Pre-treatment Client Interpersonal Problems Relation to the Initial Working Alliance Using Multilevel Modeling

by

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ABSTRACT

This study examined the relationship of client pretreatment interpersonal problems (measured by the Inventory of Interpersonal Problems) to the therapeutic alliance (as measured early in treatment by a self-report version of the Working Alliance Inventory-Short) using multilevel modeling to account for client and counselor variables. Specifically, the correlations of dominance, hostility and cold/distance interpersonal problems with the initial working alliance were investigated. Participants consisted of 144 clients and 44 graduate student counselors at the Counselor Training Center at Arizona State University. The intraclass value of .23 indicated there is a sizable effect, with counselor differences accounting for 23% of the variance in client alliance ratings, supporting the use of multilevel modeling. There was a dominance counselor gender interaction with working alliance scores. Clients who had problems with dominance reported higher working alliance scores with male counselors while clients who had problems with submissiveness reported higher working alliance scores with female counselors. Hostile dominance interpersonal problems were associated with lower initial working alliance scores regardless of counselor gender.

Implications for clinical practice are discussed.

Keywords: working alliance, interpersonal problems, multilevel modeling
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Chapter 1

INTRODUCTION

According to Kiesler (1996), human behavior cannot be fully understood by situational factors or intrapsychic motivators, but only in relation to the historical and current interpersonal conflicts; therefore, the focus of psychotherapy research should be on interpersonal problems. “Interpersonal problems are the characteristic difficulties an individual experiences in relating to others and are sources of subjective distress” (Gurtman, 1996, p. 241). In any relationship or interaction between two people, both parties have influence on the establishment of the relationship and how it progresses. Hatcher (1990) stated that previous interpersonal experiences are brought into every relationship and the therapeutic relationship is affected by these experiences (Horvath & Luborsky, 1993). The therapeutic relationship between the counselor and the client is a specific type of relationship of significant interest in the psychological field for numerous reasons. The quality of the therapeutic relationship has been widely studied and a modest positive correlation with therapeutic outcome has been repeatedly supported within the context of behavioral therapy, cognitive therapy, gestalt therapy, and psychodynamic therapy (Horvath & Luborsky, 1993). “Positive alliance is not in itself curative, rather the working alliance has been seen as the ingredient that ... makes it possible for the client to accept and follow treatment faithfully” (Bordin, 1980, p. 2). The
The central aim of this study is to examine how client pre-treatment interpersonal problems are related to how the therapeutic alliance is initially developed. This study specifically investigated the association between client pretreatment interpersonal problems and the client’s perception of the therapeutic alliance at the third session.

The concept of the therapeutic alliance (a positive alliance between the client and the counselor) was identified as an essential component of the relationship to reach a successful outcome in therapy (Greenson, 1967). Although there have been numerous definitions of alliance, Horvath and Symonds (1991) found a theme: all definitions included a collaborative nature between the client and counselor to negotiate a contract regarding how counseling will progress. Working alliance is partly based on the view that both the therapist and client make important contributions to form an effective partnership (Horvath & Symonds, 1991). Bordin (1979) defined the working alliance by three different components: (1) the degree to which the client and therapist agree on the goals of therapy; (2) the degree to which there is agreement upon how to reach the goals of therapy; and (3) the therapeutic bond, which is the personal attachment between the therapist and client incorporating mutual trust, acceptance, and confidence.

Research indicates that there are two critical alliance phases. The first is the initial therapeutic alliance formed in the first five weeks, peaking within the third week (Horvath, 1981; Saltzman, Luetgert, Roth, Creaser, &
Howard, 1976). Most studies focusing on this initial phase of the therapeutic alliance study the alliance at the third session because this allows sufficient time for initial rapport building (Saltzman et al., 1976). Within the initial phase, it is essential that the client develop trust in the counselor as well as agreement upon the goals of counseling and the methods utilized to reach these goals (Kokotovic & Tracey, 1990). The initial phase of the therapeutic alliance appears to be an important phase for successful therapy. When difficulties occur during this initial phase of the therapeutic alliance it is unlikely that the client will adhere to the treatment plan and engage in a productive therapeutic relationship and early termination is probable (Horvath, 1991; Kokotovic & Tracey, 1990). Hartley and Strupp (1983) found more successful clients reported an increase in therapeutic alliance ratings during the initial phase, while less successful clients reported a drop in alliance ratings. The initial therapeutic alliance has also been found to be more predictive of client outcome than therapeutic alliance measured during the middle and end of therapy (Horvath, 1981).

The second critical phase occurs when the therapist begins to challenge the client more frequently, which the client may experience as a reduction in sympathy and support, often weakening or rupturing the alliance (Horvath & Luborsky, 1993). The manner in which the client is challenged and how the alliance is repaired during this phase is critical for a successful outcome (Horvath & Luborsky, 1993). Separate difficulties may
be encountered during each critical phase of the alliance. Difficulties in the second phase appear to be more associated with how the therapist challenges the client and then repairs the relationship, whereas difficulties in the initial phase are indicative of difficulties establishing initial collaboration and trust within the relationship (Horvath & Symonds, 1991; Kokotovic & Tracey, 1990). However, according to Horvath and Symonds (1991), “the alliance literature reveals a significant lack of unanimity with regard to how the alliance operates and what contribution each participant must provide for the development of a strong working alliance in therapy” (p. 147).

Due to the correlation between the therapeutic alliance and outcome, the factors contributing to forming the therapeutic alliance have become a topic of research. Existing research studies focus on what influences the therapeutic alliance to figure out why sometimes it is easy to build a good therapeutic alliance and in other cases it is difficult. The idea that a client’s interpersonal problems factor into the therapeutic relationship is a long-standing theoretical proposition. Interpersonal problems are defined as the characteristic difficulties that an individual experiences relating to others that are a source of subjective distress (Horowitz, 1994). Freud (1912) focused on transference in session, or how the client’s previous relationship patterns would play out in session. Geslo and Carter (1994) expanded on this idea, explaining that there are two parts of the therapeutic relationship: the real relationship and the transferential relationship. The real relationship
refers to a realistic adult-to-adult interaction between the client and the therapist, whereas the transferential relationship refers to the stylized patterns of interacting that both parties bring into the relationship, that have developed from previous relationship experiences (i.e. hostility to authority figures). According to Kiesler (1996), in a predominantly unconscious manner our verbal and non-verbal behaviors communicate to others our self-definition in an attempt to influence others to respond in a way that confirms this self-definition. In the case of a pathological individual, maladaptive and negative beliefs about the self in relation to others are rigidly maintained and consequently lead to a restricted range of interpersonal behavior (Muran, Segal, Samtag, & Crawford, 1994). These limited interpersonal experiences then continuously cycle to confirm and perpetuate the individual’s self-definition. This is the perspective of general psychopathology described by theorists from diverse orientations (Baldwin, 1992) and consistent with definitions of personality disorders (Millon, 1986).

Interpersonal theory utilizes a circular rather than linear causality to explore the relationship between the client and counselor; the relationship is a two-person group in which both parties exert mutual influence (Kiesler, 1996). According to Kiesler, each person acts in order to elicit responses that confirm or validate their self-perceptions and presentations to fulfill basic interpersonal needs. The interpersonal circle reflects the assumption that interpersonal behaviors and problems are defined by blends of two basic
motivations: the need for control and the need for affiliation (Kiesler, 1996). Among the major premises of interpersonal theory are that every interpersonal behavior can be described along the dimensions of control and affiliation and blends of these dimensions indicate different interpersonal behaviors or problems (Sodano & Tracey, 2011). These interpersonal problems can be viewed along the dimensions of control (from non-assertive to domineering/controlling) and affiliation (from cold/distant to self-sacrificing) (Kiesler, 1986). Interpersonal problems can also be mapped out in a circular fashion based on the blend of the orthogonal dimensions of affiliation and control, differentiating eight octant subscales: Domineering/controlling, intrusive/needy, self-sacrificing, overly accommodating, non-assertive, socially inhibited, cold/distant and vindictive/self-centered (Kiesler, 1986).

Figure 1: Interpersonal Circle
While interpersonal behaviors are not necessarily problematic, some individuals experience a deficit or excess of certain interpersonal behaviors, attitudes, or feelings, which can become problematic (Gurtman & Lee, 2009). The Inventory of Interpersonal Problems (IIP; Horowitz et al., 1988) is a self-report questionnaire that measures the most common interpersonal problems through the circumplex model. The IIP was initially created through observations of a client in psychotherapy (Horowitz, 1979) and then categorized similar interpersonal complaints reported by psychiatric outpatients into domains of interpersonal problems (Horowitz & French, 1979). Each item of the IIP is written in the form of a statement describing a particular kind of deficit or excess related to an interpersonal behavior, attitude or feeling (Gurtman & Lee, 2009). The IIP has roots in interpersonal theory, specifically to the idea that an individual may reenact maladaptive interpersonal patterns to confirm their self-definition (Kiesler, 1986) or maintain a psychological connection to an earlier caregiver (Sodano & Tracey, 2011).

Counselors, who usually have selected the profession based on their highly developed social skills and trained to attend to their clients verbal and non-verbal behaviors, are easily able to act in ways that adhere to the client’s definition of the relationship, complementing their behavior (Tracey, 2002). However, despite the skill set most counselors have, some may still have significant difficulty building rapport with particular clients. Tracey (2002)
explains two reasons for this difficulty: (1) client rigidity, which leaves little room for the therapist to act and build a realistic relationship; or (2) the client request for a behavior/interaction that is not in the therapist’s repertoire by choice or due to his or her own rigidity. Both the client and the therapist come into the relationship with expectations and interpersonal patterns or difficulties, which can lead to a good fit and positive rapport or a poor fit with the inability to define a positive relationship. Due to counselor’s increased flexibility to adapt to the client in the beginning of therapy it appears that the client’s predisposing interpersonal problems would play a more significant role during the initial phase of the therapeutic alliance (Kiesler & Watkins, 1989).

Research supports the theory that client interpersonal problems are negatively related to the ability to build a strong therapeutic alliance during the initial phase of treatment (Beretta et al., 2005; Paivio & Bahr, 1998; Saunders, 2001; Muran et al., 1994). Beretta and colleagues (2005) researched the role of client interpersonal Problems and found client overall pre-treatment inventory of interpersonal problem scores were correlated ($r = -.41, p < .01$) with therapeutic alliance scores at the third session. According to Saunders (2001) based on the client self report scales, client interpersonal problems were better predictors of the emotional bond with the therapist at the beginning of counseling than was client symptomatic distress, supporting the strong role interpersonal problems play in the
therapeutic alliance. Specifically the need for control, patterns of hostility (Paivio & Bahr, 1998) and the need for intimacy (Saunders, 2001) were negatively correlated with the therapeutic alliance. Muran and colleagues (1994) investigated the correlation between the Inventory of Interpersonal Problems and Millon Clinical Multiaxial Inventory (MCMI) axis II scales prior to treatment and the working therapeutic alliance at the third session of short-term cognitive therapy. Results indicated that narcissistic, histrionic, antisocial and paranoid subscales of the MCMI were negatively associated with the overall alliance and the task and goal components, which they conclude indicates support that vindictive-self-centered interpersonal problems negatively predict alliance (Muran et al., 1994). Vindictive-self-centered (defined by the IIP vector score and degree in the interpersonal circle) has been related to numerous traits including narcissism, distrust, manipulative (defined by the PAF) and destructive interactional styles such as aggressive control seeking, determined by therapist and client reports (Gurtman, 1996).

Interpersonal problems are presumed to shape the interactional patterns that emerge in counseling, that either promote or hinder the work in session (Henry, Schachi & Strupp, 1986). The extremeness of client vindictive/self-centered interpersonal behaviors were found more likely to inhibit the client’s ability to form a good therapeutic alliance than the extremeness of therapist vindictive/self-centered interpersonal behaviors
during the early stages of therapy, despite equivalent means in vindictive/self-centered behaviors between client and counselor data (Kiesler & Watkins, 1989). The results revealed that the more extreme the client’s vindictive/self-centered interpersonal behavior, the more likely the client perceived a less positive working alliance in all WAI scales except the task subscale (Kiesler & Watkins, 1989). In contrast, therapist extreme vindictive/self-centered behaviors were only significantly correlated with the goal subscale of the client’s WAI (Kiesler & Watkins, 1989). Kiesler and Watkins discuss that these results may indicate that clients with maladaptive vindictive/self-centered interpersonal behaviors are more likely to selectively ignore or misperceive the positive aspects of the therapist’s helping behavior and attend to the negative aspects of the therapist’s alliance behaviors; results suggest this makes building a strong working alliance more difficult and time consuming. In other words for clients with more severe interpersonal problems the counselor may be flexible and accepting but the client may not perceive the counselor this way, leading to therapeutic alliance difficulties.

There are also some client interpersonal problems that are associated with an increased ability to build a positive therapeutic alliance. Beretta and colleagues (2005) have shown that clients with non-assertiveness problems establish a better alliance over time. Those with lower control scores are less likely to engage in power struggles within the therapeutic relationship and
may be more willing to relinquish control to engage in a productive working relationship (Beretta et al., 2005). This would make it easier to come to an agreement in regards to therapy goals and the methods used to reach these goals, which are two of the tree components of the therapeutic alliance. Interpersonal problems of dependency and non-assertiveness have also been associated with an initial strong therapeutic alliance (Muran, Segal, Samtag, & Crawford, 1994). The results indicated that self-sacrificing/non-assertive problems (indicated by the overly nurturing/self-sacrificing and exploitable/overly accommodating subscales of the IIP) were positively associated with the overall score and the task and goal components of the working alliance. The non-assertive octant score was only correlated with the task and goal components of the working alliance but not the overall working alliance. Client interpersonal problems with affiliation have been marginally positively correlated with the therapeutic alliance at the third session \(r = .24, p = .07\), indicating that clients with self-sacrificing interpersonal problems may have a stronger early alliance (Beretta et al., 2005). These findings show that some interpersonal difficulties, such as self-sacrificing and non-assertiveness problems, do not seem to hinder the initial therapeutic alliance and may actually be associated with a higher initial therapeutic alliance. Interpersonal problems related to self-sacrificing and non-assertiveness may be helpful to building a good therapeutic alliance because the client is more apt to respect the therapist and work
collaboratively. While on the other hand, interpersonal difficulties such as cold/distance, hostility, intimacy and the need for control may hinder the initial therapeutic alliance (Beretta et al., 2005; Paivio & Bahr, 1998; Saunders, 2001; Muran et al., 1994; Gurtman, 1996).

These results, however, do not account for the counselor differences. Previous cited studies regarding the connection between interpersonal difficulties and the early therapeutic alliance (Beretta et al., 2005; Paivio & Bahr, 1998; Saunders, 2001; Muran et al., 1994; Gurtman, 1996) have not taken nested data into account. This ignores the entire second reason Tracey (2002) outlined for difficulty building rapport, which is the interpersonal rigidity the counselor may bring into the relationship. It is important to account for counselor differences because numerous counselor variables may affect the therapeutic alliance. While one would hope most therapists have the qualities, skills, and flexibility to present to the client the necessary components required for building a successful therapeutic alliance, it is unlikely that all therapists possess these qualities or skills and are able to act on them with all of their clients (especially clients with extremely rigid interpersonal patterns). Therefore, it is essential to take into account counselor differences in the data analysis. According to Kahn (2011), ignoring nested data, which in this case refers to the individual clients that exist within counselor caseloads, can have disastrous consequences. Baldwin, Murray and Shadish (2005) re-analyzed data from 33 studies regarding
group administered treatments that did not initially account for nested data. After accounting for nested data only 12-68% of the findings from all 33 studies were still significant (Murray & Shadish, 2005).

According to a literature review by Ackerman and Hilsenroth (2003), several therapist factors are correlated to the therapeutic alliance ratings, supporting the importance of using multilevel modeling to account counselor variation when looking at client variables. Significant relationships have been found between early alliance and therapist attributes, such as conveying a sense of trustworthiness (Horvath & Greenberg, 1989), affirming/understanding (Najavits & Strupp, 1994), flexibility (Kivlinghan, Clements, Blake, Arnez & Brady, 1993), interest, alertness, relaxation, confidence (Hersoug et al., 2001), warmth (Mohl et al., 1991) and experience (Hersoug et al., 2001; Mallinkrodt & Nelson, 1991). It has also been found that if the therapist expected the relationship with the client to be positive, a better working alliance was facilitated based on client and therapist scores on all scales of the WAI at session three (Al-Darmaki & Kivlinghan, 1993). Ackerman and Hilsenroth (2003) reported that the client perception of the therapist as understanding, accepting, respectful, empathetic, experienced and insightful or helpful is positively related to the therapeutic alliance; these client perceptions are malleable, changing over the duration of treatment. According to Ackerman and Hilsenroth, “the ability of a therapist to instill confidence and trust within the therapeutic frame is essential to therapeutic
success” (2003, p. 3). However, it is more difficult to instill this trust and confidence with clients who start therapy with more hostile interpersonal difficulties (Kiesler & Watkins, 1989). There may be some therapists who are particularly talented with clients in this area, but there is not sufficient research regarding this topic.

Researchers have sought to identify characteristics of people who have a particular male or female counselor preference (Bernstein, Hofmann & Wade, 1987). However, conflicting results have been produced. For example, both preferences toward male counselors (Boulware & Holmes, 1970) and female counselors (Jones & Zoppel, 1982; Simmon & Helms, 1976) have been documented. On the other hand, others (Koile & Bird, 1956; Walker & Stake, 1978) have demonstrated that clients prefer same sex counselors, and Kirshner (1978) found that a “significant minority” of female clients prefer a male counselor to a female counselor. Based on previous studies demonstrating counselor gender preferences, it is reasonable to expect that counselor and client gender could play a role in the initial therapeutic alliance; therefore these factors were included in the present study.

Therapist factors, including positive memories of caregivers, and controlling interpersonal style were related to client alliance ratings in late treatment but not to client alliance ratings early in treatment (Hersoug et al., 2001). This is consistent with Horvath and Luborsky’s (1993) findings that
the second phase of the therapeutic alliance is focused on how the therapist challenges the client and repairs the relationship. Accordingly, it seems that the therapist interpersonal problems may have more of a relationship to the therapeutic alliance in the second critical phase of the therapeutic alliance. For this reason, the current study focuses on client interpersonal problems instead of counselor interpersonal problems.

This study was designed to investigate the correlation between client pre-treatment interpersonal problems and the initial working alliance after accounting for nested data. According to Horvath (1981), early alliance may be the most clinically useful indicator of future client success. Given the results of Baldwin, Murray and Shadish (2005), in addition to the many therapist variables that have been associated with the working alliance, it is necessary to utilize multilevel modeling to account for the nested data of clients within counselor caseloads. The first hypothesis of the present study was that differences between counselors in general would account for a large enough portion of the variation in the initial therapeutic alliance rating to validate the use of multilevel modeling. The intra-class correlation determines the total variation in the outcome variable that lies between groups (Lee, 2000), which in this case are the counselor caseloads of individual clients. When the intra-class correlation is greater than 10% of the total variation in outcome, use of multilevel modeling is suggested (Lee, 2000).
The second hypothesis was that there would be a correlation between the pretreatment affiliation and control dimensions of the client IIP scores and the overall score of the working alliance self-report at the third session. Based on previous studies (Beretta et al., 2005; Muran et al., 1994; Paivio & Bahr, 1998), I hypothesize specifically that cold/distant and controlling interpersonal problems will be negatively associated with the quality of the initial therapeutic alliance, and non-assertiveness problems will be positively associated with the quality of the initial therapeutic alliance.

The last hypothesis was that vindictive/self-centered (hostile dominance) interpersonal problems would be negatively associated with the quality of the initial working alliance based on previous studies that have negatively correlated hostile and hostile dominance interpersonal problems to the quality of the initial working alliance (Paivio & Bahr, 1998; Muran et al., 1994; Gurtman, 1996).
Subjects

Participants consisted of 144 clients (80 females, 63 males and one transgendered client) who received outpatient-counseling services weekly at the Counselor Training Center at Arizona State University (ASU). Clients included both college students (40.6%) and faculty (4.2%) from ASU as well as community members (50.3%) who sought services from the Counselor Training Center (4.9% missing responses). The majority of clients were Caucasian (64.8%) and between the ages of 19-49 years old (90.2%).

Treatment consisted of weekly sessions with the same counselor. Only clients who had not previously participated in research at the Counselor Training Center were included in the study to avoid including clients who have stayed with the same counselor from a previous semester. Treatment was provided by 44 graduate students (33 females and 11 males) in their first or second year of practicum at ASU. Counselors averaged approximately 3 clients in their caseload who volunteered to participate in the study.

Measures

The Inventory of Interpersonal Problems – Circumplex – Item Response Theory (IIP-C-IRT; Sodano & Tracey, 2011) was used as a measure of interpersonal problems. This 32 item version of the original 64 item version of the IIP has respondents rate the level of difficulty for each interpersonal
difficulty using a five point Likert scale (0=not at all, 4=extremely) just as the original version does (Alden, Wiggins & Pincus, 1990). Eighteen items address behaviors that are hard to do (i.e. “It is hard for me to take instructions from people who have authority over me”) and 14 items address behaviors that occur too often (i.e. “I try to please other people too much”). The instrument was designed to yield interpersonal circumplex octant scores on the dimensions of affiliation (cold-distant vs. self-sacrificing) and control (non-assertive vs. domineering/controlling), and also a total distress score. For the purposes of this study the dimensions of affiliation and control were utilized. The affiliation and control scores can range from -9.8 to 9.8. Control scores are calculated with an equation positively weighting domineering/controlling, vindictive/self-centered and intrusive/needy octant scales and negatively weighting socially inhibited, non-assertive and socially inhibited octant scales. The affiliation scale is calculated with a dimensional equation positively weighting overly accommodating, self-sacrificing and intrusive needy octant scores and negatively weighting vindictive/ self-centered, cold/distant and socially inhibited octant scores. Research supports the psychometric properties of the IIP (Gurtman, 1996; Horowitz, et al., 2000; Soldz et al., 1995; Tracey et al., 1996). Sodano and Tracey (2011) constructed the IIP-C-IRT based on the original IIP-C version by utilizing brief test construction methods based on item response theory (IRT) to select fewer items, which maximally discriminate individuals along
the interpersonal circumplex. The precision of the subscales was examined across varying levels of interpersonal problems, and IRT based reliability levels were found to be adequate or better across the score levels in all subscales and demonstrated precision in discriminating individuals on levels of the latent trait (Sodano & Tracey, 2011). The vindictive/self-centered octant subscale of the IIP-C-IRT was utilized in the present study. The items in this subscale are, “It’s hard for me to trust other people”, “It’s hard for me to put somebody else’s needs before myself”, “I am too suspicious of other people” and “I want to get revenge against other people to much”.

*The Working Alliance Inventory Short (WAI-S; Tracey & Kokotovic, 1989)*, is a shortened version of the original 36-item WAI. The 12-item questionnaire is given to clients and therapists to measure therapeutic alliance. Each item is rated on a 7-point scale and yields three sub-scale scores (goal, task, and bond) in addition to one overall general alliance score. The sub-scales represent three components of alliance. The goal component is the degree to which the therapist and client agree on the goals of therapy (i.e. “My therapist does not understand what I am trying to accomplish in therapy”). The task component is the degree to which the client and therapist agree on how to reach these goals (i.e. “My counselor and I agree about the things that I need to do in therapy to help improve my situation”). The bond component is the personal attachment developed between the counselor and the client (i.e. “My therapist and I trust one another”). For the purposes of
this study the general alliance score completed by the client will be utilized. Client report of working alliance has been found to have the strongest association with outcome (compared to therapist or observer reports) regardless of who assesses the client outcome (Horvath & Symonds, 1991). Therefore client perception of the working alliance appears to be more important to client outcome than the therapist’s perception, and was thus utilized for the current study. Tracey and Kokotovic (1989) demonstrated the construct validity of these sub-scale scores and the overall general alliance score. In this sample an internal consistency estimate of $\alpha = .94$ was obtained for the general alliance score, $\alpha = .89$ for the task sub-scale, $\alpha = .64$ for the goals sub-scale and $\alpha = .92$ for the bond sub-scale.

**Procedures**

Prior to the first session of counseling, clients were informed about the study and 165 chose to participate and completed a consent form for the study. They filled out demographic information identifying their gender, age, ethnicity and income. Age and income were split up as categorical variables. Participants were identified by a code number to protect their confidentiality. The Inventory of Interpersonal Problems (IIP-C-IRT) was completed prior to the first session. The pre-treatment IIP dimension scores were utilized to indicate client pre-treatment interpersonal problems. The initial therapeutic alliance is the focus of this study because it has been found to be the most clinically useful indicator of client outcome (Horvath, 2001).
Thus prior to the third session, clients completed the Working Alliance Inventory Short (WAI-S).

The counselors in training were enrolled in a course that consisted of a combination of didactic training and group supervision. The counselors were supervised and observed through a one way mirror by a licensed psychologist and were provided one hour of individual supervision a week with a licensed psychologist or an advanced doctoral student in supervision training.

Due to client termination or cancelations, 21 of 165 clients were excluded from the study. These clients were excluded due the lack of data for the dependent variable or independent variables; four clients missed their second session and did not complete the IIP, while seventeen dropped out of the study and had no WAI-S data. Analyses were conducted to test if the IIP scores of participants who dropped out differed from the rest of the sample. The two groups did not differ in dominance scores $F(1, 153) = 1.29, p = .26$ or love scores $F(1, 153) = .01, p = .94$.

**Analysis**

Of the clients that were included in the sample, 0.57% of the data values were missing. Five multiple imputations of the missing data at the item level were conducted and input into the multilevel model. For this study multilevel modeling was used to model variation in overall working alliance ratings at session three at both the client and counselor level. This method of
analysis accounts for difference in counselors across individual clients, which previous studies failed to take into account. The level 1 variables included were the client control (CON) and affiliation dimension scores (AFFI) from the Inventory of Interpersonal Problems and client sex (CLSEX). CON and AFFI variables were entered as group centered variables to facilitate interpretation of the parameters and CLSEX was entered un-centered to interpret the difference between dummy coded female and male genders. Though age was correlated with the WAI in the bivariate correlation analysis it was not included in this model because age was measured categorically and only fifteen counselors had clients in more than one age category. The Level 2 variable in the model was counselor gender (CO_Gender). Counselor gender was entered un-centered to be able to interpret the difference between female and male genders. Equation 1 below represents the Level 1 equation and Equations 2-5 represent the Level 2 equations where $i$ represents the individual and $j$ the group level.

**Level 1:**\[ \text{WAITOTAL}_{ij} = \beta_{0j} + \beta_{1j}(CON_{ij}) + \beta_{2j}(AFFI_{ij}) + \beta_{3j}(CLSEX_{ij}) + r_{ij} \] (1)

**Level 2:**\[ \beta_{0j} = \gamma_{00} + \gamma_{01}(CO\_GENDER_{j}) + u_{0j} \] (2)
\[ \beta_{1j} = \gamma_{10} + \gamma_{11}(CO\_GENDER_{j}) + u_{1j} \] (3)
\[ \beta_{2j} = \gamma_{20} + \gamma_{21}(CO\_GENDER_{j}) + u_{2j} \] (4)
\[ \beta_{3j} = \gamma_{30} + \gamma_{31}(CO\_GENDER_{j}) + u_{3j} \] (5)

The first step in the analysis was to determine the extent of the variance in overall alliance score accounted for by Level 2 effects, verifying
the importance of utilizing multilevel modeling techniques. I predicted that differences between counselors would account for a large enough portion of the variance in the overall working alliance to validate the need for multilevel modeling. The analysis of the Level 2 effects was completed by partitioning the variance at Level 1 and Level 2. The portion of the variance at Level 2, the intraclass correlation (ICC), provides an indication of the magnitude of the Level 2 effects (Lee, 2000).

In order to investigate the unique correlation between vindictive self-centered interpersonal problems and the working alliance, another model was investigated. The vindictive/self-centered octant score (BC) was entered as a client variable at Level 1 and counselor gender was entered as a counselor variable at Level 2. The octant score was entered as a group centered variable and gender was entered un-centered again to facilitate interpretation. Equation 6 below represents Level 1 and Equations 7 and 8 represent Level 2 in the model.

Level 1: \[ WAITOTAL_{ij} = \beta_{0j} + \beta_{1j}(BC_{ij}) + r_{ij} \]  \hspace{1cm} (6)

Level 2: \[ \beta_{0j} = \gamma_{00} + \gamma_{01}(CO\_GENDER_j) + u_{0j} \]  \hspace{1cm} (7)

\[ \beta_{1j} = \gamma_{10} + \gamma_{11}(CO\_GENDER_j) + u_{1j} \]  \hspace{1cm} (8)
Chapter 3

RESULTS

I predicted that client interpersonal problems would correlate strongly with the client’s overall alliance ratings at session three, specifically, that clients who were more cold and distant (those with low affiliation scores) and those who were more controlling (higher control scores) would self-report lower working alliance ratings. An initial analysis of the correlations between the control and affiliation scores, the WAI-S and client demographics was conducted (see Table 1). Age was the only client demographic variable significantly correlated with the WAI-S ($r = .18$, $p < .05$).

Table 1.

<table>
<thead>
<tr>
<th>Client Variables Correlations, Matrix (N = 144)</th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<td>.07</td>
<td>-.13</td>
<td>-.09</td>
<td>.19*</td>
<td>-.11</td>
<td>-.14</td>
</tr>
<tr>
<td>2. Affiliation</td>
<td>--</td>
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<td>-.19*</td>
<td>.14</td>
<td>.12</td>
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<tr>
<td>3. WAI-S</td>
<td>--</td>
<td>-.07</td>
<td>-.18*</td>
<td>.13</td>
<td>-.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Counselor Gender</td>
<td>--</td>
<td>.02</td>
<td>-.04</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Age</td>
<td>--</td>
<td>-.25*</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Ethnicity</td>
<td>--</td>
<td>.23*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Income</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

I also predicted that differences between counselors would account for a large enough portion of the variance in the overall working alliance to validate the need for multilevel modeling. The ICC value of .23 indicates there is a sizable effect, with counselor differences accounting for 23% of the
variance in client alliance ratings. The design effect (10.73) indicates that the standard errors obtained from a traditional single-level analysis would be about ten times smaller than they should be. Analyzing the data without accounting for the clustered nature of the data produces highly inflated type I error rates. The use of multilevel modeling methods for analysis was supported.

The hypothesis that client interpersonal problems would be correlated with lower working alliance ratings was in the expected direction for control problems (un-standardized coefficient = -1.53, \( p = .18 \)) and for affiliation problems (un-standardized coefficient = 0.25, \( p = 0.79 \)). However, the correlations were not significant, therefore, I cannot conclude from the analysis that there is a correlation between control and the working alliance or between affiliation and the working alliance. Model 1 showed an interaction between counselor gender and client control problems. The slope between control and the WAI-S increases by 3.94 points between female and male counselors (un-standardized coefficient = 3.94, \( p = .04 \)). Table 2 shows the variance components for Level 1 and Level 2.

<table>
<thead>
<tr>
<th>Multilevel Model 1 Coefficients</th>
<th>Coefficient</th>
<th>SE</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>-1.53</td>
<td>1.14</td>
<td>-1.34</td>
<td>0.18</td>
</tr>
<tr>
<td>Affiliation</td>
<td>0.25</td>
<td>0.96</td>
<td>0.26</td>
<td>0.79</td>
</tr>
<tr>
<td>Client gender</td>
<td>-2.30</td>
<td>1.63</td>
<td>-1.41</td>
<td>0.16</td>
</tr>
<tr>
<td>Counselor gender</td>
<td>1.12</td>
<td>2.75</td>
<td>0.41</td>
<td>0.69</td>
</tr>
<tr>
<td>Client gender*Counselor gender</td>
<td>-0.12</td>
<td>2.43</td>
<td>-0.05</td>
<td>0.96</td>
</tr>
</tbody>
</table>
Clients who reported more interpersonal problems with control (according to the control dimension score) reported higher initial working alliance ratings with male counselors; for each standard deviation increase in dominance from the mean, the working alliance rating is predicted to increase by 2.80. Clients who reported lower scores on the control dimension reported higher initial working alliance ratings with female counselors; for each standard deviation decrease in control from the mean, the working alliance rating is predicted to increase by 1.53. Figure 2 shows the simple slopes for the dominance counselor gender interaction. This interaction was found in both female and male clients.

![Figure 2. Client Dominance and Alliance by Counselor Gender Interaction](image)
The hypothesis that clients with vindictive/self-centered (hostile dominance) interpersonal problems would report lower WAI-S scores was supported (un-standardized coefficient = -4.32, \( p = .02 \)). For every unit increase in the vindictive/self-centered octant score (BC), the WAI-S is predicted to decrease by 4.32. The counselor gender by BC interaction was not significant (un-standardized coefficient = 1.11, \( p > .05 \)). Regardless of counselor gender, clients with more vindictive/self-centered interpersonal problems report lower initial working alliance scores.
Chapter 4

DISCUSSION

The results of this study provided support for the use of multilevel modeling when studying the working alliance in counseling. Counselor differences in the present study accounted for a moderate portion of the variance in working alliance scores (23%). If ignored, counselor variables could influence the results and lead to type I errors. Therefore, counselor differences seem to have a large effect on the initial working alliance and should not be ignored. Some therapists are simply better than others at developing a good therapeutic alliance with their clients.

The proposed relation between client interpersonal problems and the initial working alliance was found in the expected direction; cold/distant and controlling client interpersonal problems were negatively correlated with initial working alliance scores. However, this correlation was not significant in contrast to previous findings (Beretta et al., 2005; Muran et al., 1994; Paivio & Bahr, 1998). It is possible that with a larger sample size this correlation would be significant. Utilizing multilevel modeling requires a larger sample size because each client is not treated as independent but as part of the caseload of a particular counselor. A large number of Level 1 cases within each group provide more reliable estimates of Level 1 coefficients (Kahn, 2005). In the current sample there was an average of three clients per
counselor, which could have diminished the power to detect Level 1 coefficients.

However, utilizing multilevel modeling may produce clearer results since it accounts for the variance at the counselor level. It is possible that when different therapists are taken into account there is no longer a relationship between the affiliation and control dimensions of interpersonal problems and the therapeutic alliance. Some therapists are better at building a therapeutic alliance and when therapist differences are taken into account the specific client interpersonal problems are no longer predictive of the therapeutic alliance score. Previous studies have investigated correlations without the use of multilevel modeling, which does not account for the nested data of clients within counselor caseloads, ignoring the counselor effects (Beretta et al., 2005; Muran et al., 1994; Paivio & Bahr, 1998). Baldwin et al., (2005) found that reanalyzing the same data accounting for nested data showed that only 12-68% of the findings were no longer significant. By accounting for nested data and using multilevel modeling the current results may present a more accurate picture of how client interpersonal problems relate to the working alliance.

Although client dominance interpersonal difficulties were not significantly correlated to the initial working alliance alone, there was a significant interaction of counselor gender and dominance with the initial working alliance. Clients with more dominance interpersonal problems
reported higher working alliance ratings with male counselors. On the other hand, clients with more submissiveness interpersonal problems reported a higher working alliance with female counselors. The same interaction was present for both male and female clients.

It is possible clients with control or non-assertiveness problems stereotype counselor genders to perceive their relationships with male or female counselors differently. According to stereotypic beliefs about gender, women tend to be viewed as more self-sacrificing and less self-assertive than men (Eagly & Steffen, 1984). Therefore, clients with non-assertiveness problems may perceive male counselors as more controlling and intimidating, leading them to be more comfortable with female counselors. Clients with control problems may perceive male counselors as more controlling and capable of dealing with their problems than female counselors and thus feel more comfortable with male counselors. Clients with non-assertiveness problems may feel they have a more equal role with a female counselor and clients with more controlling problems may feel they would have a more equal role with a male counselor. More equal roles between the counselor and client are claimed to be present (Tracey, 1985) and especially beneficial in the early stages of therapy for the client to gain trust and confidence in the counseling process (Hersoug et al., 2001). Further studies are needed to explore what client perceptions or counselor behaviors are related to the counselor gender/client control interaction with working
alliance. It would be interesting to explore client perceptions and stereotypes about male and female counselors before they begin therapy as well as counselors’ actual interpersonal behaviors in therapy.

The results also supported the hypothesis that vindictive/self-centered interpersonal problems are negatively correlated with the initial working alliance. Regardless of counselor differences or counselor gender, vindictive/self-centered interpersonal problems were negatively correlated with the client reported initial working alliance. This aligned with Kiesler and Watkins’ findings (1989) that focused on interpersonal behaviors as opposed to interpersonal problems. Therefore, in addition to past findings that the extremeness of vindictive/self-centered client behavior is negatively associated to the therapeutic alliance (Kiesler & Watkins), client vindictive/self-centered interpersonal problems are correlated negatively with the initial therapeutic alliance, regardless of counselor differences. This is important for counselors to be aware of. Counselors could utilize the IIP measure to detect vindictive/self-centered interpersonal problems and work with clients to address possible working alliance difficulties. Future studies should investigate how to build the therapeutic alliance with clients who have vindictive/self-centered interpersonal problems. This would be especially beneficial for settings in which more clients struggle with more extreme vindictive/self-centered difficulties.
Overall, the results of the study indicate the importance of using multilevel modeling when exploring the factors that contribute to the working alliance as well as the need to further explore counselor variables in addition to client variables. Some counselors are better than others at building a good initial relationship with the client, therefore counselor variables in addition to client variables should be explored in future studies investigating the working alliance. Learning why some counselors are better at building therapeutic rapport than others can inform counselors who have difficulties learn what they can do to improve.

The therapeutic alliance is an essential ingredient in counseling (Bordin, 1980) and one of the most robust factors connected to outcome (Castonguay, Constantino & Holtforth, 2006). Knowledge about what pre-treatment interpersonal problems are associated with lower client reports of initial alliance can help counselors be more aware and prepared. Results indicate vindictive/self-centered interpersonal problems are associated with lower therapeutic alliance scores. Awareness that clients with non-assertive interpersonal problems report higher initial working alliances with female counselors, while clients with controlling interpersonal problems report higher initial working alliances with male counselors is useful for clinical practice. This allows counselors to identify these possibilities early on.
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APPENDIX A

WORKING ALLIANCE INVENTORY-SHORT
SATISFACTION WITH INTERVIEW

The following are sentences that describe some of the different ways a person might think or feel about his or her therapist. Using the following seven-point scale, please respond to every item with your first impressions of your counselor. You will be asked to fill this form out every two weeks.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>My counselor and I agree about the things that I need to do in therapy to improve my situation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>What I am doing in therapy gives me new ways of looking my problem.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I believe my therapist likes me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My therapist does not understand what I am trying to accomplish in therapy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am confident in my therapist’s ability to help me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My therapist and I are working toward mutually agreed upon goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel that my therapist appreciates me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>We agree on what is important for me to work on.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My therapist and I trust one another.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My therapist and I have different ideas on what my real problems are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>We have established a good understanding of the kind of changes that would be good for me.</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I believe the way we are working with my problem is correct.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
APPENDIX B

INVENTORY OF INTERPERSONAL PROBLEMS
list of problems that people report in relating to other people. Please read the list below, and for each item, consider whether that problem has been a problem for you with respect to any significant person in your life. Then select the number that describes how distressing that problem has been, and write that number to the left of the item on the line provided.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Example:

_____ 00. It is hard for me to talk to my relatives.

If you think that this is moderately hard to do, you would put a 2 in the space to the left of the item.

_____ 1. It is hard for me to take instructions from people who have authority over me.
_____ 2. It is hard for me to be supportive of another person's goals in life
_____ 3. It is hard for me to show affection to people.
_____ 4. It is hard for me to express my feelings to other people directly
_____ 5. It is hard for me to be assertive with another person
_____ 6. It is hard for me to argue with another person
_____ 7. It is hard for me to let myself feel angry at somebody I like
_____ 8. It is hard for me to stay out of other people's business
_____ 9. I manipulate other people too much to get what I want
_____ 10. It is hard for me to put somebody else's needs before my own
_____ 11. It is hard for me to feel close to other people.
_____ 12. It is hard for me to open up and tell my feelings to another person.
_____ 13. It is hard to be self-confident when I am with other people
_____ 14. It is hard for me to feel angry at other people
_____ 15. It is hard for me to set limits on other people.
_____ 16. I feel too responsible for solving other people's problems.
_____ 17. I am too independent.
_____ 18. It is hard for me to really care about other people's problems
_____ 19. It is hard for me to get along with people.
_____ 20. It is hard for me to ask other people to get together socially with me
_____ 21. It is hard for me to be another person's boss.
_____ 22. I am too gullible
_____ 23. I try to please other people too much.
_____ 24. I open up to people too much
_____ 25. I try to control other people too much.
_____ 26. I fight with other people too much.
_____ 27. I keep other people at a distance too much
_____ 28. I am too afraid of other people
_____ 29. I am too easily persuaded by other people
_____ 30. It is hard for me to be firm when I need to be.
_____ 31. I put other people's needs before my own too much.
_____ 32. I want to be noticed too much.