Therapist In-session Rated Facilitative Interpersonal Skills (FIS-IS) in the Psychotherapy Process

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This dissertation titled

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Therapist In-session Rated Facilitative Interpersonal Skills (FIS-IS) in the Psychotherapy Process

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Therapist behavioral characteristics have been identified as important yet understudied variables in psychotherapy process and outcome research. One method that has shown some promise for measuring effective therapist interpersonal behavior is the Facilitative Interpersonal Skills (FIS) performance task analysis. Though previous research has demonstrated relationships between FIS, alliance, and outcome, it is still unknown whether the FIS can predict therapist interpersonal behavior in actual therapy settings, or whether such behavior rated in-session would also predict alliance and outcome. For this study, the Facilitative Interpersonal Skills In-Session (FIS-IS) rating instrument was developed to consider these possibilities. The FIS-IS method was used to rate therapist behavior in 45 video-taped sessions from the Ohio University Helping Relationships Study (OUHRS). This study also used archival data from the OUHRS including the Outcomes Questionnaire-45, the Working Alliance Inventory, the Inventory of Interpersonal Problems - Circumplex, the Social Skills Inventory, and Facilitative Interpersonal Skills. The FIS-IS instrument was found to be relatively convenient to use and inter-rater reliability between judges was strong. Zero-order correlation showed a significant positive relationship between the FIS-IS and the FIS performance task. Hierarchical regression analyses showed that, in the presence of client social skills, FIS-IS significantly predicted therapist-rated working alliance, but not client-rated working
alliance. FIS-IS was highly correlated with both client-rated and therapist-rated working alliance for the subsample involving trained therapists, though no such significant relationships were found for the subsample involving untrained therapists. Contrary to expectations, FIS-IS did not predict positive outcome change.

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I dedicate this dissertation to my father
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CHAPTER 1: INTRODUCTION

The nature of psychotherapy process as an object of empirical study remains in many ways elusive, particularly given the absence of clearly and consistently identifiable relationships between client, therapist, relational, and outcome variables. As psychotherapy research uses more sophisticated analyses to study the complex interactive contributions that multiple variables make to outcome over time, convenient ways of assessing a full range of variables within this dynamic system should be of value. One important set of variables involves characteristics of the therapist, which have been identified as accounting for between 6 and 9 percent of outcome variance across studies (Crits-Cristoph & Mintz, 1991; Wampold, 2001). Therapist variables, both as predictors of therapy outcome and as vital components of therapeutic process, have been receiving more attention in recent years as an indispensable area of psychotherapy research (Beutler, Malik, Alimohamed, Harwood, Talebi, Noble, et al, 2004; Wampold, 2001). Though largely pushed into the background by the Empirically Supported Treatments movement (Bergin, 1997; Beutler, 1997), consideration of therapist characteristics has also been recognized as essential for evidence-based practice.

The therapist as a variable falls into the larger category of non-treatment-specific variables known as common factors (Frank & Frank, 1993; Wampold, 2001). Common factors research “seeks to determine the core ingredients that different therapies share in common (Norcross, 2005, p. 9).” Such factors are often contrasted with the more specific factors identified by different theoretical orientations as the active therapeutic ingredients in their respective treatment modalities. An important area of common factors that has been more widely studied than therapist variables, and yet may be directly related to
them, is the therapeutic relationship. Studied as a combination of interrelated process variables, the therapeutic relationship both accounts for substantial variance in outcome across studies (Wampold, 2001; Norcross, 2002), and has been argued to be a one of the primary curative elements directly affecting the client’s healing process (Frank & Frank, 1993; Safran & Muran, 2000; Fraser & Solovey, 2007). The most well-established relational variable to consistently predict therapeutic outcome is the working alliance (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000). Commonly using Bordin’s (1979) model, working alliance theory argues that agreement about the tasks and goals of therapy and an affective bond between therapist and client, serve as an important context for the collaborative work of therapy. Also well-established as predictors of outcome are Carl Rogers’ facilitative conditions (Rogers, 1959, 1980, 1984). Facilitative condition variables, such as empathy and positive regard, have been observed to contribute both to the therapeutic alliance, other important process variables, and outcome (Bohart, Elliott, Greenberg, & Watson, 2002; Farber & Lane, 2002). Other relational variables such as alliance-rupture repair, effective therapist self-disclosure, and collaboration have also been shown over studies to contribute to therapeutic outcome (Norcross, 2002).

Currently, a variety of methods are available to assess a wide range of such relational process variables, most of which pay little or no attention to the behaviors of the therapist as important variables in and of themselves. Typically, relational variables have been studied at the level of a process or a condition, which emerges as an aspect of the relationship between therapist and client in a given therapy dyad over a given period of time. Examples of this trend can be seen in the aforementioned literature on working alliance and Roger’s facilitative conditions. By contrast, relational variables at the level
of the therapist are either states or traits attributed to the therapist herself, rather than to
the process occurring between therapist and client. Some process-level variables
inherently involve the behavior of the therapist as an important aspect of the relational
process. For example, studying the process of empathy will inherently involve attention
paid to the therapist’s empathetic behavior, though the therapist himself is not the object
of measurement. Indeed, differentiating between process-level and therapist-level
relational variables is not necessarily a clear-cut process, which may be partly due to the
lack of research that intentionally seeks to make such a distinction.

Despite this tradition of focusing on the role of relational variables on the level of
process, research on relational variables at the level of therapist behavior has not received
comparable attention. In addition, a method for conveniently and reliably assessing such
therapist behavioral variables as a set has been lacking. Given the importance of
relational processes in psychotherapy, it may be useful to identify a consistent set of
therapist interpersonal skills that could be shown to contribute to the therapeutic process.
In attempt to consider therapist interpersonal skill as its own behavioral construct,
Anderson, Patterson and Weiss (2006) developed a methodology for assessing a set of
variables that they have termed Facilitative Interpersonal Skills (FIS). These are therapist
skills that research and theory suggest should be essential for facilitating an effective
therapeutic relationship and therapeutic change. Derived largely from common factors
research, this construct presupposes that certain relational processes are of equal or
greater importance for therapeutic change than the specific treatment modality that is
implemented (Norcross, 2002). It is further presumed that there are specific observable
therapist interpersonal behaviors that will contribute to and facilitate important relational
processes. Anderson et al. (2006) describe interpersonal skills generally as “the learned emotional and interpersonal patterns of behavior that allow some people to be more effective at navigating through difficult and complex interpersonal situations (p.2).” Those interpersonal skills that are believed to facilitate therapeutic processes in therapy, i.e. FIS, are then defined as follows:

Facilitative Interpersonal Skills are the general and personal qualities of persons who are capable of 1) perceiving, understanding, and sending a wide range of interpersonal messages and 2) persuading others who have personal problems to apply proposed solutions to their problems and abandon maladaptive patterns (Anderson et.al., 2006, p.3).

**Studying FIS in Therapy Sessions**

The FIS tool uses a performance task analysis method in which participant therapists view short video clips from reenacted therapy sessions, and then record their own responses to clients’ utterances as though they themselves were the therapists in these sessions. Thus far only a few studies have been conducted using this method, and the validity and reliability of the FIS over time are still unknown. Though the FIS method has shown some promise for more widespread use in psychotherapy research, it may be premature to presume that it is valid to assess FIS as a variable of aptitude, prior to studying this phenomenon in its naturalistic context. It is also unknown the extent to which FIS might be affected by other recursive variables when therapists are manifesting them in therapy. In addition, the existing body of relational process literature has tended to measure important variables in actual therapy sessions. The current measurement of FIS therefore remains only distally related to the body of psychotherapy research from which it is derived. This study aims to further explore the validity, utility, and predictive value of the FIS construct by evaluating it as it occurs in actual therapy sessions.
In order to accomplish this, the current study utilizes a newly developed instrument that codes Facilitative Interpersonal Skills in therapy sessions (Facilitative Interpersonal Skills In-Session; FIS-IS; Uhlin, Anderson, & MacFarlane, 2010). It is intended that this new coding system assess the original FIS constructs as closely as possible, although some clear differences are inevitably present on account of the fact that the new system assesses longer periods of time in a naturalistic rather than an experimental setting. As an instrument based on the FIS, the FIS-IS measures identifiable, observable behaviors that are believed to function together as a set, comprising a single, overarching behavioral variable.

The FIS-IS Construct

The individual FIS-IS variables are comprised of interpersonal capacities that are largely, though not entirely, derived from empirical research and related theoretical discussion. These skills include verbal fluency, emotional expressiveness, persuasiveness, warmth, hopefulness, empathic accuracy, and alliance-bond capacity. Several of these therapist behaviors have had their empirical justification reasserted by the APA Division 29 Task Force on Empirically Supported Relationships (Ackerman, Benjamin, Beutler, Gelso, Goldfried, Hill, et al., 2001; Norcross, 2002). Other FIS-IS variables have less empirical support but are argued to also make reasonable contributions to the therapeutic process and correlate with more well-studied process variables. It should be noted that most of the following research cited addresses variables at the process level. Discussion of this literature is therefore intended in most cases to offer reasoning and rationale for the inclusion of each FIS-IS item, and not direct empirical support for the therapist-level indicants.
Of the individual FIS-IS variable constructs, one of the most widely studied at the level of a *process* variable has been empathy or empathetic accuracy. According to the findings of the Division 29 Task Force, empathy is one of only a few variables that falls into the category of demonstrably effective relationship variables (Ackerman, et al., 2001; Norcross, 2002). In a comprehensive literature review, Bohart et al. (2002) identified 47 appropriate studies that researched the relationship between empathy and other process and outcome variables. These authors found overall corrected and uncorrected correlations of about .20 for effect-level analyses, with empathy accounting for about 4% of outcome variance. Within these studies it was shown that empathy both makes its own unique contribution to outcome (Burns and Nolen-Hoeksema, 1992), and also correlates strongly with other important process variables such as working alliance (Martin, Garske, & Davis, 2000; Mosely, 1983; Salvio, Beutler, Wood, & Engle, 1992) and positive regard (Bohart et al., 2002; Zuroff, Blatt, Sotsky, Krupnick, Martin, Sanislow, et al., 2000). Empathy has also been recognized as a process that lends itself to the identification and repair of alliance ruptures (Burns, 1989; Burns & Auerbach, 1996; Safran & Segal, 1990).

The FIS-IS variable of alliance-bond capacity closely reflects the process-level construct of goal consensus / collaboration, which also falls under the Division 29 Task Force’s category of demonstrably effective (Norcross, 2002). Globally, we can see the importance of collaboration supported by research on the working alliance, which is believed to be dependent upon collaborative processes (Wampold, 2001, 2007; Horvath & Bedi, 2002; Martin, Garske, & Davis, 2000). In reviewing existing literature, Horvath (2001) found support for a direct relationship between collaboration and stronger
working alliance. Brossart, Wilson, Patton, Kivlighan, and Multon (1998) found in a
time series study that the impact of therapists’ use of clients’ own language impacted
alliance ratings, suggesting that collaboration is actually occurring when alliance is
stronger. Eisenthal, Koopman, and Lazare (1983) found a significant positive
relationship between client and therapist sharing decision-making responsibility and
that client understanding and agreement on the purpose and rationale of treatment was
positively related to outcome. In a study of available research on goal consensus across
14 studies, Tryon and Winograd (2002) conclude that research on the relationship
between goal-consensus and outcome is still mixed, however they also conclude there is
significant evidence for a relationship between goal consensus and other important
process variables.

Under the category of promising and probably effective, The Division 29 Task
Force identifies positive regard. Farber and Lane (2002) recognize that the use of the
terms warmth and positive regard have been used interchangeably throughout the
research in ways that are not always consistent. However, these authors argued that each
of these constructs can be seen as indicants of essentially the same phenomenon.
Orlinsky, Grawe and Park (1996) reviewed a body of 76 studies and found that 56% of
the findings showed positive relationships between positive regard and outcome and
almost no studies showing negative relationships. Though effect sizes were generally
positive, they varied widely, with 40 falling below .50 and 28 falling below .20. In
Farber and Lane’s (2002) more recent review, none of the 12 new studies identified
showed a negative relationship between positive regard and outcome, and most showed a
significant positive relationship. Positive regard has also been consistently shown to be strongly related to empathy (Bohart et al., 2002; Zuroff, Blatt, Sotsky, Krupnick, Martin, Sanislow, et al., 2000).

The remaining four FIS-IS variables considered in this study do not involve the substantial empirical support as the three variables mentioned thus far, though some research supports their inclusion among important common therapist behaviors. First, the therapist’s ability to be persuasive in therapy has been strongly argued by the Contextual Model of psychotherapy to be important for therapeutic change (Frank and Frank, 1993), and some modest empirical support for this argument exists. For example, Truax, Fine, Moravec and Millis (1973) found that objective ratings of what they termed persuasion potency had a significant effect on two global measures of outcome. Next, Truax and Lister (1974) found that high persuasive potency was positively related to several other outcome measures. An indirect argument can be made for persuasiveness if we consider homework compliance to be a function of the therapist’s ability to effectively “sell” a rationale for treatment interventions. Some studies have found a positive relationship between homework compliance and outcome (Neimeyer & Feixas, 1990; Vaughan, Armstrong, Gold, O’Connor, Jenneke, & Tarrier, 1994). Further, Addis and Jacobson (2000) found that the client’s acceptance of the therapist’s rationale for homework had a positive interaction effect with compliance and on outcome.

The FIS-IS construct of emotional expression has its justification partly in the argument that effective therapy involves an emotionally charged relationship (Frank and Frank, 1993). Some research has shown that therapist experiencing, which involves the therapist’s emotional engagement in the therapeutic process, has a positive effect on the
therapeutic process (Klein, Mathieu-Coughlan, & Kiesler, 1986; Mathieu-Coughlan & Klein, 1984). Though research on the therapist’s emotional expression is minimal, it has been argued that the therapist’s use of appropriate emotional expression should facilitate the client’s own emotional processes (Greenberg & Paivio, 1997; Greenberg, 2010), and the importance of the emotional expression of the client is well-documented. For psychodynamic therapies, client emotional expression and experiencing were found to have positive effects on outcome across studies (Diener, Hilsenroth, & Weinberger, 2007). Among therapies that enhanced emotional arousal in therapy sessions, Greenberg, Elliott and Lietaer (1994) found an effect on outcome in favor of those that enhanced arousal. Orlinsky et al.’s (2004) review of clients’ emotional expressiveness in session showed a trend toward a positive relationship between this variable and outcome. Further, a general trend has been well established between emotional expression and emotional well-being (Gortner, Rude, & Pennebaker, 2006; Pennebaker, 2007; Pennebaker & Beall, 1989).

Though the FIS-IS construct of hopefulness has not been an explicit focus of therapy research, there is some support for the hopefulness of clients as a factor in general well-being (Snyder, Harris, et al., 1991), motivation for change (Snyder, 2002), and clinical symptom presentation (Cheavens et al., 2006). Also supporting the relevance of hopefulness for therapeutic process is research on client expectations, which has demonstrated a relationship between therapeutic alliance and clients’ hopeful expectations about therapy prior to treatment (Patterson, Uhlin, & Anderson, 2008; Tokar, Hardin, Adams, & Brandel, 1996). It therefore stands to reason that a therapist’s
tendency to regularly incorporate hopeful attitudes about the client’s situation and healing process would facilitate the therapeutic relationship.

Finally, the FIS-IS construct of verbal fluency presupposes that a therapist’s ability to communicate easily and effectively will complement both the other FIS constructs and other process variables, though such relationships are largely unsupported. In one of the few studies attempting to assess a similar construct, Wiseman and Rice (1989) included the Therapist Vocal Quality Scale and the Client Vocal Quality Scale (Rice & Kerr, 1986) to assess various aspects of therapist and client verbal responses in a study designed to investigate therapist-client interactions during change events. These authors found that therapist vocal quality was significantly related to client peak experiencing during change events. In another study, Ritchie (1999) analyzed the therapy of clients with hyperphagia, and determined that different aspects of therapist vocal quality correlated with important elements of perceptual processing. Despite these promising studies on therapist vocal quality, further studies have unfortunately not been pursued. Nonetheless the current FIS and FIS-IS theory argues that a therapist’s ability to speak effectively with clients will fall into line with his or her other interpersonal qualities.

*Previous FIS Research*

The Ohio University Helping Relationships Study (OUHRS) was the first to make use of the FIS methodology. The OUHRS study was unique in that participants were randomly assigned to two treatment conditions based on therapist characteristics, namely high and low therapist interpersonal skills and trained and untrained therapists. It was found that the therapist FIS condition contributed significantly to outcome on several
measures of client distress, with higher FIS being positively related to better outcome. It was also found that the presence of therapist training had no effect on outcome, which further bolsters the importance of these therapist interpersonal skills.

Also using the FIS construct as a therapist variable, a recent unpublished dissertation considered how FIS interacted with client attachment style in rated therapy sessions (Janzen, 2007). This study used the pretreatment FIS manual to code segments of therapy sessions identified as important by clients themselves for the building of the therapeutic relationship, and also took a random sampling of therapy sessions. In the random segment sample, there was a significant positive relationship between attachment anxiety and total FIS. In the segments identified as significant by clients, the hope subscale of the FIS was positively correlated with avoidant attachment style and the collaboration subscale of the FIS was negatively related to attachment anxiety. The author of this study argues that different client attachment characteristics have tendencies to pull for differing FIS behaviors from the therapists.

Finally, a recent study used multi-level modeling to assess the predictive value of FIS on outcome in a large psychotherapy sample collected over several years (Anderson, Ogles, Patterson, Lambert, & Vermeersch, 2009). In this sample an outcome effect was found for therapist as a variable, meaning that outcome varied significantly as a function of which therapist a client saw. This lends support for the hypothesis that the person of the therapist in fact important for outcome. It was also found that the level of therapist FIS significantly predicted outcome on several symptom measures, even after controlling for other common therapist variables such as age, gender and orientation. Interestingly, only age contributed to outcome in a model including conventional therapist variables,
but age was no longer a significant contributor to outcome when FIS was added to the model.

*The Current Study*

It is unknown whether or not the performance task method of FIS rating will predict therapist behavior in an actual therapy situation. The first purpose of this study was to determine whether or not pretreatment ratings of FIS would correlate with in-session ratings of FIS-IS. This study further evaluated the usefulness of the FIS-IS by determining whether or not such in-session behavior would contribute to alliance, which was measured with the client-rated and the therapist-rated versions of the Working Alliance Inventory (WAI; Horvath & Greenberg, 1986). As both therapist and client are each believed to make their own contributions to the therapeutic relationship, the clients’ Social Skills Inventory (SSI; Riggio, 1986) was used as an independent control variable in the analyses of the effect of FIS-IS on alliance. This self-report instrument measures subjects’ own evaluation of their interpersonal social skills in a variety of contexts. Though methodologically distinct from the FIS-IS, it was hoped that inclusion of the SSI as an independent variable predicting alliance would allow a comparison of the variance accounted for by both therapist behavior and client behavior. With regard to the effects of FIS-IS on outcome, the Outcomes Questionnaire - 45 (OQ-45; Lambert, Lunnen, Umphres, Hansen, & Burlingame, 1994) was used as a global measure of psychological distress. As a measure of the client’s specific interpersonal problems, the Inventory of Interpersonal Problems - Circumplex (IIP-CX; Alden, Wiggins, & Pincus, 1990) was used. The effects of FIS-IS on each of these outcome measures was tested in the presence of client-rated working alliance, in order to determine the relative contributions
of these two variables on outcome change. This was based on the hypothesis that if FIS-IS was to effect outcome change, it may be doing so either through the alliance as an indirect effect, or as its own main effect independent of alliance. Finally, post hoc analyses repeated each of these analyses separately, once for the subsample involving trained therapists, and once for the subsample involving untrained therapists.
CHAPTER 2: METHOD

Participants

Clients. Archival data for both clients and therapists were obtained for this study from the Ohio University Helping Relationships Study (OUHRS). The OUHRS involved a seven-session treatment of 45 to 50-minute sessions at the Ohio University Psychology and Social Work Clinic. The treatment sample used in this study consisted of forty-five participants in the active treatment group. Twenty-seven were female and eighteen were male. The mean age of participants was 19 with a range of 18 to 23. A majority of participants (90.9%) identified as Caucasian, while 2.3% identified as African American, 2.3% identified as Asian/Pacific Islander, and 4.5% identified as multi-racial. Thirty-six percent of the participants reported having had some form of psychotherapy treatment in the past. The initial sample consisted of 46 clients. One subject dropped out prior to completing the study and was not included in the data set. Data for the client version of the Working Alliance Inventory was missing for one subject, leaving a final sample of \( N = 44 \) for those analyses involving that measure.

Clients in the OUHRS were recruited from introductory psychology classes at a medium-sized Midwestern university and offered course credit and financial reward. Out of the students interested in participating, clients were chosen based on the following criteria: 1) SCL-90-R scores were two standard deviations above the mean or higher, and remained so on a follow-up administration one week later, 2) at least three scores on the IIP-CX were clinically significant, 3) and a clinical interview determined the presence of a DSM-IV (APA, 1994) diagnosis that substantially impaired interpersonal functioning. Clients were excluded from the study if they were currently in therapy or intending to
seek therapy, had significant drug and/or alcohol dependence, had frequent suicidal ideations, or had severe personality disorders. Students who were selected after the final screening process were then randomly assigned to either the active treatment group or the control group. Clients were told that this was not actual psychotherapy but that someone had been selected for them to talk with and that research indicates that it is helpful to talk to someone. Aside from these basic guidelines, therapists and clients jointly determined the course of their sessions.

**Therapists.** Of the individuals who volunteered to serve as therapists for the OUHRS, those who scored in the high and low ranges of the Social Skills Inventory (SSI; Riggio, 1986) were asked to participate in the study. This group consisted of eight males and fifteen females. Nineteen were Caucasian, three were Asian and one was Hispanic. The mean age was 31 with a range of 23 to 53.

The 23 therapists for this study were recruited from two sources. Eleven graduate students with clinical training were selected from the Ohio University Clinical Psychology Program. Clinical Psychology students eligible for this study had completed at least two years in the clinical program, which consists of course-work in helping skills, psychotherapy research, theory and treatment, psychopathology, personality assessment, intellectual assessment, and personality theory. These students had completed at least one year of clinical practicum at the Ohio University Psychology and Social Work Clinic providing psychotherapy services to clients primarily drawn from the Ohio University student population. The group of twelve untrained therapists consisted of graduate students recruited from other disciplines that involved no experience in psychotherapy training or other clinical mental health training. All therapists were trained in adhering to
the guidelines laid down by the Ethics Code of the American Psychological Association (APA, 1994). Beyond these guidelines, therapists were intentionally given no further instruction, other than to do their best to help their clients with their problems in whatever ways they believed were most appropriate.

Each individual who participated as a therapist in this study was administered the Facilitative Interpersonal Skills (FIS) Performance Task (see Measures). The FIS coding manual was used by two postdoctoral level research clinicians with psychotherapy research experience to rate the quality of the facilitative interpersonal skills displayed by the therapists in their responses. Therapists were then assigned to either the high or low interpersonal skills group based on these scores. This was done using a median split of these scores. Two therapists that did not fall completely into either group were placed into the low skills group because they were at least one standard deviation below the mean on the SSI. This was based on criteria which had been determined prior to these assignments, in the event that a therapist did not neatly fit in either group. Once these two groups were established, clients were randomly assigned to one of the groups, with each therapist receiving two clients.

*Measures*

**Facilitative Interpersonal Skills - In-Session (FIS-IS).** In order to code in-session FIS, The Facilitative Interpersonal Skills In-Session (FIS-IS) Coding Manual was developed. In this measure, seven behavioral variables are rated on a 5-point Likert type scale. These variables, based on common factors and facilitative conditions literature, include Empathy, Warmth, Verbal Fluency, Hopefulness, Emotional Expression, Alliance-Bond Capacity, and Persuasiveness. Detailed operational definitions of these constructs can be
found in Appendix A. Empathy is defined as the participant’s capacity to respond with an expressed understanding of the subjective experience of the client. The participant’s reflections must also convey an accurate understanding of the thoughts and emotions expressed by the client. Warmth is defined as the ability of the participant to care for and accept the other. Therapist behaviors/attitudes that might indicate an absence of warmth include: a judgmental attitude, condescension, rudeness, disapproval, guilt-induction, exasperation, or annoyance. Verbal fluency is defined as the extent to which the participant is verbally capable and at-ease in communicating, and his or her speech is delivered in a relaxed manner, without significant signs of anxiety (e.g., broken speech, extended and awkward pauses). Emotional expression is defined as the energy and emotion in the participant’s speech that would be expected to increase affective engagement. Alliance-bond capacity is defined as the participant’s capacity to provide a collaborative environment, one in which there is recognition of the need to work with the client jointly on problems. Finally, hopefulness is defined as the participant’s ability to express hope, optimism, and positive expectations for change. It also reflects the participant’s focus on building client agency for actions that will facilitate meeting the client’s goals.

Coding procedures instruct raters to begin by thinking of a rating of 3, which is a neutral rating indicating that the observed therapist is exhibiting the skill in a moderate manner that is neither particularly strong nor particularly poor. Coders then follow a rating system that qualitatively describes how very poor, poor, average, good, and very good manifestations of each skill are expected to look, with ratings of 1-5 assigned respectively for each skill level. This Likert scale attributes a high value of 5 to those
therapists judged to be exceptionally exhibiting the FIS-IS indicant being rated, a score of 4 to those judged to be strongly exhibiting the indicant, a score of 3 to those judged to be moderately exhibiting the indicant, a score of 2 to those judged to be poorly exhibiting the indicant, and a score of 1 to those judged to be very poorly exhibiting the indicant. If the rater believes that the skill is not observable or present in the segment coded, a moderate rating of 3 is maintained. These seven individual scores are then summed together for each therapist observed to produce the FIS-IS Total Score, which is the score used in the analyses of this study. In the current study, internal consistency for the FIS-IS Instrument was found to be high, Cronbach’s Alpha = .94, supporting the hypothesis that the seven variables hang together as part of a broader construct. Discussion between raters following coding also suggests a general emergence of these skills as a set for most therapists observed.

Facilitative Interpersonal Skills (FIS) Performance Task. The Facilitative Interpersonal Skills (FIS) Performance Task (Anderson et al., 2006) rates the behavioral performance of participants in an analogue setting where they are asked to view video clips of reenacted therapy sessions from the Vanderbilt II Psychotherapy Research Project. These video clips were intentionally chosen because they contained interpersonally problematic behavior from the clients that was likely to involve a threat to the therapeutic relationship. The therapist participants respond to the clips by saying what they believe they would say if they were themselves the therapists in the recorded session. Independent raters then code the participants’ responses on 10 FIS items using a 5-point Likert type scale. These items are based on common factors and facilitative conditions literature.
Outcome Questionnaire (OQ - 45). The OQ - 45 (Lambert, Lunnen, Umphres, Hansen, & Burlingame, 1994) is a commonly used 45-item instrument that assesses general symptomatology on the dimensions of subjective distress, interpersonal relationships, and social role performance. The OQ is advantageous in that it is relatively easy to administer and assess symptoms in a pantheroretical manner, making it appropriate for use in most treatment modalities. The OQ is also commonly used in outcome research using college student populations. Internal consistency alphas for the OQ range from .70 to .93. Test-retest reliability coefficients range from .78 to .84. For the purposes of this study, OQ scores from pretreatment and termination will be used.

Inventory of Interpersonal Problems (IIP). The IIP (Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988) uses 127 five-point items to rate multiple constructs of interpersonal distress and dysfunction. In the OUHRS, the IIP-Circumplex (IIP-CX; Alden, Wiggins, & Pincus, 1990) 64-item version of this measure was used. In addition to its brevity, this version has the advantage that items factor into eight subscales that fit the model of the interpersonal circumplex (Domineering, Vindictive, Overly-Cold, Socially Avoidant, Nonassertive, Exploitable, Overly-Nurturing, and Intrusive). In this study, IIP-CX data was taken from administrations of this instrument taken at pretreatment and termination. The Total IIP-CX score was used, which totals each item on the instrument together. Internal consistency coefficients for the IIP-CX range from .72 to .85. Test-retest reliability coefficients for this measure range from .58 for the Domineering Scale to .84 for the Socially Avoidant Scale (Horowitz et al., 2000).
Working Alliance Inventory, Client Version (WAI-C) and Therapist Version (WAI-T). The Working Alliance Inventory (WAI; Horvath & Greenberg, 1986) is one of the most widely used measures of working alliance and is suggested to be appropriate for psychotherapy research by the most recent working alliance meta-analysis (Martin, Garske, & Davis, 2000). Three 12-item subscales rate clients’ and therapists’ perceptions of the quality of the therapeutic bond, agreement on tasks, and goal collaboration.

Internal consistency for this measure has been found to be high, with alpha=.96 for WAI-Client and alpha=.95 for WAI-Therapist (Tichenor & Hill, 1989). As working alliance rated at the third session of therapy has been found to predict overall alliance and outcome, and the third session is the focus of FIS-IS coding, WAI-Total scores from the third session are used in this study.

Social Skills Inventory. The SSI assesses social skills with is 90 self-report items. For this study, the global SSI score will be used, though 15 subscales are available. This measure has high internal consistency and factor analytic studies have supported the multidimensional structure of the scale. In the initial sample, coefficient alphas ranged from .75 to .88. In another sample, Riggio (1989) found test-retest reliability coefficients to range from .81 to .96 and alpha coefficients ranging from .62 to .87.

Procedure

In addition to the OUHRS archival data used in this study, data for therapists’ FIS-IS was coded using the newly developed in-session coding manual. The primary investigator of this study and another clinical psychology graduate student with psychotherapy research experience served as coders. Prior to exposure to the OUHRS video recordings, which served as data for this study, both coders applied the manualized FIS-IS coding procedure
to psychotherapy recordings from the Vanderbilt Psychotherapy Research Project II. Through this process, the coders addressed misunderstandings and differences in interpretation of the manual. Once inter-rater reliability of at least 80% percent was reached for five consecutive rated sessions, coding of the OUHRS data began. Such agreement was reached after 11 practice sessions and continued for the next four sessions. Both raters observed it to be relatively easy to resolve differences in ratings through discussion.

Video recordings of the third session of each therapy dyad was used as the content to be coded for FIS-IS. Video recordings of two of the therapy session were missing from the archival data set. These two sessions were coded using available audio recordings. The primary investigator coded all 45 third-session recordings and the secondary coder coded 20 randomly selected recordings for the purpose of establishing inter-rater reliability. During this process, periodic checks were made on inter-rater agreement. Of the 20 sessions coded by both investigators, ratings for one session were found to have poor inter-rater agreement and discrepancies in codings were resolved through discussion. Final inter-rater reliability between the two coders was found to be strong with a Pearson correlation of $r = .91$. The ratings of the primary investigator were designated as the criterion data and constitutes the FIS-IS values that were used in the analyses of this study.
CHAPTER 3: RESULTS

Preliminary Analyses

Prior to conducting primary regression analyses, independent samples t-tests were performed to determine whether or not there were significant differences in the dependent variables of the regression analyses based on therapist social skills and therapist training status, as these were involved in the initial selection criteria for the therapists chosen for the OUHRS study. No significant differences were found on these dependent variables between each of these groups. In addition, an independent samples t-test showed no significant mean difference for FIS-IS between the trained and untrained therapists. Also, the variables of therapist social skills and pre-treatment FIS were added as control variables in an additional second step of the regression analyses, in order to check for possible suppression effects. Because these variables were used in the process of selecting the therapists in the OUHRS study, it was important to consider the possibility that these variables might have an effect on the relationships between FIS-IS and alliance and FIS-IS and outcome. As no such effects were found, these variables were left out of the reported results, and the regression analyses were conducted as planned. Finally, a repeated measures analysis of variance tested the effect of time on the outcome variables from intake to termination, in order to determine whether an analysis of the effect of FIS-IS on outcome would be warranted. There was a significant difference found between intake and termination for the means of the OQ-45, $F(1, 44)=61.03, p<.001$, and the IIP-CX, $F(1, 44)=29.19, p<.001$, with means on both measures being lower at termination. These findings indicate a significant treatment effect and therefore justify considering the effects of other variables on outcome.
Primary Analyses

The primary analyses of this study were conducted to test three sets of hypotheses. First, it was hypothesized that the FIS performance task would significantly correlate with FIS-IS. Next, it was hypothesized that FIS-IS would significantly predict working alliance, as rated by both client and therapist, in the presence of client social skills. Finally, it was hypothesized that FIS-IS would significantly predict outcome on the OQ-45 and the IIP-CX, in the presence of client-rated working alliance.

Means and standard deviations of primary study variables are listed in Table 1. Correlations between these variables are presented in Table 2. Correlational analysis was used to test the hypothesis that the pre-treatment performance analysis FIS scores would significantly correlate with FIS-IS scores. This was found to be the case for this sample, \( r = .48, p < .01 \). Correlations between the performance task FIS subscales and FIS-IS subscales are as follows: verbal fluency, \( r = .42, p < .01 \), emotional expression, \( r = .51, p < .01 \), persuasiveness, \( r = .51, p < .01 \), warmth, \( r = .26, p < .10 \), hope-building, \( r = .54, p < .001 \), empathy, \( r = .49, p < .01 \), and alliance bond – capacity \( r = .31, p < .05 \).

Hierarchical linear regression analyses were used to test the hypothesis that FIS-IS would significantly predict both client-rated WAI and therapist-rated WAI, each in the presence of client scores on the Social Skills Inventory, and that FIS-IS would significantly predict change in two outcome measures in the presence of client-rated WAI. Summaries of hierarchical linear regression analyses are displayed in Table 3 through Table 6. Using criteria outlined by Stevens (2002), potential issues of multicollinearity, normal distribution of the dependent variable, and assumptions of multiple regression were considered. It was first observed that each of the dependent
variables closely resembled a normal distribution, with little or no signs of skewness or kurtosis. Next, residuals plots suggest homogeneity of error variance for each analysis. Evaluation of the variance inflation factors and tolerance values met Stevens’ (2002) criteria for lack of problematic multicolinearity for each of the analyses. Cases were excluded pair-wise. As client-rated WAI data was missing for one subject, data points were reduced by one for all analyses containing this variable.

Each regression analysis was inspected for outliers. One data point in the regression analysis of the OQ-45 had a Mahalanobis Distance and a Cook’s Distance that exceeded Stevens’ (2002) criteria for outliers, and had a studentized residual exceeding three standard deviations. Logarithmic and square root transformations were conducted on the data, in order to determine if this would eliminate the outlier issue. For the square root transformed data, results were comparable, but the same data point well exceeded outlier criteria. For the logarithmic transformation, the point in question was no longer an outlier in the analysis, however the significant relationships found in the raw data were no longer occurring. As the regression results were significantly different with and without this data point, it was found to be having excessive influence on the regression equation, and arithmetic transformation of the data did not resolve the outlier issue, this point was removed from the analysis of the OQ-45.

The first hierarchical regression analysis showed the relative effect of FIS-IS on client-rated working alliance, in the presence of client social skills. It can be seen in the first step that client social skills did not make a significant contribution to the variance in client-rated working alliance, $\Delta R^2 = .03$, $\Delta F (1, 42) = 1.13$, $p = n.s$. The beta weight in the second step of the analysis indicated that the unique effect of FIS-IS on Client-Rated
Working Alliance was approaching, but not meeting, significance at the .05 alpha level, $\Delta R^2 = .09$, $\Delta F(1, 41) = 2.48$, $p < .10$.

The second hierarchical regression analysis showed the relative effect of FIS-IS on therapist-rated working alliance, in the presence of client social skills. It can be seen in the first step that client social skills did not make a significant contribution to the variance in therapist-rated working alliance, $\Delta R^2 = .05$, $\Delta F(1, 43) = 2.18$, $p = n.s$. The beta weight in the second step of the analysis indicated that the unique effect of FIS-IS on therapist-rated working alliance was statistically significant, $\Delta R^2 = .14$, $\Delta F(1, 42) = 7.32$, $p < .01$.

The third hierarchical regression analysis showed the relative effect of FIS-IS on the total score of the IIP-CX at termination, in the presence of the total score of the IIP-CX at intake and client-rated working alliance. Beta weights in the second step indicated that client-rated working alliance did not make a significant impact on the IIP-CX, $\Delta R^2 = .04$, $\Delta F(1, 41) = 3.25$, $p < .10$, but is approaching significance. The beta weight in the third step of the analysis indicated that the unique effect of FIS-IS on the IIP-CX is statistically significant, $\Delta R^2 = .06$, $\Delta F(1, 40) = 5.84$, $p < .05$. In addition, the negative effect of WAI-Client on IIP-CX at termination became significant in the presence of both IIP-CX at intake and FIS-IS, $p < .05$. The direction of the beta weights in the third step of the analysis should be noted, with increasing client-rated WAI scores related to lower levels of IIP-CX pathology at termination, and higher levels of FIS-IS related to higher levels of the same pathology at termination.

The fourth hierarchical regression analysis showed the relative effect of FIS-IS on the OQ-45 Total score at termination, in the presence of the same score at intake and
client-rated working alliance. Beta weights in the second step indicated that client-rated working alliance did not make a significant contribution to the variance in the OQ-45 Total, \( \Delta R^2 = .02, \Delta F(1, 40) = 1.13, p = n.s. \) The beta weights in the third step of the analysis indicated that the unique effect of FIS-IS on OQ – 45 was not statistically significant, \( \Delta R^2 = .01, \Delta F(3, 39) = 0.75, p = n.s. \)

**Post Hoc Analyses**

In order to determine whether or not correlational results would vary between the groups of trained therapists (n= 21) and untrained therapists (n=24), the above analyses were repeated separately for each of these groups. For the subgroup of trained therapists, the correlation between FIS and FIS-IS was .47, \( p < .05 \). For the subgroup of untrained therapists, the correlation between FIS and FIS-IS was .52, \( p < .05 \). For the subgroup of trained therapists, FIS-IS significantly predicted client-rated WAI in the presence of the SSI, \( \Delta R^2 = .37, \Delta F(1, 18) = 10.62, p < .01 \). For the subgroup of untrained therapists, FIS-IS did not significantly predict client-rated WAI in the presence of SSI, \( \Delta R^2 = .00, \Delta F(1, 20) = .04, p = n.s. \) For the subgroup of trained therapists, FIS-IS significantly predicted therapist-rated WAI in the presence of SSI, \( \Delta R^2 = .40, \Delta F(1, 18) = 12.90, p < .01 \). For the subgroup of untrained therapists, FIS-IS did not significantly predict therapist-rated WAI in the presence of SSI, \( \Delta R^2 = .05, \Delta F(1, 21) = 1.06, p = n.s. \) For the subgroup of trained therapists, FIS-IS did not significantly predict OQ-45 change in the presence of client-rated WAI, \( \Delta R^2 = .01, \Delta F(1, 16) = 0.44, p = n.s. \) For the subgroup of untrained therapists, FIS-IS did not significantly predict change in OQ-45 in the presence of client-rated WAI, \( \Delta R^2 = .01, \Delta F(1, 19) = 0.33, p = n.s. \) For the subgroup of trained therapists, FIS-IS did not significantly predict change in IIP-
CX in the presence of client-rated WAI, $\Delta R^2 = 0.02$, $\Delta F(1, 17) = 0.33$, $p = n.s.$ For the subgroup of untrained therapists, FIS-IS did not significantly predict change in IIP-CX in the presence of client-rated WAI, $\Delta R^2 = 0.11$, $\Delta F(1, 20) = 3.90$, $p < .10$.

Variance scores and scatter plots were viewed for each of these post hoc correlations. For each analysis, the variances of each variable were comparable between the trained therapist and untrained therapist subsamples. There was no lack of variance in any variable that might explain the non-significant relationships between some variables. Further, scatter plots showed no noticeable abnormal distribution patterns for any of the correlational analyses.
CHAPTER 4: DISCUSSION

The FIS-IS procedure was found to be relatively convenient and practical for its purpose, assuming that adequate preparation is allotted to establish inter-rater reliability between coders. The strength of the relationship between FIS and FIS-IS is strong relative to that which is typical of situational judgment tests (SJT’s) and job performance. In personnel psychology, SJT’s have been defined as “simulations requiring the respondent to exercise judgment when responding to hypothetical problem situations that occur in work settings (p. 19, O’Connell, Hartman, McDaniel, Grubb, and Lawrence, 2007).” McDaniel, Hartman, Whetzel and Grubb (2007) conducted a meta-analysis of available studies on the relationship between SJT’s and job performance in various contexts. They found that across 118 effect size coefficients, the mean relationship between SJT’s and job performance was .26. One study looking at a variable conceptually related to FIS-IS found that an SJT significantly predicted a measure of interpersonal facilitation in job performance, $r=.27$ (Chan & Schmitt, 2002). In that study interpersonal facilitation was defined in terms of conflict resolution, negotiation, teamwork and cooperation. In light of such trends, the criterion validity and predictive validity of the FIS in its prediction of FIS-IS is substantial.

Also of interest was the substantial impact of FIS-IS on therapist-rated working alliance. These findings may simply indicate a direct relationship between these two variables, which would be expected given previous research. Another less direct possibility exists, given that it is here the therapist that is rating his or her own experience of the alliance. It may be that those individuals who are more socially capable tend to experience themselves in more positive ways in their interpersonal reactions, and might
therefore have a tendency to rate themselves highly on a measure of positive interpersonal process. If this were the case, it would not so much be that therapists with high FIS-IS actually form better working alliances, but rather that they are the kind of individuals who might evaluate themselves as having higher working alliances. This speculation seems consistent with the findings in this study that there was no significant relationship between therapist-rated and client-rated WAI, and no significant relationship between FIS-IS and client-rated WAI. Future research might clarify these alternate explanations for the relationship between FIS-IS and process as rated by the therapist.

Regarding the finding that FIS-IS did not significantly predict client-rated alliance, post hoc power analysis indicated that power was not sufficient to detect a significant relationship for the observed effect size in this analysis. Preliminary power analysis had indicated that the sample size in this study would offer sufficient power if the relationship between FIS-IS and alliance was comparable to effect sizes that are typical for process-level relational variables and alliance. Though sample size may have been at issue, it is also possible that working alliance from the perspective of the client is simply not directly related to FIS-IS. Another possibility is that the unique nature of studying therapists with no clinical training affected the relationship between alliance and FIS-IS in unknown ways, potentially distorting the kind of relationship that would be expected from previous research.

Regarding FIS-IS and outcome, it had initially been speculated that it would be unlikely for there to be no relationship between these variables, given that a previous study of the same therapy sample found a relationship between the task performance FIS and outcome. As FIS-IS was a rating of what was actually occurring during the therapy
sessions, it seemed at first blush that it should be more proximal to actual outcome change. Further, previous research on relational variables such as empathy, warmth, collaboration, etc. as process conditions in therapy have shown these to consistently predicted outcome (Norcross, 2002). One possibility is that constructs such as empathy and warmth function quite differently at the level of a condition manifest in therapy than they function at the level of the therapist’s interpersonal behavioral ability. For example, ratings of high empathetic connection coded as a condition in a therapy session, indicate that the facilitative condition has indeed manifested itself in the relationship between client and therapist. On the other hand, the observed presence of empathy as a skill exhibited by the therapist, as is coded by FIS-IS, does not necessarily indicate that the parallel condition will ever be manifest in the actual relationship, or what the quality of that condition might be if it is in fact present.

Another possibility is that the pretreatment performance FIS scores were actually tapping into something more vital for therapy outcome than the FIS-IS scores, namely how therapist interpersonal skills manifest in response to the kinds of interpersonally challenging client interactions that are used as the stimulus material in the pretreatment FIS method. The in-session FIS-IS method, by contrast, looks at how such interpersonal skills manifest over the course of one session. Any given therapy session should vary widely regarding the number and intensity of critical or challenging therapy incidents in which therapist interpersonal skills might count the most. Indeed, it may be the case that such skills over the more mundane, less emotionally charged course of therapy may not be particularly important for outcome at all. This possibility is consistent with Janzen’s (2007) findings of most of the significant correlations between outcome and FIS were
found only during periods of time designated by clients as critical incidents in the therapy. Further, Anderson et al. (2009) suggest that it is the therapist’s ability to use FIS in the context of interpersonally difficult situations that accounted for the relationship they found between FIS and outcome change.

Regarding the outcome analysis of the IIP-CX, it is unclear why, taken together, higher client-rated working alliance was related to better outcomes on the IIP-CX, while higher FIS-IS was related to poorer outcomes. One possibility is that the more distressed and potentially more treatment-resistant clients might actually pull for more FIS-IS. For example, individuals with more problematic attachment styles and resistance to change may tend to create more of an interpersonally challenging and insecure environment, which would in turn evoke more observable FIS-IS behaviors from therapists in attempt to repair interpersonal tensions and soothe clients’ distress and anxiety. It seems intuitive that some therapists might be observed to be displaying more manifest FIS-IS in therapy sessions with clients presenting as more demoralized, interpersonally challenging, and resistant to therapeutic intervention and change. This would then create the appearance of a negative relationship between FIS-IS and interpersonal problem outcome change. That being said, it may then be the alliance itself that is the variable more stable in its positive relationship to the healing process. Alliance is likely a condition developed through positive interactive processes, and would therefore not be so much pulled for by higher levels of interpersonal pathology the way FIS-IS might be.

Another possibility is that being more proximal to the change process actually exposes the FIS-IS to more confounding factors, both with regard to its measurement and how it is interacting with other variables in the actual therapy. Some theorists have
argued that the complex and dynamic nature of the therapy relationship keeps process, therapist, and client variables in continually interdependent and changing relationships with each other, rendering linear causality unlikely (Krause & Lutz, 2009; Stiles, 2009; Stiles, Honos-Webb, & Surko, 1998). This literature therefore suggests that we should not be too surprised in our failure to find consistent, positive linear relationships between desirable therapist behavioral variables and outcome change. Referred to as responsiveness, Stiles (2009) described processes by which the therapist continually responds to the ongoing unique needs of the client, in ways that directly and indirectly affect commonly studied process variables. In turn, this changing behavior of the therapist affects client behavior as well, which also has its own effects on all variables in the system. The proposed “pull” for more FIS-IS from more demanding and distressed clients, as described above, might be one example of such a responsive process. This possibility reflects findings from a study by Hardy, Stiles, Barkham, and Startup (1998), who found that therapists tended to respond to clients who had more over-involved interpersonal styles with more relationship-oriented and affective interventions styles. The possibilities of how FIS-IS both affects and is affected by dynamic responsiveness processes in therapy are numerous, and with each possibility comes more potentially confounding factors clouding any direct relationships that might exist between FIS-IS and outcome. It is also possible that responsiveness affects the correlation between pretreatment FIS and FIS-IS similarly to the ways it affects the correlation between process and outcome. That is, the complexity of in-session processes is much greater than that of the linear, trait-like measurement that has been used so commonly in psychotherapy research.
Following the rating procedure, discussion raised the possibility that there may be a difference between the trained and untrained therapists for the relationships between FIS-IS and other study variables. As such, each of these groups was considered separately for the primary analyses of the study. These post hoc correlational analyses show substantial difference between these groups for working alliance, with FIS-IS significantly accounting for 37% of the variance in client-rated alliance and 40% of the variance in therapist-rated alliance for the group of trained therapists. At the same time, there was no significant relationship found between FIS-IS and either therapist-rated alliance or client-rated alliance for the group of untrained therapists. These relationships in the trained therapist group reflect effect sizes that would be expected given previous research on alliance and other important process-level variables, such as empathy and positive regard (see Bohart et al. 2002; Farber & Lane, 2002). These findings appear to suggest that there is some process through which trained therapists use their FIS-IS to form stronger alliances, whereas untrained therapists tend not to channel their FIS-IS to such an effect. There may in fact be a trait level FIS-IS range in the general population that is picked up by the current rating system. However, this general trait may not facilitate affective bond and agreement on the tasks and goals of therapy in the absence of other clinical skills, knowledge of theoretical models of change, understanding of therapy processes, or other characteristics that should be developed through clinical training. Such training may allow therapists to channel their FIS-IS towards the work of therapy in ways that the FIS-IS of the non-trained population does not. These findings should be considered tentatively, as the sample sizes are low and they were raised in a post hoc
manner. Further research comparing FIS-IS between trained therapists and individuals in other professions would be helpful to better understand these findings.

Given these findings, it should also be asked exactly what kind of variable the FIS-IS is. Given the substantial contribution that FIS-IS among trained therapists makes to alliance, the FIS-IS might be understood as its own process variable. However, unlike other process-level variables such as empathy, positive regard and collaboration, the FIS-IS did not make comparable contributions to outcome. According to Orlinsky et al.’s (2004) Generic Model of Psychotherapy, the actual actions of the therapist are not believed to make direct contributions to outcome. Rather, they contribute, along with client interpersonal behavior, to the therapeutic bond, which in turn contributes directly to outcome. This would be consistent with these findings about the FIS-IS if we consider it to be primarily the behavior of the therapist. On one hand, therapist FIS-IS may be its own therapist variable that makes a direct contribution to the alliance and other process variables, but not to outcome. On the other hand, the strong relationship between therapist-rated alliance and FIS-IS in this study may also suggest that FIS-IS actually functions at a level that is subtly distinct from both therapist characteristic variables and therapeutic relationship variables, and yet is proximally related to both.

Indeed, it may be that FIS-IS does not fit neatly into the category of either therapist characteristic or process variable. A construct conceptually related to FIS-IS, therapist experiencing, poses a similar challenge to clearly defining therapist behavioral variables in the process-outcome model. Defined as the therapist’s own engagement in the clients experiencing, therapist experiencing involves an interactive awareness of what is occurring for both therapist and client in the moment (Klein, Mathieu-Coughlan, &
Kiesler, 1986). Mathieu-Coughlan and Klein (1984) argued that variables such as therapist empathy and positive regard are best understood in terms of therapist and client experience. Similarly, the FIS-IS, if it is indeed manifesting within an ever-changing system of responsiveness between client and therapist variables, might also be best understood in terms of what both therapist and client are experiencing in that system. If this is the case, it may be too simplistic to define FIS-IS primarily in terms of either behaviors acted out by the therapist in a given session, or as a more stable characteristic of the therapist.

It may therefore be helpful to consider the FIS-IS within the dynamic therapy system as a state-level variable, which both varies in its manifestation from moment to moment in therapy, but is also emerges directly from trait-level qualities of the therapist's personality. Beutler et al. (2004), drawing on state personality theory, divided therapist variables into the four categories of observable traits such as age and gender, observable states such as experience and skill, inferred traits such as personality, values and beliefs, and inferred states such as ability to form a therapeutic relationship. Based on the above discussion, it is possible that FIS-IS may reflect an observable state, in that it is initially defined as a set of observable behaviors. At the same time, there are aspects of the FIS-IS that reflect elements of an inferred state. For example, the language of the alliance/bond capacity item actually involves discussion of the therapist behaving in ways that would contribute to a collaborative bond. The FIS, on the other hand, as a measure of aptitude would be considered an inferred trait. The pretreatment FIS might then be considered a characteristic of the therapist that contributes to the moment-to-moment or
session-by-session FIS-IS behavior of the therapist, but is by no means the actual changing behavior itself.

As a final consideration, the strong relationship between FIS-IS and alliance among trained therapists begs the question of what kinds of client interpersonal behaviors might make comparable contributions to therapeutic relationship variables. According to the Generic Model of Psychotherapy, both therapist and client interpersonal behaviors are the primary contributors to the therapeutic bond, while therapeutic bond and client impacts are the primary contributors to outcome (Orlinsky et al., 2004). Clarkin and Levy’s (2004) review of research on client variables identifies client interpersonal characteristics as one of the most studied client variables. For example, attachment characteristics such as secure, insecure and anxious attachment behaviors have been shown to predict the establishment and maintenance of alliance (e.g. Kivlighan, Patton, & Foote, 1998; Reis & Grenyer, 2004). Further, better social adjustment prior to therapy has been shown to significantly predict alliance (Santiago et al., 2002). Despite this trend, only a few studies have studied client interpersonal behavior in actual therapy sessions, and these have mostly investigated the role of client involvement (Nelson & Borkovec, 1989; Gomez-Schwartz, 1978; O’Malley, Suh, & Strupp, 1983). If therapist interpersonal behavior in-session can account for as much as 40% of alliance variance, it would be helpful to know how much of that variance is accounted for by client interpersonal behavior in the actual therapy session.

In this study, the Social Skills Inventory (SSI) was included to consider the possibility that clients’ self-rated interpersonal skills might make a contribution to the alliance, in much the same way that the FIS-IS was hypothesized to account for part of
the therapist’s contribution. The SSI’s lack of contribution to alliance in this study may not be surprising when considering that the SSI is a self-report measure that assesses self-perceived competencies in everyday social situations, and not in therapeutic contexts. The use of this measure is more reflective of the bulk of psychotherapy research on client interpersonal characteristics, which assesses client interpersonal variables at a pre-therapy self-report level (Clarkin & Levy, 2004). Within the therapeutic context, there may be particular client interpersonal behaviors, possibly paralleling therapist FIS-IS, that make their own contribution to the therapeutic process. For example, clients will likely vary with respect to their abilities to effectively collaborate, engage in affiliative behaviors towards the therapist, bring hopefulness into the therapeutic discourse, evoke emotional energy in the relationship, articulately express their thoughts and feelings, and even accurately express what they think the therapist is trying to communicate. Future research identifying and improving on what might be called Client Facilitative Interpersonal Skills may therefore be useful in accounting for more variance in therapeutic alliance and outcome. If such client characteristics are shown to be important, clinicians might want to seek out ways to empower their clients to further develop such qualities.
CHAPTER 5: LIMITATIONS AND CONCLUSION

Despite the successful implementation of a new therapist-variable coding procedure and some relevant findings, this study has some clear limitations. As with all psychotherapy coding measures, there are always questions about the specific nature of the subjective biases and the acceptability of agreement between judges, even in cases when inter-rater reliability is strong (Hill & Lambert, 2004). For example, four of the five individuals involved in the development of the FIS-IS instrument, and both of the individuals who served as judges in this study, identify themselves strongly with interpersonal, relational and psychodynamic models of therapy. It remains to be seen if a research team working with theoretical leanings that are not as interpersonally focused would display the same codings of the same events, or if they would also attain high inter-rater reliability. Sample-size was also a clear issue, as power was not sufficient to detect significant relationships given the effect sizes of some variables. We cannot however allow for speculation about what results would mean given a larger sample. This is a problem with much therapy research that looks at such complex constructs as interpersonal process, in that it is dealing with multifaceted and mediated relationships between a large number of variables, most of which have relatively small effects on each other. Another important limitation is lack of independence between therapist FIS-IS scores. The nature of the OUHRS study was such that each therapist only saw a few clients. Each therapy dyad data point shared a common therapist with one other therapy dyad, with only one exception. Though this is not an uncommon issue in psychotherapy process research, it may have had unknown effects on the regression analyses.
Despite such limitations, we argue that the FIS-IS method shows promise as a means of assessing a global therapist interpersonal competence at the level of a therapist variable, and that both the FIS-IS and FIS methodologies warrant use in several possible areas of future research. First, it would be useful to apply either of these measures to larger sample sizes such that finer analyses of the relationship between these and other therapist, client and process variables and their interactions can be conducted. Also important would be research using fewer therapists seeing more clients, such that generalized therapists effects can be assessed, and it could then be determined the degree to which such effects are accounted for by FIS-IS relative to other therapist and process variables. FIS-IS might also be used in future research as a means of controlling for interpersonal therapist factors when they are believed to affect other study variables of interest. Next, given the comparable correlations between FIS-IS and alliance among trained therapists in this study and process-level variables and alliance in previous studies, it would be helpful to determine the relationships between FIS-IS and such process-level variables as empathy, positive regard, collaboration, and emotional engagement. The FIS-IS may also be useful in studies that wish to consider interactions between treatment modalities and therapist skills. For example, will FIS-IS be more important for some approaches to therapy than it is for others?

Finally, the importance of FIS-IS and FIS found in research thus far begs the question of whether or not FIS can be taught through experience and training, or if it tends to be a more stable general characteristic that some individuals consistently manifest better than others. It is often presumed that, given adequate training, individuals in helping professions develop sufficient interpersonal skills to be effective clinicians.
Though this assumption may be desirable, it has not been tested with systematic empirical research. The ability to test Facilitative Interpersonal Skills with both pretreatment and in-session methodologies can help investigate such unknown questions about clinical training. All of these questions have substantial importance for the mental health profession, and potentially for the spectrum of health and human services and beyond. In any of these possible research contexts, the FIS-IS may be particularly useful for data sets where in-session recordings are available for coding, but the therapists used in the study are not themselves available for FIS performance analysis assessment.
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Table 1

*Means and Standard Deviations of Study Variables*

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<th>Variable</th>
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<th>SD</th>
<th>Range</th>
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<td>5.83</td>
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<td>142.75-300.25</td>
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<td>150.00-244.00</td>
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<td>122.00-245.00</td>
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<td>25.69</td>
<td>53.00-158.00</td>
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<tr>
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<td>14.74</td>
<td>55.00-126.00</td>
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<td>5.00-150.00</td>
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*Note.* N=44.
Table 2

Intercorrelations of Study Variables

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<td>.00</td>
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<td>.35*</td>
<td>.18</td>
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<td>-.15</td>
<td>-.16</td>
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<td>5. IIP-Intake</td>
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<td>.37*</td>
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<td>9. Client Social Skills</td>
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*Note. N=44.*

*p < .05, **p < .01
Table 3

**Summary of Hierarchical Regression Analysis Predicting Client-Rated Working Alliance**

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*Note. N=44.*
Table 4

Summary of Hierarchical Regression Analysis Predicting Therapist-Rated Working Alliance

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<td>WAI-Therapist</td>
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Note. $N=45$.

*p < .05 **p < .01
Table 5

Summary of Hierarchical Regression Analysis Predicting Inventory of Interpersonal Problems – Circumplex

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<td>IIP-CX</td>
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*Note. N=44.*

*p<.05  **p<.01
### Table 6

*Summary of Hierarchical Regression Analysis Predicting Outcomes Questionnaire-45*

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<th>SE B</th>
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<th>F</th>
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</tr>
<tr>
<td>Step 1</td>
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<td>4.84**</td>
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<tr>
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<td>0.61</td>
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<td>0.38</td>
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<tr>
<td>OQ-Total – Intake</td>
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<td>0.56</td>
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<td>8.41**</td>
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<td>-1.27</td>
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*Note. N=43.*

*p<.05 ** p<.01
Facilitative Interpersonal Skills In-Session Rating Manual (FIS-IS)

General Instructions: Ratings for each item are made on a 5-point system. The rating scale ranges from Not Characteristic (“1”) to Extremely Characteristic (“5”). More elaborate descriptions of each rating level are provided to help identify the correct rating level.

Response Set: Clearly, people differ in how they evaluate the skillfulness of helper interventions. The descriptions of these items are lengthy in order to provide the context for what is intended by each particular FIS domain/item. Items are written in order to assist the rater in using specific evidence from the session to inform rating decisions. In rating a response, instances of an “average” level of a helping behavior would merit a rating of 3. Ratings of 3 are thought of as the default rating for all items and are considered ordinary helping or facilitative interpersonal skills. Thus, a 3 should be the starting point for ratings and the participant’s response may influence you to increase or decrease your rating from a 3.

As a procedure for rating FIS in an individual therapy session, it is recognized that these skills will vary according to the context of the client and the therapy process. It is therefore up to the rater to consider not only the degree to which each FIS skill is present, but also the degree to which the therapist displays the skill in ways that are consistent across the session and appropriate to the unique needs presented by the client. In other words, FIS may be largely absent in the first segment of a session for various reasons, but then begins to display effective FIS as the session moves on. Such a participant would not be penalized simply because he or she allowed the client space to do most of the talking for segments of the therapy session.

As therapists are in this context the subjects of research, they are referred to as participants in the FIS-IS manual.
The FIS-IS Items

1. Verbal Fluency.
This item is a rating of the extent to which the participant is verbally capable and at-ease in communicating. Throughout the session, speech is delivered in a relaxed manner and without significant signs of anxiety in speaking (e.g., broken speech, extended and awkward pauses, lack of clarity in communication). The content of what is said is not rated, but rather how it is spoken. It is presumed that this skill is a relatively stable quality of the therapist in how he or she communicates to clients. At the same time, some variability will arise depending on the difficulty of the content that the therapist wishes to communicate.

In some circumstances poor verbal fluency may seem to reflect avoidance or anxiety. Avoid attempting to interpret such causes and focus on the verbal quality.

5  The participant is at great ease and communicates ideas with no anxiety, reflecting a desire to "approach" the other. The verbal quality of the speech may have a melodic or rhythmical quality. It should consistently easy to follow.

4  The speech is fluent, and participant communicates with more ease than is found in average communication, though not to the extent that the quality would be considered superb.

3  A moderate level of verbal fluency indicates that the participant's speech is conversational and mostly easy to follow. However, there is nothing that stands out about the quality of the participant’s speech.

2  Fluency tends to be disrupted by the participant’s anxiety, avoidance, or other difficulty in communicating. The respondent may tend to seem anxious about what he or she has to say and struggles to formulate responses. The communication is at times choppy, even halting.

1  The participant has great difficulty verbalizing his or her ideas through out the course of the session (for example, may sound anxious, shaky or timid throughout the session). The participant lacks confidence in speaking and is consistently difficult to follow.
2. Emotional Expression.
This item rates the energy and emotional engagement of the participant's behavior. For this item, the context of the therapy process must be taken into consideration, in order to ensure that the emotional expression is appropriately matched with the content of the conversation. For example, the emotional expression that is appropriate when the client is discussing painful content will not be appropriate for discussing trivial matters. In other words, to what degree is the therapist behaving in ways that facilitates the emotional engagement between client and therapist.

5 There is affect and prosody in the participant's voice in such a manner that is appropriate to the context of the session and facilitates emotional engagement. The primary criterion is that the vocal expression conveys emotion. There may be a more focused delivery of emotional intonations to emphasize meanings that influence other processes (e.g. persuasion).

The participant may even be somewhat provocative or challenging in delivering an emotion-based response toward the client. However, a "5" should not be rated if the affect is primarily demeaning or hostile toward the other (in which case a "3" would be the maximum rating possible).

4 The participant is typically emotionally expressive at a moderate to high level. There is more emotion than found in ordinary speech, but it is not as effective and focused in its delivery as the maximum rating of 5.

3 The participant has a moderate level of emotional engagement. It may be inconsistent throughout the session, or at times seem inappropriate, but there is nothing about it that undermines the interactions between therapist and client.

2 The participant may display some sense of interest or curiosity, but the speech tends to not be emotionally engaging. The lack of engagement may begin at times to seem problematic for the therapy process (i.e. client and/or therapist look bored or uninterested).

1 The participant seems hardly emotionally engaged with the client, or not at all. He or she will likely seem boring and lacking emotion.
3. Persuasiveness.
Persuasiveness involves that ability to convey a clear, organized understanding about the client’s situation as well as some new way of thinking about it. Persuasiveness implies an ability to communicate what Jerome Frank called a “believable myth.” This capacity implies that the persuasive therapist must be convincing in communicating important concepts to the client in ways that the client is both likely to understand and “buy into.”

High ratings require that the participant consistently provide clear expression of points of view and rationales throughout the session. It is necessary that the ideas communicated be relevant to the other’s problems and at least somewhat novel to the other’s experience.

Apparent client resistance to effective persuasiveness should not reduce the score.

5 The participant tends to be highly persuasive throughout the session. Persuasive persons may speak with great confidence, certainty, and authority. Advice may or may not be given, but the participant must offer some explanation or re-framing of the other's experience.

4 The participant tends to speak persuasively. Rationales may be more implicit and it is even possible that the rationale, though present, may be unclear or less relevant to the other’s problems.

3 The participant is moderately or inconsistently persuasive.

2 The participant typically unpersuasive. Unpersuasive behavior may be characterized by either:
   a) Offering rationales that lack credibility or are difficult to believe. As a rule, you can accept most explanations offered as being credible unless there is a clear logical flaw in the process of explaining their particular belief.
   b) rationales that are expressed with a lack of confidence or uncertainty by the participant will be low in persuasiveness.
   c) Participants that offer little or no rationales may be coded as low in persuasiveness as well

1 The participant’s utterances are typically unorganized, incoherent, and difficult to follow. The participant may also seem to not know what to say throughout the session. There is a general sense that a client would not likely be absorbing much of what the therapist is saying.
This item is a rating of the ability of the participant to care for and accept the other. Therapist behaviors/attitudes that might indicate an absence of acceptance and understanding include: a judgmental attitude, condescension, rudeness, disapproval, guilt-induction, exasperation, or annoyance. Often it will be necessary to avoid rating what the participant does (e.g., giving advice), but rate how it is being done. Note that accepting does not necessarily mean approval, but rather a caring attitude and determination to help the other. At times when it appears appropriate to challenge or even criticize the client, it is done in a caring and respectful manner. It is assumed that for some therapists their levels of warmth will vary. Therefore they should be rated according to their typical behavior.

5. The participant tends to express clear and obvious warmth, concern and acceptance, consistently throughout the session. The participant may, for example, make a compassionate attempt to relate to the other’s experience.

4. The participant’s behavior tends to be genuinely nonjudgmental and gently explores the other’s thoughts, feelings, alternatives for dealing with future situations, etc. The participant appears concerned for and respectful of the client. This rating would be given for participants who express warmth at the level of a five most of the time, but show some exceptions throughout the session.

3. There is a moderate level of courtesy and warmth in the session. Effectively, there is little communication of any elevated care or concern for client, but there is also nothing that would undermine a client’s sense that he or she is being respected and cared for.

2. The participant seems to convey a subtle lack of acceptance, or concern of the other (e.g., sarcasm, exasperation, annoyance). Expressions of warmth are rare or absent.

1. The participant has an obvious lack of respect, acceptance, or warmth for the other (e.g., clearly pejorative comments, judgmental attitude, condescension, disapproval, guilt induction, blaming the other).
5. Hope & Positive Expectations.
This item rates expressions of hope, optimism, and positive expectations for change. Staats (1989, 2001) defines hope as the interaction between wishes and expectations. The interpersonal skills needed for hope involve facilitating a) personal agency and b) building the pathways needed for attaining desired goals and expectations (Steed, 2002). Here building agency refers to the therapist having and encouraging a “you can do it” attitude. Pathways refers to the therapist offering plausible ideas about how positive changes might be made.

Hope is related to persuasiveness and collaboration in the sense that hope and positive expectations are often built through offering a rationale, friendliness, and enthusiasm. As defined here, hope focuses more on building client agency for actions that will facilitate meeting the client’s goals whereas persuasion is based more on a plausible explanation (which may or may not include hope).

5 The participant offers expressions of clear hope about the client’s future and/or positive expectations about therapeutic work. In addition, for a response to be coded as a “5” there needs to be an allusion to building the client’s agency as well as how the client might participate or do something that will help move toward his/her desired goals (i.e., pathways).

4 The participant either builds the client agency OR facilitates the building of pathways to meet the client’s goals. A general expression of optimism about the client must also be conveyed.

3 A general sense of optimism about the client’s situation is detected, but there is nothing specific in regard to building the client’s agency or building pathways for meeting goals.

2 There is no clear conveyance of hope over the course of the session. There may be some gratuitous hopefulness expressed, but with little confidence or reason for being hopeful.

1 The participant not only fails to actively engage in hope building, but also tends to come across as though he or she is not particularly confident about the client’s potential for change. For example, the participant may address only issues or concerns beyond the control of the other or subtly suggests that the other cannot change or improve his/her problems.
6. **Empathy.**
The capacity to respond with an expressed understanding of the subjective experience of the client. The participant’s reflections must also convey an accurate understanding of the thoughts and emotions expressed by the client. Therefore, it is especially important that the rater pay careful attention to what is expressed by the client. The quantity of empathic reflections is not rated, but rather whether or not the participant uses empathy in ways and at times that would facilitate the therapeutic process.

5  Over the course of the session the therapist offers sufficient and appropriate reflections demonstrating that he/she is not only listening, but also obtaining an exceptional comprehension of what the other is experiencing. In order to receive a "5" the participant must be able to infer something about the other's experience that is not explicitly stated by the other.

4  Participant comments accurately on the other's experience but not to the extent required to receive a “5" rating. The distinction between the 4 and 5 ratings are matters of intensity. Also receiving a 4 would be a therapist who generally performs at the level of a 5, but has had some inaccurate reflections.

3  Participant is generally accurate about the other's experience but only perceives the more obvious aspects of the other's experience or concerns.

2  Participant rarely or ineffectively communicates an awareness or understanding of the other’s experience, and/or there are minor distortions of the other’s experience. Some aspects of the participant's response may be irrelevant to the other's concerns.

1  The participant offers no sense that he or she is understanding the client’s experience, as would be evidenced by regularly distorting the client’s experience or offering no reflections about the client’s experience. Also give a rating of 1 if the response indicates a clear disregard of the other’s experience.
7. **Alliance Bond Capacity.**

This item rates the participant's capacity to provide a collaborative environment, one in which there is recognition of the need to work with the client jointly on problems. In order to move upward from a score of 3, the participant must display some obvious behaviors that either reflect or facilitate collaboration.

5. **Specific actions on the part of the participant help create a collaborative atmosphere.** There should be a sense that the participant is attempting to work with the other to create a "we-ness" that is implied in the participant's behavior (e.g., participant checks with the other by asking questions about the "fit" of interpretations, conclusions, goals, etc.).

4. Some effort to collaborate is made but not as strong as a “5” (e.g., subtle invitations to engage in working with the client).

3. The participant neither undermines nor attempts to enhance a collaborative effort.

2. The participant may slightly undermine the building of a collaborative atmosphere, although it may be unintentional or superficial. This rating is appropriate if there is a minor alliance rupture that is not attended to by the therapist.

1. The participant actively undermines a mutual collaboration. The participant may respond in a way that is over-involved or reactive (e.g., moralistic lecturing, "preaching" to the other, assuming all responsibility). The rupture may also involve withdrawal or under-involvement in the participant’s response (e.g., putting all the responsibility for change on the other). This rating is also appropriate when major alliance ruptures are ignored by the therapist.
**Facilitative Interpersonal Skills In-Session Coding Template**

Space is provided for judges to make notes as the session progresses. Judges can use the space to note impressions of the scores for each item in the beginning, middle, and end segments of the session. This space is provided only for the sake of making notes. The final ratings should be made of the entire session, and should not be thought of as an average of any ratings that may have been noted.

Client:___________  Coder:___________  Date:______________

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<tr>
<th></th>
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<th>Middle</th>
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<td><strong>Alliance Bond Capacity</strong></td>
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</table>
APPENDIX C: EXTENDED DETAILS OF THE OUHRS SAMPLE DATA AND PROCEDURE

Clients. Clients in this study were recruited from introductory psychology classes at Ohio University and offered course credit and financial reward. Out of 2142 students screened through a routine pre-screening of all psychology 101 students, 204 students were identified as scoring at least two standard deviations above the mean on the SCL-90-R and were invited to participate in this study. A total of 83 of these students expressed interest in participating in the study after being screened for substantial clinical distress. Interested students then participated in a more in-depth screening process which involved a second administration of the SCL-90-R, an administration of the IIP-CX, and a structured interview with either a licensed psychologist or one of five graduate students with advanced experience in clinical psychology. At this point, students were invited to continue in the study if they met the following criteria: 1) SCL-90-R scores were two standard deviations above the mean or higher, 2) at least three scores on the IIP-CX were clinically significant, 3) and the clinical interview determined the presence of a DSM-IV diagnosis that substantially impaired interpersonal functioning. Clients were excluded from the study if they were currently in therapy or intended on seeking other therapy over the next 22 months. Also excluded were those students with significant drug and/or alcohol dependence, frequent suicidal ideations, or severe personality disorders. Excluded students were referred to professional treatment elsewhere.

Students who were selected after the final screening process were then randomly assigned to either the active treatment group or the control group, with 59 participants in the former and 24 participants in the latter. These participants were informed that the
study was voluntary and that they could drop out of the study at any point without penalty. They also signed informed consent forms that outlined confidentiality terms and limitations. Treatment participants were paid fifty dollars for participation in the study, which consisted of a commitment of 13.5 hours of participation over 22 weeks. Participants in the control group were paid ten dollars for participation, which consisted of a four hour time commitment over the course of 22 weeks.

The final treatment sample after a drop-out of seven participants consisted of forty-five participants in the active treatment group. Twenty-seven were female and eighteen were male. The mean age of participants was 19 with a range of 18 to 23. A large majority of participants (90.9%) identified as Caucasian, while 2.3% identified as African American, 2.3% identified as Asian/Pacific Islander, and 4.5% identified as multi-racial. Thirty-six percent of the participants reported having had some form of psychotherapy treatment in the past.

Therapists. The 23 therapists for this study were recruited from two sources. The eleven students with clinical training were recruited from the Ohio University clinical psychology program. Students eligible for this study had completed at least two years in the clinical program, which consists of course-work in helping skills, psychotherapy research, theory and treatment, psychopathology assessment, and personality theory. These students had completed at least one year of clinical practicum at the Ohio University Psychology and Social Work Clinic providing psychotherapy services to clients primarily drawn from the Ohio University student population. The group of twelve untrained therapists were graduate students recruited from other disciplines that involved no experience in psychotherapy training or other clinical mental health training.
These participants were explained the nature of the study, but were not given further instruction beyond what would be necessary to maintain confidentiality and other necessary ethical standards. The final sample of these students came from the disciplines of biology, chemistry, experimental psychology, history, English, comparative arts, interpersonal communication and consumer sciences. All participating therapists were paid 200 dollars and committed to 11 hours of work over seven weeks to provide the therapy treatment and fill out relevant measures.

Out of 56 students interested in participating in the study, the final selection of therapists who would deliver treatment was based on their scores on the Social Skills Inventory (SSI; Riggio, 1986). Those students who scored in the high and low ranges for their social skills were asked to participate. This final group consisted of eight males and fifteen females. Nineteen were Caucasian, three were Asian and one was Hispanic. The mean age was 31 with a range of 23 to 53.

Procedure

Pretreatment Performance Analysis and Random Group Assignment. Given the purpose of the OUHRS study, it was intended that clients would be randomly assigned to either the group of therapists with high FIS or the group of therapists with low FIS. For this reason, therapist FIS was rated using the performance analysis method prior to the assignment of the subjects. First, modeling a method developed by Bein and Strupp (1996), therapists viewed a five minute segment of a reenacted therapy session. Following the viewing the therapists were asked to talk about the relationship between the people in the segment and the feelings that these two were likely to have been having at the time. Next, the therapists were asked to view several clips of reenacted therapy
sessions from the Vanderbilt II psychotherapy research project. These video clips were intentionally chosen because they contained interpersonally problematic behavior from the clients that was likely to involve a threat to the therapeutic relationship. The therapists then responded to the clips by saying what they believe they would say were they themselves the therapists in the recorded session.

The pretreatment FIS manual was then used by two clinical psychology graduate students with psychotherapy research experience to rate the quality of the facilitative interpersonal skills displayed by the therapists in their responses. Therapists were then assigned to either the high or low interpersonal skills group based on these scores and their scores on the SSI. This was based on a median split of these scores. Two therapists that did not fall into either group were placed into the low skills group because they were at least one standard deviation from the mean on the SSI, which was a criterion determined prior to these assignments. Once these two groups were established, clients were randomly assigned to one of the groups, with each therapist receiving two clients.

The OUHRS Treatment Procedure. All therapists were instructed with the same general guidelines to follow over the course of the weekly, eight week treatment. Sessions were to be 45 to 50 minutes and take place in assigned rooms in the Ohio University Psychology and Social Work Clinic. Therapists were also trained in adhering to the guidelines laid down by the ethics code of the American Psychological Association (APA, 1992). Beyond these guidelines, therapists were intentionally given no further instruction, other than to do their best to help their clients with their problems in best ways that they saw fit. Periodic supervision was conducted by a licensed clinical psychologist and therapists were encouraged to seek supervision if issues arose that they
did not feel competent to address. Clients were informed if their therapist did not have training, but otherwise were unaware of the specific hypotheses of the study. Aside from these basic guidelines, therapists and clients jointly determined the course of the sessions, with no recommendations offered to the therapists about treatment modality or interventions.
APPENDIX D: REGRESSION ANALYSIS OF THE OQ-45, INCLUDING REMOVED OUTLIER

As explained in the results section, each regression analysis was inspected for outliers. One data point in the regression analysis of the OQ-45 had a Mahalanobis Distance and a Cook’s Distance that exceeded Stevens’ (2002) criteria for outliers, and had a studentized residual exceeding three standard deviations. Logarithmic and square root transformations were conducted on the data, in order to determine if this would eliminate the outlier issue. For the square root transformed data, results were comparable, but the same data point well exceeded outlier criteria. For the logarithmic transformation, the point in question was no longer an outlier in the analysis, however the significant relationships found in the raw data were no longer occurring. As the regression results were significantly different with and without this data point, this point was found to be having excessive influence on the regression equation, and arithmetic transformation of the data did not resolve the outlier issue, this point was removed from the analysis of the OQ-45.

It is recognized that removal of outliers form linear regression analyses is not always a straightforward and uncontroversial procedure. Results as they were observed prior to the removal of the outlier are therefore presented here. It can first be seen by the appended table that in the second step of the outcome analysis, WAI-Client did not significantly contribute to variance in the OQ-45 at termination, in the presence of the OQ-45 at intake, $\Delta R^2 = .04$, $\Delta F(1, 41) = 2.10$, $p = n.s$. Next, it can be seen in the third step
that FIS-IS accounts for a significant amount of variance in the OQ-45 at termination, in the presence of WAI-Client and OQ-45 at intake $\Delta R^2 = .09$, $\Delta F(1, 40) = 4.81$, $p < .05$. 
### Summary of Hierarchical Regression Analysis Predicting the Outcomes Questionnaire - 45

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Note N = 44.