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Empathy and the Therapeutic Alliance: Their Relationship to Each Other and to Outcome in Cognitive-Behavioral Therapy for Generalized Anxiety Disorder

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EMPATHY AND THE THERAPEUTIC ALLIANCE: THEIR RELATIONSHIP TO

EACH OTHER AND TO OUTCOME IN COGNITIVE-BEHAVIORAL THERAPY

FOR GENERALIZED ANXIETY DISORDER

A Thesis Presented

by

JOAN DEGEORGE

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EACH OTHER AND TO OUTCOME IN COGNITIVE-BEHAVIORAL THERAPY

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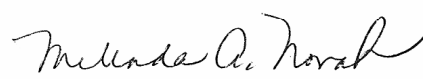Department of Psychology

ABSTRACT

EMPATHY AND THE THERAPEUTIC ALLIANCE: THEIR RELATIONSHIP TO EACH OTHER

AND TO OUTCOME IN COGNITIVE-BEHAVIORAL THERAPY FOR GENERALIZED ANXIETY

DISORDER

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Therapist empathy has long been recognized as an important therapeutic factor across different psychotherapies. However, despite its widely accepted clinical importance, empathy is conceptually complex, and its relation to other psychotherapy constructs and to therapy outcomes remains empirically unclear. The current study examined the association between empathy and the therapeutic alliance, as well as their respective and potentially interactive associations with treatment outcome. Using confirmatory factor analysis, structural equation modeling, and path analysis, these relations were examined in the context of cognitive-behavioral therapy (CBT) for generalized anxiety disorder (GAD), a condition for which little research exists on treatment process and relationship variables. Although not all path analyses could be interpreted because of the relatively small sample size ($N = 69$), the results indicated, as predicted, a distinction between therapist empathy and the global therapeutic alliance, as well as therapist empathy and the alliance components (viz., bond, tasks, and goals). Empathy and the therapeutic alliance differentially predicted outcome as measured by global anxiety symptomatology level. In addition, a model where early empathy's relationship to outcome was mediated by the middle alliance was a significant improvement over a model without the mediation.

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CHAPTER I

EMPATHY AND THE THERAPEUTIC ALLIANCE: THEIR RELATIONSHIP TO

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FOR GENERALIZED ANXIETY DISORDER

Introduction

Empathy has a long and storied place in the history of psychotherapy (Bohart, Elliott, Greenberg, & Watson 2002; Rogers, 1959; Snyder, 1992; Truax & Carkhuff, 1967). For example, Freud (1912, 1958) described empathy as the way in which the therapist could know the mind of the patient. However, within Freudian psychoanalysis, this understanding was not openly shared with the patient (Bohart & Greenberg, 1997). Empathy as a more direct therapeutic tool became most pronounced in the humanistic tradition. Working from his client-centered approach, Carl Rogers defined empathy as the ability "…to perceive the internal frame of reference of another with accuracy and with emotional components and meanings…as if one were the person" (Rogers, 1959; pp. 210-211). Rogers viewed empathy as one of four therapist-offered conditions (the others being positive regard, unconditionality, and congruence) that were both necessary and sufficient for promoting therapeutic change. Although the Rogerian conditions are more contemporarily viewed as necessary, but *not* sufficient, for patient improvement, the clinical importance of patient-perceived therapist empathy has been well-established and widely accepted (Barrett-Lennard, 1986; Brown, 2007; Gurman, 1977; Watson, 2002). But despite its prominent place in the psychotherapy literature, the nature of therapeutic empathy remains conceptually complex, and its association to other psychotherapy constructs and to therapy outcomes remains empirically unclear (Bohart, et al., 2002).

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Conceptualizations of Therapeutic Empathy

The conceptual complexity of empathy is perhaps most underscored in the lack of a consensual definition in the clinical literature (Bohart et al., 2002). Although Rogers (1959) provided a working heuristic for the basic nature of empathy, not all clinical theorists have defined empathy the same way. According to Duan and Hill (1996), empathy has been defined as "feeling in" by Downey (1929; p. 176), as "vicarious introspection" by Kohut (1971; p. 219), as "assuming the internal frame of another" by Truax and Carkhuff (1967; p. 285), and as "transposing oneself into the thinking, feeling and acting of another" by Dymond (1950; p. 344). According to Bohart et al. (2002), although there may be general agreement on the current definition of therapeutic empathy as putting oneself into the shoes of another, there are different subcategories in which empathy can occur. Bohart et al. reported that empathic understanding can be provided "…emotionally, cognitively, on a moment to moment basis, or by trying to grasp an overall sense of what it is like to be that person" (p. 90). Thus, there are theoretical distinctions as to the manner in which empathy can be delivered and experienced in the therapeutic setting.

Therapeutic Empathy and Other Relationship Constructs

The conceptual complexity, or ambiguity, of empathy is also reflected in the empirical literature. For example, intercorrelations of different types of empathy measures have generally been weak (Bohart et al., 2002). Across 10 studies, Gurman (1977) reported 17 correlations among different empathy measures ranging from .00 to .88, with a mean of .28. Furthermore, it is unclear how distinct empathy is from other relational constructs. For example, empathy relates differentially to Rogers's other

therapist-offered conditions. In a review of 20 studies using the Barrett-Lennard

Relationship Inventory (BLRI; Barrett-Lennard, 1962), a commonly used patient-report

measure of the Rogerian constructs, Gurman found that empathy, on average, had a

correlation of .62 with congruence, .53 with positive regard, and .28 with

unconditionality. In a separate study, Blatt, Zuroff, Quinlan, and Pilkonis (1996) also

found that the BLRI empathy scale was positively correlated with congruence (.92) and

with positive regard (.87). Gurman also factor-analyzed the subscales of the BLRI and

found that empathy, congruence, and positive regard all loaded on one factor. However,

when factor-analyzing at the item level, empathy emerged as its own factor.

It is also unclear how empathy relates to the most commonly referenced

relationship factor, the *therapeutic alliance*. In a classic definition of the alliance,

Luborksy (1976) advanced a two-factor conceptualization that emphasized different

stages of treatment. In his Type I alliance, which typically operates early in treatment,

emphasis is placed on the therapist's provision of warmth and genuineness, and the

patient's experience of their therapist as supportive, helpful, and understanding. All of

these elements may be linked conceptually to the overarching notion of patient-perceived

therapist empathy. Luborsky also articulated a later-treatment Type II alliance, which

involves a working bond formed around pursuing agreed-on therapeutic goals.

Luborsky's alliance components are also reflected in Bordin's (1979, 1994) widely-cited,

pantheoretical alliance definition. This tripartite model posits three interrelated alliance

components: (a) patient-therapist agreement on treatment goals, (b) patient-therapist

agreement on tasks to achieve the goals, and (c) the development of an affective bond

between the patient and therapist. Although there are other variations on alliance

definitions and components, the construct is generally characterized as representing interactive, collaborative elements of the therapeutic relationship in the context of a positive attachment (see Constantino, Castonguay, & Schut, 2002).

Some research has demonstrated that patient-perceived therapist empathy, as well as other Rogerian constructs (i.e., congruence and positive regard), are highly correlated with alliance measures. For example, in a study conducted by Salvio, Beutler, Wood and Engle (1992), a comparison of the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989), a commonly used measure assessing Bordin's three alliance components, and the BLRI was conducted from 46 patients assigned to one of three treatments over a 20-week period. The correlations between WAI subscale scores and BLRI subscale scores were high, ranging from .65 to .85. These results call into question whether empathy is a separate construct from the alliance. Salvio et al. also highlighted that the alliance components of agreement on goals, agreement on tasks, and bond may also not be distinct, but rather reflect one overall factor. More recent alliance research has supported this perspective of alliance as one overarching factor. For example, in Klein et al.'s (2003) study of alliance within a chronically depressed patient sample, they limited their analyses to the global alliance factor given the high intercorrelations of the three subscales in their data. Furthermore, in a factor analysis of three alliance measures completed by 231 patients, the goal, task, and bond components of the alliance were found to be unrelated to improvement beyond the general factor (Hatcher & Barends, 1996). Such findings also raise questions about the prominent conceptual understandings of the alliance and its components.

Other evidence, however, suggests that empathy is a related, but distinct construct from the alliance. For example, empathy has been shown to have differentially strong associations with the alliance components, with the strongest association occurring with the bond component and moderate associations with the task and goal components. In a study of 29 patients with unreported diagnoses, Horvath and Greenberg (1986) found that empathy was correlated at .53 with the bond component, .32 with the task component, and .48 with goal component. The fact that empathy is at least somewhat related to all alliance components is consistent with Watson's (2002) notion that empathic responding requires having access not only to patients' emotional worlds, but also to their goals, intentions, and values.

In summary, the evidence is mixed with respect to the conceptual and empirical relationship between empathy and other relationship constructs, including the therapeutic alliance. In addition to attempting to understand the conceptual nature of empathy, other research has focused on the association between empathy and patient improvement.

Therapeutic Empathy and Treatment Outcome

Individual studies have demonstrated the link between empathy and outcome. For example, Truax and Mitchell (1971) found that there was a strong positive relationship between all Rogerian therapeutic constructs, including empathy, and outcome; however, additional analyses by Truax and Mitchell led to more cautious interpretations. Orlinsky, Grawe, and Parks (1994) found that out of 115 studies, 54% showed a positive correlation between empathy and outcome. In a meta-analysis of 47 different studies, incorporating 190 separate tests from a variety of patient populations and outcome measurements, Bohart et al. (2002) found that empathy accounted for approximately 4%

of the outcome variance, which reflects a small-medium effect size. Within this same

meta-analysis, the therapeutic alliance was also found to account for approximately 4%

of the outcome variance. Thus, empathy accounts for as much, if not slightly more,

outcome variance than the alliance (which is generally considered to be the most

consistent and robust predictor of patient improvement; Castonguay, Constantino, &

Gross Holtforth, 2006; Horvath & Bedi, 2002; Martin, Garske, & Davis, 2000).

Furthermore, empathy and the alliance appear to account for more outcome variance than

specific treatment interventions (Wampold 2001).

In summary, empirical evidence suggests that both empathy and the alliance

individually predict outcomes across various treatment orientations. These effects tend to

be small-medium and more robust than those of specific technical interventions.

Therapeutic Empathy and Theoretical Orientation

The association between empathy and treatment outcome has also been assessed

within different treatment orientations. For example, Bohart et al. (2002) examined this

link in a meta-analysis encompassing 47 studies and over 3,000 patients across cognitive-

behavioral, experiential/humanistic, and psychodynamic therapies. Approximately 47%

of patients had been diagnosed with "mixed neuroticism," which included affective and

anxiety disorders. The authors predicted that the empathy-outcome correlations would be

highest in experiential/humanistic therapies given their primary focus on empathy as a

central change ingredient. However, the results did not support this hypothesis. In

actuality, empathy and outcome were most highly correlated within cognitive-behavioral

therapies (a mean *r* of .32), relative to experiential/humanistic therapies (mean *r* of .20),

psychodynamic therapies (mean *r* of .16), and other, or unspecified, therapies (mean *r* of

.19).

In an analogue study, Hatcher et al. (2005) examined whether there were differences among therapists of different orientations in their beliefs about whether they could be empathic with patients who had notable differences in life experiences from them. Ninety-three therapists viewed five videotaped vignettes based on actual case material. There was no orientation effect in therapist-reported empathy toward the patients. In other words, therapists who identified themselves as cognitive-behavioral, psychodynamic, humanistic, integrative, and "other" had comparable beliefs in their ability to be empathic.

In summary, limited empirical evidence suggests that empathy-outcome associations are influenced by the treatment orientation, while therapist's own feelings of empathy toward a patient may be unaffected by orientation.

Therapeutic Empathy and Cognitive-Behavioral Therapy

Empathy's place in the history of cognitive-behavioral therapy (CBT) has been a contentious one. Although some CBT pioneers have argued for its necessary role in treatment (e.g., Beck, 1995; Beck, Rush, Shaw, & Emery 1979), others have downplayed its utility (Ellis, 1962). Empirically, it does appear that empathy plays some role in CBT's curative process. Several hypotheses have been as advanced to explain this role. First, some have argued that empathy on its own may serve to elevate a patient's mood (e.g., Burns & Nolen-Hoeksema, 1991). Second, empathy may wield its influence by improving a patient's sense of hope or motivation, which may in turn increase treatment compliance. Such compliance may take the form of completing self-help homework assignments, a behavior that has been shown to relate to patient improvement (Burns &

Nolen-Hoeksema, 1991). Finally, it is possible that empathy promotes greater engagement in the therapeutic relationship, which could manifest as a quality working alliance (if indeed these constructs are distinct).

To investigate further empathy's role in CBT, Burns and Nolen-Hoeksema (1992) examined the direct and indirect influence of empathy on outcome in a large sample of patients undergoing CBT for depression. Results confirmed that patients of the warmest and most empathic therapists (as per the patients' report) improved significantly more than patients whose therapists received the lowest empathy ratings. This finding held even when controlling for original depression severity and homework compliance. Burns and Nolen-Hoeksema pointed to the importance of perceiving one's therapist as warm and empathically understanding even in the context of treatments that have traditionally placed more emphasis on technical interventions than therapist or relationship characteristics.

At present, however, it remains unclear whether empathy leads to better engagement in the treatment and/or use of its techniques, or if the nature of the treatment itself promotes perceptions of therapist empathy. Furthermore, the pathways through which empathy influences outcome remain understudied. The Burns and Nolen-Hoeksema (1992) study shed some light on this issue in finding that therapist empathy was robustly associated with an improvement in depression symptoms even when statistically removing the influence of homework compliance. This finding suggested that empathy has a unique and direct effect on treatment outcome and that it does not work specifically through its influence on homework activity. As the authors note, however, it is possible that empathy could be acting on a myriad of other factors not contained in

their specific model. One such factor could be the overall quality of the therapeutic alliance. Thus, more rigorous research is needed to better understand the complex pathways among empathy, other treatment variables (including the alliance), and outcome. Such work should include a focus on CBT given the apparently influential role of empathy in this treatment. Furthermore, it seems important to extend such work into the realm of other specific disorders commonly treated by CBT, such as anxiety conditions, where there is a notable lack of attention paid to relationship variables (Stiles & Wolfe, 2006).

<div align="center">Specific Aims</div>

The current study examined the conceptual association between therapist empathy and the therapeutic alliance, as well as the direct and indirect influence of empathy on treatment outcome for patients who received CBT for generalized anxiety disorder (GAD). As noted above, there has been a limited focus on such treatment process variables in the treatment of anxiety disorders. This lack is unfortunate considering that anxiety disorders are highly prevalent. For example, the lifetime prevalence rate for GAD has been estimated at 3.6% to 5.1% (Kendler, Neale, Kessler, Heath, & Evans, 1992). Additionally, there is some evidence that GAD may be at the root of many of the anxiety disorders, such as panic disorder, social phobia, and obsessive-compulsive disorder (Brown, Chorpita, & Barlow, 1998). Thus, it seems especially important to assess therapeutic change factors in GAD.

Data for the present study derived from a controlled clinical trial conducted at The Pennsylvania State University (Borkovec, Newman, Pincus, & Lytle, 2002). In this component analysis of CBT, GAD patients were randomly assigned to one of the three

following conditions: (a) applied relaxation and self-controlled desensitization (SCD), (b) cognitive therapy (CT), or (c) a combination of SCD and CT. For the full outcome findings on the main study, see Borkovec et al. (2002). In brief, no differences in treatment outcome were found between the conditions, suggesting that all components were important contributors to treatment efficacy. Both therapist empathy and alliance quality in this trial were rated from the patient's perspective. For both the empathy-outcome and the alliance-outcome associations in the broader literature, the patient's ratings have been shown to be the strongest predictors (Gurman, 1977; Horvath & Bedi, 2002). The specific research questions and related hypotheses for the current study were as follows:

Research Question 1: Are the latent constructs of therapist empathy and the therapeutic alliance distinct?

Hypothesis 1: I predicted that therapist empathy and the global therapeutic alliance would emerge empirically as related, but distinct latent constructs.

Research Question 2: To the extent that therapist empathy and the therapeutic alliance are distinct, what are the degrees of association between therapist empathy and the components of the therapeutic alliance in CBT for GAD?

Hypothesis 2: I predicted that empathy would be positively, but differentially related to the alliance components. Specifically, I expected a high correlation between empathy and the bond component, and moderate associations with the tasks and goals components, further suggesting that empathy is related to, but distinct from the alliance.

Research Question 3: What are the direct and indirect associations of empathy with posttreatment outcome?

Hypothesis 3: I predicted that empathy will be directly and positively related to treatment outcome, and that a significant indirect temporal pathway will be found from empathy (early treatment)→alliance (middle treatment)→outcome (posttreatment), suggesting that the alliance mediates the empathy-outcome association.

Method

Participants

Patients. Patients were 69 adults who were randomly assigned to 1 of the 3 treatment conditions. There were 23 patients per condition (15 women and 8 men). Patients were recruited by advertisements and referrals from local clinics and practitioners. To be eligible, potential participants had to (a) receive a principal GAD diagnosis from two independent assessors using Albany's Anxiety Disorders Interview Schedule for *DSM-III-R* (ADIS-R; Di Nardo & Barlow, 1988), (b) receive an assessor global severity rating greater than 4 on the 8-point ADIS-R assessor severity scale of GAD-related anxious symptomatology, and (c) be between 18-65 years old. Potential participants were excluded if they (a) met criteria for major depression, substance abuse, psychosis, and/or had medical or physical conditions with underlying anxiety, (b) had received CBT in the past or were presently participating in additional psychotherapy and/or (c) were taking an unstable dose of psychotropic medication. The sample was predominately Caucasian (*n* = 62; 90%), with 4% (*n* = 3) of the participants identifying as Hispanic, 3% as African-American (*n* = 2), and 3% (*n* = 2) as Middle Eastern. The mean age of the sample was 37.14 years (*SD* = 11.71), and the mean duration of GAD symptomatology was 12.81 years (*SD* = 12.07). All patients had achieved at least a high school education, with a large percentage (95.7%) completing education beyond high

school. No significant differences were found between treatment conditions on demographic variables or pretreatment symptomatology. For additional information on recruitment and screening procedures, see Borkovec et al. (2002).

Therapists. Two Ph.D. clinical psychologists (1 male and 1 female), 1 post-doctoral student (female), and 1 advanced graduate student (female) each treated male and female patients across the 3 treatment conditions. All therapists had previous experience in CBT and received specific and extensive training prior to the trial. Moreover, the principal investigator (Borkovec) provided weekly supervision throughout the trial to foster protocol adherence and competent delivery of the treatment components.

<div align="center">Treatments</div>

Patients participated in 14 weekly, individual therapy sessions, with the first 4 sessions lasting 2 hours each and the remaining sessions lasting 1.5 hours each. Patients also participated in 1 "fading" session after the posttreatment assessment in order to reinforce the skills they had learned in therapy. A 30-minute reflective listening period was added to the CT-only and SCD-only conditions so that the duration of the session in each of these conditions would equal the time spent in the combined condition sessions. Provision of a rationale for the therapy approach, self-monitoring of anxiety cues, and homework assignment and review were elements common to all 3 conditions. A detailed description of each treatment component follows.

CT. Formal CT was conducted following the guidelines outlined in Beck and Emery (1985). This approach is based on the notion that anxiety is caused by how one views oneself, the world, and personal situations, and it focuses specifically on the

distorted perceptions of threat that people with GAD often experience. The therapy

includes monitoring thought processes, applying new views to daily living, and creating a

rational response to anxiety-provoking situations. This approach did *not* include

relaxation training or imaginal SCD. As noted above, an additional 30-minute reflective

listening period was added to the sessions. During this period, patients were asked to

discuss themselves, their week, and any relevant experiences related to their presenting

anxiety concerns, while the therapist adopted a nondirective, supportive, and empathic

stance.

 SCD. Central elements of SCD included developing coping response strategies

such as self-monitoring, early detection of anxiety cues, applied relaxation, and the use of

imagery. In order to develop these strategies, patients were asked to imagine anxiety-

provoking situations and the anxiety-related symptoms that came along with them. The

patient then used the coping strategies they had learned to help them to relax and to

alleviate anxiety. As in the CT-only condition, a 30-minute reflective listening period was

added to the sessions in order to keep treatment time constant across all 3 conditions.

 SCD/CT. This condition incorporated each of the central elements from the CT-

only and the SCD-only conditions with the exception of the 30-minute reflective listening

period. This time was instead used to incorporate fully both the CT and SCD techniques.

<div align="center">Measures</div>

 GAD Outcome Measures. The following widely used and well-validated

measures (see Antony, Orsillo, & Roemer, 2001) were used to assess GAD

symptomatology: Hamilton Anxiety Rating Scale (HARS; Riskind, Beck, Brown, &

Steer, 1987), Assessor Severity of GAD Anxiety Symptoms (SEV), Penn State Worry

<div align="center">13</div>

Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990), State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene, 1970), Relaxation and Arousal Questionnaire (RRAQ; Heide & Borkovec, 1983), and Client Daily Diary of Anxiety Level.

For the current study, these measures were used to assess outcome both in terms of the level of global anxiety symptomatology (GAS) and clinically-significant change. For GAS, the 6 anxiety measures were standardized via z-score transformation and summed to produce a global anxiety index. To operationalize clinically significant improvement, Borkovec et al. (2002) created a measure of endstate functioning (ESF). Clinically meaningful gain was calculated by adding the number of the 6 outcome measures on which patients fell within 1 standard deviation of the mean of nonanxious normative samples (for the HARS, PSWQ, STAI, and RRAQ) or had a score that reflected a face valid level of change for the measures that did not have normative data (SEV and diary ratings). ESF could thus range from 0 to 6, with higher values reflecting more clinically-significant improvement.

Empathy. Patient-perceived therapist empathy was assessed with the Barrett-Lennard Relationship Inventory (BLRI; Barrett-Lennard, 1962). The BLRI is a widely used relationship measure that assesses therapist empathy, unconditionality, positive regard, and congruence. The BLRI includes 64 items (16 per subscale), with each rated on a scale from -3 ("No, I strongly feel that it is not true") to +3 ("Yes, I feel strongly that it is true") without including 0. Scores are totaled for negative and positive items, with a high overall score reflecting a higher empathy rating. Each subscale has a possible range of scores from -48 to 48 per participant. Gurman (1977) found that all scales of the BLRI

had good internal consistency with alphas of .91, .88, .84, and .74 for positive regard, congruence, empathy, and unconditionality, respectively. Barrett-Lennard (1986) reported high validity, as evidenced by findings from an independent, five judge panel that found good agreement on the classification of positive and negative item valence on the final measure.

Working Alliance. The quality of the patient-therapist relationship was assessed by patients on the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989). The WAI assesses Bordin's (1979) elements of alliance: (a) agreement on therapy goals, (b) agreement on therapy tasks, and (c) the therapeutic bond. The WAI is a 36-item scale with each item rated on a scale from 1 ("Never") to 7 ("Always"). Higher scores reflect a better quality alliance, with a possible range of scores from 36 to 252 per participant. The WAI is a widely used measure with well-established psychometric properties. Internal consistency for the entire scale (patient version) has been estimated at .93. For the subscales, internal consistency estimates range from .85 to .88. The WAI has also been shown to have high convergent validity with the Empathy Scale of the BLRI (Barrett-Lennard, 1962) and high predictive validity (Horvath & Greenberg 1986, 1989).

Procedure

At baseline, posttreatment, and 6- and 12-month follow-up, clinical assessors administered a structured diagnostic interview and patients completed the multiple outcome measures of anxiety. The present analyses will focus only on posttreatment outcomes. Patients completed the WAI following sessions 2, 5, 10, and 14. Patients completed the BLRI following sessions 1, 4, 8, and 12.

Results

Because (a) the main outcome paper found no treatment differences on patient outcome (Borkovec et al., 2002), (b) all treatments reflected components of CBT, and (c) there was a relatively limited number of patients per condition, analyses were conducted on the entire patient sample. See Table 1 for descriptive statistics and Table 2 for the intercorrelations of all relevant study variables.

Research Question 1 (Are the latent constructs of therapist empathy and the therapeutic alliance distinct?)

To address this question, I employed a multi-method approach to examine the convergent/divergent validity of these two constructs. First, I conducted a confirmatory factor analysis (CFA) using LISREL 8.72 (Joreskog & Sorbom, 2005) to assess the relationships among the goal, task, and bond components of the alliance (each averaged across all 4 time points) and empathy (averaged across all 4 time points). I conducted both a one-factor and two-factor CFA to examine whether these variables were better represented as one latent "relationship" construct or separate latent "alliance" and "empathy" constructs, the latter of which would reflect distinctness. In the one-factor model (see Figure 1), empathy and the three alliance components were loaded onto the one latent "relationship" factor. In the two-factor model (see Figure 2), empathy was loaded onto its own latent factor and the three alliance components were loaded onto their own latent alliance factor. The goodness-of-fit statistics between the two models were then compared.

Neither the one-factor model, χ^2 (2) = 9.93, p = .01; RMSEA = .221; 90% CI for RMSEA (.08, .38); SRMR = .05; NFI = .95; CFI =.957 nor the two-factor model χ^2 (2) = 9.930, p < .01; RMSEA = .221; 90% CI for RMSEA (.08, .38); SRMR = .05; NFI = .95;

CFI = .957 exhibited good fit. These poor fits, however, were not altogether surprising given the small sample size. Although the fit indices cannot be used to establish definitively that either the one-factor or the two-factor model is the best model for the given covariance structure, it is evident that empathy does not load as strongly on the global relationship construct as it does on its own latent construct (see Figures 1 and 2). Thus, this finding provides partial support for the distinctness of the empathy and alliance constructs.

Second, I used structural regression modeling to examine the differential predictive validity of the latent constructs of empathy (averaged across all 4 time points) and alliance (averaged across all 4 time points) on treatment outcome. Although the models included a measurement component (which reflected the CFA presented above), the present analysis focused on the path component of the model. Differences in the predictive validity of the latent constructs would also point to distinctness. First, the differential predictive power of empathy and alliance were examined in relationship to GAS (see Figure 3). This model fit reasonably well, χ^2 (4) = 11.21, $p < .05$; RMSEA = .146; 90% CI for RMSEA (.02, .27); SRMR = .04; NFI = .95; CFI = .97; though the χ^2 fit statistic was significant, the SRMR, the NFI, and the CFI were within acceptable bounds. Although empathy did not show a significant negative predictive path to GAS (standardized path estimate = -.14, $p > .05$) the therapeutic alliance did (standardized path estimate = -.37, $p < .05$); higher alliance quality was associated with reduced anxiety at posttreatment. The second model examined the differential predictive power of empathy and alliance in relationship to ESF (see Figure 4). This model also fit reasonably well, χ^2 (4) = 10.84, $p < .05$; RMSEA = .143; 90% CI for RMSEA (.01, .26); SRMR = .04; NFI =

.95; CFI =.97. The path estimates for neither alliance (standardized path estimate = .21, p > .05) nor empathy (standardized path estimate = .30, p > .05) showed significant positive relations with ESF. The differential predictive validity of empathy and alliance also provides partial support for the distinctness of these constructs.

Finally, given the small sample size, a path analysis was also conducted to examine the differential predictive validity of empathy (averaged across all 4 time points) and global alliance (averaged across all 4 time points) on the GAS and ESF outcomes simultaneously (see Figure 5). Because previous literature (e.g., Hatcher & Barends, 1996; Salvio et al., 1992) has shown that the alliance components are highly correlated, the global alliance score was used in this path model. This model provided poor fit χ^2 (2) = 115.39, p < .001; RMSEA = .64; 90% CI for RMSEA (.50, .79); SRMR = .24; NFI = .002; CFI = 0. Because of this poor fit, the pathways could not be reliably interpreted. The model was rerun using the mean of empathy from sessions one and four and the mean of the alliance from sessions two and five. The purpose of this secondary analysis was to examine if *early* alliance and empathy are stronger and more differential predictors of outcome, while addressing the issue of later empathy and alliance ratings being potentially confounded by patient improvement over time. The fit of this model was also poor χ^2 (2) = 112.92, p < .001; RMSEA = .636; 90% CI for RMSEA (.50, .79); SRMR = .23; NFI = .003; CFI = 0. Again, because of the poor fit of the model, the pathways could not be interpreted and, thus, no support for the distinctness of the empathy and alliance constructs could be determined.

Research Question 2 (To the extent that therapist empathy and the therapeutic alliance are

distinct, what are the degrees of association between therapist empathy and the

components of the therapeutic alliance in CBT for GAD?)

Given the results from Question 1, I completed the next analyses using a two-factor model framework. To address this question, I initially conducted a path analyses in LISREL, which has the benefit of being a multivariate approach that allows all parameters to be estimated simultaneously. In the first model, the path estimates between empathy and the three alliance components were freely estimated parameters. In the second model, the path estimates were constrained to be equal to each other (see Figure 6). However, the model around the covariance matrix of the four variables of interest was saturated, rendering no degrees of freedom for testing the model's fit. However, the relationships between each alliance component and empathy can be gleaned, albeit not in the same multivariate model, from their bivariate correlations. The correlations for goal (r =.51, p <.01), task (r = .54, p <.01) and bond (r =.56, p <.01) with empathy were all significant, with the bond component having the highest correlation. Thus, these correlations provide some support that all alliance components relate significantly, yet perhaps differentially, to empathy.

Research Question 3 (What are the direct and indirect associations of empathy

with posttreatment outcome?)

To address this question, I constructed two path analyses to examine whether the relationship between early empathy (the mean of sessions 1 and 4) and outcome was mediated by the middle alliance (mean of sessions 5 and 10). The non-mediating model (which examined the direct effect of empathy on outcome) was nested in the mediating

model which allowed for a statistical test of whether one model was better fitting than the other.

For the first model, alliance and empathy were both defined to predict the outcome measures (GAS and ESF) (see Figure 7). This model had a poor fit, χ^2 (2) = 74.69, $p < .001$; RMSEA = .742; 90% CI for RMSEA (.60, .89); SRMR = .334; NFI = -.22; CFI = 0. For the second model, a path was defined from empathy to alliance to model a partial mediation of the relationship between empathy and outcome (see Figure 8). This model also had a poor fit χ^2 (1) = 54.71, $p < .001$; RMSEA = .902; 90% CI for RMSEA (.72, 1.11); SRMR = .24; NFI = -.01; CFI = 0. However, a chi square difference test indicated that adding the mediating path from early empathy to outcome by way of middle alliance significantly improved the model fit ($\Delta\chi^2$ (1) = 23.71, $p < .001$). Given the lack of acceptable fit in either model, the individual paths were not interpreted.

Discussion

The purpose of this study was to examine the conceptual associations between therapist empathy and the therapeutic alliance, as well as the direct and indirect influence of empathy on treatment outcome for patients receiving CBT for GAD. The main findings were as follows: (a) when comparing a 1-factor vs. 2-factor model, empathy loaded more strongly on its own factor than a global relationship factor; (b) empathy and the alliance differentially predicted outcome as measured by global anxiety symptomatology (viz., alliance was negatively associated with posttreatment symptoms while empathy was not); (c) the components of the alliance were all significantly correlated with empathy, with the bond component having a slightly stronger correlation than task and goal agreement; and (d) adding a mediating path of middle alliance from

early empathy to outcome significantly improved a model where early empathy was related to outcome alone. Thus, the present findings lend partial support for the distinctness of therapist empathy and the therapeutic alliance.

I addressed the question of whether the therapeutic alliance and empathy constructs are distinct with a multi-modal approach. As predicted, a CFA supported a 2-factor model (one where empathy and the alliance are distinct constructs) being more appropriate than a 1-factor model (one where empathy and the alliance are all part of one larger relationship factor). Although this small sample did not allow direct comparison of the two models, the improved strength of the path coefficient of empathy onto its own factor provides at least some evidence that empathy is a distinct construct from the alliance, and supports the notion that empathy should continue to be conceptualized as distinct and measured independently. To further strengthen these findings, future research with larger sample sizes should be conducted to examine whether the current conceptual models provide a better fit to the data, thus allowing the significance of the pathways to be interpreted.

As expected, the structural regression model provided some further support for the distinctness between empathy and the alliance constructs. Although neither empathy nor the alliance positively predicted ESF, the alliance was significantly negatively associated with GAS at posttreatment. Empathy, however, was not significantly related to GAS. Given that the alliance and empathy differentially predicted GAS outcome, this analysis provided further evidence for the distinctness of the constructs.

Although it was not possible to evaluate simultaneously the associations between the alliance components and empathy, the separate bivariate correlations revealed that all

three alliance components were significantly correlated with empathy, with the bond component having the highest correlation (as predicted). Horvath and Greenberg (1986) found a similar pattern between empathy and the alliance components. Although these results do not distinguish definitively empathy from the alliance components, they do provide further evidence for conceptual distinction. Additionally, given Watson's (2002) view that empathic responding requires having access not only to patients' emotional worlds, but also to their goals, intentions, and values, one would expect relatedness among each alliance component and empathy, which was clearly demonstrated here.

It should also be noted that, in this sample, empathy did not produce significant predictive paths to the two outcome measures when using path analysis. Although empathy did have significant bivariate correlations with both outcome measures, the lack of association in the main analytic models suggests that the mechanisms through which relationship factors work may be different in CBT for GAD than in CBT for other disorders (where significant empathy-outcome associations have been demonstrated; Bohart et al., 2002; Burns & Nolen-Hoeksema, 1992).

Given that the results from the tests for establishing distinctness between empathy and alliance indicated that (a) a 2-factor model was more appropriate than a 1-factor model, (b) empathy and the alliance differentially predicted treatment outcome as measured by GAS, and (c) the alliance components produced significant, yet differential correlations with empathy, the results of this study generally support the distinctness of the two constructs. The concerns regarding sample size and several poor model fits necessitate significant caution in interpreting the findings. However, the findings do point to distinctness being more likely than nondistinctness, which suggests that a good

therapeutic relationship, as identified by the patient, is not solely a function of empathy, and that empathy, as perceived by the patient, is not simply a function of a good relationship. Given the complexity of empathy as a concept and a technique, it will be important to keep its uniqueness from the alliance in mind if the field of psychotherapy research moves toward a common factors approach to training. Given recent calls to train therapists not only in therapeutic techniques, but also from a common factors perspective (Castonguay, 2000), the impulse may be to lump empathy in with the alliance as a singular relationship variable. The preliminary results here further make a case for empathy as its own separate technique that would require its own separate set of skills than those needed for alliance development.

The final question regarding the nature of the association between empathy and the alliance was whether there was temporal precedence among empathy, alliance, and outcome. Because the path analysis produced poor fit statistics for both the non-mediating and mediating models, it was not possible to interpret the pathways. However, because there was significant improvement in the model fit when the relation between empathy and outcomes were mediated by middle alliance, there was some indication that there may be a temporal pathway from empathy to outcome with middle alliance as a mediator. A review of the literature on client-centered conditions (see Norcross, 2002) has pointed to empathy as neither necessary nor sufficient for treatment outcome. Some psychotherapy researchers (see Hill, 2007) have called for a reformulation of the mechanisms of conditions such as empathy. Because early empathy is positively associated with middle alliance in this study, these results suggest, albeit very preliminarily, that early empathy might be important to building an alliance throughout

treatment. Although these results cannot definitely point to empathy as a precursor for building an alliance, which in turns promotes adaptive outcomes, it is an encouraging first step to reformulating empathy's role in the therapeutic relationship.

A number of limitations characterize the current study. First, the sample size was relatively small for conducting path analyses and structural regression models. Thus, many of the models exhibited a poor fit. A larger sample would have likely resulted in better fitting models overall, which would have allowed for more confidence in the interpretations of the path estimates. Chi-squared minimum fit statistics are often significant in small samples, which points to poor fit. Thus, I decided that relying on the normative fit indices, the comparative fit indices, and standardized RMR was appropriate in some cases. Second, this study provided limited ecological validity, as the treatments examined in this study were highly manualized treatments. In order to provide more generalizability in understanding the constructs of empathy and the alliance, future studies would be helpful where a broader range of treatments and therapists are examined (perhaps especially in naturalistic settings). There is also limited generalizability to populations beyond white, educated, and anxious patients who were dominant in this sample. It would be a worthwhile exploration to determine if patient perceived empathy and the alliance demonstrated equal distinctness in samples of greater diversity and/or different forms of pathology (e.g., Axis II). Finally, the division of the patients into three treatments groups could have had an impact on empathy ratings. In particular, the CT and SCD-only groups added an additional 30-minute reflective listening period to the end of each session so as to have equal timing across all three groups. Because therapists were instructed to be nondirective, supportive, and empathic, empathy ratings from these

groups could have had a differential association with the other variables of interest

relative to the combined group. However, given the already small sample size, it was

decided not to reduce it further by running analyses by treatment group.

The present findings, though preliminary, have clear clinical implications.

Understanding empathy as a distinct construct from the alliance could leave an important

impression on how we understand the therapeutic relationship and the steps that we take

to achieve that relationship. Knowledge of how empathy impacts the alliance may be

important for implementing alliance training programs and perhaps programs that train

clinicians in empathy (Angus & Kagan, 2007). If establishing empathy is indeed an

important precursor to the alliance, empathy techniques may be as crucial as other

techniques used by therapists. Although further research is needed to confirm these

results with GAD patients undergoing CBT, as well as other populations and treatments,

the findings here are a promising first step to appreciating and uncovering the influence

of two clinically central common factors.

Table 1

Descriptive Statistics for Relationship Factors and Outcome Measures

Variables	N	M	SD	Min	Max
Total Average Empathy	62	14.58	8.84	-8.33	36.33
Total Average Alliance	62	212.57	18.73	149.50	245.25
Total Average Goal	67	71.76	6.89	49.33	82.50
Total Average Task	67	71.52	6.65	50.33	82.75
Total Average Bond	67	68.81	7.32	47.5	82.50
Early Average Empathy	65	13.47	10.05	-10.00	38.00
Middle Average Alliance	67	212.35	19.49	153.50	243.5
GAS	67	-.02	4.63	-10.63	10.68
ESF	67	3.50	1.73	0.00	6.00

Note. Total Average Empathy = mean rating across sessions 1, 4, 8, and 12; Total Average

Alliance = mean rating across sessions 2, 5, 10, and 14; Total Average Goal = mean rating

for goal alliance component across sessions 2, 5, 10, and 14; Total Average Task = mean

rating for task alliance component across sessions 2, 5, 10, and 14; Total Average Bond =

mean rating for bond alliance component across sessions 2, 5, 10, and 14; Early Average

Empathy = mean rating across sessions 1 and 4; Middle Average Alliance = mean rating

across sessions 5 and 10; GAS = global anxiety symptomatology at posttreatment; ESF =

endstate functioning at posttreatment.

Table 2

Intercorrelations of All Study Variables

Variable	1	2	3	4	5	6	7	8	9
1. Total Average Empathy	–								
2. Total Average Alliance	.55**	–							
3. Total Average Goal	.51**	.96**	–						
4. Total Average Task	.54**	.94**	.94**	–					
5. Total Average Bond	.56**	.91**	.76**	.72**	–				
6. Early Average Empathy	.96**	.54**	.50**	.55**	.54**	–			
7. Middle Average Alliance	.58**	.97**	.93**	.91**	.88**	.56**	–		
8. GAS	-.30*	-.40**	-.43**	-.39**	-.31**	-.35**	-.37**	–	
9. ESF	.37**	.39**	.40**	.37**	.36**	.40**	.37**	-.92**	–

Note. Total Average Empathy = mean rating across sessions 1, 4, 8, and 12; Total Average Alliance = mean rating across sessions 2, 5, 10, and 14; Total Average Goal = mean rating for goal alliance component across sessions 2, 5, 10, and 14; Total Average Task = mean rating for task alliance component across sessions 2, 5, 10, and 14; Total Average Bond = mean rating for bond alliance component across sessions 2, 5, 10, and 14; Early Average Empathy = mean rating across sessions 1 and 4; Middle Average Alliance = mean rating across sessions 5 and 10; GAS = global anxiety symptomatology at posttreatment; ESF = endstate functioning at posttreatment.

*p< .05, **p < .01

Figure 1 - One-factor model for the confirmatory factor analysis with empathy and the three alliance components (viz., goal, task, and bond) loaded onto one latent "relationship" factor.
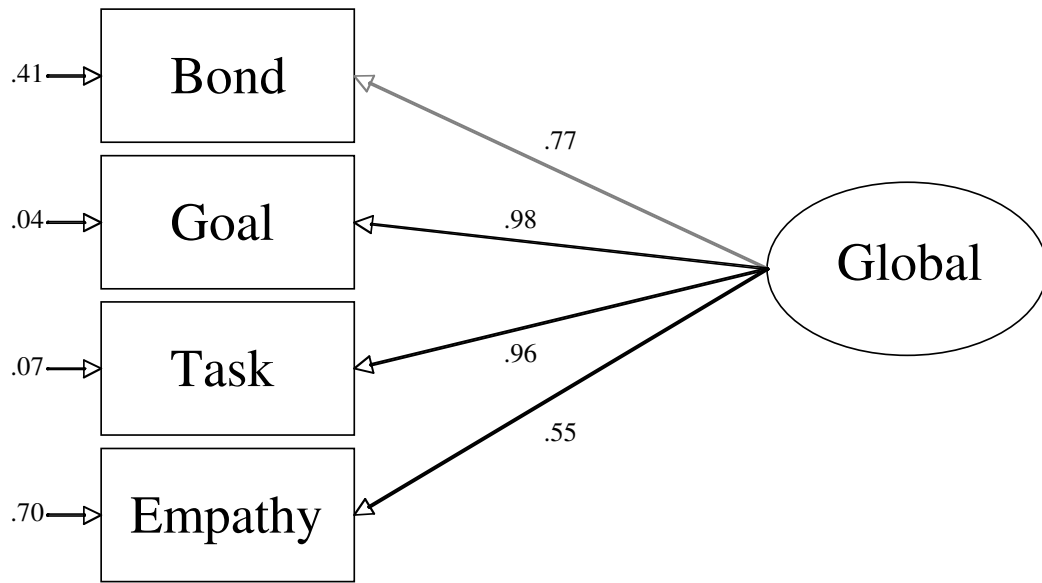
Figure 2 - Two-factor model for the confirmatory factor analysis with empathy loaded onto its own latent factor and the three alliance components loaded onto their own latent alliance factor. The figure indicates the standardized path coefficients.
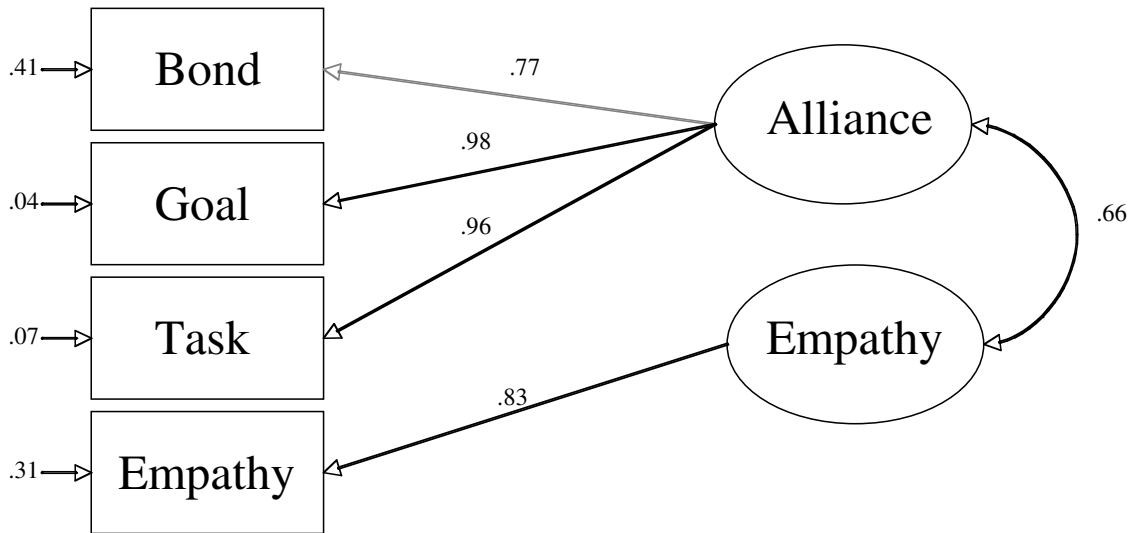
Figure 3 - Structural regression model examining the differential predictive validity of the latent empathy and alliance constructs on global anxiety symptomatology (GAS). The figure indicates the standardized path coefficients and their statistical significance.
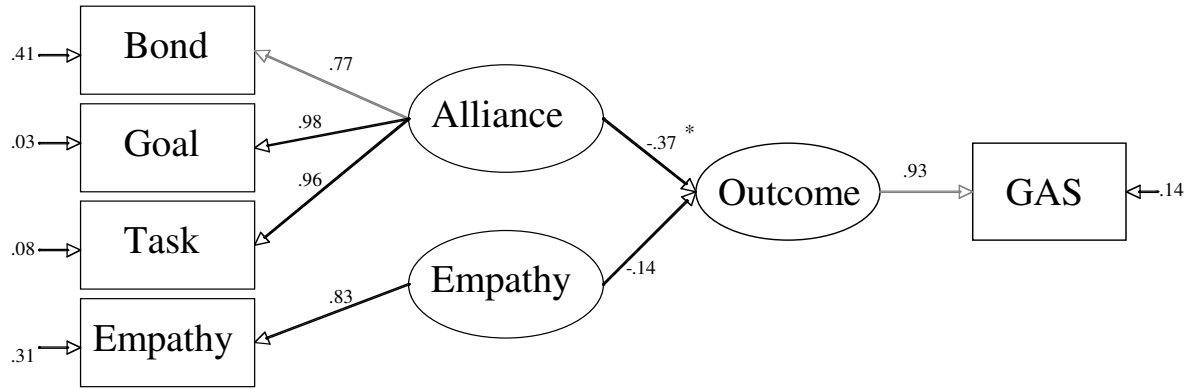
Figure 4 - Structural regression model examining the differential predictive validity of the latent empathy and alliance constructs on endstate functioning (ESF). The figure indicates the standardized path coefficients and their statistical significance.
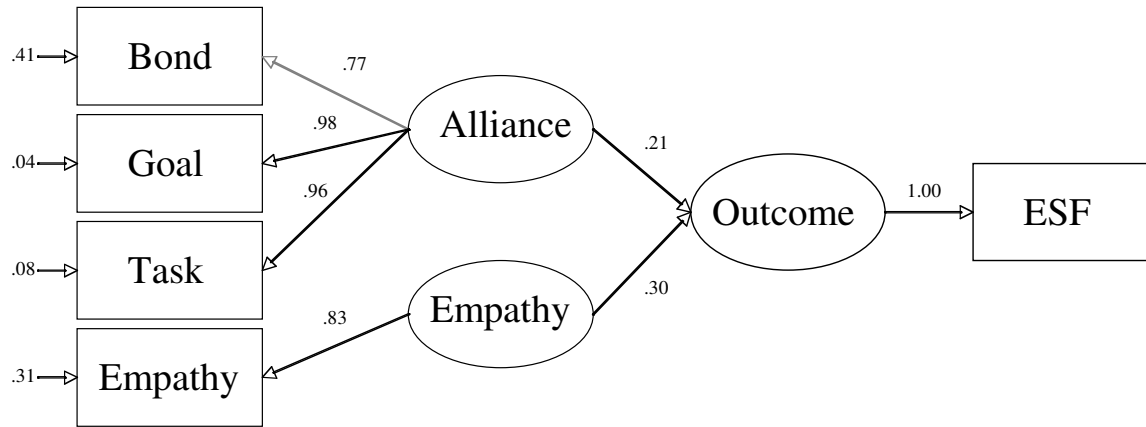
Figure 5 - Path model examining the differential predictive validity of the latent empathy and global alliance constructs on a global anxious symptomatology (GAS) and ESF simultaneously.
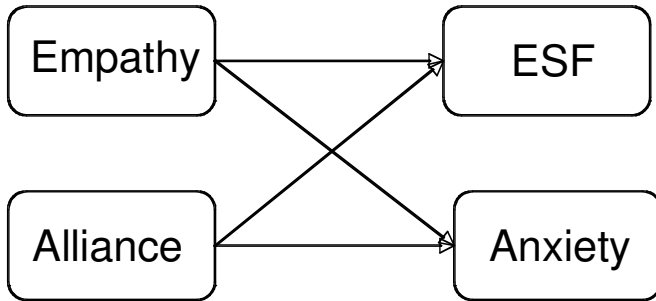
Figure 6 - Path models that examine the relationship between the alliance components and empathy.
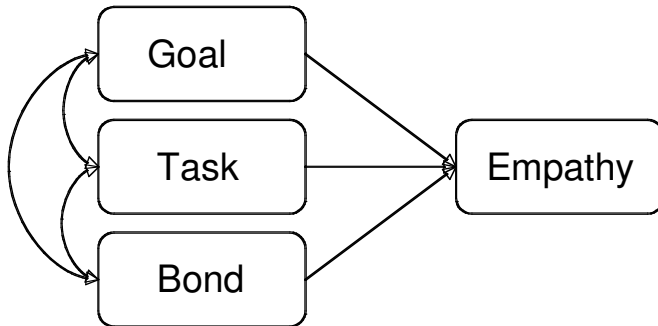
Figure 7 - Path model examining the direct influence of early empathy and the middle
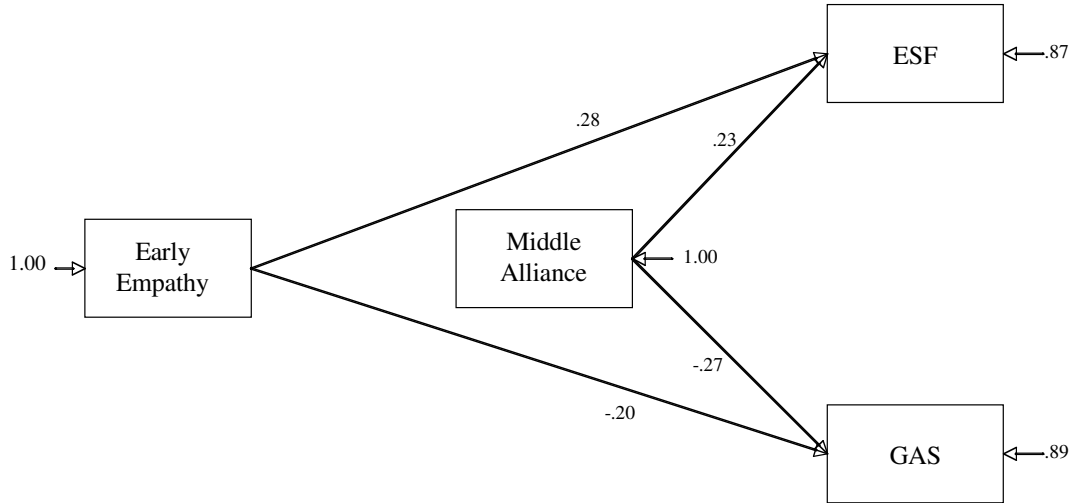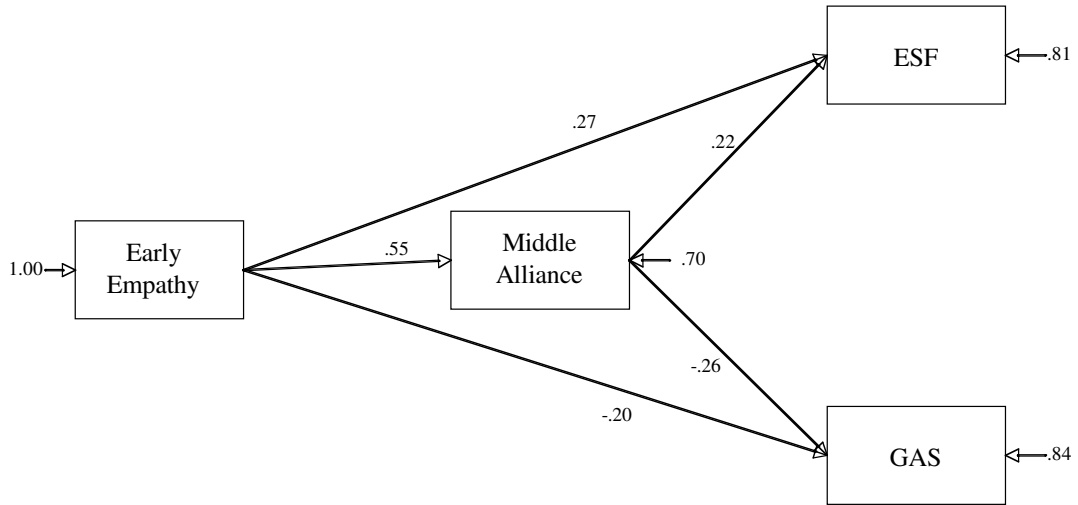
alliance separately on treatment outcome.

Figure 8 - Path model examining the indirect (with middle alliance quality as a mediator) influence of early empathy on treatment outcome.

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