotherapy researchers and were agreed by consensus. These items were subjected to a content validation procedure involving relevancy ratings first by 10 senior clinicians, and then by 60 graduate students in clinical psychology or recently graduated clinicians. Based on the results of the reliability and item analyses, the items derived from the six dimensions were retained to construct the RRQ. The dimensions were as following:

1. Affective Attunement – emotional connection between patient and therapist

(similar to the bond aspect of the therapeutic alliance);
2. Separation-Individuation – the recognition that patient and therapist are separate individuals with their own needs, which also includes self-assertion;

3. Patient Owns Role in Interaction – patient’s recognition and acknowledgement of own contribution to rupture;

4. Expansion of self-definition – discovery of previously avoided emotions that emerge in the exploration of the rupture with the therapist;

5. Coming Clean – experience of relief resulting from disclosing uncomfortable feelings;

6. Disconfirmation – experience of having implicit fears about relationships disconfirmed through interactions with the therapist.

The psychometric properties of the instrument were tested on a sample of 37 cases. The results were promising: the RRQ demonstrated adequate internal consistency (.84), modest concurrent validity with regard to patient and therapist-ratings of session impact \( r = .25-.68 \) and therapeutic alliance measured with WAI (WAI-12: Tracey & Kokotovic, 1989) \( r = .49-.59 \), and modest predictive validity with regard to the overall outcome \( r = .13-.38 \). Clearly, these results are limited due to a small sample size and should be replicated on a larger sample.

1.5 **Summary and Conclusions**

More than sixty years of empirical research on psychotherapy outcome and process strongly support the following findings: (1) psychotherapy, in general, is effective; (2) different types of psychotherapy are relatively equivalent in producing
therapeutic change; (3) measures of therapeutic relationship correlate more highly with outcome than specialized therapy techniques; (4) the quality of the therapeutic alliance appears to be the most robust predictor of the outcome.

Therapeutic alliance became a focus of rigorous empirical investigation. The concept of the alliance has been refined over the years, with multiple instruments designed to measure it, thereby contributing to the definition of the construct. The recent reconceptualization of the alliance as an ongoing negotiation requires further empirical investigation. The alliance appears to be dynamic, and fluctuations in the alliance (i.e., ruptures and resolutions) appear to be important change-related events in the therapy process. The empirical research on alliance ruptures and resolution is promising. However, the number of studies investigating this issue is limited; most of the studies are qualitative and based on small sample sizes. Having said that, the preliminary evidence suggests that the process of recognizing and addressing ruptures in the therapeutic alliance may play an important role in preventing patient dropout and in facilitating good outcome. There is also evidence that even experienced clinicians experience difficulties recognizing and resolving ruptures in the alliance. Continued research on the mechanism of rupture resolution would clearly have implications for practice, potentially providing clinicians with guidelines on how to effectively deal with problems in the alliance. Psychometrically sound measures of rupture resolution would facilitate these research efforts.
1.6 Statement of Purpose and Research Hypotheses

The purpose of this dissertation is to conduct a study of the psychometric properties of the patient self-report measure, the Rupture Resolution Questionnaire (RRQ), and to establish the RRQ as a measure of the therapeutic alliance as negotiation. These questions will be addressed by examining convergent and discriminant relations between the RRQ and various measures of psychotherapy process and treatment outcome.

The research hypotheses are as follows:

1. Therapeutic alliance rupture resolution as measured by the RRQ will be positively related to the global index of the rupture resolution.

2. Therapeutic alliance rupture resolution will be positively related to the strength of the therapeutic alliance.

3. Therapeutic alliance rupture resolution will be positively related to the depth of the therapy session.

4. Therapeutic alliance rupture resolution will be negatively related to the smoothness of the therapy session.

5. Therapeutic alliance rupture resolution will be positively related to global treatment outcome.
CHAPTER II
METHOD

2.1 Participants

Subjects in this study were patient-therapist dyads who participated in the Brief Psychotherapy Research program at Beth Israel Medical Center between 1994 and 1999. Patients were recruited through advertisements in the local newspapers or referred directly to the program. Participation is voluntary, following informed consent regarding the parameters of the overall research protocol (see Appendix A). Inclusion criteria for participation in the program include: (1) 18-65 years old; (2) willingness to be videotaped; (3) willingness to complete research assessment parameters. Exclusion criteria for the program include: (1) organic brain syndrome or mental retardation; (2) psychosis or need for hospitalization; (3) Bipolar Disorder; (4) active substance abuse disorder; (5) active Axis III medical diagnosis; (6) history of violent behavior or impulse control problems; (7) active suicidal behavior, and (8) Cluster B or C Personality Disorder on Axis II.

Patients were screened for inclusion and exclusion criteria during a thorough intake procedure that includes an initial phone interview, a completion of a packet of intake questionnaires (to be described below) and two structured diagnostic interviews (SCID-P: Spitzer, Williams, Gibbon, & First, 1988; SCID-II: Spitzer, Williams, & Gibbon, 1987). As participants in this program, patients received brief, low cost
psychotherapy, with fees determined on an income-based sliding scale. Upon acceptance into the program, subjects were randomly assigned to a therapist and treatment modality. Treatment modalities included short term dynamic psychotherapy (STDP), supportive psychotherapy (SUP), brief adaptive psychotherapy (BAP), cognitive-behavioral psychotherapy (CBT), and brief relational psychotherapy (BRT). Supportive treatment consisted of 40 sessions, whereas all other types of treatment consisted of 30 sessions.

Therapists for the program were recruited from the Beth Israel Medical Center Department of Psychiatry and Behavioral Sciences and included licensed psychologists, licensed psychiatrists, licensed clinical social workers, psychiatric residents (PGY-IIIIs and IVs), and psychology interns and externs.

The subjects in this study were consecutive admissions to the Brief Psychotherapy Research Program who completed at least three RRQs. The study examined the data for 64 therapeutic dyads. Patients ranged in age from 26 to 69 ($M = 43.31$, $SD = 9.94$), and included 28 females and 36 males. 58 participants were Caucasian, 2 were Hispanic, 2 were Asian, and 1 was African-American (information about one participant’s race was unavailable). 32 participants (50%) were never married, 23 participants (35.9%) were married, and 9 participants (14.1%) were divorced or separated. 10 participants (15.6%) attended some college, 25 participants (39.1%) were college graduates, 5 participants (7.8%) had some additional post-graduate education, and 24 (37.5%) participants attained a graduate degree. Most of the participants (81.3%) were employed during the course of treatment. Among these subjects, 34 (53%) were diagnosed with a depressive disorder on Axis I of the DSM-III-R (American Psychiatric Association, 1987) or DSM-IV
(American Psychiatric Association, 1994); 16 (25%) were diagnosed with an anxiety disorder; 7 (11%) were diagnosed with relational problems; and 7 (11%) were diagnosed with an adjustment disorder or did not carry a diagnosis on Axis I. 48 subjects (75%) were diagnosed with an Axis II personality disorder.

25 patients (39%) were treated in the BRT modality; 20 patients (31%) were treated in the BAP modality; 11 patients (17%) were treated in the CBT modality; 7 patients (11%) were treated in the STDP modality; and 1 patient (2%) was treated in the SUP modality. 52 patients (81%) completed the treatment protocol, 11 patients (17%) terminated the treatment prematurely, and 1 patient (2%) had an early termination due to external circumstances.

50 different therapists provided treatment in this study, with 12 therapists treating multiple cases (from 2 to 3). Their age ranged from 26 to 65 years old ($M = 37.77$, $SD = 8.65$). 39 of them were females and 33 were males (for 4 therapists demographic information was unavailable). 39 therapists were Caucasian, 2 therapists were Asian, 1 was Hispanic, 1 characterized herself as “other”, and the rest did not provide information about their race. This group of therapists included 19 psychology externs/interns, 17 psychiatrists, 11 licensed psychologists and 3 clinical social workers.

2.2 Measures and procedures

Both patients and therapists were asked to complete a packet of questionnaires at intake and at termination of the treatment in order to assess the ultimate outcome of treatment. Patients completed the following measures: the Symptom Checklist-90, the
Target Complaints and the Inventory of Interpersonal Problems-64. Therapists completed the Target Complaints, the Inventory of the Interpersonal Problems-32 and the Global Assessment Scale.

*Symptom Checklist-90 Revised* (SCL-90R: Derogatis, 1983) is a self-report inventory developed to assess general psychiatric symptomatology. It consists of 90 items, each rated for degree of severity on a Likert-type scale of 0 to 4, where 0 = “not at all” and 4 = “extremely.” Normative data and adequate psychometric properties have been reported for this instrument. In this study, the Global Severity Index (GSI), which is an overall mean score, was used.

*Target Complaints* (TC: Batle, et al., 1966) is an idiographic instrument developed to assess patients’ particular presenting problems. It asks patients to identify three main problems that they would like to focus on in treatment, and to rate the severity of each problem on a Likert-type scale of 1 to 13, where 1 = “not at all” and 13 = “couldn’t be worse.” The therapist version of the TC measure asks the therapist to independently rate the three problems identified by the patient. Adequate psychometric properties have been reported for this instrument. In this study, the ratings of the three problems (for patient’s and therapist’s version separately) were averaged for an overall index.

*Inventory of Interpersonal Problems* (IIP: Horowitz et al., 1988) is a self-report inventory developed to assess patient’s social adjustment and interpersonal difficulties. Patient’s version (IIP-64) consists of 64 items, each rated for degree of distress on a Likert-type scale of 0 to 4, where 0 = “not at all” and 4 = “extremely.” Therapists
completed a short-form of the inventory (IIP-32), which was developed from factor analytic procedures and consists of 32 questions. Normative data and adequate psychometric properties have been reported for this measure. In this study, the overall mean score was used.

*Global Assessment Scale* (GAS: Endicott et al., 1976) is a clinician-rated scale for evaluating the overall mental health and adaptive functioning of a patient. Therapist provided a single rating on a continuum from 1 (the hypothetically sickest individual) to 100 (the hypothetically healthiest individual). Adequate psychometric properties have been reported for this instrument.

In addition to the measures assessing global outcome of the treatment, patients and therapists were asked to complete parallel versions of the Post Session Questionnaires (PSQ: Muran, Safran, Samstag, & Winston, 2002) after each psychotherapy session (see Appendices B and C). PSQ consists of several measures assessing session impact and the therapeutic relationship, including the Rupture Resolution Questionnaire, the Working Alliance Inventory and the Session Evaluation Questionnaire. In addition, the PSQ includes six direct questions regarding ruptures in the therapeutic alliance. These questions assess the following: (1) whether or not there was any problem or tension in the therapeutic relationship during the session (Rupture Presence); (2) the location of the problem in the session; (3) the severity of the problem (Rupture Intensity, rated on a Likert-type scale from 0 to 5); (4) the degree to which the problem was addressed during the session (Rupture Addressed, rated on a Likert-type scale from 0 to 5); (5) the degree to which the problem was resolved during the session...
(Rupture Resolution, rated on a Likert-type scale from 0 to 5); and (6) a narrative description of a problem.

Session Evaluation Questionnaire (SEQ: Stiles, 1980; Stiles, Shapiro, & Firth-Cozens, 1990; Stiles & Snow, 1984) measures the impact of psychotherapy sessions in terms of depth and smoothness, which have been shown to be distinct, independent dimensions. It consists of 12 bipolar adjective scales presented in seven-point semantic differential format and yields two subscales regarding session smoothness and session depth.

Working Alliance Inventory (WAI: Horvath & Greenberg, 1986, 1989; WAI-12: Tracey & Kokotovic, 1989) is a well-established in psychotherapy research measure of the therapeutic alliance between patient and therapist. It was derived from Bordin’s (1979) transtheoretical perspective and is comprised of three subscales measuring bond, agreement on tasks, and agreement on goals. This study used a 12-item version of the WAI, completed by patient and therapist, and will use the overall mean score. 12 items are rated on a 7-point Likert-type scale where 1 = “never” and 7 = “always.” Both patient- and therapist-rated versions have demonstrated high internal consistency (.85) and robust predictive validity, i.e., significantly correlated to a variety of outcome measures (Horvath & Symonds, 1991; Martin et al., 2002)

The Rupture Resolution Questionnaire (RRQ: Winkelman, Safran, & Muran, 1996), which is the focus of this study, is a self-report measure designed to identify the presence of the experiences hypothesized to be associated with the process of alliance rupture resolution (see Appendix D). It was developed based on series of evaluations of
items and underlying dimensions. The selection process consisted of a content validation procedure involving relevancy ratings first by 10 senior clinicians, and then by 60 graduate students or recently graduated clinicians. As a result, 12 items loading on six dimensions were retained to construct the RRQ. The six dimensions were as follows: (1) Affective Attunement, or the emotional connection between patient and therapist; (2) Separation-Individuation, or the recognition of separateness, including the assertion of own needs; (3) Responsibility, or the recognition of the own role in the interaction; (4) Expansion of Self-Definition, or the discovery of dissociated self-states; (5) Coming Clean, or the experience of relief resulting from disclosing uncomfortable feelings; and (6) Disconfirmation, or the experience of explicit fears disconfirmed (see Appendix E for the definitions of the RRQ dimensions). Patients completed the RRQ only if there was a rupture in the alliance (i.e., they reported a problem or tension in their relationship with the therapist during a session). The number of ruptures and, therefore, completed RRQs ranged from 3 to 29 per case. Table 8, Appendix F presents the frequencies of ruptures for each case.

2.3 Data Analysis

This study examined the psychometric properties of the patient version of the RRQ by conducting the following analyses.

2.3.1 Reliability

Reliability was assessed by examining the internal consistency of the RRQ through item analysis. Item distribution and item-total scale correlations were computed.
In order to examine the underlying structure of the RRQ, principal component analysis was conducted and item-subscale correlations were computed.

2.3.2 Concurrent Validity

In order to assess the concurrent validity of the RRQ, the relationship between the RRQ and several process measures were examined. The following process variables were included in the analyses: the SEQ session impact (depth and smoothness), the working alliance, the session helpfulness as measured by a direct query on a Post Session Questionnaire and the degree of rupture resolution as measured by a single item query on the PSQ. These relationships were examined for patient and therapist ratings on all measures. The data in this study are inherently nested: that is, session data are nested within therapists in temporal order and patient data is nested within therapists. In order to control for the presence of clustered within-subject effects, the Generalized Estimating Equations (GEE) procedures (Diggle, Liang, & Zeger, 1994; Hardin & Hilbe, 2003) were used in the analyses using the XTGEE program in the Stata for Windows Statistical Package (Stata Corporation, 2002).

2.3.3 Predictive Validity

In order to assess the predictive validity of the RRQ, a series of regression analyses between the degree of rupture resolution as measured by the RRQ and the amount of change on the global outcome measures were performed. For all the cases that completed the treatment, residual gain scores (Manning & DuBois, 1962) between Intake and Termination were calculated for all available outcome measures, which included the
SCL-90, the GAS, patient and therapist Target Complaints, the IIP-64 and the IIP-32. Residual gain scores assess the degree to which patients demonstrate relative change over the course of treatment. This method of calculating change is recommended over using the raw difference between pre- and post measures, since it offers a better adjustment for the initial values by excluding the variance attributable to regression to the mean (Cronbach & Furby, 1970; Fiske et al., 1970).

Complete data was not available for all subjects due to premature termination of treatment or failure to submit certain questionnaires. As a result, the number of subjects included in each analysis varied considerably, depending on the availability of the data. The GEE procedures employed for data analysis build statistical models on the available data, therefore their accuracy is not compromised by small to moderate amounts of missing data.
CHAPTER III
RESULTS

3.1 Reliability

Reliability of the RRQ was assessed by computing coefficient alpha to determine the degree of internal consistency. A reliability coefficient of .7 or higher is generally considered to be adequate (Nunnaly, 1978). Cronbach’s alpha was .871, indicating that the RRQ has good internal consistency. Item-total statistics are listed in Table 9, Appendix F.

Principal component analysis using promax with Kaiser normalization was employed in order to examine the underlying structure of the RRQ. Three components with eigenvalues over 1 were extracted (eigenvalues = 5.15, 1.18, 1.02). Taken together, these three components accounted for 61.2% of the variance. The first factor accounted for a considerable proportion (42.9%) of the total variance, with the second and third factors accounting for 9.8% and 8.5% respectively. However, the examination of the scree plot (Figure 1) suggests that there is one dominant factor present.

The pattern of loadings in the structure matrix (see Table 10, Appendix F) indicated that most of the items had factor loadings more than .3 on more than one factor. Furthermore, the component correlation matrix (see Table 11, Appendix F) revealed that all three factors are highly intercorrelated with correlation coefficients higher than .5. The above described results of the factor analysis suggest that the RRQ has a one factor structure.
Finally, item-to subscales correlations were calculated between the RRQ items and theoretically derived six subscales (Winkelman, Safran, & Muran, 1998). All items were highly correlated with multiple subscales and all the correlations were significant at less than .0001 level (see Table 12, Appendix F). These results were similar to the results of the factor analysis, further confirming one factor structure of the RRQ.

3.2 Concurrent Validity

To establish the concurrent validity of the RRQ, the relationships between the RRQ and a number of psychotherapy process variables were analyzed by conducting a series of generalized estimating equations (GEE). The following process variables were included in the analyses: patient-reported session depth (Pt SEQ Depth), session
smoothness (Pt SEQ Smoothness), working alliance (Pt WAI Mean), session helpfulness as measured by a direct query on a Post Session Questionnaire (Pt Session Helpfulness), a degree of rupture resolution as measured by a single item query on the PSQ (Pt Rupture Resolved) and the same variables as reported by therapist (Th SEQ Depth, Th SEQ Smoothness, Th WAI Mean, Th Session Helpfulness, Th Rupture Resolved).

As can be seen in Table 1, there were statistically significant \( p < .0001 \) for all variables, except for Th SEQ Smoothness where \( p = .003 \) relationships in the positive direction between the RRQ Mean and all examined variables.

### Table 1

*Regression Results Using GEE for the RRQ Mean and Process Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>( N )</th>
<th>( \chi^2(1) )</th>
<th>( B )</th>
<th>( SE )</th>
<th>( z )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pt SEQ Depth</td>
<td>613</td>
<td>95.62</td>
<td>1.033</td>
<td>.106</td>
<td>9.78</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Pt SEQ Smoothness</td>
<td>613</td>
<td>23.77</td>
<td>.344</td>
<td>.070</td>
<td>4.88</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Pt WAI Mean</td>
<td>613</td>
<td>78.11</td>
<td>.905</td>
<td>.102</td>
<td>8.84</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Pt Session Helpfulness</td>
<td>608</td>
<td>147.82</td>
<td>1.248</td>
<td>.103</td>
<td>12.16</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Pt Rupture Resolved</td>
<td>606</td>
<td>129.46</td>
<td>.796</td>
<td>.070</td>
<td>11.38</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Th SEQ Depth</td>
<td>518</td>
<td>24.27</td>
<td>.404</td>
<td>.082</td>
<td>4.93</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Th SEQ Smoothness</td>
<td>518</td>
<td>8.70</td>
<td>.214</td>
<td>.072</td>
<td>2.95</td>
<td>.003</td>
</tr>
<tr>
<td>Th WAI Mean</td>
<td>520</td>
<td>26.34</td>
<td>.442</td>
<td>.086</td>
<td>5.13</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Th Session Helpfulness</td>
<td>517</td>
<td>27.39</td>
<td>.512</td>
<td>.098</td>
<td>5.23</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Th Rupture Resolved</td>
<td>325</td>
<td>12.25</td>
<td>.375</td>
<td>.107</td>
<td>3.50</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

Note. \( N \) are number of sessions; \( n = 64 \) for all analyses, except for Th Rupture resolved where \( n = 62 \); SEQ = Session Evaluation Questionnaire; WAI = Working Alliance Inventory.

Therefore, it can be said that when patients reported higher degree of rupture resolution during a session, both patients and therapists also reported these sessions to be
more helpful, have a stronger working alliance and a higher degree of depth and smoothness.

3.3 Predictive Validity

To examine the predictive validity of the RRQ, a series of regression analyses was conducted between the RRQ Mean and the following measures of the global outcome: patient-rated Symptoms Checklist-90 (Pt SCL-90), patient- and therapist-rated Inventory of Interpersonal Problems (Pt IIP Mean and Th IIP Mean), patient- and therapist-rated Target Complaints Index (Pt TC and Th TC) and therapist-rated Global Assessment Scale (Th GAS). As discussed earlier, residual gain scores were computed for all of the above measures and used in the analyses. The data was analyzed from bivariate and multivariate perspectives. First, bivariate regressions between the RRQ Mean and all the measures of global outcome were conducted. In order to determine whether the RRQ makes a unique contribution to predicting outcome, bivariate regressions between the WAI and the single-item resolution index (Pt Rupture Resolved) and all the measures of global outcome were also conducted, followed by multivariate regressions that included the RRQ Mean and the WAI and the RRQ Mean and the single-item resolution index as predictors. These multivariate analyses are important because of the highly significant associations between the RRQ, the WAI and the single-item resolution index (see section 3.2). Finally, regression analyses for each phase of treatment (beginning, middle and end) were also conducted. For all of the above analyses, GEE could not converge to a solution, so regression with the robust standard errors utilizing the Huber-White estimator of variance was used. This estimator adjusts the standard errors to account for the non-
independence of data. The *robust* and *cluster* options available in the Stata statistical package were utilized to perform these regression analyses.

As can be seen in Table 2, the bivariate regressions between the RRQ Mean and the outcome variables indicated that the RRQ was statistically significantly related to the Th GAS in the positive direction and to the Th IIP and Pt SCL-90 in the negative direction.

Table 2

Regression Results for the RRQ Mean and Outcome Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>df</th>
<th>F(1, df)</th>
<th>$R^2$</th>
<th>$\sqrt{\text{MSE}}$</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Th GAS</td>
<td>46</td>
<td>45</td>
<td>4.51</td>
<td>0.118</td>
<td>1.002</td>
<td>0.537</td>
<td>0.253</td>
<td>2.12</td>
<td>0.039</td>
</tr>
<tr>
<td>Th IIP</td>
<td>13</td>
<td>12</td>
<td>8.60</td>
<td>0.166</td>
<td>0.833</td>
<td>-0.643</td>
<td>0.219</td>
<td>-2.93</td>
<td>0.013</td>
</tr>
<tr>
<td>Pt IIP</td>
<td>45</td>
<td>44</td>
<td>3.04</td>
<td>0.043</td>
<td>0.920</td>
<td>-0.286</td>
<td>0.164</td>
<td>-1.74</td>
<td>0.088</td>
</tr>
<tr>
<td>Th TC</td>
<td>47</td>
<td>46</td>
<td>1.37</td>
<td>0.032</td>
<td>1.026</td>
<td>-0.270</td>
<td>0.231</td>
<td>-1.17</td>
<td>0.248</td>
</tr>
<tr>
<td>Pt TC</td>
<td>45</td>
<td>44</td>
<td>1.06</td>
<td>0.011</td>
<td>0.954</td>
<td>-0.148</td>
<td>0.144</td>
<td>-1.03</td>
<td>0.309</td>
</tr>
<tr>
<td>Pt SCL</td>
<td>45</td>
<td>44</td>
<td>4.25</td>
<td>0.081</td>
<td>0.931</td>
<td>-0.405</td>
<td>0.197</td>
<td>-2.06</td>
<td>0.045</td>
</tr>
</tbody>
</table>

*Note.* GAS = Global Assessment Scale; Th IIP = Inventory of Interpersonal Problems-32 (overall mean); Pt IIP = Inventory of Interpersonal Problems-64 (overall mean); TC = Target Complaints Index; SCL = Symptom Checklist-90.

That is, higher degree of rupture resolution is associated with the improved overall level of functioning (RRQ accounted for 12% of the variance), decreased severity of interpersonal difficulties (RRQ accounted for 17% of the variance) and decreased severity of symptoms by the end of the treatment (RRQ accounted for 8% of the variance). The correlation coefficients between the RRQ and Th GAS, Th IIP and Pt SCL-90 were also computed, and were found to be in the medium range. The correlation between the RRQ and the Th GAS was .34, between the RRQ and Th IIP it was .41 and
between the RRQ and Pt SCL-90 it was .28. The relationships between the RRQ Mean and Pt IIP, Th TC and Pt TC were non-significant.

The results of the bivariate regressions between the WAI and the outcome measures (see Table 3) indicated statistically significant relationships between the WAI and Th GAS and Pt SCL-90. The relationships between the WAI and all other outcome measures were not significant.

Table 3

Regression Results for the WAI and Outcome Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>df</th>
<th>$F(1, df)$</th>
<th>$R^2$</th>
<th>$\sqrt{MSE}$</th>
<th>$B$</th>
<th>$SE$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Th GAS</td>
<td>46</td>
<td>45</td>
<td>5.31</td>
<td>0.086</td>
<td>0.960</td>
<td>0.294</td>
<td>0.128</td>
<td>2.31</td>
<td>0.026</td>
</tr>
<tr>
<td>Th IIP</td>
<td>13</td>
<td>12</td>
<td>0.01</td>
<td>0.001</td>
<td>0.865</td>
<td>0.022</td>
<td>0.178</td>
<td>0.12</td>
<td>0.905</td>
</tr>
<tr>
<td>Pt IIP</td>
<td>45</td>
<td>44</td>
<td>2.19</td>
<td>0.026</td>
<td>0.952</td>
<td>-0.155</td>
<td>0.105</td>
<td>-1.48</td>
<td>0.146</td>
</tr>
<tr>
<td>Th TC</td>
<td>47</td>
<td>46</td>
<td>2.94</td>
<td>0.032</td>
<td>0.987</td>
<td>-0.180</td>
<td>0.105</td>
<td>-1.71</td>
<td>0.093</td>
</tr>
<tr>
<td>Pt TC</td>
<td>45</td>
<td>44</td>
<td>3.11</td>
<td>0.033</td>
<td>0.967</td>
<td>-0.177</td>
<td>0.100</td>
<td>-1.76</td>
<td>0.085</td>
</tr>
<tr>
<td>Pt SCL</td>
<td>45</td>
<td>44</td>
<td>5.03</td>
<td>0.067</td>
<td>0.932</td>
<td>-0.249</td>
<td>0.111</td>
<td>-2.24</td>
<td>0.030</td>
</tr>
</tbody>
</table>

Note. WAI = patient-rated Working Alliance Inventory (overall mean); GAS = Global Assessment Scale; Th IIP = Inventory of Interpersonal Problems-32 (overall mean); Pt IIP = Inventory of Interpersonal Problems-64 (overall mean); TC = Target Complaints Index; SCL = Symptom Checklist-90.

The results of the multivariate regressions between the RRQ Mean, the WAI and the outcome measures are presented in Table 4. The RRQ was significantly related to the Th IIP above and beyond the WAI. The relationships between the RRQ and the Th GAS and Pt SCL-90 significant on the bivariate level were not significant in the context of the WAI.
Table 4
*Multivariate Regression Results for the RRQ, WAI and Outcome Measures*

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>df</th>
<th>F(2,df)</th>
<th>$R^2$</th>
<th>$\sqrt{MSE}$</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Th GAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>46</td>
<td>45</td>
<td>2.52</td>
<td>0.158</td>
<td>0.980</td>
<td>0.248</td>
<td>0.189</td>
<td>1.31</td>
<td>0.197</td>
</tr>
<tr>
<td>Pt WAI Mean</td>
<td>46</td>
<td>45</td>
<td>2.52</td>
<td>0.158</td>
<td>0.980</td>
<td>0.258</td>
<td>0.167</td>
<td>1.55</td>
<td>0.129</td>
</tr>
<tr>
<td>Th IIP Mean</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>13</td>
<td>12</td>
<td>6.97</td>
<td>0.187</td>
<td>0.825</td>
<td>-0.793</td>
<td>0.212</td>
<td>-3.73</td>
<td>0.003</td>
</tr>
<tr>
<td>Pt WAI Mean</td>
<td>13</td>
<td>12</td>
<td>6.97</td>
<td>0.187</td>
<td>0.825</td>
<td>0.146</td>
<td>0.122</td>
<td>1.19</td>
<td>0.256</td>
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<tr>
<td>Pt IIP Mean</td>
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<td></td>
<td></td>
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<tr>
<td>Pt RRQ Mean</td>
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<td>2.10</td>
<td>0.070</td>
<td>0.908</td>
<td>-0.799</td>
<td>0.171</td>
<td>-0.47</td>
<td>0.642</td>
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<tr>
<td>Pt WAI Mean</td>
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<td>-1.50</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>47</td>
<td>46</td>
<td>0.79</td>
<td>0.039</td>
<td>1.023</td>
<td>-0.147</td>
<td>0.213</td>
<td>-0.69</td>
<td>0.494</td>
</tr>
<tr>
<td>Pt WAI Mean</td>
<td>47</td>
<td>46</td>
<td>0.79</td>
<td>0.039</td>
<td>1.023</td>
<td>-0.111</td>
<td>0.130</td>
<td>-0.86</td>
<td>0.396</td>
</tr>
<tr>
<td>Pt TC</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>45</td>
<td>44</td>
<td>0.78</td>
<td>0.018</td>
<td>0.952</td>
<td>-0.038</td>
<td>0.185</td>
<td>-0.20</td>
<td>0.839</td>
</tr>
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<td>Pt WAI Mean</td>
<td>45</td>
<td>44</td>
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<td>0.097</td>
<td>0.117</td>
<td>-0.83</td>
<td>0.413</td>
</tr>
<tr>
<td>Pt SCL</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
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<td>44</td>
<td>2.93</td>
<td>0.100</td>
<td>0.923</td>
<td>-0.227</td>
<td>0.199</td>
<td>-1.14</td>
<td>0.260</td>
</tr>
<tr>
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<td>45</td>
<td>44</td>
<td>2.93</td>
<td>0.100</td>
<td>0.923</td>
<td>-0.157</td>
<td>0.099</td>
<td>-1.59</td>
<td>0.120</td>
</tr>
</tbody>
</table>

*Note.*  WAI = patient-rated Working Alliance Inventory (overall mean); GAS = Global Assessment Scale; Th IIP = Inventory of Interpersonal Problems-32 (overall mean); Pt IIP = Inventory of Interpersonal Problems-64 (overall mean); TC = Target Complaints Index; SCL = Symptom Checklist-90.

The results of the bivariate regressions between the global resolution index (Pt Rupture Resolved) and the outcome measures are presented in Table 5. The results of the multivariate regressions between the RRQ, the global resolution index and the outcome measures are presented in Table 6. As can be seen from Table 5, there were no significant associations between the global resolution index and outcome. Table 6 shows that in the context of the global resolution index, the RRQ was significantly related to Th GAS and Th IIP, while the relationship between the RRQ and Pt SCL-90 was marginally significant.
Table 5
Regression Results for the Global Resolution Index and Outcome Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>df</th>
<th>$F(1, df)$</th>
<th>$R^2$</th>
<th>$\sqrt{MSE}$</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Th GAS</td>
<td>46</td>
<td>45</td>
<td>1.74</td>
<td>0.004</td>
<td>1.043</td>
<td>0.065</td>
<td>0.049</td>
<td>1.32</td>
<td>0.194</td>
</tr>
<tr>
<td>Th IIP</td>
<td>13</td>
<td>12</td>
<td>1.65</td>
<td>0.015</td>
<td>0.894</td>
<td>-0.105</td>
<td>0.082</td>
<td>-1.29</td>
<td>0.223</td>
</tr>
<tr>
<td>Pt IIP</td>
<td>45</td>
<td>44</td>
<td>2.05</td>
<td>0.011</td>
<td>0.929</td>
<td>-0.091</td>
<td>0.063</td>
<td>-1.43</td>
<td>0.159</td>
</tr>
<tr>
<td>Th TC</td>
<td>47</td>
<td>46</td>
<td>0.30</td>
<td>0.003</td>
<td>1.038</td>
<td>0.049</td>
<td>0.089</td>
<td>0.55</td>
<td>0.586</td>
</tr>
<tr>
<td>Pt TC</td>
<td>45</td>
<td>44</td>
<td>0.57</td>
<td>0.003</td>
<td>0.959</td>
<td>-0.047</td>
<td>0.062</td>
<td>-0.76</td>
<td>0.453</td>
</tr>
<tr>
<td>Pt SCL</td>
<td>45</td>
<td>44</td>
<td>3.76</td>
<td>0.032</td>
<td>0.946</td>
<td>-0.159</td>
<td>0.082</td>
<td>-1.94</td>
<td>0.059</td>
</tr>
</tbody>
</table>

Note. WAI – patient-rated Working Alliance Inventory (overall mean); GAS = Global Assessment Scale; Th IIP = Inventory of Interpersonal Problems-32 (overall mean); Pt IIP = Inventory of Interpersonal Problems-64 (overall mean); TC – Target Complaints Index; SCL = Symptom Checklist-90.

Table 6
Multivariate Regression Results for the RRQ, the Global Resolution Index and Outcome Measures

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>df</th>
<th>$F(2, df)$</th>
<th>$R^2$</th>
<th>$\sqrt{MSE}$</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
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<td>Th GAS</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>46</td>
<td>45</td>
<td>3.57</td>
<td>0.135</td>
<td>0.998</td>
<td>0.645</td>
<td>0.325</td>
<td>1.98</td>
<td>0.054</td>
</tr>
<tr>
<td>Pt Rupture Res</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.141</td>
<td>0.126</td>
<td>-1.11</td>
<td>0.271</td>
</tr>
<tr>
<td>Th IIP Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>13</td>
<td>12</td>
<td>4.19</td>
<td>0.159</td>
<td>0.832</td>
<td>-0.593</td>
<td>0.208</td>
<td>-2.85</td>
<td>0.015</td>
</tr>
<tr>
<td>Pt Rupture Res</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.038</td>
<td>0.064</td>
<td>-0.59</td>
<td>0.568</td>
</tr>
<tr>
<td>Pt IIP Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>45</td>
<td>44</td>
<td>2.34</td>
<td>0.046</td>
<td>0.923</td>
<td>-0.245</td>
<td>0.196</td>
<td>-1.25</td>
<td>0.217</td>
</tr>
<tr>
<td>Pt Rupture Res</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.058</td>
<td>0.083</td>
<td>-0.70</td>
<td>0.491</td>
</tr>
<tr>
<td>Th TC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>47</td>
<td>46</td>
<td>1.61</td>
<td>0.057</td>
<td>1.017</td>
<td>-0.402</td>
<td>0.255</td>
<td>-1.58</td>
<td>0.121</td>
</tr>
<tr>
<td>Pt Rupture Res</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.176</td>
<td>0.110</td>
<td>1.60</td>
<td>0.117</td>
</tr>
<tr>
<td>Pt TC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>45</td>
<td>44</td>
<td>0.57</td>
<td>0.012</td>
<td>0.956</td>
<td>-0.147</td>
<td>0.149</td>
<td>-0.99</td>
<td>0.330</td>
</tr>
<tr>
<td>Pt Rupture Res</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.007</td>
<td>0.064</td>
<td>-0.11</td>
<td>0.915</td>
</tr>
<tr>
<td>Pt SCL-90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt RRQ Mean</td>
<td>45</td>
<td>44</td>
<td>2.41</td>
<td>0.091</td>
<td>0.930</td>
<td>-0.341</td>
<td>0.175</td>
<td>-1.95</td>
<td>0.057</td>
</tr>
<tr>
<td>Pt Rupture Res</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.094</td>
<td>0.052</td>
<td>-1.80</td>
<td>0.078</td>
</tr>
</tbody>
</table>

Note. Pt Rupture Res = Global Resolution Index.

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Finally, multivariate regressions for the RRQ, the WAI and the outcome measures were conducted for the beginning (sessions 1-10), the middle (sessions 11-20) and the end (sessions 21-30) phases of treatment. In the beginning phase of treatment, the RRQ was significantly related in the negative direction to the Th TC (t = -2.15, p = .037) above and beyond the WAI, and the WAI was significantly and positively related to the Th GAS (t = 2.45, p = .019). In the middle phase of treatment, the RRQ was significantly related in the negative direction to the Th IIP (t = -2.35, p = .037) above and beyond the WAI. In the end phase of treatment, the RRQ was significantly related in the negative direction to the Th IIP (t = -3.51, p = .005) above and beyond the WAI. All other relationships between the RRQ, the WAI and the outcome were not significant. Results are presented in detail in Tables 12, 13 and 14, Appendix F.

3.4 Additional Analyses

As described above, the RRQ and the WAI were found to be significantly related to each other and to have significant predictive relationship to some of the outcome measures. After examining the relationships between the RRQ, the WAI and the outcome measures, the mediation effects hypothesis (Baron & Kenny, 1986) was proposed. That is, it was hypothesized that successful rupture resolution improves the overall working alliance, which, in turn, positively affects the outcome. The mediation hypothesis was tested for all the outcome measures significantly predicted by the RRQ (i.e., Th GAS, Th IIP and Pt SCL). Considering that the mediation model is causal and temporal (i.e., it presumes that the independent variable has a causal relationship to the mediator), we used the RRQ Mean for the first 25 sessions as an independent variable and the WAI Mean for
the last 5 sessions as a mediator. The Aroian version of the Sobel test suggested by Baron and Kenny (1986) was utilized to test the mediation hypothesis. We used the calculation method described by Preacher and Leonardelli (2001). As can be seen from Table 7, no significant mediation effects were found for all the tested models.

Table 7
Aroian z values from Testing the Mediation Effects of the WAI on the RRQ for the Outcome Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Th GAS R</td>
<td>1.405</td>
<td>0.1564</td>
</tr>
<tr>
<td>Th IIP M</td>
<td>-0.562</td>
<td>0.5815</td>
</tr>
<tr>
<td>PT SCL R</td>
<td>1.337</td>
<td>0.1782</td>
</tr>
</tbody>
</table>
CHAPTER IV

GENERAL DISCUSSION

The present study was designed to examine the psychometric properties of the self-report patient-rated measure the Rupture Resolution Questionnaire (RRQ) which assesses the presence of experiences associated with the process of alliance rupture resolution, and, as such, is hypothesized to constitute a measure of the therapeutic alliance as negotiation. Overall, the results of this study support the reliability and the validity of the RRQ, and suggest that this measure is a potentially useful instrument for future research on psychotherapy process and outcome.

4.1 Reliability and Structure of the Instrument

Consistent with the previous findings (Winkelman, Safran, & Muran, 1998), this study found the RRQ to be a soundly reliable instrument with an adequate internal consistency (Cronbach’s alpha = .87). The results of the factor analysis and the item-to subscales correlations did not provide evidence for the presence of factors corresponding to six theoretically derived dimensions of the rupture resolution process (i.e., Affective Attunement, Separation-Individuation, Responsibility, Expansion of Self-Definition, Coming Clean, Disconfirmation). It appears that the RRQ has a one-factor structure and measures a unitary construct.
4.2 Construct Validity of the Instrument

The overall results of this study provided substantial support for the construct validity of the RRQ. By examining the relationship between the RRQ and various measures of psychotherapy process, this study found strong evidence for the concurrent validity of the instrument. Previous research has demonstrated that there is invariably some degree of disagreement between patients’ and therapists’ assessment of therapeutic alliance and other facets of psychotherapy process (Bachelor & Salame, 2000; Lambert & Hill, 1994; Tichenor & Hill, 1989), and it is considered critical to include measures from different perspectives. It is important to point out that this study examined the relationship between the patient-rated RRQ and measures of psychotherapy process and outcome from both patient and therapist perspective.

As expected, the RRQ was found to be significantly positively related to both patient’s and therapist’s global index of rupture resolution. The interpretation of this finding is straightforward: it supports the notion that the RRQ measures experiences that are associated with the process of successful rupture resolution.

The high degree of rupture resolution was found to be significantly positively related to both patient’s and therapist’s ratings of session helpfulness. This is an expected finding, consistent with the theoretical understanding of the rupture resolution process (Safran, 1993a; Safran & Muran, 2000; Safran, Muran, Samstag & Stevens, 2002). Regardless of the nature of the rupture, an experience of successfully negotiating the conflict with a therapist is presumed to enhance patient’s feelings of trust and to provide patient with an experience of authentic relatedness (Safran, 1993a). This, in turn, gives
patient a subjective experience of being helped. On the therapist’s side, the process of rupture resolution is probably construed in various ways, depending on the therapist’s theoretical orientation and her understanding of the nature of the therapeutic process. Whether the process of rupture resolution is interpreted as a way of creating corrective emotional experience for the patient or as working through the transference-countertransference enactment or in some other way, it appears that therapists working in different modalities of treatment agree that this experience is therapeutic and helpful to the patient.

The RRQ was found to have a significant and positive relationship with the session depth. That is, when patients reported high degree of rupture resolution, both patients and therapists perceived these sessions to have a higher degree of depth of in-session exploration. This is an expected finding, consistent with the previous research on rupture resolution process (Muran, Safran, Samstag, & Winston, 2003; Winkelman, Safran, & Muran, 1998). This finding suggests that ruptures in the therapeutic alliance are significant treatment events and that the process of their resolution is accompanied by in-depth exploration of patient’s attitudes, beliefs and emotions. The fact that both sides of the therapeutic dyad find the process of resolving ruptures to be a highly meaningful experience, highlights the intersubjective nature of this process.

The RRQ was found to have a significant positive relationship with both patient’s and therapist’s rankings of session smoothness. This relationship was not in the expected direction. It was hypothesized that the process of rupture resolution would be perceived by both participants as uncomfortable and even painful, that is, the opposite of “smooth.”
Previous findings (Winkelman, Safran, & Muran, 1998) in regard to the relationship between the rupture resolution and the patient-rated session smoothness were somewhat mixed: the relationship was negative in the beginning phase of the treatment and positive in the end phase of the treatment. One possible explanation of our finding might be the presence of the halo effect. That is, having successfully negotiated the conflict, both participants are likely to have a sense of satisfaction and relief, which might color their perception of the level of discomfort during this process. On the other hand, if the rupture is not resolved, both participants might have a heightened awareness of having had a “rough” experience during the session.

As expected, this study found the RRQ to be significantly and positively related to the strength of the therapeutic alliance as ranked by both patients and therapists. This finding lends support to the theoretical assumption that successful rupture repair is a crucial factor for maintaining and improving the quality of the therapeutic alliance and it contributes to the body of research providing empirical evidence to this assumption (Foreman & Marmar, 1985; Lansford, 1986; Muran, 2002; Rhodes, Hill, Thompson, & Elliott, 1994; Winkelman, Safran, & Muran, 1998).

To summarize, the results of this study provide strong support for the convergent validity of the RRQ by establishing significant relations between the degree of the rupture resolution and psychotherapy processes that theoretically should be related to the process of rupture resolution. However, an important limitation of this study has to be noted here. Statistical methods employed to examine the above relationships (GEE) do not, at this time, provide information about the magnitude of these relationships, thus
limiting our ability to do more fine-grained analysis of convergent and discriminant validity. For example, we would like to see moderately high strength of the relationship between the RRQ and the WAI in order to establish that these instruments measure related but not completely overlapping constructs.

In regard to the predictive validity of the RRQ, the results of this study were promising but more modest. The predictive validity was examined by analyzing the relationships between the RRQ and patient- and therapist-rated measures of the global outcome of treatment. The RRQ was significantly related to three variables out of six measures of outcome. The RRQ was found to be a significant predictor of the improvement in the patient’s overall level of functioning (as rated by therapist), a significant predictor of the decrease in severity of patient’s interpersonal problems (as rated by therapist) and a significant predictor of the decrease in the severity of symptoms (as rated by patient). The correlation coefficients were in the medium range (.28-.41), which is similar to the effect sizes reported in the literature for the relationship between the outcome and therapeutic alliance and other important psychotherapy variables (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000).

The results of the study also showed that the patient global index of the rupture resolution as measured by a direct single-item query was not significantly related to any of the outcome measures. When the RRQ was related to the outcome in the context of the global resolution index, the associations between the RRQ and two measures of outcome (the global level of functioning and the severity of interpersonal problems) remained significant, and the relationship between the RRQ and the severity of symptoms
approached significance. These findings taken together support the predictive validity of the RRQ.

However, when we examined the relationship between the RRQ and the outcome measures in the context of the WAI, the RRQ was found to make a unique and significant contribution to predicting only one measure of outcome: the decrease in severity of interpersonal problems as rated by therapist. This is an important finding on several accounts. First of all, it suggests that the RRQ measures facets of psychotherapy process that are not fully accounted for by the WAI, which provides further support for the construct validity of the RRQ. Second, it is consistent with the theory that emphasizes the role of rupture resolution in the process of therapeutic change (Bordin, 1994; Lansford, 1986; Safran, 1993b; Safran & Muran, 1996; Safran & Muran, 2000). The successful resolution of the ruptures is hypothesized to produce change by allowing patients to modify their dysfunctional interpersonal schemas (Safran, 1993b). The finding that the high degree of rupture resolution is associated with the improvement in interpersonal functioning provides empirical support to these theoretical assumptions. The fact that the degree of the rupture resolution is assessed by the patients, while the reported change is based on therapists’ ratings is also important. On one hand, it reduces the possibility of the presence of the halo effect which is often suspected when the same participants rate both the process and outcome measures. On the other hand, it is not clear why the degree of rupture resolution was not significantly related to the patient-rated improvement in interpersonal functioning.
The results of the examination of the relationship between the RRQ and the measures of the outcome by each phase of treatment (beginning, middle and end) were largely consistent with the above described findings. The RRQ was found to be a significant predictor of the improvement in the interpersonal functioning (as rated by therapist) above and beyond the contribution of the WAI for the middle and the end phases of treatment, but not for the beginning phase. In addition, the RRQ in the beginning phase of treatment was found to be a significant predictor of the improvement in the severity of the presenting problems as rated by therapist. The WAI in the beginning phase of treatment was found to be significantly related to the therapist-rated overall improvement in functioning above and beyond the contribution of the RRQ.

Finally, this study tested the hypothesis that the working alliance mediates between the degree of the rupture resolution and the outcome. That is, it was hypothesized that the successful rupture repair affects the outcome by improving the overall level of the therapeutic alliance. This hypothesis was rejected due to the non-significance of the tests for the mediation effects.

4.3 General Implications of the Findings

As discussed above, this study showed that successful negotiation of the ruptures is related to various important aspects of psychotherapeutic process from both patient and therapist perspective. Specifically, high degree of rupture resolution appears be associated with the perceived depth of therapeutic exploration, overall helpfulness of the session and improved overall therapeutic alliance. It also appears to be related to the
successful treatment outcome, especially to the improvement in patients' interpersonal functioning and decrease in interpersonal problems. These findings are consistent with the theoretical perspective that emphasizes the role of rupture resolution process in maintaining productive therapeutic relationship and in facilitating good treatment outcome, and provide empirical evidence to support this view.

In summary, the results of this study established the RRQ to be a promising instrument for future research on psychotherapy process and outcome. The RRQ was shown to have adequate reliability, solid concurrent validity and promising predictive validity. Overall findings of this study suggest that the RRQ measures the processes associated with negotiation and resolution of ruptures in the therapeutic alliance that are not directly measured by the existing psychotherapy process instruments. Therefore, the RRQ appears to be a unique measure that has a potential to significantly contribute to the future psychotherapy research. It can allow future researchers to focus their investigative efforts specifically on rupture resolution processes and to further advance our understanding of the rupture resolution process. This research, in turn, would have implications for clinical practice by providing clinicians with useful information on how to effectively address problems in the alliance and to facilitate therapeutic change.

4.4 Limitations of the Study

The general limitation of this study is its reliance exclusively on self-report measures of psychotherapy process and outcome. The overarching assumption of the research that uses self-report measures is that these measures are reliable and valid in a general sense, that is, that the respondents' answers reflect what is going on during a
therapeutic hour and are not just a set of random responses. There is an attempt to incorporate the procedures that would insure that but these safe-guards are not entirely fool-proof. For example, the participants in this study were instructed to complete the questionnaires immediately after the therapeutic hour but we have no means to ensure that they, in fact, did so, rather than reconstructing the events of the session a week or two later. Similarly, when the data are missing, we do not know whether it is a random event or whether the participants “forgot” to complete the questionnaires because the session was particularly uncomfortable (and, thus, potentially containing valuable information). We can account for the missing information statistically, as we did in this study, but we might lose some meaningful and rich data. Having said that, it has to be noted that without extensive use of self-report measures it would be extremely difficult to conduct any research on psychotherapy process and outcome. However, supplementing the self-report measures with observer-rated measures applied to audio- and video recording of psychotherapy and combining quantitative research with qualitative and scrupulous examination of single cases and sessions would enhance our understanding of the processes we study. Some suggestions on how this can be done in relation to the current study will be made below.

This study also had some methodological limitations. First of all, the overall sample size was relatively small (N = 64), and as is common in psychotherapy research, the data were incomplete for many subjects, particularly with regard to outcome data (n = 13-47). This restricted the power of statistical analyses and may have prevented us from discovering other meaningful relationships between the RRQ and outcome. The small
sample size also did not allow us to investigate some potentially existing group
differences (e.g., different modalities of treatment or different diagnostic categories).

Another methodological limitation concerns the use of the GEE which although
beneficial in one aspect (accounting for non-independence of data) had also had some
drawbacks, as it did not allow us to determine the effect sizes for the relationships
between the RRQ and the process measures. This limited out ability to further delineate
the convergent and discriminant validity of the RRQ. It is hoped that with the advance of
the statistical science a method to determine the effect sizes for the GEE analyses will be
found.

Finally, it has to be remembered that this study is observational and
nonexperimental, so the observed relationships between the degree of rupture resolution
and outcome do not necessarily represent causality.

4.5 Directions for Future Research

Further validity studies of the RRQ conducted with larger samples are suggested
in order to confirm and clarify the results of this study, particularly in regard to the
predictive validity of the instrument. Additional validation of the RRQ is recommended
from the independent observer perspective. Videotapes of sessions with low and high
degree of rupture resolution as measured by the RRQ can be subjected to analysis with
the use of the established observer-rated measures such as the Structural Analysis of
Social Behavior (SASB: Benjamin, 1974), Experiencing Scales (EXP: Klein, Mathieu-
Coughlan, & Kiesler, 1986), Client Vocal Quality (CVQ: Rice & Kerr, 1986) and the
Rupture Resolution Scale (RRS: Samstag, Safran, & Muran, 2000), a newly developed
measure specifically designed to identify ruptures in the therapeutic alliance and patient and therapist behaviors that contribute to the rupture resolution.

In addition to providing further information on the validity of the RRQ, observer-rated measures can also be used to gain more information about the process of rupture resolution.
REFERENCES


66


APPENDICES

Appendix A  Patient's Informed Consent

Beth Israel Medical Center
St. Luke's Roosevelt Hospital Center

CONSENT FOR PARTICIPATION IN RESEARCH
J. Christopher Muran, Ph.D.

Name of Subject (Printed)  Principal Investigator
Brief Psychotherapy Research Program

Title of Project

IRB/COSA # 048-88 (16)

Attached to this form is a full description of the study in which we are asking you to participate. The description tells you about the reason for the study, the procedures, interviews, and drugs or devices which may be involved; the duration of the study; and any risks and benefits to you. The description also gives you information about other medical treatments you may receive if you do not want to participate in this study.

If you have questions concerning this research project or your rights as a research subject, or if you have a research-related injury, you may telephone the Principal Investigator
J. Christopher Muran, Ph.D.  at 420-4662

or the Patient Representative  Ms. Laura Weil  at 420-3818

CONSENT TO PARTICIPATE -- ADULT

I have read the attached study description. The purpose of the study, the risks of the study and what it means to participate in the study have all been explained to me, and my questions have been answered. I agree to participate in the study and agree to take all the tests or procedures mentioned in the study description. If I am injured in the study, I understand only immediate essential medical treatment will be provided free of charge. I understand that participating in the study is voluntary, that I can decline to participate, and that I can stop participating at any time. I also understand that my decision to participate in or to withdraw from the study will not affect the health care I receive, now or in the future. I have been told that records of this investigation will be kept confidential to the extent permitted by law but are subject to inspection by the U.S. Food and Drug Administration and study sponsors.

Signature of Subject or Legal Guardian

Signature of Witness

Date  Date

Signature of Authorized Representative or Person Giving Consent

Date  Relationship to Subject

I, _____________________________, have clearly and fully explained to the above subject (or person giving consent) the nature, requirements and risks of the study.

Signature of Researcher

Date

May be Used to Enroll Subjects Until

INSTITUTIONAL REVIEW BOARD

AUG 11 2000

(stamp)

DISTRIBUTION: Original to Research Records; copies for Subject (or Person Giving Permission), Investigator, Hospital Chart and Pharmacy (where appropriate).

Page 1 of 3  Pages
Brief Psychotherapy Research Program

Purpose and Nature of Program
You are being asked to participate in a study involving an integrative form of time-limited psychotherapy incorporating cognitive-behavioral and relational techniques. The techniques used in this integrative treatment have already been demonstrated to be significantly effective. We are now attempting to learn more about the relative contributions of these techniques in effecting overall change so that you and others like you can receive the benefit of the best available treatment approaches.

Treatment Conditions
If you decide to participate, you will first complete a thorough assessment evaluation to determine if time-limited treatment is appropriate for you. You will then be assigned to a therapist based on schedule availability. The therapy will be conducted once per week for 30 weeks. This type of psychotherapy incorporates a generally high level of therapist activity with a focus on specific, targeted problem areas.

If you chose to participate in this study you will be asked to do the following:
1. Not participate in other psychotherapy or take psychoactive medication while receiving treatment in this program.
2. Be available for 30 psychotherapy sessions and any relevant assessment evaluations.
3. Complete a package of questionnaires to evaluate your progress at four points in the treatment:
   a. Before beginning treatment
   b. Midway during treatment
   c. At termination of treatment
   d. Six months after treatment is completed
4. Complete a post-session questionnaire after each session.
5. Agree to have evaluation and treatment sessions videotaped.
6. Consent to have information obtained from videotaped recordings of sessions used for scientific purposes, such as a research study, professional publication, and educational presentations in transcribed, audiotaped, or videotaped format by the program staff.

Treatment Fees
There is no fee for any of the assessment evaluations. The fee for the 30 sessions of therapy is established on an income-sensitive scale, ranging from $30 to $100 per session.

Possible Risks
We know of no inherent risks associated with these treatments. Each type of treatment may cause some emotional discomfort at times, but this is generally considered a natural part of the therapeutic process.

Confidentiality
Information that is obtained in connection with this study that can be identified with you, including evaluation materials and videotaped recordings, will be held in the strictest confidence and would be voluntarily disclosed only with your explicit permission, although confidentiality can never be guaranteed in the absolute sense. The one exception to our ongoing efforts to protect your confidentiality is in the event that you may be in danger of harming yourself or someone else. In accordance with New York State laws, relevant individuals or authorities would be notified. Otherwise, we will share such information only with members of our research and treatment team at Beth Israel Medical Center. The post-session questionnaire, which is not available to your therapist, will identify you solely by your confidential identification number provided at the outset. This provision is made because some of the material in this questionnaire pertains to your relationship with your therapist. While it is possible that at some point in the future selected excerpts from your sessions will be either presented or published for
scientific purposes, adequate precautions will be taken to maintain complete confidentiality, according to the customary professional ethics of Beth Israel Medical Center.

Possible Benefits
The treatment offers possible therapeutic benefits to you because it follows clinical principles that have been tested and proven effective. We are attempting to study specific aspects of cognitive and relational techniques that contribute to, or detract from, their efficacy, particularly in terms of specific types of individuals and specific types of problems. Your participation in the research may be beneficial to you and other mental health treatment consumers in terms of contributing to the development of the most effective integrative, time-limited psychotherapy.

Withdrawal
You may withdraw or cancel your participation at any time and you are under no obligation to participate. If you choose not to participate in this study, or if it is determined that the therapy is not appropriate for you, you will be provided with referrals for alternative forms of treatment. If you withdraw at a later date, you will not jeopardize your future care by doing so. In this event, you will be provided with standard Beth Israel care on the usual basis.

Questions
If you have any questions, you may contact Christopher Muran, Ph.D., Program Director, at 420-3819. If you have any unsatisfied complaints, you may contact Laura Weil, Patient Representative at 420-3818. You may request a copy of this consent form at any time. You may also request feedback regarding aspects of the study upon the termination of your treatment and the completion of the assessment protocol.
Appendix B  Patient Post Session Questionnaire

BRIEF PSYCHOTHERAPY RESEARCH PROJECT
BETH ISRAEL MEDICAL CENTER
NEW YORK NY 10003

PATIENT POST-SESSION QUESTIONNAIRE

Complete immediately after session. Please answer all questions.

Your number ____________________________  Session number ____________________________
Your therapist's initials ____________________________  Date of session ____________________________

PART A

1. Please rate how helpful or hindering to you this session was overall by circling the appropriate number below.

1  2  3  4  5  6  7  8  9
Extremely hindering  Neutral  Extremely helpful

2. Please rate to what extent you feel that the problems you had at the beginning of therapy are resolved.

1  2  3  4  5  6  7  8  9
Not at all  Moderately  Completely

PART B

1. Did you experience any problem or tension in your relationship with your therapist during the session?

Yes  □  No  □

2. If so, about where in the session did this problem begin?

Beginning  □  Middle  □  End  □

3. Please rate the highest degree of tension you felt during the session as a result of this problem.

1  2  3  4  5
Low  Medium  High

4. Please describe the problem briefly:
5. To what extent was this problem addressed in this session?

1 2 3 4 5
Not at all Somewhat Very much

6. To what degree do you feel this problem was resolved by the end of the session.

1 2 3 4 5
Not at all Moderately Completely

7. If this problem was at all resolved, please rate the extent to which each of the following statements reflects your experience.

a. I felt a closer connection with my therapist.

1 2 3 4 5
Not at all Moderately Completely

b. I felt more trusting of my therapist.

1 2 3 4 5
Not at all Moderately Completely

c. I felt able to disagree with my therapist.

1 2 3 4 5
Not at all Moderately Completely

d. I began to feel that my therapist can help me even if he/she is not perfect.

1 2 3 4 5
Not at all Moderately Completely

e. I saw what I was doing to avoid my therapist.

1 2 3 4 5
Not at all Moderately Completely

f. I became aware that I had been upset with my therapist without really knowing it.

1 2 3 4 5
Not at all Moderately Completely

g. I saw that my self-assertion did not drive my therapist away.

1 2 3 4 5
Not at all Moderately Completely

h. My therapist did not react as negatively as I feared he/she would when I expressed anger or vulnerability.

1 2 3 4 5
Not at all Moderately Completely
i. I acted in a way which felt more authentic for me.

1 2 3 4 5
Not at all Moderately Completely

j. I told my therapist something I had been hesitant to say.

1 2 3 4 5
Not at all Moderately Completely

k. I began to get a sense that I can expose risky feelings and not be abandoned by my therapist.

1 2 3 4 5
Not at all Moderately Completely

l. I learned that I have the ability to work things out with my therapist after a misunderstanding or conflict.

1 2 3 4 5
Not at all Moderately Completely

PART C

Please circle the appropriate number to show how you feel about this session.

This session was:

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PART D

The following items reflect your working relationship with your therapist based on your most recent session. Please rate each item by circling the appropriate number in terms of how you felt about this session.

1. My therapist and I agreed about the things I need to do in therapy to help improve my situation.

1 2 3 4 5 6 7
Never Sometimes Always
2. What we are doing in therapy gave me new ways of looking at my problem.

1 2 3 4 5 6 7
Never Sometimes Always

3. I believed that my therapist likes me.

1 2 3 4 5 6 7
Never Sometimes Always

4. My therapist did not understand what I am trying to accomplish in therapy.

1 2 3 4 5 6 7
Never Sometimes Always

5. I was confident in my therapist's ability to help me.

1 2 3 4 5 6 7
Never Sometimes Always

6. My therapist and I worked towards mutually agreed upon goals.

1 2 3 4 5 6 7
Never Sometimes Always

7. I felt that my therapist appreciates me.

1 2 3 4 5 6 7
Never Sometimes Always

8. We agreed on what is important for me to work on.

1 2 3 4 5 6 7
Never Sometimes Always

9. My therapist and I seemed to trust one another.

1 2 3 4 5 6 7
Never Sometimes Always

10. My therapist and I seemed to have different ideas on what my problems are.

1 2 3 4 5 6 7
Never Sometimes Always

11. We had a good understanding of the kind of changes that would be good for me.

1 2 3 4 5 6 7
Never Sometimes Always
12. I believed the way we were working with my problem was correct.

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<th>Never</th>
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PART E

Please rate how well each of the following sets of four adjectives, taken all together, describes YOU in the session just completed.

1. ASSERTIVE-FORCEFUL-PERSISTENT-INDUSTRIOUS
2. TRICKY-BOASTFUL-CONCEITED-CRAFTY
3. UNSOCIABLE-INTROVERTED-DISTANT-SHY
4. MEEK-INCONSISTENT-UNPRODUCTIVE-UNAUTHORITATIVE
5. UNDECEPTIVE-UNARGUMENTATIVE-NONEGOTISTICAL-UNDEVIOUS
6. KIND-TENDER-FORGIVING-COOPERATIVE
7. COLDHEARTED-IMPOLITE-UNSYPATHETIC-UNCORDIAL
8. FRIENDLY-OUTGOING-CHEERFUL-APPROACHABLE

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<th>very much</th>
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<td>1 2 3 4 5 6 7</td>
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Please rate how well each of the following sets of four adjectives, taken all together, describes YOUR THERAPIST in the session just completed.

1. ASSERTIVE-FORCEFUL-PERSISTENT-INDUSTRIOUS
2. TRICKY-BOASTFUL-CONCEITED-CRAFTY
3. UNSOCIABLE-INTROVERTED-DISTANT-SHY
4. MEEK-INCONSISTENT-UNPRODUCTIVE-UNAUTHORITATIVE
5. UNDECEPTIVE-UNARGUMENTATIVE-NONEGOTISTICAL-UNDEVIOUS
6. KIND-TENDER-FORGIVING-COOPERATIVE
7. COLDHEARTED-IMPOLITE-UNSYPATHETIC-UNCORDIAL
8. FRIENDLY-OUTGOING-CHEERFUL-APPROACHABLE

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<td>1 2 3 4 5 6 7</td>
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</table>
Appendix C  Therapist Post Session Questionnaire

BRIEF PSYCHOTHERAPY RESEARCH PROJECT
BETH ISRAEL MEDICAL CENTER
NEW YORK NY 10003

THERAPIST POST-SESSION QUESTIONNAIRE

Complete immediately after session. Please answer all questions.

Your patient's initials ______________________ Session number ______________________
Your initials ______________________ Date of session ______________________

PART A

1. Please rate how helpful or hindering to your patient this session was overall by circling the appropriate number below.

1 2 3 4 5 6 7 8 9
Extremely hindering Neutral Extremely helpful

2. Please rate to what extent your patient's presenting problems are resolved.

1 2 3 4 5 6 7 8 9
Not at all Moderately Completely

PART B

1. Did you experience any problem or tension in your relationship with your patient during the session?

Yes ☐ No ☐

2. If so, about where in the session did this problem begin?

Beginning ☐ Middle ☐ End ☐

3. Please rate the highest degree of tension you felt during the session as a result of this problem.

1 2 3 4 5
Low Medium High

4. To what extent was this problem addressed in this session?

1 2 3 4 5
Not at all Somewhat Very much

85
5. To what degree do you feel this problem was resolved by the end of the session?

1 2 3 4 5
Not at all  Moderately  Completely

6. Please describe the problem briefly:

PART C

Please circle the appropriate number to show how you feel about this session.

This session was:
Bad 1 2 3 4 5 6 7 Good
Safe 1 2 3 4 5 6 7 Dangerous
Difficult 1 2 3 4 5 6 7 Easy
Valuable 1 2 3 4 5 6 7 Worthless
Shallow 1 2 3 4 5 6 7 Deep
Relaxed 1 2 3 4 5 6 7 Tense
Unpleasant 1 2 3 4 5 6 7 Pleasant
Full 1 2 3 4 5 6 7 Empty
Weak 1 2 3 4 5 6 7 Powerful
Special 1 2 3 4 5 6 7 Ordinary
Rough 1 2 3 4 5 6 7 Smooth
Comfortable 1 2 3 4 5 6 7 Uncomfortable

PART D

The following items reflect your working relationship with your patient based on your most recent session. Please rate each item by circling the appropriate number in terms of how you felt about this session.

1. My patient and I agreed about the things he/she will need to do in therapy to help improve his/her situation.

1 2 3 4 5 6 7
Never  Sometimes  Always

2. My patient believed that what we are doing in therapy gave him/her new ways of looking at his/her problem.

1 2 3 4 5 6 7
Never  Sometimes  Always

3. My patient believed that I like him/her.

1 2 3 4 5 6 7
Never  Sometimes  Always

86
4. My patient believed that I did not understand what he/she is trying to accomplish in therapy.

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5. My patient was confident in my ability to help him/her.

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6. My patient and I worked towards mutually agreed upon goals.

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7. My patient felt appreciated by me.

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8. We agreed on what is important for him/her to work on.

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9. My patient and I seemed to trust one another.

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10. My patient and I seemed to have different ideas on what his/her problems are.

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11. We have established a good understanding of the kind of changes that would be good for him/her.

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12. My patient believed the way we were working with his/her problem was correct.

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**PART E**

Please rate how well each of the following sets of four adjectives, taken all together, describes YOU in the session just completed.
1. ASSERTIVE-FORCEFUL-PERSISTENT-INDUSTRIOUS
   1 2 3 4 5 6 7

2. TRICKY-BOASTFUL-CONCEITED-CRAFTY
   1 2 3 4 5 6 7

3. UNSOCIABLE-INTROVERTED-DISTANT-SHY
   1 2 3 4 5
   6 7

4. MEEK-INCONSISTENT-UNPRODUCTIVE-UNAUTHORITATIVE
   1 2 3 4 5 6 7

5. UNDECEPTIVE-UNARGUMENTATIVE-NONEGOTISTICAL-UNDEVIOUS
   1 2 3 4 5 6 7

6. KIND-TENDER-FORGIVING-COOPERATIVE
   1 2 3 4 5 6 7

7. COLDHEARTED-IMPOLITE-UNSYPATHETIC-UNCORDIAL
   1 2 3 4 5 6 7

8. FRIENDLY-OUTGOING-CHEERFUL-APPROACHABLE
   1 2 3 4 5 6 7

Please rate how well each of the following sets of four adjectives, taken all together, describes YOUR PATIENT in the session just completed.

1. ASSERTIVE-FORCEFUL-PERSISTENT-INDUSTRIOUS
   1 2 3 4 5 6 7

2. TRICKY-BOASTFUL-CONCEITED-CRAFTY
   1 2 3 4 5 6 7

3. UNSOCIABLE-INTROVERTED-DISTANT-SHY
   1 2 3 4 5
   6 7

4. MEEK-INCONSISTENT-UNPRODUCTIVE-UNAUTHORITATIVE
   1 2 3 4 5 6 7

5. UNDECEPTIVE-UNARGUMENTATIVE-NONEGOTISTICAL-UNDEVIOUS
   1 2 3 4 5 6 7

6. KIND-TENDER-FORGIVING-COOPERATIVE
   1 2 3 4 5 6 7

7. COLDHEARTED-IMPOLITE-UNSYPATHETIC-UNCORDIAL
   1 2 3 4 5 6 7

8. FRIENDLY-OUTGOING-CHEERFUL-APPROACHABLE
   1 2 3 4 5 6 7

Progress Note
Appendix D  Rupture Resolution Questionnaire (RRQ)

Please rate the extent to which each of the following statements reflects your experience

a. I felt a closer connection with my therapist.

1  2  3  4  5
Not at all  Moderately  Completely

b. I felt more trusting of my therapist.

1  2  3  4  5
Not at all  Moderately  Completely

c. I felt able to disagree with my therapist.

1  2  3  4  5
Not at all  Moderately  Completely

d. I began to feel that my therapist can help me even if he/she is not perfect.

1  2  3  4  5
Not at all  Moderately  Completely

e. I saw what I was doing to avoid my therapist.

1  2  3  4  5
Not at all  Moderately  Completely

f. I became aware that I had been upset with my therapist without really knowing it.

1  2  3  4  5
Not at all  Moderately  Completely

g. I saw that my self-assertion did not drive my therapist away.

1  2  3  4  5
Not at all  Moderately  Completely
h. My therapist did not react as negatively as I feared he/she would when I expressed anger or vulnerability.

1 2 3 4 5  
Not at all Moderately Completely

i. I acted in a way which felt more authentic for me.

1 2 3 4 5  
Not at all Moderately Completely

j. I told my therapist something I had been hesitant to say.

1 2 3 4 5  
Not at all Moderately Completely

k. I began to get a sense that I can expose risky feelings and not be abandoned by my therapist.

1 2 3 4 5  
Not at all Moderately Completely

l. I learned that I have the ability to work things out with my therapist after a misunderstanding or conflict.

1 2 3 4 5  
Not at all Moderately Completely
Appendix E  Definitions of the dimensions of resolution

1. Affective Attunement  The dimension of affective attunement refers to the extent that the patient and the therapist are emotionally connected to one another. When the therapist is affectively attuned to the patient, the patient feels heard and seen. In many ways the dimension of affective attunement reflects the bond aspect of the therapeutic alliance. (RRQ items a and b)

2. Separation-Individuation  The dimension of separation-individuation refers to the extent to which the patient feels that s/he and the therapist are separate individuals with their own needs and the extent to which the patient can accept the fact that the therapist will not always be there for her/him in the way s/he wants him to be. This includes self-assertion which refers to the experience of standing up for oneself and making one’s position clear. (RRQ items c and d)

3. Patient Owns Role in Interaction  The dimension of patient owns role in interaction refers to the patient beginning to recognize and acknowledge the role that s/he plays in contributing to problematic interactions with the therapist. (RRQ items e and f)

4. Expansion of Self-Definition  This dimension refers to the extent that the patient begins to develop expanded concepts of him or herself through the acknowledgement of previously avoided emotions that emerge in the exploration of the rupture with the therapist. Often this will involve the discovery and recognition of previously avoided feelings of anger or disappointment. (RRQ items g and h)

5. Coming Clean  The dimension of coming clean refers to the experience of relief resulting from having told the therapist about uncomfortable feelings that were previously too frightening to expose. (RRQ items i and j)

6. Disconfirmation  The dimension of disconfirmation refers to the experience of having one’s implicit fears about relationships disconfirmed through interactions with the therapist. (RRQ items k and l)
Appendix F  Tables

Table 8  
*Number of reported ruptures for each case*

<table>
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<tr>
<th>Case N</th>
<th>Number of ruptures</th>
<th>Total number of sessions</th>
<th>Case N</th>
<th>Number of ruptures</th>
<th>Total number of sessions</th>
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Table 9
**RRQ Reliability Analysis for session 7, Item-total Statistics (N = 29)**

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<th>Scale Variance if item deleted</th>
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Statistics for scale:

\[ M = 40.38 \quad \text{Variance} = 78.244 \quad SD = 8.846 \quad \text{N of variables} = 12 \]

Item Means:

\[ M = 3.365 \quad \text{Minimum} = 2.69 \quad \text{Maximum} = 3.897 \quad \text{Range} = 1.207 \]
\[ \text{Max/Min} = 1.449 \quad \text{Variance} = .117 \]

Cronbach’s Alpha = .871
Cronbach’s Alpha based on standardized items = .870
Table 10  
*Principal Component Analysis Structure Matrix*  

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Table 11  
*Principal Component Analysis Component Correlation Matrix*  

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Table 12  
*RRQ Item-to Subscale Correlations*

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Note. Subscale 1 = Affective Attunement; Subscale 2 = Separation-Individuation; Subscale 3 = Patient Own Role in Interaction; Subscale 4 = Expansion of Self-Definition; Subscale 5 = Coming Clean; Subscale 6 = Disconfirmation.
Table 13
Multivariate Regression Results for the RRQ, the WAI and Outcome Measures for the Beginning Phase of Treatment (sessions 1-10)

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*Note*. WAI – patient-rated Working Alliance Inventory (overall mean); GAS = Global Assessment Scale; Th IIP = Inventory of Interpersonal Problems-32 (overall mean); Pt IIP = Inventory of Interpersonal Problems-64 (overall mean); TC – Target Complaints Index; SCL = Symptom Checklist-90.
Table 14
**Multivariate Regression Results for the RRQ, the WAI and Outcome Measures for the Middle Phase of Treatment (sessions 11-20)**

<table>
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<tr>
<th>Variables</th>
<th>n</th>
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*Note. WAI – patient-rated Working Alliance Inventory (overall mean); GAS = Global Assessment Scale; Th IIP = Inventory of Interpersonal Problems-32 (overall mean); Pt IIP = Inventory of Interpersonal Problems-64 (overall mean); TC – Target Complaints Index; SCL = Symptom Checklist-90.*
Table 15
Multivariate Regression Results for the RRQ, the WAI and Outcome Measures for the End Phase of Treatment (sessions 21-30)

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Note. WAI = patient-rated Working Alliance Inventory (overall mean); GAS = Global Assessment Scale; Th IIP = Inventory of Interpersonal Problems-32 (overall mean); Pt IIP = Inventory of Interpersonal Problems-64 (overall mean); TC = Target Complaints Index; SCL = Symptom Checklist-90.