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Effect of counselor self-disclosure of religious similarity on client perception of empathy within the therapeutic relationship: an analogue study

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Effect of counselor self-disclosure of religious similarity on client perception of empathy within the therapeutic relationship: An analogue study

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ABSTRACT

This analogue study was intended to investigate the impact of a specific counselor intervention, self-disclosure, on therapeutic empathy and working alliance by exposing 189 participants from a large Midwestern university to one of four randomly assigned conditions featuring a sex-matched, simulated counseling interaction. Participants' video-stimuli ratings were analyzed by a series of planned comparisons and ANCOVAs.

Planned comparisons revealed that Working Alliance Inventory (WAI) ratings were significantly higher for the mean of the combined self-disclosure treatment groups than for the non-disclosure control and that mean WAI ratings for the matched religious self-disclosure condition were significantly higher than for the control. When analyzed via ANCOVA, partialling out significant covariates, the mean of the combined treatment groups was significantly higher than that of the control for each dependent measure (WAI, Accurate Empathy Scale, and Empathic Understanding Scale). The findings indicated that counselor self-disclosure can have a positive impact on the therapeutic relationship. Implications for research, training, and counseling are discussed.

CHAPTER 1. INTRODUCTION AND LITERATURE REVIEW

Therapeutic Relationship

For as long as psychotherapists and counselors[1] have been formally treating psychological concerns, there have been attempts to understand the nature and mechanisms of client change (Heller, 1971). The numerous examples of treatments that worked without an explicit rationale, coupled with investigations comparing psychotherapies, have spurred research into how and why psychological treatments seem to work (Blatts & Zuroff, 2005). Indeed, in many ways it has been the search for what facilitates client change that has driven theory and research since the formal practice of helping began. That change does often happen for clients[2] in psychotherapy and counseling is well established, but the exact means by which change occurs remain somewhat illusive (Prochaska, DiClemente, & Norcross, 1992).

The "dodo bird effect," which refers to the general lack of differences in efficacy among the various forms of psychotherapies, has been a point of contention since its proposition by Luborsky, Singer, and Luborsky in 1975. The claim spurred a torrent of research, most of which has failed to demonstrate appreciable differences in the efficacy of the various psychotherapies (Messer & Wampold, 2002; Nathan, Stuart, & Dolan, 2000). As a result of the considerable evidence supporting the "dodo bird effect," the general consensus has been that, although there are specific conditions where a particular technique seems to be slightly more effective, all psychotherapies are of equal efficacy overall (Bernier & Dozier,

[1] The terms psychologist, psychotherapist, therapist, and counselor are all used interchangeably throughout the text.

[2] The terms patients and clients are used interchangeably throughout the text, as are the terms psychotherapy and counseling.

2002; Hill & Nakayama, 2000). Likewise, the lack of any meaningful variability in technique efficacy seems to indicate that there is some piece of understanding which eludes the scientific community. This question of what is responsible for the efficacy of psychotherapy has led to several suppositions.

Based on the data, many researchers have concluded that the specific theories and techniques applied by psychologists may not be directly responsible for treatment outcomes (Messer & Wampold, 2002). One potential alternative that has been suggested is that the techniques may access some common factors, which serve to generate the curative effects (Rosenzweig, 1936; see also Grace, 1994). Foremost among those common factors, the therapeutic relationship has been widely accepted by most approaches (Iwakabe, Rogan, & Stalikas, 2000).

If the relationship was the central factor in determining client change, that would help to explain why all therapies seem to work (Kozart, 2002; Martin, Garske, & Davis, 2000). Indeed, the importance of the relationship has been acknowledged by numerous studies (Iwakabe et al., 2000; Lambert & Barley, 2001). It is in such cases that psychology began to look beyond the treatment method to the healing properties of the unique relationship between the patient and the therapist. Research into positive outcomes from psychotherapy has uncovered some interesting insights into the therapeutic relationship and in particular, the healing power of empathy.

Historical Background of Empathy

The concept of the therapeutic relationship has deep roots in counseling psychology. Although the existence of a relationship between the client and counselor had been discussed by Freud and many others throughout the years, far more importance was initially given to

specific therapeutic techniques than to that relationship (Horvath & Luborsky, 1993; Horvath & Symonds, 1991; Howgego, Yellowless, Owen, Meldrum, Dark, 2003). It was not until the humanistic movement of the 1950s that the focus began to move away from specific techniques and toward the relationship between counselor and client. It was also during that time that empathy was first formally thought of as an essential component of that relationship with healing properties of its own (Barone, Hutchings, Kimmel, Traub, Cooper, & Marshall, 2005; Kozart, 2002; Summers & Barber, 2003).

Client-Centered Therapy. First popularized by Carl Rogers (1940), person-centered therapy was simply a place to experience some of the relationships all people would always have in an ideal world. Rogers, well known for his attempts to create a "non-directive" form of therapy, also proposed a concept that was nothing short of radical for the time. Rogers (1951; 1957b) suggested that positive outcomes in therapy were not derived from the specific therapeutic technique employed by the counselor, but rather from the expression of three core conditions: congruence, unconditional positive regard, and accurate empathic understanding. These qualities, Rogers believed, would allow for the client and therapist to establish a supportive and caring bond.

This bond between the patient and the counselor, in turn, allows for trust and understanding to take the place of whatever negative affective experiences brought the patient to psychotherapy (Erskine et al., 1999). This concept, which became central to Rogers' view of therapy, also had a profound impact on the understanding of the therapeutic process. Building on that trust and understanding is the idea that the client and the therapist are united in a common goal of improving the wellbeing of the client (Rogers, 1957a; see also Kozart, 2002). For these reasons, some researchers have suggested that the relationship

is the underlying factor responsible for promoting change across approaches (Nathan et al., 2000).

The Therapeutic Alliance. Based on Rogers' initial work on that bond, clinicians have further developed this concept, positing a number of relationship constructs which are generally thought of as the therapeutic (or working/ helping) relationship or alliance (Horvath & Symonds, 1991). The importance of empathy within the therapeutic alliance has been established by numerous studies, especially with regard to the initial sessions in the therapeutic process (Nathan et al., 2000; Stein & Lambert, 1995; Reynolds & Scott, 1999).

As an essential component of the therapeutic alliance, empathy serves to support and nurture the bond between the patient and the psychologist (Horvath & Luborsky,1993). Indeed, some even consider the establishment of an effective therapeutic relationship to be a basic condition necessary for client change within the therapeutic dyad (Iwakabe et al., 2000). The therapeutic relationship between the counselor and the client has been associated with positive outcomes and although conditions have been added to the list, empathy remains among the most fundamental to the successful establishment of the therapeutic alliance (Hill & Nakayama, 2000; Kozart, 2002; Lambert & Barley, 2001; Nathan et al., 2000).

Therapeutic Groups. Although group therapy also has considerable efficacy, the channels from which healing flows are believed to differ from the dyadic relationship. In contrast to the counselor's intentions in the therapeutic dyad, it seems that the role of the psychologist in group therapy is not to directly provide empathic understanding, but rather to encourage empathic interactions between the members of the group. When the counselor is successful in doing so, group members often experience positive outcomes (Kivlighan & Kivlighan, 2004).

Positive Outcomes of Empathy within the Relationship

In support of the facilitative nature of the therapeutic alliance, it seems that empathy within relationships does play a significant role in positive outcomes (Hill & Nakayama, 2000). From terminal illnesses to depression, it is generally believed that many illnesses of either organic or psychological nature can be impacted by empathy (Grace, 1994; Hollinger-Samson & Pearson, 2000; Pistrang, Solomons, & Barker, 1999). Indeed, many in the medical and psychological communities firmly maintain that patients actively seek empathic support from a relationship with another person (Shapiro & Rucker, 2004; Coulehan, 2004).

Further, Erskine and colleagues (1999) have boldly suggested, based on their clinical experience, that often a healing and understanding relationship is enough to facilitate some improvement in patients, regardless of whether the patient experiences medical or psychological difficulties. Additionally, patients often improve simply from knowing there is someone who cares enough about them to work to find healing (Erskine et al., 1999; Nagel, Cimbolic, & Newlin, 1988). This empathic relationship effect, first noted by Carl Rogers (1957b), has since been supported by a growing body of literature (Gurman, 1977).

Connection of Spirituality and Empathy within Multiculturalism

In counseling and psychotherapy, there has been a growing movement toward expanding the field beyond into multicultural awareness. This movement, which some have even gone so far as to call the "fourth force," represents another opportunity for therapists to connect to their clients (Naidoo, 2000; Ponterotto, 2000). One demographic issue, in which common experiences can improve communications, has been in religion and spirituality. Just as being able to tune in to the same words or social cues can help bridge ethnic, racial, or linguistic barriers, so too can similarities in religion and spirituality. This can take place due

to the perception by clients that the counselor has shared the same spiritual experiences and background (Worthington, Kurusu, McCullough, & Sandage, 1996).

Worthington et al. (1996) concluded that the patient-provider relationship can be strongly affected by issues related to religion and spirituality. The authors determined that patients desire to be able to discuss issues of religion and spirituality with their therapists, but often feel unable to do so. Particularly, some highly religious patients felt they could best relate experiences through religious discussion, but feared having their beliefs undermined. Additionally, patients often expressed concern about being ignored or misunderstood when discussing their beliefs with the counselor.

Patients' fears about having their beliefs shaken or being misunderstood ties in with the issue of frame of reference in the relationship. Perhaps because clients would feel more at ease and better able to communicate with a therapist of similar beliefs to themselves, some patients preferred a psychologist who appeared to share their beliefs (Worthington et al., 1996). For example, patients who were devout Roman Catholics or Jews strongly preferred counselors of the same religious affiliation, or who at least appeared to be of a similar faith.

This effect, which could be elicited by simply displaying a religious symbol such as a cross or yarmulke, illustrates the importance of patient perception in the empathic process of developing an effective therapeutic relationship (Worthington et al., 1996). It may be that clients are more likely to openly discuss the importance of religion and spirituality with their psychologist if they feel secure in the psychologist's similarity. That similarity in religious and spiritual beliefs would allow enhanced understanding, makes a great deal of intuitive sense, a sort of shared group identity.

Another study that investigated the importance of spirituality in the therapeutic relationship was conducted by Rose, Westefeld, and Ansley (2001). The authors determined that both patients in psychotherapy and patients in medical treatment desired to discuss issues of spirituality with their provider. Although previous research had indicated patients often feared how the provider might react to their beliefs, much like the findings of Worthington et al. (1996), Rose et al. (2001) failed to find this as a significant factor in treatment. In fact, the authors found that most patients feel that they could openly discuss issues of spirituality in treatment if they wished.

Although the findings of Rose et al. (2001) appear to contradict previous research, there may be an uplifting reason for this. Perhaps, because of the influence of multiculturalism, therapists have been made more aware of this issue, and are consequently better able to address patients' concerns regarding religion and spirituality in treatment than providers were previously. If this were the case, it would make a strong argument for continued expansion of multicultural values and training in treatment as a means of encouraging patient perceptions of empathy toward the provider.

The general conclusion one might draw from the body of research is that shared demographic factors, as a function of shared worldview and prior experiences, is conducive to the facilitation of empathy within the relationship (Bernier & Dozier, 2002). Perhaps, just as a common culture, language, or belief system improves empathy, so to does any commonalities in life experiences. This was supported by the views of the importance of spirituality in the formation of worldview, expressed by Rose et al. (2001) as well as DiLalla, Hull, and Dorsey (2004). Although a therapist would not change her or his own spiritual

beliefs and experiences to fit the client, an awareness of the potential benefits of sharing any spiritual similarities could be valuable for both patients and psychologists.

Value of Self-Disclosure

The value of therapist self-disclosure is unclear from the literature, with some adamantly praising its value while others prohibit its use (Stiles, Shapiro, & Elliot, 1986). For example, while humanistic and feminist therapists often use and value self-disclosures, psychoanalysts traditionally avoid them (Peterson, 2002). Although there have been some studies that have found counselor self-disclosures to be helpful to clients, others have questioned both the value and ethics of such therapist self-disclosures to clients.

One study conducted by Kim, Hill, Gelso, Goates, Asay, and Harbin, (2003) failed to find any effects of therapist self-disclosure on session outcome with Asian American clients. They did find; however, that European American therapists were more likely to use affirming self-disclosures with Asian American clients. The authors speculated that this was motivated by counselors' desire to strengthen the therapeutic relationship with their clients.

Another multicultural study with European American counselors and clients of color also found some interesting relational effects of counselor self-disclosure to clients of a different race (Burkard, Knox, Groen, Perez, & Hess, 2006). Though the authors found that counseling training with self-disclosures was limited in general and nonexistent in cross-cultural counseling, they did find that European American counselors do self-disclose more often with clients of another race.

They also found that these altruistically motivated self-disclosures were perceived as helpful by counselor and client alike. This fits with another study conducted by Burkard and Knox (2004) that found that counselors who are more aware of racial issues are perceived as

more empathic by clients of color. If these findings were confirmed by other research, and could be generalized to other populations, it could provide counselors with a very useful tool in improving the empathic connection between counselor and client within the therapeutic relationship.

Use of Analogue Designs in Counseling Process Research

History and Context. As was previously indicated, psychologists have long struggled to understand the healing mechanisms of therapy and counseling (Heller, 1971). Psychologists seeking to better understand how the process of counseling helps clients, turned from the more naturalistic studies that had traditionally dominated clinical practice to analogue studies in an attempt to make understandable the complex exchanges between the therapist and the patient (Heller, 1971; Heppner, Kivlighan, & Wampold, 1999). Employed by researchers since the late 1940s, analogue designs have been a staple in counseling literature (Heller, 1971; Johnson, Pierce, Baldwin, Harris, & Brondmo, 1996).

Analogue studies have been conducted in a variety of ways, particularly with regard to stimulus material medium (Heppner et al., 1999). In a study examining equivalence of stimulus material media, Johnson and colleagues (1996) identified differential results among audio/visual, audio-only, written transcript, and written transcript with a head-shoulders photograph presentation methods. Indeed, there may even be differential effects among different analogues of the same type (McKitrick, 1981). For example, participants who view audio/visual analogue counseling sessions where only the counselor is visible tend to rate counselors more positively than when both the counselor and client are portrayed (McKitrick, 1981).

In addition to the various presentations of stimulus materials methods, analogue designs can also vary in the amount of participant involvement in the analogue particularly in live simulations (Helms, 1976; Heppner et al., 1999). Many analogue designs, particularly audio/visual; audio-only; written transcript with or without pictures; and viewing "live" counseling behind a one-way mirror, feature very little participant involvement. Participants in such analogues are spectators rather than a part of the analogue session. Conversely, quasi-analogue designs feature a simulated counseling session in which the participant acts in the role of a client and is very much involved in the analogue. The growing body of literature suggests that the differing amounts of participation in these designs may lead to differing results as well (McKitrick, 1981).

Analogue studies have typically followed one of two foci (Heller, 1971). Researchers initially used analogues to explicate mechanisms of factors already considered to be of therapeutic importance. Examples of this focus include Rogers' studies of the core conditions or psychodynamic investigations of interpretations and free associations. The other main approach was derived from applications of social psychology to counseling and is interested in examining the communication processes that take place between counselor and client in therapy (Helms, 1976; Heppner et al., 1999). In a deluge of studies from the late 1960s through the 1980s, this type of analogue represented the majority of analogue studies conducted in counseling research.

The Great Tradeoff. Although analogue studies were implemented by psychologists seeking to gain a measure of experimental control while studying the complex, real-life intricacies of counseling, this method has been at the heart of the struggle to balance scientific rigor with practical relevancy (Helms, 1976; Munley, 1974). The MAXMINCON

principle, which suggests that researchers should seek to maximize the variance due to the manipulation of the independent variable while minimizing the variance due to error from measurement and controlling for extraneous variance, details some of the advantages analogue designs feature (Kerlinger, 1973).

Analogue studies by definition contain experimental control, which means they typically have good internal validity by controlling for extraneous variance. Additionally, analogue designs offer researchers unparalleled specificity (Heppner et al., 1999). This kind of specificity of treatment can be useful in minimizing error variance due to poor measurement of the target variable. For psychologists who are interested in achieving precision in terms of variable levels and operational definitions, analogue designs can be uniquely suited to provide this, particularly for well suited counselor behaviors such as self-disclosure (Heppner et al., 1999; Munley, 1974).

Although analogue designs offer a great deal of benefits to researchers in experimental control and precision, there have been many questions about how applicable and/or comparable findings are to real-life counseling. Indeed, some have suggested that researchers striving for internal validity, have trivialized and minimized the therapeutic process to such an extent that results from analogues are completely ungeneralizable to real-life counseling. In response, some researchers have attempted to make analogues more realistic by utilizing quasi-analogue designs. Although the quasi-analogue design is another useful research tool, it is not without concerns of its own.

Indeed, some evidence exists that participants in quasi-analogue studies who role-play clients view the analogue counselor more positively than participants who simply observe a simulated analogue session (McKitrick, 1981). This leads to several questions in

applying results of an analogue study to real-life counseling. Is this positive perception tendency limited to quasi-analogue designs or does it also take place in actual therapy sessions? It may be that quasi-analogues better capture the very pieces of human communication or of the therapeutic relationship that are so important to therapy.

It may also be, as Heller (1971) so correctly pointed out, that psychologists are so used to working with extreme complexity in therapy research that the power of simple human contact between two people can be forgotten. If this is wholly or partially responsible for therapeutic effects, then it makes the quasi-analogue much more appealing an option. Conversely, this tendency toward more positive ratings may be some sort of artificial bias that not only does not take place in real-life counseling, but actually confounds the application of findings to actual therapy. Does the participant truly feel better about the "counselor" or is the participant simply trying to be "nice" or "helpful" to either researchers or the person portraying a therapist?

A further concern with quasi-analogue research is that, though it intuitively seems more likely to resemble actual counseling, certain areas of interest are not feasible with the quasi-analogue design implementation (Munley, 1974). For example, say a research has an interest in determining what communication behaviors support a good therapeutic relationship. This is such a complex process that the researcher chooses to investigate the effect of a specific counselor communication behavior, self-disclosure of religious similarity, on a specific component of the therapeutic relationship, empathy. Matching analogue participants with therapists of the same religion, and ensuring the counselor disclosed her or his religious preference to the participant would be very difficult to arrange in a quasi-analogue design. Thus the quasi-analogue, like the true analogue design that preceded it, is

not a panacea for MAXMINCON, but must remain one of many useful but flawed tools of researchers (Heppner et al., 1999).

Understandings of Empathy

At present, the most complete conceptualizations of how empathy works are dynamic, mutual perception and reaction models that include cognitive, affective, and moral components (Hollinger-Samson & Pearson, 2000). In such models, the patient must express a need to be understood which is recognized and responded to by the therapist. The patient then must acknowledge the therapist's empathy and then the therapist continues to express empathic understanding.

As to the nature and promise of what empathy is, two quotations seem to sum up the various views as concisely as is currently possible. The first quote, by an anonymous English writer, explains in an evocative fashion what empathic understanding is. "To empathize is to see with the eyes of another, to hear with the ears of another, and to feel with the heart of another." Likewise, Bitel (2002, p. 56) has explained the potential that empathy holds for the patient-provider relationship. "That's the magic of empathy. That's what connects human beings to each other. Empathy, unlike sympathy, offers hope for change." It is that empathic connection between people hoping for change, that is the heart of the therapeutic relationship.

Rationale

Although these quotes give a literary summation of empathy, much remains unknown. While there have been some studies, including a study on the effects of therapist posture on patient perceived empathy and several studies on counselor verbal responses, surprisingly few studies have successfully delineated what specific counselor behaviors

increase client perception of empathy (Barkham & Shapiro, 1986; Hermansson, Webster, & McFarland, 1988; Pistrang, Picciotto, & Barker, 2001). Much the same thing is present in the working alliance literature as well (Ackerman & Hilsenroth, 2003). Moreover, there exists no clear consensus on how counselor empathy can help clients (Duan & Hill, 1996; Hill & Nakayama, 2000).

If empathy is a dynamic process by which the counselor understands cognitively and emotionally some portion of the client's experience, shares that understanding in some way, and the client realizes and acknowledges the therapist's understanding; then perhaps self-disclosure can be a tool to allow the counselor to share her or his understanding of the patient. Self-disclosure might allow the counselor to empathize more effectively in a number of ways, such as by allowing the therapist to react more emotionally based on his or her own experiences and feelings from those experiences. The process of remembering the experience might encourage cognitive empathy while the strong emotional reaction might facilitate emotional empathy.

As was indicated previously, there is also little consensus on the therapeutic benefits of therapist self-disclosures in counseling (Peterson, 2002). Additionally, it is unknown to what extant counselor self-disclosures have an impact on how empathic the client perceives the counselor to be, and subsequently how that perception of empathy influences the therapeutic relationship and process. Further, while some research has investigated racial and ethnic issues in counselor self-disclosure, little is available on how patients view therapist religious or spiritual self-disclosures.

The limited research on empathy and self-disclosure that is available suggests that minority clients' feel more understood when they believe their counselor is somewhat similar

to them (Kim et al., 2003; Kim et al., 2005). Self-disclosing similarity to clients, may allow the client to perceive the counselor as more understanding.

This makes sense if patients say to themselves, "My therapist has had a lot of experiences like my life that help her/him to get what I'm saying." Perhaps, in the client's mind, the counselor becomes part of an in-group of people who can understand what the client has been through because they share common experiences and backgrounds. For members of a minority group, this might be especially important as they might be rightfully concerned about being misunderstood and judged because of their minority status.

Thus, perhaps clients who perceive themselves as part of a group, be it racial or religious, and have a strong sense of identity with that group, would benefit from hearing the counselor share that she or he is a member of that group or has experiences that are similar to someone in that group. As it is not always immediately apparent to what religious group a therapist might belong, self-disclosure could be an effective way to share any commonalities in belief or experience that the dyad might share. If that sharing of commonalities facilitates either the generation of empathy within the therapist or the perception of the counselor's empathy in the client, this intervention could have an important impact on their relationship.

Future research is needed to refine the definition of empathy and how it works. Variables, including self-disclosure and its influence on empathy, should be clarified by research to understand how it can best be elicited for the mutual benefit of patients and psychologists. These issues must be addressed if counselors are to fully utilize the potential relationship benefits empathy offers; benefits that offer the ability to connect a patient and a provider together through mutual understanding and perception, by working toward change.

Overview of the Study

The present study sought to determine the effects of self-disclosure of religious similarity by the counselor on client perception of the counselor's empathy. Hill and Nakayama (2000) have called for additional research on those therapeutic processes that lead to client change. As previously stated, empathy is a substantial component of the therapeutic relationship, which is associated with treatment outcomes (Hill & Nakayama, 2000). While empathy is widely recognized as being of central importance in therapy, the exact counselor behaviors that encourage clients to see their counselors as empathic are somewhat less clear.

Hill and Nakayama (2000, p. 871) posed the question quite succinctly by asking "we know that client-perceived therapist empathy is an important predictor of outcome, so what specifically does a therapist do that causes the client to feel the therapist is empathic?" By investigating the impact of a specific counselor behavior, religious self-disclosure, on the client's perception of how empathic that counselor is, the present study hopes to begin to answer that very question by providing therapists with some guidelines for cultivating that empathic bond which is so important for patient outcomes.

An analogue design is no freer of limitations than any research method, but was employed in this study to tap a considerable strength of this design. Although naturalistic studies can and do provide much useful data, they often of a necessity lack the precision and specificity to provide information about when, why, and how specific counselor behaviors induce empathy (Heppner et al., 1999). Through an analogue design, we hoped to examine how a counselor presented in variations of constructed client-counselor self-disclosures is perceived by participant observers who were asked to place themselves in the roles of the

client in those dyads. Based upon the prior cited literature, and though use of an analogue design, the following hypotheses were advanced and tested.

Hypothesis 1: Participants, the observers of a constructed client-counselor interaction, will rate the counselor in all of the disclosure treatment conditions more positively in terms of empathy and the working alliance than those in the non-disclosure control condition.

Hypothesis 2: Participants in the religious content-matched disclosure treatment will rate the counselor more positively in terms of empathy, as well as in the working alliance, than in the non-disclosure control condition.

Hypothesis 3: Participants in the religious content-matched disclosure treatment would see the counselor more positively in terms of empathy and the working alliance than in the financial content-matched disclosure treatment.

Hypothesis 4: Observers with higher religiosity in any treatment or control condition will rate counselors more positively in terms of empathy and the working alliance than observers with low religiosity.

Hypothesis 5: Observers with higher religiosity will rate counselors who self-disclose religious similarity to their client in a discussion of spiritual conflict more positively in terms of empathy and the working alliance than therapists who do not self-disclose.

Hypothesis 6: Female observers, regardless of treatment group, will rate counselors more positively in terms of empathy and the working alliance than male observers.

CHAPTER 2. MATERIALS AND METHODS

Pilot Study

This study sought to provide evidence for the integrity and content validity of the experimental stimuli. It attempted to determine the following: a) if the video stimuli were sufficiently believable and realistic to serve effectively, b) if there were clear differences in how believable and realistic each video was compared to all the others, c) if there were effects of participant sex on ratings of videos, d) as well as if there were differences in the videos and, if so, what were the most salient and noticeable differences between them. In addition the pilot study assessed a) to what degree the various self-disclosures by the counselor were perceived as similar for the treatment conditions compared with each other, and compared with the control conditions in which client content is religious and the counselor responds with a content neutral reflection, b) to what degree the client and counselor in each dyad were seen as similar, and c) to what degree the female dyad and the male dyad were seen as similar in attractiveness.

Participants

A total of thirty-nine participants, graduate and undergraduate students, agreed to participate in the pilot study manipulation check. The psychology graduate students (n = 10) all volunteered to participate to assist in research, while the undergraduate volunteers (n = 29) were students in sections of psychology courses. The undergraduate students of a counseling psychology graduate student, who taught Psychology 131, were offered the opportunity to participate in the pilot study as one potential extra credit option for their academic learning and study strategies course. The other undergraduate students received experimental credit for their participation. While the responses of the graduate students and

the undergraduate students who received experimental credit were not anonymous, those of the undergraduate participants in Psychology 131 were as the responses were forwarded by their instructor.

Procedures

Data was collected in two rounds. In the first round, a total of 14 participants (10 graduate and 4 undergraduate students) responded with useable data. The second round consisted solely of 25 undergraduate students whose data was collected via the Sona system to further evaluate the stimulus materials. All participants watched the complete set of eight video, four treatment conditions for each sex, which were either linked in the e-mail request for participation they received or listed on the signup description of the Sona system. To help minimize any order effects, five different listings of the links were sent to participants. After watching the eight videos, the participants completed the manipulation check questionnaire (see Appendix A).

Data Analysis

Participant responses were analyzed both qualitatively and quantitatively. Specifically, open-ended responses were solicited to elicit what were the most noticeable differences in the videos. In addition participants could provide additional feedback. These data were used to evaluate the realism/believability, differences, similarities, and levels of disclosure among the various video stimuli.

Several quantitative analyses were used to evaluate these dimensions. An one-way analysis of variance (ANOVA) was conducted to determine if potential differences in stimuli ratings existed between female and male participants. Additionally, a series of paired-sample

t-tests were conducted to examine the differences in means among various pairs of videos for each of the dimensions.

Main Study

Participants

Participants for first session were 399 students recruited from the undergraduate participant pool at a large Midwestern public university. All the volunteer-participants were enrolled in undergraduate psychology classes, signed up for participation in the study via the psychology department's online research system (see Appendix B), and received experimental credit in select psychology courses for their participation. The participants also used the psychology department's online research system to complete online questionnaires associated with the study in the spring of 2007.

Two-hundred and thirty-four of the 399 participants from the first session completed both the first and second sessions. This level of participation in the second session represents a 58.6% retention rate from the first session. To be included in the data analyses a participant had to have completed a minimum of 80% of responses across all questionnaires administered. Due to missing or obviously flawed data (e.g. all responses were the same), 45 participants were deleted prior to data analysis resulting in a total number of respondents of 189.

The proposal for this research study was reviewed by the Iowa State University IRB and IRB approval was granted on August 23, 2006; IRB Identification Number 06-369. Please see Appendix C for examination of the approval letter and Appendix D for the participant informed consent for participation.

Demographic information was collected from participants during the first session (see Appendix E). Participants were asked their age, race/ethnicity, year in school, sex, and religious affiliation. This information was then linked to the participant responses in the second portion of the study. Frequencies and distributions of the demographic information can be found in Appendix F.

The sample was comprised primarily of Caucasian students, 174 persons (92.1%), followed by five Asian Americans (2.6%), two African Americans (1.1%), two Pacific Islanders (1.1%), two student reporting Other (1.1%), one Latina/o American (0.5%), one Native American/Inuit (0.5%), and a single Multiracial student (0.5%). There were 104 female (45.0%) and 85 male (55.0%) participants. Most of the participants (n = 177, 93.7%) indicated they were undergraduate students. The participants ranged in age from 18 to 55 years, and the largest number 172 (91%), were in the range of 18 to 21 years.

Power Analysis

A power analysis was completed prior to data collection using the formula: $n_j = 2(Z_{\alpha/2} + Z_{\beta})^2 \tilde{\sigma}^2 / \Delta^2$ (Zar, 1984). To provide at least a 95% chance of successfully obtaining significant results with a minimally clinically interesting difference in mean EUS empathy scores of 10 points, a sample size of 32 participants per group was required.

Procedure

Main Study. Participants, who signed up for the study on the Sona system online signup (IRB approval number 06-089; date 3/02/06), first provided informed consent (see Appendix D) via the online system. Students were informed that the study was a two-part online investigation of religiosity and therapeutic empathy. Students were also informed that their participation was completely voluntary and that they could withdraw their participation

at any time with no negative consequences. In exchange for participation, students received experimental credit applied toward their psychology course.

Upon completion of the informed consent procedure, those students who elected to participate began the first part of the study. Participants were presented with a series of questionnaires in the following order: the Religious Commitment Inventory-10 (RCI-10; Worthington et al., 2003), the Self-report Emotional Intelligence Test (SREIT; Schutte et al., 1998), the Big-Five Mini-Markers (Saucier, 1994), the Empathy Quotient (EQ; Baron-Cohen, & Wheelwright, 2004), the Balanced Inventory of Desired Responding (BIDR; Paulhus, 1991), and a demographic questionnaire. Consistent with the order of presentation, please see Appendices G, H, I, J, and K for the RCI-10, SREIT, Mini-Markers, EQ, and BIDR. After they had completed these questionnaires, participants submitted their responses and were credited for completing the first session.

Study Completion. In a reminder e-mail (see Appendix L, participants were directed to one of eight websites containing the stimulus material (see Appendices M, N, O, P) for the treatment group to which they had been randomly assigned. After having viewed the stimulus clips, participants returned to the online system and to complete the empathy measure. The dependent counselor empathy measure, (see Appendix Q) combined the shortened Accurate Empathy Scale (AES) of Truax and Carkhuff's Relationship Questionnaire (1963) and the Empathic Understanding Scale (EUS) from the Barret-Lennard Relationship Inventory (1962). Interspersed among those 44 items were the 50 items of a modified International Personality Item Pool Questionnaire, which were in the same format as the empathy questions and served to distract participants from consistently answering questions exclusively about therapist empathy. Following the counselor empathy measure,

participants were presented with the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989), a measure of the therapeutic relationship. The WAI is presented in Appendix R. After completion of the entire study, students submitted their responses through the online system. They were then presented with the debriefing form (see Appendix S) and automatically granted credit for their participation by the system.

Order of Independent Variables

As religiosity was the primary covariate of interest in the original proposal, the RCI-10 (see Appendix G) was the first measure presented to the participants. This was done in the hopes that the majority of respondents would complete it with few or no omissions. This procedure also increased, however minutely, the time gap between questions of religion and participant responses to the dependent variables in the second session, which was the primary reason for conducting the study take place in two sessions, three days apart.

Both emotional intelligence and participant empathy were also theoretically interesting covariates, which seem to be theoretically related as well. Thus, it seemed important to separate these two measures to some degree so that participants would not be answering questions about two related constructs in one large block. It was arbitrary decided that the SREIT (see Appendix H) would go first and be followed by the Mini-Markers (see Appendix I) to break up the SREIT and the EQ (see Appendix J), which would follow the Mini-Markers.

After the EQ, was administered the BIDR (see Appendix K). Although it was vital to measure social desirability in a self-report survey study involving several constructs known to be related to social desirability, this measure was placed last for practical reasons. Since the BIDR is a measure of impression management and self-deception enhancement,

completion of it may sensitive respondents to portray themselves in an overly favorable manner. Thus, we did not wish the BIDR to serve as a social desirability cue that might confound subsequent responses. For that reason, it appeared as the final measure in the first session.

Order of Dependent Variables

The dependent variables, counselor empathy (see Appendix Q) and working alliance (see Appendix R), were presented in that order. The questions of the AES were intermixed with questions from the IPIP Questionnaire and followed by the items from the EUS[3] with items from the IPIP. As therapist empathy was the primary dependent variable of interest in the proposal, these measures were placed first, followed by the WAI. Although empathy was the main dependent variable of interest in the proposal, it makes sense to include a conceptually related measure of the whole therapeutic relationship such as the WAI. Additionally, the WAI was correlated with EUS results during development studies of the WAI (Horvath & Greenberg, 1989).

Measures

Religiosity. The Religious Commitment Inventory-10 (RCI-10; Worthington et al., 2003) is 10-item measure of religiosity containing two subscales: Intrapersonal Religious Commitment and Interpersonal Religious Commitment. Each of the items is rated on a 5 point Likert-type scale from 1 *(not at all true of me)* to 5 *(totally true of me)*. Scores on the RCI-10 can range between 10 and 50. The RCI-10 is reliable, with a reported internal consistency for the full scale of .93, a .87 3-week test-retest reliability coefficient, and a 5-month test–retest reliability coefficient of .84.

[3] Permission to use the copyrighted BLRI was granted by author, Godfrey Barrett-Lennard, 1/3/07.

The RCI-10 is a sufficiently valid measure of religiosity (Worthington et al., 2003). The reported construct validity of the full scale is supported by a .70 correlation with a single-question about participation in religion events, as well as a .58 correlation with self-rated spirituality as defined by belief in or participation with some transcendental realm. Additionally, criterion validity data indicates a .70 correlation with frequent attendance of religious events.

The discriminant validity for the full scale was determined through comparison with a single-item, "If *spirituality* is defined as qualities and characteristics of exemplary humanity (e.g., honesty, hope, compassion, love of humanity, etc.), then to what degree do you consider yourself spiritual?", and was not significantly correlated with that measure (Worthington et al., 2003, p. 86). Further support for the full scale's discriminant validity was provided by a comparison with the 21 items taken from the Visions of Everyday Morality Scale (VEMS), which is a measure of everyday prosocial behavior. As was the case with the exemplary human characteristics definition of spirituality, VEMS scores also were not significantly correlated with scores on the RCI-10. In both cases, it would appear that the RCI-10 is measuring religiosity as a distinct construct, apart from spirituality as defined by exemplary human characteristics and ordinary morality.

Emotional Intelligence. The 33-item measure of emotional intelligence known as the Self-report Emotional Intelligence Test (SREIT) was developed by Schutte and colleagues (1998) and is one of the best-known self-report measures of emotional intelligence (Brackett & Mayer, 2003). Each of the items is rated on a 5 point Likert-type scale from 1 *(Strongly Disagree)* to 5 *(Strongly Agree)*. Items 5, 28, and 33 are reverse scored and total scores on the STREIT can range between 33 and 165.

Although the construct of emotional intelligence remains somewhat ill-defined, this self-report measure has been associated, in a conceptually consistent manner, with a number of theoretically relevant constructs including emotional regulation ($r = 0.68$), attention to emotions ($r = 0.63$), clarity of feeling ($r = 0.52$) and positive life outlook ($r = 0.52$) (Schutte et al., 1998). Additionally, the scale was negatively correlated with a measure of alexithymia ($r = -0.65$), a measure of depression ($r = -0.37$), and impulsivity ($r = -0.39$).

The authors of the SREIT reported a wide range of initial psychometric data. They indicated that the reading level of the SREIT, as determined by the Flesh-Kincaid reading grade level formula, was equivalent to a typical fifth-grade student (Schutte et al., 1998). Two forms of reliability data were provided. Internal consistency analyses revealed a coefficient alpha of 0.90 initially, and 0.87 in an internal consistency replication study. Reported two-week test-retest reliability was 0.78.

Schutte et al. (1998) also provided information about the SREIT's validity. The authors determined that the SREIT predicted grade point average at the end of the first year for 63 university students ($r = 0.32$). To distinguish between emotional intelligence and other forms of cognitive ability, discriminant validity was also evaluated. The SREIT was not significantly related to SAT scores, nor was it related to all but one dimension of the Big Five of the NEO, with only openness to experience being significantly correlated ($r = 0.54$). Finally, between-group differences were noted between therapists ($M = 134.92$) and prisoners ($M = 120.08$) as well as between women ($M = 130.94$) and men ($M = 124.78$). One would expect such differences based on previous literature, particularly between therapists and prisoners.

Participant Five Factor Model Personality. Saucier's (1994) Mini-Markers are 40 adjectives that participants use to rate to what degree they feel each adjective describes them. Rated from 1 *(Extremely Inaccurate)* to 9 *(Extremely Accurate)*, each adjective belongs to a group of 8 such adjectives that either is positively or negatively associated with the one of the five factors to which it has been grouped. Factor loadings for the respective adjectives and the appropriate respective factors range from absolute 0.44 to 0.83.

Saucier (1994) indicated that the factor structure from the Mini-Markers closely resembled the structure of the original, full set of 100 markers. The correlations between the original set of 100 markers and the Mini-Markers ranged from 0.91 to 0.96. This is to be expected as the Mini-Markers were derived from the full set.

As the NEO has been growing ever more popular as a measure of the Five Factors, it makes sense that researchers would be interested in examining the correlations between the Mini-Markers and the NEO as another measure of the Five Factors. One study that examined those correlations between Saucier's Mini-Makers and the NEO-FFI was conducted by Mooradian and Nezlek (1996). The authors reported the alpha coefficients for each measure, along with correlations both uncorrected and corrected for attenuation due to unreliability. Alpha coefficients for the NEO were 0.84 for Extroversion, 0.75 for Agreeableness, 0.74 for Conscientiousness, 0.75 for Neuroticism, and 0.83 for Openness to Experience/Intellect (Mooradian & Nezlek, 1996). For the Mini-Markers, alpha coefficients were 0.86, 0.82, 0.84, 0.78, and 0.78 respectively.

The corrected correlations between the Mini-Markers and the NEO were fairly strong (Mooradian & Nezlek, 1996). The authors reported correlations of 0.73 for Extraversion, 0.88 for Agreeableness, 0.86 for Conscientiousness, -0.71 for Neuroticism, and 0.71 for

Openness to Experience/Intellect. We would expect a negative correlation between the NEO's Neuroticism scale and the Mini-Markers' Emotional Stability as the Mini-Markers seem to focus more on the adaptive side of the construct while the NEO seems to focus more on the pathological.

Participant Empathy. The Empathy Quotient (EQ) is a recently developed instrument designed to provide a measure of an individual's capacity to empathize with others (Baron-Cohen, & Wheelwright, 2004). The EQ was designed to be an improvement over existing measures of empathy by focusing on measuring only the cognitive and emotional aspects of empathy, rather than other additional constructs. Additionally, the EQ was designed using clinical and general populations to allow for use as a research and clinical tool.

The EQ is a 60-item scale with 20 filler items designed to distract from continuous questions about empathy (Baron-Cohen, & Wheelwright, 2004). Items in the EQ are measured on 4-point Likert-type scale from 1 (*Strongly Agree*) to 4 (*Strongly Disagree*). Filler items are disregarded in scoring and roughly half the remaining items are intended to elicit a "disagree" as the empathic response. Each of the items is scored with 1 point if the correct empathic response "mildly" is given, or 2 points if endorsed "strongly". Other responses receive a "0". This results in a theoretical range of scores from 0 to 80 points. The authors of the EQ provided information about its reliability statistics during development (Baron-Cohen, & Wheelwright, 2004). A 12-month, test-retest reliability (r = .97) was computed. Additionally, Cronbach's alpha was calculated for the total EQ. Alpha was 0.92. Additional psychometric information was provided during a series of experiments designed to further examine the EQ's reliability and validity (Lawrence, Shaw, Baker, Baron-Cohen & David, 2004). A 10-12 month test-retest reliability correlation of .835 was found.

Information about convergent and divergent validity was also provided by comparing the EQ to several other measures including the Interpersonal Reactivity Index (IRI), another reported measure of empathy; an estimate of verbal IQ; as well as the Beck Anxiety and Depression Inventories (Lawrence et al., 2004). Several of the EQ and IRI subscales were moderately correlated particularly, the EQ's factor "emotional reactivity" with the IRI's "empathic concern" ($r = 0.583$) and "perspective taking" subscales ($r = 0.442$). The EQ's "emotional reactivity" was correlated with Beck anxiety scores ($r = 0.313$) while the EQ's "social skills" was negatively correlated with Beck depression score ($r = -0.346$). Some evidence of discriminant validity was also provided as two of the EQ's factors, "cognitive empathy" and "social skills" were not significantly correlated with any of the IRI. Further, the EQ was also not associated with estimated verbal IQ, which represents a distinct intelligence construct.

Social Desirability. As many of the variables in this study were entirely collected via online, self-report surveys, socially desirable responding becomes a concern. Additionally, there exists some evidence that specific questions in the EQ are susceptible to social desirability (Lawrence et al., 2004).

The Balanced Inventory of Desired Responding (BIDR) is a two-factor measure of social desirability (Paulhus, 1991). The BIDR version 6 form 40A contains two, 20-item subscales, Self Deceptive Enhancement (SDE) and Impression Management (IM). Responses are in a Likert-type format from 1 (*Not True*) to 7 (*Very True*) and half of the items for each subscale are reverse-scored. Responses of "6" or "7" are given 1 point; all others receive a "0" and scores for both subscales range from 0 to 20.

Ranges of reliability and validity are available from the literature. Alpha coefficients for SDE range from 0.67 to 0.77, and 0.76 to .85 for IM. In terms of concurrent validity, the BIDR subscales have been shown to be correlated with the Marlowe-Crowne, an established measure of social desirability (Pauls & Crost, 2004). The correlations were 0.37 and 0.46 for the SDE and IM subscales, respectively.

Stimulus Materials

Four sets of scripts depicting simulated client-counselor interactions (see Appendices M, N, O, and P) were developed and evaluated. Those scripts were used by actors who portrayed those simulated counseling interactions on videotape. The tapes, when digitized, provided the constructed independent variable stimuli for the study.

Wherever possible, the scripts use the exact same words and were designed to feature a similar number of words. Script word lengths varied from 676 words in the third script to 683 words in the first script. The scripts were written to be nearly identical except for changes in the content of discussion as well as the type of response by the therapist.

For simplicity, the videos depicted respective sex-matched dyads of Caucasian males and females. Although many more combinations of analogue are possible, these feasible choices have been selected to capitalize on the homogeneity of the participants who will be largely heterosexual; Caucasian; and Christian. Additionally, there is evidence that same-sex pairings result in greatest perceived empathy (Dalton, 1983).

The four sets of scripts (see Appendices M, N, O, P) feature two topics of content and several different counselor responses, resulting in two pairs of scripts. One of the script pairs features a client discussing religious and relationship concerns centered around a forthcoming wedding, and the counselor responds by self-disclosing religious similarity to

the client. The second script in that pair features the same discussion but instead of self-disclosing, the counselor responds neutrally by using basic counseling micro-skills.

The other pair of scripts featured a discussion by client and counselor about the client, a student, discussing financial and educational stresses. The student shares having to work a great deal to pay for school and struggling academically as a result of the long hours. In both scripts, the counselor self-discloses having a similar experience while in school. In one of those two scripts; however, the counselor expresses a religious practice that the counselor found to be helpful in dealing with the stressful situation.

After the scripts were written, they were examined by a professor of theatre. The scripts were judged to be very plausible and realistic. They featured a number of colloquialisms to fit the Midwestern background of the university student participants. The topics were also seen as realistic concerns for college students as relationship and school stresses are not uncommon.

In addition to evaluating the scripts, the professor of theatre kindly offered suggestions for directing the actors in realistically portraying the scripts. That feedback about successfully portraying the scripts in video was considered as the scripts were enacted. One of the suggestions was to provide the actors with very clear and specific instructions not to vary the portrayals from script to script. Given the need to make the videos as similar as possible for experimental purposes, this feedback was especially valuable.

After completion and evaluation of the scripts, the eight video stimuli were developed, resulting in four conditions for each sex (financial content matched counselor disclosure, financial content mismatched counselor religious disclosure, religious content mismatched counselor neutral response, and religious content matched counselor disclosure).

Each of the actors, one female pair and one male pair, for the videos had prior experience in theatre and felt comfortable memorizing the scripts. The actors were encouraged to learn the scripts as close to verbatim as possible to minimize variation between the conditions.

The videos were recorded in a split screen format using the video equipment in the Psychology Department's Counseling Clinic. The videos were recorded in two days, one for the female dyad and one for the male dyad but both took place in the same room to minimize environmental effects. Since each dyad was recorded in a single day, the clothing and positions of the actors remained constant between the videos.

The following procedure was used in recording each script. The dyad would run through the script until they came to the single part of the script, the counselor's response, which was unique to both the scripts in that pair. The actors would then pause and freeze positions for several seconds, and then they would read the unique manipulated counselor response and pause again. They would then read the unique manipulated line from the other script of the pair, pause, and continue on with the remaining common content. This process was repeated for the second pair of videos and the dyads recorded each script at least twice to allow for the best segments to be used in editing.

After the videos were recorded, they were transferred from VHS format to a digital video format via computer. This transfer allowed both computer editing and online display of the final video clips. Editing involved removal of the pauses and copying and pasting the best segments into a whole video. By using this method, the video pairs were made as similar as possible because only the manipulated counselor response varied between the clips.

This approach did have the disadvantage of creating "seams" in the videos which were somewhat noticeable despite considerable editing efforts. After some consideration of this problem, it was decided that animated transitions would be added linking one segment of the clip to the next. This covered the slight flutter of the segment changes in a very overt way. The advantage to this overt transition was that it made the clips appear to have been taken from a longer therapy session and added realism to the videos.

After the videos were successfully edited, they were uploaded to the internet via *Google Video*, a free service that uploads and hosts videos on the internet. Each video was uploaded and received a unique URL that was not searchable. Because it was not searchable, it is extremely unlikely that participants or anyone else could find the videos without being sent the unique address of that video by the researchers.

Counselor Empathy. Two measures of counselor empathy were used in this study, Empathic Understanding (EU) subscale of the Barrett-Lennard Relationship Inventory (BLRI; Barrett-Lennard, 1962), and the Accurate Empathy Scale (AES) of the Truax-Carkhuff Relationship Questionnaire (TCRQ; Truax & Carkhuff, 1967). The first measure, the BLRI form "other toward self" (BLRI OS-64; Barrett-Lennard, 1962), is 64-item measure of close relationships containing four subscales: Level of Regard, Unconditionality, Congruence, and Empathic Understanding and is the most prominent measure of clients' perceptions of the therapeutic relationship (Gurman, 1977). Each of the four subscales is comprised of 16 items representing portions of Roger's (1957) core conditions. Items on the BLRT are measured on a 6-point agreement scale from -3 (*I strongly feel that it is not true*) to +3 (*I strongly feel that it is true*). For the purpose of this study, only the empathic understanding subscale (EUS) will be used.

The 16 items of the EUS represent the most often-used measures of therapeutic empathy (Greenberg, Elliot, Watson, & Bohart, 2001). The reported mean alpha coefficient for internal reliability for the EUS was .84, with a .83 mean test-retest reliability (Barrett-Lennard, 1986; Pistrang et al., 2001). The EUS has also been judged to be one of the best and most valid measures of the person-centered empathy construct (Hollinger-Samson & Pearson, 2000; Mitchell, Bozarth, & Krauft, 1977).

Scoring of the positive question items consists of summing the total values selected by each participant. The scoring of the negative question items involves multiplying the sum of the total scores on the negative questions by -1. Then the sum of the positive items are added to the transformed total from the negative items to arrive at a total score for the 16 items of the EUS.

The second empathy measure used in the study was the Truax-Carkhuff Relationship Questionnaire (TCRQ; Truax & Carkhuff, 1967). Originally developed by Truax as an attempt to translate the earlier objective tape recording rating scale into a more convenient questionnaire form, the Relationship Questionnaire is similar in intention and form to the BLRI. Like the BLRI, the TCRQ has subscales intended to measure components of the therapeutic relationship. One subscale, the AES, was of interest as an alternative to the EUS.

Compared to the EUS, the original AES was much longer consisting of 46 *true* or *false* items. As the questionnaire format was adapted from the tape rating scale, the questionnaire originally also unfortunately lacked its own indices of validity and reliability. Despite these limitations, the TCRQ, and its AES subscale, has been a popular measurement tool (Farber & Lane, 2001).

To address some of these limitations, Lin (1973) established indices for both the original questionnaire as well as a shorter, revised questionnaire developed by Lin. Alpha coefficients for the original AES as well as the 28-item AES were 0.88 and 0.89, respectively. Lin also reported a high correlation between the original AES and the shorter version ($r = 0.99$). Although both the original and shorter AES use dichotomous response format, scoring in this study used the same procedure, 6-point agreement scale from -3 (*I strongly feel that it is not true*) to +3 (*I strongly feel that it is true*), as with the BLRI to allow for greater variability in scores and continuity with the EUS.

The EUS and the AES, two conceptually similar measures of empathy, measure similar but not totally overlapping empathy constructs. Indeed, an analysis determined that there is a .81 correlation between the EUS and the AES, indicating that 66% of the variability is shared between the measures (Lin, 1973). While this represents a meaningful similarity between the two measures, they clearly do not tap exactly the same aspects of the empathy construct.

Working Alliance. The Working Alliance Inventory (WAI) is a measure of the working alliance between counselor and client (Horvath & Greenberg, 1989). Examination of the factor structure of the WAI has demonstrated that it appears to measure a single, general Alliance factor as well as three, specific subscales (Tracey & Kokotovic, 1989). The three subscale factors in the WAI, bonds; goals; and tasks, are measured by 36 items. Those 36 items are made up of 14 negatively worded and 22 positively worded items (Hatcher, & Gillapsy, 2006). Responses are in a Likert-type format from 1 (*Not at all True*) to 7 (*Very True*).

Psychometrically, the WAI has been studied some detail (Horvath & Greenberg, 1989). Coefficient alpha for the full scale during pilot testing was 0.93. Reliabilities for the subscales were 0.85 for bonds, 0.88 for agreement on goals, and 0.88 for agreement on tasks. Attempts to generate a shorter form of the WAI reported alphas of 0.95, 0.89, 0.89, and 0.90 for the total scale, the bonds subscale, the goals subscale, and the tasks subscale, respectively (Hatcher & Gillapsy, 2006).

There is also some evidence supporting WAI validity (Horvath & Greenberg, 1989). During the development process, the authors used a group of seven "experts" from the literature on the working alliance to help select items from a randomized item pool. The experts were asked to rate each item on relevance to the working alliance as well as to which component of the working alliance the item referred to. They then used a second group of 21 randomly selected psychologists to further refine the list of items. Only items that 70% of each group agreed upon were retained for the scale.

There is also evidence of concurrent validity as the authors compared the WAI subscales to the EUS of the BLRI in a pair of studies (Horvath & Greenberg, 1989). Correlations with the EUS in the first study were 0.63 for both tasks as well as goals, and 0.83 for the client-therapist bond. The other study revealed correlations with the EUS of 0.70 for tasks as well as goals and 0.76 for bond.

Factor analyses, including exploratory and subsequent confirmatory factor analyses, indicated that the WAI has both a single, general working alliance factor, as well as the three, subscale-specific factors tasks, goals, and bonds (Busseri & Tyler, 2003; Tracey & Kokotovic, 1989). This provides some additional support for the validity of the WAI as it

matches the theoretical conceptualization of the working alliance. The results; however, also pose some questions about scoring the WAI.

The WAI literature seems mixed on whether the single, total score or individual subscale scores should be used. Additionally, the three subscales within the WAI all have reasonably high intercorrelations with each (Horvath & Greenberg, 1989). The correlation between the tasks and bonds subscales is 0.79, while the correlation between goals and bonds is 0.84 and the correlation between tasks and goals is 0.88.

Study Design

In this analogue study there were manipulated experimental conditions, the constructed video clips. Participants were randomly assigned to one of four conditions specific and congruent to their sex (see Table 1). The conditions were as follows: client financial content with a matched financial self-disclosure by counselor, client financial content with a mismatched religious self-disclosure by counselor, client religious content with a matched religious self-disclosure by counselor, and client religious content with a mismatched neutral response by counselor. The dependent variables, two empathy measures (AES and EUS) and a measure of working alliance (WAI), were analyzed separately in a factorial design by a series of successive, separate analyses of covariance (ANCOVAs). Each ANCOVA examined the potential effect on each of the respective dependent variables by a single covariate. The covariates were religiosity, emotional intelligence, the Big-Five personality dimensions (extroversion, agreeableness, conscientiousness, emotional stability, intellect/openness to experience), participant empathy, and social desirability.

Table 1.

Experimental Condition for the Video Stimuli

	Sex of Participants			
	Males		Females	
	Disclosure Match			
	Match	Mismatch	Match	Mismatch
Content				
Religious	$Rel_{(match\ disclosure)}$	$Rel_{(neutral\ response)}$	$Rel_{(match\ disclosure)}$	$Rel_{(neutral\ response)}$
Financial	$Fin_{(match\ disclosure)}$	$Fin_{(mismatch\ disclosure)}$	$Fin_{(match\ disclosure)}$	$Fin_{(mismatch\ disclosure)}$

Note [a]: Rel = Religious, Fin = Financial

Note [b]: Materials with in parentheses denote whether the counselor response matched the content of discussion with an appropriate disclosure or neutral response.

Data Analysis

Demographic information was analyzed via SPSS 14 to provide descriptive statistics including measures of central tendency (mean, median, mode) and standard deviations. Interscale correlations and scale reliabilities were also evaluated and are presented in Appendix U. A series of ANCOVAs were also performed on each of the three dependent variables with each individual covariate to examine the effect of each covariate on each of the three dependent variable measures. A summary of these results is available in Appendix V. To examine the differences in means between the various treatment conditions for each of the dependent variables, a series of planned comparisons also were conducted and examined.

CHAPTER 3: RESULTS

Pilot Study

Video Stimuli

The participants were asked to evaluate, each posed on a four-point scale (1 = least to 4 = most), the eight videos they had watched through a series of six questions. The six-item stimulus rating questionnaire is presented in Appendix A. These questions asked the participants to rate how different or similar were the videos and the dyads portrayed in the clips. One of the open-ended questions in particular asked the participants to provide their description of the most obvious differences between the various videos. The participants were also asked to rate how realistic each video clip was as well as the degree to which the portrayed counselor revealed information about himself or herself. The descriptive statistics for the manipulation check (see Appendix T for means and standard deviations for questions 3, 4, and 5) depicted the patterns of responding consistent with the purposes and intentions of the experimental manipulation.

Believability and Realism

Analyses of the pilot study indicated that the videos appeared sufficiently realistic to participants to warrant use in the main study ($M = 2.71$, $SD = 0.63$; on a four-point scale). The differences in realism that were noted, were in the expected directions (i.e., that the religious self-disclosure by the counselor during a discussion of financial concerns was not as likely to occur in reality). Given that several of the participants were counseling trainees themselves, this reaction is not particularly surprising. The exception to this was a nonsignificant difference between the male and female videos overall in the initial pilot ($t = 1.812$, df = 36, $p = 0.08$, two-tailed, -0.074 to 1.317). Additionally, there were no

statistically significant differences in realism rating between male and female participants ($F_{(1, 35)} = 0.141$, $p = 0.71$) as determined by a one-way ANOVA across the eight conditions (four for each sex).

Noticeable Differences and Disclosures

Additional examinations of the qualitative and quantitative data about the differences between the videos demonstrated the expected patterns. Participants were able to perceive the difference in sex between the female and male videos, were able to notice the differences in topic of discussion (i.e., financial and academic concerns vs. religious and relational concerns), and were able to notice that the counselor responded differently in the videos. Specifically, participants noted that in some videos the counselor reflected back what the client was saying; in others the therapist shared a similar experience he or she had had to the client's concerns. Several participants also noted whether disclosure interjected religious content into the previously non-religious discussion. There was not a statistically significant difference between the matched religious self-disclosure and matched financial self-disclosure conditions ($t = 0.557$, df = 36, $p = 0.58$, two-tailed, -0.735 to 1.113), which provides some evidence supporting similarity between the religious and financial self-disclosures by the counselor.

Similarity

As expected, the data provide evidence that participants viewed the dyads as relatively similar overall, as a mean score of the two indicated the videos were "only a bit different" ($M = 2.31$, $SD = 0.61$). It is worthy of note that the respondents saw the dyads in both the matching-content self-disclosure videos as almost identically similar (Financial: $M = 2.78$, $SD = 0.67$; Religious: $M = 2.77$, $SD = 0.82$).

The dyad pairings were also seen as being of comparable attractiveness by participants ($M = 2.82$, $SD = 0.77$) when responding to a question, "Comparing the simulated dyad pairings of male counselors and clients to the simulated dyad pairings of female counselor and clients, how similarly would you rate their attractiveness?" While this information cannot be interpreted to mean the videos were completely identical in attractiveness, it does provide some evidence that participants did not view one dyad as superior to the other in terms of physical attractiveness. Thus, we can feel somewhat confident that participants' evaluations of the videos would not be strongly affected by the actors' appearance.

Main Study

Data Normality

To examine the data, in order to determine if the normality assumption could be met, skewness and kurtosis statistics were computed for the study data. Histograms and scatterplots were also generated. As noted in Table 2, six of the variables exhibited signs of skewness or kurtosis. Based on the size of the sample, it is unlikely that the distributions are sufficiently nonparametric to interfere with standard statistical analyses. Upon this examination, it was determined that there seemed little concern about excessive outliers and that the data appeared suitably normal for analyses without transformation.

Table 2.

Skew and kurtosis values for all variables

Variable	Skew	S.E.	Kurtosis	S.E.
Independent Variables				
RCI-10	.70	.18	-.40	.35
SREIT	-1.01	.18	3.78	.35
MM-E	-.18	.18	-.16	.35
MM-A	-.75	.18	.63	.35
MM-C	-.15	.18	-.52	.35
MM-ES	.09	.18	-.52	.35
MM-I/OE	-.57	.18	.80	.35
EQ	.20	.18	-.39	.35
SDE	.78	.18	.70	.35
IM	.72	.18	.55	.35
Dependent Variables				
WAI-36	.17	.18	-.27	.35
AES-28	-.09	.18	-.28	.35
EUS	-.31	.18	-.09	.35

Note: Religious Commitment Inventory-10 (RCI-10), Self-report Emotional Intelligence Test (SREIT), Mini-Markers Extroversion (MM-E), Mini-Markers Agreeableness (MM-A), Mini-Markers Conscientiousness (MM-C), Mini-Markers Emotional Stability (MM-ES), Mini-Markers Intellect/Openness to Experience (MM-I/OE), Empathy Quotient (EQ), Self-deception Enhancement (SDE), Impression Management (IM), Working Alliance Inventory-Full Scale (WAI-36), Accurate Empathy Scale-Short Form (AES-28), Empathic Understanding (EUS). $n = 189$

Descriptive Statistics for measured variables

Means and standard deviations for the independent variables collected and retained from the first part of the study, as well as the dependent variables collected and retained from the second part of the study, were then examined. Table 3 provides a summary of these

means and standard deviations for each of the ten independent variables measured. The means and standard deviations for dependent variables measured in the second session are available in Table 4.

Table 3.

Descriptive statistics for variables from the first session for respondents for both parts

Independent Variable	*n*	*M*	*SD*
RCI-10	189	22.78	9.76
SREIT	189	124.16	12.83
MM-E	189	45.75	10.80
MM-A	189	55.79	8.43
MM-C	189	49.32	9.18
MM-ES	189	42.98	9.47
MM-I/OE	189	51.54	8.18
EQ	189	41.80	11.21
SDE	189	4.37	3.20
IM	189	5.02	3.50

Note: Religious Commitment Inventory-10 (RCI-10), Self-report Emotional Intelligence Test (SREIT), Mini-Markers Extroversion (MM-E), Mini-Markers Agreeableness (MM-A), Mini-Markers Conscientiousness (MM-C), Mini-Markers Emotional Stability (MM-ES), Mini-Markers Intellect/Openness to Experience (MM-I/OE), Empathy Quotient (EQ), Self-deception Enhancement (SDE), Impression Management (IM).

Table 4.

Descriptive statistics for variables from the second session

Dependent Variable	*n*	*M*	*SD*
WAI-36	189	124.62	40.60
AES-28	189	9.74	23.49
EUS	189	3.18	11.90

Note: Working Alliance Inventory-Full Scale (WAI-36), Accurate Empathy Scale-Short Form (AES-28), Empathic Understanding (EUS).

Reliability

Internal consistency statistics were also computed for each of the 13 scales. For on the 189 participants who participated in both parts of the study, these alpha coefficients are presented along the diagonal of Appendix U. The coefficients alpha were acceptably high, ranging from .73 to .95.

Interscale Correlations

Pearson product moment correlations were calculated to provide estimates of the correlations between the various instruments of interest. Of the total number of correlations (n = 78), summarized in Appendix U, 47 (60.26%) were significant. The significant correlations ranged from -.18 to .86. Thirty-two correlations were significant at the 0.01 level. There were also seven correlations of .5 or greater.

Main Analyses

Impact of Social Desirability on Perception of the Therapeutic Relationship

As the literature had identified social desirability as a potential threat to several of the self-report measures administered, a series of ANCOVAs were conducted to determine if there was a significant effect of social desirability on each of the three dependant measures, the WAI, the AES, and the EUS. Appendix V provides a summary of these results. The analyses did not reveal a significant effect of social desirability as defined by either of the subscales of the Balanced Inventory of Socially Desirable Responding, SDE and IM. This finding suggests that social desirability most likely did not have any effect on responses for the dependent variables.

Impact of Religiosity on Perceptions of the Therapeutic Relationship

We addressed several questions about the effects of religiosity on the therapeutic relationship. First, we hypothesized that participants who were highly religious would see the counselor who self-disclosed religious similarity as more positive than the counselor who did not self-disclose. This result would be consistent with previous literature indicating that highly religious clients prefer counselors who seem to share their religious beliefs (Worthington et al., 1996). We also hypothesized that regardless of the counselor's response, the participants who were more religious would see the counselor as more successfully conveying empathy and strengthening the working alliance when compared to those participants with lower religiosity. We further hypothesized that participants who were not highly religious would not perceive the therapist more positively when the therapist disclosed religiously.

To address the question of whether individuals with higher religiosity would perceive the role-enacted counselors as more empathic and of better facilitating the working alliance, a series of ANCOVAs were conducted. The RCI-10 total score was entered as a covariate for each of the two therapeutic empathy measures and for the WAI. Treatment condition was entered as the fixed factor in one of two ways.

In the first analysis, the four treatments were entered as separate levels for each condition. For the second analysis, treatment was entered dichotomously, with all counselor disclosure groups entered as one level and the counselor non-disclosure control group entered as the other. A summary of the results from the ANCOVAs with dichotomous treatment as the fixed-factor is available in Appendix V. In both sets of analyses, religiosity was

significantly related to scores on the WAI, the AES, or the EU. Potential explanations for this null finding will be explored in greater detail in the discussion section.

Impact of other Covariates on Perceptions of the Therapeutic Relationship

A range of other theoretically interesting constructs were also investigated as potential covariates. It is theoretically possible that emotional intelligence, participant empathy, and each of the Big-Five dimensions could all impact how participants view the stimuli. Thus, we conducted a series of ANCOVAs with each of these entered singularly as a covariate. Significant covariates were found for each therapeutic relationship measure. A summary of the effect sizes for each of the covariates can be found in Table 5 and Appendix V provides a summary of the adjusted effect sizes of treatment with the effect of the covariates partialled out.

Five covariates were statistically significant. Interestingly, agreeableness was the only statically significant covariate for all three of the dependent measures. Conscientiousness was significantly related to both the AES and EUS, as was the EQ. Emotional intelligence was only significantly related to the AES, while emotional stability was only significant for the WAI.

Table 5.
Estimates of effect size for all covariates

Covariate	WAI Total			AES Total			EUS Total		
	f	*P*	η^2	*f*	*P*	η^2	*f*	*P*	η^2
RCI-10	0.101	.751	.001	0.027	.869	.000	0.016	.901	.000
SREIT	0.222	.638	.001	4.249	.041*	.022	2.896	.090	.015
MM-E	0.483	.488	.003	0.325	.570	.002	0.330	.566	.002
MM-A	6.287	.013*	.033	7.884	.006*	.041	4.641	.032*	.024
MM-C	1.970	.162	.010	10.251	.002*	.052	8.399	.004*	.043
MM-ES	9.345	.003*	.048	0.998	.319	.005	0.062	.803	.000
MM-I/OE	0.065	.800	.000	1.573	.211	.008	1.619	.205	.009
EQ	2.315	.130	.012	5.274	.023*	.028	4.623	.033*	.024
SDE	1.144	.286	.006	1.279	.260	.007	0.417	.519	.004
IM	0.009	.925	.000	0.006	.936	.000	0.192	.661	.001

Note: Religious Commitment Inventory-10 (RCI-10), Self-report Emotional Intelligence Test (SREIT), Mini-Markers Extroversion (MM-E), Mini-Markers Agreeableness (MM-A), Mini-Markers Conscientiousness (MM-C), Mini-Markers Emotional Stability (MM-ES), Mini-Markers Intellect/Openness to Experience (MM-I/OE), Empathy Quotient (EQ), Self-deception Enhancement (SDE), Impression Management (IM).
Note: * indicates a statistically significant covariate.

Effects of Sex on Perceptions of the Therapeutic Relationship

We also hypothesized that female participants would be more likely to perceive the therapist positively than male participants, regardless of treatment condition. To test this hypothesis, three separate ANOVAs were conducted for the effect of the dependent variables. There were no significant results for the AES and the EUS; however, there was a significant difference between the sexes for the WAI ($F_{(1, 189)} = 229.53$, $p < 0.001$, $\eta^2 = 0.551$). Interestingly, the direction of this difference did not support the hypothesis as the mean WAI rating by females was 60.42 points lower than the mean WAI rating by males in the sample. Therefore, we can be 95% confident that the population difference in mean WAI score would be between 52.56 and 68.29 points lower for females than for males.

Differences between Treatment Conditions

Table 6 displays the means and standard deviations for each of the independent variables by treatment condition. We hypothesized that there would be a number of differences between the various treatment groups in terms of the dependent variables. Table 7 provides a summary of the means and standard deviations for dependent variables by treatment. We hypothesized that participants in all of the disclosure treatment conditions would see the therapist more positively than those in the non-disclosure control condition. Specifically, we also hypothesized that participants in the religious content-matched disclosure treatment would see the therapist as more positive than in the non-disclosure control condition. Further, we hypothesized that participants in the either of the content-matched disclosure treatments would see the counselor more positively than in the content-mismatched disclosure treatment. Finally, we hypothesized that participants in the religious content-matched disclosure treatment would see the counselor as more positive than in the financial content-matched disclosure treatment.

To address these questions, a series of planned comparisons were conducted on each of the relationship measures. There were no significant results for either the AES or the EUS; however, there were two significant differences for the WAI. There was a significant difference between the mean of the three treatment groups and the mean of the control group ($t = 2.511$, df = 185, $p = 0.013$). Upon examining the descriptive statistics provided by the test, it appears that the means of all the treatment groups are somewhat greater than the control, providing support for our first hypothesis. There was also a significant difference between the mean of the religious content-matched disclosure treatment and the non-disclosure control condition ($t = 2.244$, df = 185, $p = 0.026$). This finding is again in the

expected direction, with the mean of the religious content-matched disclosure treatment exceeding that of the non-disclosure control condition.

As the test does not provide confidence intervals around the mean differences, the statistical program Psy (Bird, Hadzi-Pavlovic, & Isaac, 2002) was used to generate 95% confidence intervals for the two statistically significant planned comparisons. For the first comparison (the three treatment groups compared to the control), we can be 95% confident that the population mean difference would be from 3.05 to 28.33 points higher for the self-disclosure treatment groups than the control group. Likewise, we can be 95% confident that the population mean score for the religious content-matched disclosure treatment would be between 2.14 and 33.32 points higher than for the non-disclosure control group.

As significant covariates for each of the dependent measures were found in the ANCOVAs, the statistical significance of the difference between the three treatment conditions and the control condition was evaluated with the effect of one of those significant covariates partialled out. As would be expected from the significant planned comparison, the ANCOVA differences between the treatment groups and the control were all statistically significant, providing some additional support for the findings of the planned comparison. These results are summarized in Appendix V. The covariate with the largest effect size, resulting in the lowest p value for the comparison, was emotional stability ($F_{(2, 186)} = 7.97$, $p < 0.001$, $\eta^2 = 0.079$, L.L. $\eta^2 = 0.017$, U.L. $\eta^2 = 0.155$).

Although none of the planned comparisons for either the AES or the EUS were statistically significant, the ANCOVA results for the difference between the three treatment conditions and the control condition were also examined with the effects of each covariate partialled out. For both the AES and the EUS, conscientiousness was the covariate with the

largest effect size. These results, also summarized in Appendix V, revealed a statistically significant difference between the three treatment groups and the control for both empathy measures (AES: $F_{(2, 186)} = 6.81$, $p = 0.001$, $\eta^2 = 0.068$, L.L. $\eta^2 = 0.011$, U.L. $\eta^2 = 0.141$; EUS: $F_{(2, 186)} = 4.70$, $p = 0.010$, $\eta^2 = 0.048$, L.L. $\eta^2 = 0.002$, U.L. $\eta^2 = 0.113$).

To compute 95% confidence intervals around eta-squared for each of the comparisons, the program StatPower Noncentral Distribution Calculator was used (Steiger, 2001). This program computes a confidence interval around lambda, which can be converted to a lower and upper limit for eta-squared via the following formula: $\eta^2 = \lambda / (\lambda + n)$, where n is the total sample size and λ is one of "noncentrality parameters" provided the StatPower program. The formula is applied twice per confidence interval substituting λ once for the lower "noncentrality parameter" and once for the upper value.

Table 6.

Means and Standard Deviations of independent variables by treatment group

	Treatment Group			
Measure	1	2	3	4
RCI-10	22.46 (9.63)	20.87 (9.04)	23.43 (9.45)	24.48 (10.97)
SREIT	125.50 (10.80)	124.78 (11.51)	123.41 (12.09)	123.65 (16.41)
MM-E	50.38 (10.12)	44.95 (9.82)	43.59 (10.98)	47.18 (11.42)
MM-A	56.19 (10.50)	56.07 (6.78)	55.11 (8.88)	56.18 (8.55)
MM-C	51.27 (8.74)	48.45 (9.36)	48.22 (8.00)	50.86 (10.60)
MM-ES	44.65 (11.52)	43.13 (8.04)	41.69 (8.88)	43.67 (10.70)
MM-I/OE	53.08 (8.24)	51.30 (7.40)	50.19 (8.89)	52.89 (7.94)
EQ	42.89 (10.91)	41.29 (11.65)	41.49 (10.24)	42.26 (12.41)
SDE	5.01 (2.74)	4.27 (3.08)	3.80 (2.85)	4.94 (3.94)
IM	5.36 (3.79)	4.73 (3.01)	4.82 (3.43)	5.49 (4.01)

Note[a]: Treatment Group 1 = Financial Content-Disclosure Match (n = 26), Treatment Group 2 = Financial Content-Religious Disclosure Mismatch (n = 56), Treatment Group 3 = Religious Content-Nondisclosure Mismatch (n = 63), Treatment Group 4 = Religious Content-Disclosure Match (n = 44).

Note[b]: Means and standard deviations provided for each measure for each treatment. Values in parentheses represent standard deviations.

Note[c]: Religious Commitment Inventory-10 (RCI-10), Self-report Emotional Intelligence Test (SREIT), Mini-Markers Extroversion (MM-E), Mini-Markers Agreeableness (MM-A), Mini-Markers Conscientiousness (MM-C), Mini-Markers Emotional Stability (MM-ES), Mini-Markers Intellect/Openness to Experience (MM-I/OE), Empathy Quotient (EQ), Self-deception Enhancement (SDE), Impression Management (IM).

Table 7.

Means and Standard Deviations of dependent variables by treatment group

Measure	Treatment Group			
	1	2	3	4
WAI-36	130.85 (39.59)	127.55 (43.11)	114.27 (39.72)	132.01 (37.38)
AES-28	14.92 (23.51)	9.38 (22.69)	5.44 (25.66)	13.27 (20.65)
EUS	4.15 (11.93)	2.18 (11.08)	1.98 (12.86)	5.60 (11.41)

Note[a]: Treatment Group 1 = Financial Content-Disclosure Match (n = 26), Treatment Group 2 = Financial Content-Religious Disclosure Mismatch (n = 56), Treatment Group 3 = Religious Content-Nondisclosure Mismatch (n = 63), Treatment Group 4 = Religious Content-Disclosure Match (n = 44),

Note[b]: Means and standard deviations provided for each measure for each treatment. Values in parentheses represent standard deviations.

Note[c]: Working Alliance Inventory-Full Scale (WAI-36), Accurate Empathy Scale-Short Form (AES-28), Empathic Understanding (EUS).

CHAPTER 4: DISSCUSSION

Pilot Study

The purpose of the pilot study, to serve as a manipulation check for the eight stimulus videos, was accomplished. The planning and care taken to create the video stimuli was evident by pilot participant reactions that described the videos in the manner intended by the investigators. Specifically, the data indicated that the videos were sufficiently realistic and believable to warrant use in the main study. Further, the both the clips and dyads were seen as relatively similar across conditions and sexes. Additionally, participants were correctly able to identify the experimental manipulations pertinent to the same sex dyad, topic of discussion, and type of response by the therapist. Finally, participants rated both the female and male counselor in the two neutral response control conditions as having disclosed less than in any of the other conditions, as would be expected.

Main Study

Review

Though numerous studies examining the therapeutic relationship have affirmed its importance in counseling, remarkably little is known about what specific counselor behaviors foster the development of that important relationship. The role of the therapeutic relationship component, empathy, is particularly complex and poorly understood despite the number of studies that have sought to examine it. The primary purpose of this study was to attempt to begin to answer Hill and Nakayama's (2000) question about what a counselor does to make the patient feel that the counselor is being empathic.

Another purpose of this study was to examine the impact of counselor self-disclosures on the therapeutic relationship. Opinions vary widely as to the appropriateness and

helpfulness of this controversial intervention and so this study set out to help clarify if therapists can self-disclose various types of personal content in such a way that those disclosures positively impact the therapeutic relationship. In particular, we wished to expand the multicultural literature's investigations of self-disclosures to include clients who are highly religious.

Findings

Effects of disclosure. The results of this study suggest that self-disclosure by the therapist can be, when appropriately used, beneficial to the therapeutic relationship. Two of the planned comparisons, the three treatment conditions vs. the control as well as the religious matched self-disclosure condition vs. the control, were statistically significant. The confidence intervals for the two significant planned comparisons, though wide, reflect this. The 95% confidence interval comparing the population mean score for the combined treatment groups would be 3.05 to 28.33 points higher than for the control group, while the mean for the religious content-matched disclosure treatment would be between 2.14 and 33.32 points higher than the control.

It is important to remember that this study evaluated the effect of a single intervention during a video clip less than five minutes in length. Thus, even the lowest end of the confidence intervals reflect a potentially meaningful difference in means as no therapeutic interaction would be limited to a single session with a single technique. It is also worth noting that, while not statistically significant, the descriptive means for the corresponding planned comparisons for the AES and the EUS also seem to be in the direction expected, indicating that there may be some improvement in empathy in addition to the working alliance.

In addition to the planned comparison, the results of the ANCOVAs also support the appropriate use of counselor self-disclosure. As would be expected, all the ANCOVAs for the WAI comparing the mean of the combined treatment group to the mean of the control condition were statistically significant, providing some additional support for the findings of the planned comparison. When the effect of conscientiousness was partialled out, the ANCOVAs revealed a significant mean difference between the combined treatment group and the control condition for both the AES and the EUS. The confidence intervals for the effect of treatment allow us to be 95% confident that the mean population value for eta-squared would range between 0.011 and 0.141 for the AES and between 0.002 and 0.113 for the EUS.

Religiosity and disclosure. In contrast to our expectations, religiosity did not influence scores on any of the dependent variables. This is particularly puzzling as the literature has suggested a link between religiosity and empathy, as well as a trend in highly religious clients preferring counselors of a similar religious background (Worthington et al., 1996). One potential explanation for this null-finding might be that it is not so much raw religiosity that is important, but rather the specific religious background of the client. As the majority of respondents in this study were Christian, and mostly Protestant with few religious minorities, it is unclear to what degree religious background might impact therapeutic empathy and the working alliance.

Worthington and colleagues (1996) mentioned that the findings in the literature were particularly strong with clients who were highly devout Catholics, Jews, or Mormons. As these three groups are typically a minority faith community in many parts of the U.S., it may be that they are more concerned about being misunderstood by a therapist of another

religious background. Thus, it would make sense that highly religious patients who consider themselves at risk for being misunderstood by a majority, Protestant Christian counselor might be particularly sensitive to this concern. Conversely, a highly religious client who is of a majority religious background might assume that their counselor might be of the same faith, taking for granted potential differences.

This explanation would also fit with the rest of the multicultural counseling literature that suggests that minority clients tend to view counselors more favorably when clients perceive the counselor as similar to the client (Grace, 1994; Yutrzenka, 1995). It also is supported by the trend that majority therapists can use self-disclosure to help to foster the therapeutic relationship between themselves and their minority clients (Burkard et al., 2006). This would also potentially fit with the belief that any suggestion of religious background may serve to influence client's assumptions about their therapist. Indeed, just as a non-verbal clue about the therapist's religious background may affect their client's perceptions of them, perhaps openly sharing one's religious similarity with clients may impact the therapeutic relationship.

Another potential explanation might stem from the limited variability of the religiosity responses. While not so non-parametric as to preclude data analysis, participant religiosity scores were skewed toward the low end. This relative lack of highly religious participant responses may have affected the findings; therefore, we do not know the extent to which the findings suggested by Worthington and colleagues (1996) might apply if the sample had included a greater number of highly devout participants.

Other potential client variables. Although no statistically significant relationship was found for religiosity, several other covariates (emotional intelligence, agreeableness,

conscientiousness, emotional stability, and participant empathy) were significantly related to one or more dependent variables. These finding provide some evidence suggesting that client variables such these might be important considerations in predicting the influence of the therapeutic relationship on clinical outcomes. Indeed when one or more of these covariates were included in the analyses, both dependent variable empathy measures were significant.

Sex and working alliance. Three of the main findings of this study were apparent: a sex difference on WAI scores, significant treatments vs. control conditions differences, and significant matched religious-disclosure vs. neutral control condition differences. The sex difference, although in the opposite direction than we would have anticipated, was quite large with a 95% confidence interval between 52.56 and 68.21 points lower for females than for males on WAI scores.

Potential Strengths of the Present Study

The name "bubble hypothesis" has been given to the inherent struggle that researchers face in developing a "perfect" study (Gelso, 1979). Nevertheless, the present study offers several potential strengths of note. As an experimental design, this study features strong internal validity. Because participants were randomly assigned to treatment, we can be fairly confident that the differences found between groups were due to the manipulation. This is further bolstered by the fact that a pilot manipulation check was conducted to support the validity of the experimental treatments.

Additionally, the analogue nature of this study presented some unique benefits. While a more naturalistic design would more readily lend itself to generalization, there are some substantial practical and ethical concerns about these alternative designs. To simply

correlate types of self-disclosure with ratings of the therapeutic relationship in a naturalistic study would, not only be less compelling evidence than an experimental design, but would also be susceptible to the "halo effect" which has plagued the therapeutic relationship research literature (Ackerman & Hilsenroth, 2003).

Conversely, to randomly assign screened participants to conditions of counselor self-disclosure might provide experimental control in a more naturalistic fashion, but is not feasible from an ethical standpoint. To artificially induce or restrict an intervention based on experimental condition with real patients would potentially handicap the therapist from being able to act with their best clinical judgment, which might result in reduced quality of care for the patient. Thus, one of the strengths of the present study is its compromise design allowing for experimental control without such obvious ethical concerns.

The online nature of this study also presented some advantages to both participants and researchers. As participants were able to sign up and complete the entire study online, the administration of this study was relatively easy for researchers. This also made the study convenient for participants who could complete the questionnaires in a comfortable environment, potentially allowing them to respond in a more thoughtful and honest manner. Further, there were likely little or no experimenter effects in the present study as participants received all the same instructions in the same copy and pasted format, the instructions on the Sona system or in the e-mail invitation.

Another positive feature of the current study is the fact that social desirability was included as a covariate. Because of the self-report nature of this study, social desirability could have had a substantial impact on responses. As neither of the BIDR scales were statically significant; however, we can be fairly confident that social desirability did not have

a strong impact on participants' responses. Again, this absence of social desirability bias might have been influenced by the fact that participants were able to complete the entire study online in privacy, away from researchers. Simply clicking or typing in responses to a computer may have reduced their perceptions that they would need to respond in a socially desirable fashion.

A further strength of this study is the measurement of participant variables such as empathy as covariates. One of the challenges in the empathy literature has been that while empathy is conceptualized as something of a transactional process, clients' ability to empathize has not effectively been measured (Reynolds, Scott, & Jessiman, 1999). Indeed, previous studies have concentrated on client, observer, and therapist ratings of how empathic the therapist was while neglecting the empathic sensitivity of the client. This study began to address this shortcoming by examining how empathic the participants were and, as has been suggested, participant empathy was a statistically significant covariate. By accounting for participant variables that influence the therapeutic relationship, this study has helped to clarify this complex process.

Limitations of the Present Study

While this study had several strengths, it also had several important limitations. As an experimental analogue design, the study by necessity traded some of its external validity for internal validity. Additionally, this study was conducted entirely on students. While this population makes for a convenient sample and is worthy of study, the college student population is very likely unique from other populations. For these reasons, the results of this study must be generalized only with great caution.

As an online-study, the present investigation also carries the limitations of surveying participants in that medium. There was no experimental control over the conditions under which participants completed either session of the study, nor was there any way to be absolutely certain the participants watched and were attentive to the video stimulus. Participants may have thoughtfully responded in an ideal setting or they may have responded haphazardly answered after a late night at the bars, there is simply no way of knowing.

Another limitation might be in the single measure we used to examine religiosity. While the RCI-10 is a sound instrument, perhaps it was not sufficiently inclusive or sensitive to differentiate among clients in our sample. Across the four development studies that provided religious demographic information, approximately 60% of the participants were Protestant Christians and approximately 78% of the samples were Christians of some denomination. While this indicates that there were participants of other religious and non-religious backgrounds, the norms for this instrument for non-Christians are in need of further examination as the authors themselves caution (Worthington et al., 2003). While roughly 76% of our sample identified themselves as some Christian denomination, there were differences in the composition of those various Christian denominations when compared to the samples used in developing the RCI-10. Perhaps such differences in composition might have influenced the sensitivity of the RCI-10 in our results.

Additionally, we only measured religiosity and did not measure spirituality. While these two constructs have been traditionally considered together, growing evidence suggests that they might occur distinctly and should perhaps be measured independently (King & Crowther, 2004; Saucier & Skrzypińska, 2006). If this distinction is valid it might have substantial implications for measurement of these constructs. Perhaps university students at

a public school are more strongly connected to spiritual beliefs than a firm religious commitment and if so, religiosity might not be as related to university student's perceptions of the an experimental condition with religious implications.

This distinction between religiosity and spirituality may be particularly important given feedback presented by participants. A number of participants who identified themselves as Agnostic or Atheist expressed some difficulties in accurately capturing the importance of their belief system with the RCI-10. Even seemingly straightforward questions asking participants to rate to what degree they engage in religious behaviors can easily be misinterpreted with responses from participants who are not traditionally religious. For example, one respondent indicated that, as he was not religious, he spent no time reading about religious materials. He did; however, spend a great deal of time reading Atheist periodicals which he found to be very meaningful to his life.

An additional limitation arises from the video stimuli. Although the pilot studies suggested sufficient reason to use the stimuli, these data were obtained from a limited sample (n = 14 for the first round, n = 25 for the second round). It is also important to consider that 10 of the 14 participants in the first round, upon which we initially decided to use the stimuli, were graduate students. It is possible that, as the majority of participants in the main study were undergraduates, the stimuli were viewed differently by participants in the main study than the initial pilot.

Another limitation of the present study is that the sample size was fairly limited. Although 399 participants were surveyed in the first session, only 47% of those participants were retained for the final analyses. Due to attrition and incomplete data, 210 participants from the first session were lost. Thus, the statistical power of the study may have been

insufficient to detect some of the differences in the dependent variables, and the resulting confidence intervals were fairly wide. Specifically, statistical power was likely to low to detect differences between the three counselor self-disclosure treatments.

Implications for Counseling

Perhaps the most interesting implication this study has for therapy is the empirical support for appropriate use of self-disclosure by the counselor. The aggregate mean score of the disclosure treatment conditions (including the mismatched disclosure of religion during financial discussion) was larger than the neutral control condition. Likewise, the religious self-disclosure during religious discussion was perceived more positively than the control. Both cases indicated that traditional neutral responses in counseling may not be as effective in fostering the working alliance as a well-placed and appropriate self-disclosure.

These findings also have implications for clinical training. While various theories and training models may differ to some degree, self-disclosure may not necessarily be as commonly explored as an intervention as are other techniques. Certainly, in the course of this author's training, more cautions have been raised about using self-disclosure than using other basic counseling interactions such as reflection of feelings or even interpretations.

Additionally, the multicultural competency literature suggests frank discussions about race, sex, and sexual preference may be critical to the development of the therapeutic relationship (Sue & Sue, 2003). While suggestions for some demographic differences are available, much less literature is available to provide guidance on the discussion of religious and spiritual concerns in counseling, particularly with regard to how to address the potential similarities and differences that may exist between client and therapist. Again, if these results are replicated, this study suggests that open discussion of religion can be useful for

fostering the working alliance. Additionally, as the self-disclosure mismatch condition was not significantly different from the other two self-disclosure conditions, this study can provide some reassurance to trainees that even self-disclosures about religion that appear to be out-of-place can be acceptable to patients.

Directions for Future Research

Although this study contributed to clarifying the role of self-disclosure in the therapeutic relationship, clearly more research is needed to better illuminate this important component of counseling. In particular, further investigations are needed to evaluate the effects of different types of counselor self-disclosure. Additionally, clarification of when counselor self-disclosures are appropriate would allow for improved guidelines for clinicians and training programs.

Future research should attempt to replicate these findings with a larger and more diverse sample before any definitive conclusions can be reached. A larger sample would provide more statistical power and allow for the computation of tighter confidence intervals, which would help to clarify the clinical significance of the effects size observed in this study. Further, a more diverse sample would increase the generalizability of the study from essentially Midwestern, Christian, Caucasian university students to other groups.

Additionally, the many definitions and conceptualizations of therapeutic empathy and the therapeutic relationship should be explored. Many measures exist for both these constructs but applied psychology would benefit from a more unified understanding and measurement tool for the therapeutic relationship and its relationship to therapeutic empathy. Also, as the therapeutic relationship and empathy are both seen as dynamic, two-directional

interactions, it is recommended that future studies examine the participant/client's levels of empathy as was done in this study.

Another area for future exploration might be any differences between empathy and the working alliance in terms of patient sex. While the empathy literature suggests sex differences, few studies seem to have examined whether there are sex differences in the working alliance (Lawrence et al., 2004). Indeed, the only study investigating sex differences in the WAI that this author was able to procure involved couples counseling and the Working Alliance Inventory – Observer Form (WAI-O; Thomas, Werner-Wilson, & Murphy, 2005).

Additionally, further research should attempt to explore how multicultural concerns about religion and spirituality impact the therapeutic relationship in general, and empathy in particular. Fertile ground might include studies investigating how clients of differing levels of religiosity experience the therapeutic relationship with counselors of various levels of religiosity. Further, as little is known about how clients of diverse faith communities view their relationship with counselors of similar or different religious backgrounds, researchers and clinicians should attempt to examine if religious similarity is facilitative of the therapeutic relationship. Also, more research is needed to elaborate on how clients who are highly spiritual, but not strongly religious in a traditional sense, are different in comparison to more traditional highly religious clients.

Beyond religiosity, future studies should also continue to explore other patient variables that might influence the therapeutic relationship and treatment outcomes. The results of the ANCOVAs demonstrate how important these variables can be in understanding the dynamic interactions between client and counselor within the therapeutic relationship.

Research might one day be able to recommend certain combinations of variables (such as personality or empathy ratings) that would be optimal for dyad treatments. At the very least, clinicians would benefit from evaluating how client variables might impact the formation and maintenance of the therapeutic relationship.

Conclusions

The effort to identify therapeutic factors has been a continual struggle in psychology. One of the most predictive of these factors has long been the therapeutic relationship. Although this relationship has long been held to be important for clinical outcomes, much of how that relationship is fostered remains unclear. This study has provided some additional clarification on the impact one specific counselor intervention, self-disclosure, can have on the therapeutic relationship. The results of this study suggest that therapist self-disclosure may improve perceptions of the therapeutic relationship, which may in-turn improve clinical outcomes from therapy.

Though the therapeutic relationship and empathy are difficult enough to define let alone measure, this study has used a variety of independent and dependent variables to help begin to evaluate some of the potential influences on this dynamic and important relationship. By continuing to evaluate such client and therapist factors that influence the therapeutic relationship, we may be better able to provide guidelines for under what circumstances to use various interventions to maximize the therapeutic benefit to clients.

CHAPTER 5: REFERENCES

Ackerman, S. J. & Hilsenroth, M. J. (2003). A review of therapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review, 23*, 1–33.

Barkham, M. & Shapiro, D. A. (1986). Counselor verbal response modes and experienced empathy. *Journal of Counseling Psychology, 33(1)*, 3–10

Baron-Cohen, S., & Wheelwright, S. (2004). The empathy quotient: An investigation of adults with Asperger syndrome or high functioning autism and normal sex differences. *Journal of Autism and Developmental Disorders, 34*, 163–175.

Barone, D. F., Hutchings, P. S., Kimmel, H. J., Traub, H. L., Cooper, J. T., & Marshall, C. M. (2005). Increasing empathic accuracy through practice and feedback in a clinical interviewing course. *Journal of Social and Clinical Psychology, 24(2)*, 156-171.

Barrett-Lennard, G. T. (1962). Dimensions of therapist response as causal factors in therapeutic change. *Psychological Monographs, 76(43, Whole No. 562)*.

Barrett-Lennard, G. T. (1986). The relationship inventory now: Issues and advances in theory, method, and use. In L. S. Greenberg & W. M. Pinsolf (Eds.), *The psychotherapeutic process: A research handbook* (pp. 439-476). New York: The Guidford Press.

Bernier, A. & Dozier, M. (2002). The client–counselor match and the corrective emotional experience: Evidence from interpersonal and attachment research. *Psychotherapy: Theory/Research/Practice/Training, 39*, 32–43.

Bird, K., Hadzi-Pavlovic, D., & Isaac, A. (2002). Psy statistical program [Computer software]. Retrieved June 17, 2007, from http://www.psy.unsw.edu.au/research/resources/psyprogram.html

Bitel, M. (2002). Grizzly Empathy. *Social Work with Groups, 25*, 53-59.

Blatt, S. J. & Zuroff, D. C. (2005). Empirical evaluation of the assumptions in identifying evidence based treatments in mental health. *Clinical Psychology Review, 25(4)*, 459-486.

Brackett, M. A. & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin, 29*, 1147-1158.

Burkard, A. W. & Knox S. (2004). Effect of therapist color-blindness on empathy and attributions in cross-cultural counseling. *Journal of Counseling Psychology, 51*, 387–397.

Burkard, A. W., Knox S., Groen, M., Perez, M., & Hess, S. A. (2006). European American therapist self-disclosure in cross-cultural counseling. *Journal of Counseling Psychology, 53(1)*, 15–25.

Busseri, M. A. & Tyler, J. D. (2003). Interchangeability of the Working Alliance Inventory and Working Alliance Inventory, Short Form. *Psychological Assessment, 15*, 193-197.

Constantine, M. G. (2002). Predictors of satisfaction with counseling: Racial and ethnic minority clients' attitudes toward counseling and ratings of their counselors' general and multicultural counseling competence. *Journal of Counseling Psychology, 49*, 255–263.

Coulehan, J. (2004). The possible dream: A commentary on the Don Quixote effect. *Families, Systems, & Health, 22*, 453–456.

Dalton, J. E. (1983). Sex differences in communication skills as measured by a modified Relationship Inventory. *Sex Roles, 9(2)*, 195-204.

DiLalla, L. F., Hull, S. K., & Dorsey, J. K. (2004). Effect of gender, age, and relevant course work on attitudes toward empathy, patient spirituality, and physician wellness. *Teaching & Learning in Medicine, 16*, 165-170.

Duan, C. & Hill, C. E. (1996). The current state of empathy research. *Journal of Counseling Psychology, 43(3)*, 261–274.

Erskine, R. G., Moursund, J. P., & Trautmann, R. L. (1999). *Beyond empathy: A therapy of contact in relationships*. Philadelphia: Brunner/Mazel.

Farber, B. A. & Lane, J. S. (2001). Positive regard. *Psychotherapy: Theory, Research, Practice, Training, 38(4)*, 390-395.

Gelso, C. J. (1979). Research in counseling: Methodological and professional issues. *The Counseling Psychologist, 8* (3), 7-35.

Grace, W. C. (1994). HIV counseling research needs suggested by psychotherapy process and outcome studies. *Professional Psychology: Research and Practice, 25*, 403-409.

Greenberg, L. S., Elliot, R., Watson, J. C., & Bohart, A. C. (2001). Empathy. *Psychotherapy, 38(4)*, 380–384.

Gurman, A. S. (1977). The patient's perspective of the therapeutic relationship. In A. S. Gurman & A. M. Razin (Eds.), *Effective psychotherapy: A handbook of research* (pp. 503-543). Oxford: Pergamon Press Inc.

Hatcher, R. L. & Gillapsy, A. (2006). Development and validation of a revised short version of the Working Alliance Inventory. *Psychotherapy Research, 16*, 12-25.

Heller, K. (1971). Laboratory interview research as an analogue to treatment. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (pp. 126-153). New York: Wiley.

Helms, J. E. (1976). A comparison of two types of counseling analogues. *Journal of Counseling Psychology, 23(5)*, 422-427.

Heppner, P. P., Kivlighan, D. M., & Wampold, D. E. (1999). Analogue research. In *Research design in counseling* 2nd edition (pp. 357-371). Belmont, CA: Wadsworth Publishing Company.

Hermansson, G. L., Webster, A. C., & McFarland, K. (1988). Counselor deliberate postural lean and communication of facilitative conditions. *Journal of Counseling Psychology, 35(2)*, 149–153.

Hill, C. E. & Nakayama, E. Y. (2000). Client-centered therapy: Where has it been and where is it going? A comment on Hathaway (1948). *Journal of Clinical Psychology, 56(7)*, 861-875.

Hollinger-Samson, N. & Pearson, J. L. (2000). The relationship between staff empathy and depressive symptoms in nursing home residents. *Aging & Mental Health, 4*, 56-65.

Horvath, A. O. & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology, 36(2)*, 223–233.

Horvath, A. O. & Luborsky, L. (1993). The role of the therapeutic alliance in psychotherapy. *Journal of Consulting and Clinical Psychology, 61(4)*, 561-573.

Horvath, A. O. & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38(2)*, 139–149.

Howgego, L. M., Yellowless, P., Owen, C., Meldrum, L., Dark, F. (2003). The therapeutic alliance: the key to effective patient outcome? A descriptive review of the evidence in community mental health case management. *Australian and New Zealand Journal of Psychiatry, 37*, 169–183.

Iwakabe, S., Rogan, K., & Stalikas, A. (2000). The relationship between client emotional expressions, therapist interventions, and the working alliance: An exploration of eight emotional expression events. *Journal of Psychotherapy Integration, 10(4)*, 375-401.

Johnson, M. E., Pierce, C. A., Baldwin, K., Harris, A., & Brondmo, A. (1996). Presentation format in analogue studies: Effects on participants' evaluations. *The Journal of Psychology, 130*, 341-349.

Kerlinger, F. N. (1973). Foundations of behavioral research (2nd ed.). New York: Holt, Rinehart and Winston. Loesch, L. C., & Vacc, N. A. (Eds.) (1997). Research in counseling & therapy. Greensboro, NC: ERIC Counseling and Student Services Clearinghouse.

Kim, B. S., Hill, C. E., Gelso, C. J., Goates, M. K., Asay, P. A., & Harbin, J. M. (2003). Counselor self-disclosure, East Asian American client adherence to Asian cultural values, and counseling process. *Journal of Counseling Psychology, 50(3)*, 324–332.

Kim, B. S. K., Ng, G. F., & Ahn, A. J. (2005). Effects of client expectation for counseling success, client–counselor worldview match, and client adherence to Asian and European American cultural values on counseling process with Asian Americans. *Journal of Counseling Psychology, 52*, 67–76.

King, J. E. & Crowther, M. R. (2004). The measurement of religiosity and spirituality: Examples and issues from psychology. *Journal of Organizational Change Management, 17*, 83-101.

Kivlighan, D. M. & Kivlighan, M. C. (2004). Counselor intentions in individual and group treatment. *Journal of Counseling Psychology, 51*, 347–353.

Kozart, M. F. (2002). Understanding efficacy in psychotherapy: An ethnomethodological perspective on the therapeutic alliance. *American Journal of Orthopsychiatry, 72*, 217–231.

Lambert, M. J. & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy, 38(4)*, 357-361.

Lawrence, E. J., Shaw, P., Baker, D., Baron-Cohen, S. & David, A. S. (2004). Measuring empathy: Reliability and validity of the Empathy Quotient. *Psychological Medicine, 34*, 911–924.

Li, L. C., & Kim, B. S. K. (2004). Effects of counseling style and client adherence to Asian cultural values on counseling process with Asian American college students. *Journal of Counseling Psychology, 51*, 158–167.

Lin, T. (1973). Revision and validation of the Truax-Carkhuff relationship questionnaire. *Measurement Evaluation in Guidance, 6(2)*, 82-86.

Luborsky, L., Singer, B. & Luborsky, L. (1975). Comparative studies of psychotherapies: Is it true that "everyone has won and all must have prizes"? *Archives of General Psychiatry, 32*, 995-1008.

McKitrick, D. (1981). Generalizing from counseling analogue research on subjects' perceptions of counselors. *Journal of Counseling Psychology, 28(4)*, 357-360.

Messer, S. B. & Wampold, B. E. (2002). Let's face facts: Common factors are more potent than specific therapy ingredients. *Clinical Psychology: Science and Practice, 9(1)*, 21-25.

Mitchell, K. M., Bozarth, J. D. & Krauft, C. C. (1977). A reappraisal of the therapeutic effectiveness of accurate empathy, non-possessive warmth and genuineness. In A. S. Gurman & A. M. Razin (Eds.), *Effective psychotherapy: A handbook of research* (pp. 482-503). New York: Pergamon Press.

Mooradian, T. A. & Nezlek, J. B. (1996). Comparing the NEO-FFI and Saucier's Mini-Markers as measures of the Big Five. *Personality and Individual Differences, 21*, 213-215.

Munley, P. H. (1974). A review of counseling analogue research methods. *Journal of Counseling Psychology, 21(4)*, 320-330.

Naidoo, A. V. (2000). Multiculturalism as a fourth force. *South African Journal of Psychology, 30*, 52-54.

Nagel, J., Cimbolic, P., & Newlin, M. (1988). Efficacy of elderly and adolescent volunteer counselors in a nursing home setting. *Journal of Counseling Psychology, 35*, 81-86.

Nathan, P. E., Stuart, S. P., & Dolan, S. L. (2000). Research on psychotherapy efficacy and effectiveness: Between Scylla and Charybdis? *Psychological Bulletin, 26*, 964-981.

Paulhus, D.L. (1991). Measurement and control of response bias. In J.P. Robinson, P.R. Shaver, & L.S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp.17-59). San Diego: Academic Press.

Pauls, C. A. & Crost, N. W. (2004). Effects of faking on self-deception and impression management scales. *Personality and Individual Differences, 37*, 1137–1151.

Peterson, Z. D. (2002). More than a mirror: The ethics of therapist self-disclosure. *Psychotherapy: Theory, Research, Practice, and Training, 39(1)*, 21-31.

Pistrang, N., Picciotto, A., & Barker, C. (2001). The communication of empathy in couples during the transition to parenthood. *Journal of Community Psychology, 29(6)*, 615-636.

Pistrang, N., Solomons, W., & Barker, C. (1999). Peer support for women with breast cancer: The role of empathy and self-disclosure. *Journal of Community & Applied Social Psychology, 9*, 217-229.

Ponterotto, J. G. (2000). Multiculturalism as a fourth force. *Cultural Diversity and Mental Health, 6*, 102-104.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist, 47(9)*, 1102-1114.

Reynolds, W. J. & Scott, B. (1999). Empathy: A crucial component of the helping relationship. *Journal of Psychiatric and Mental Health Nursing, 6*, 363–370.

Reynolds, W. J., Scott, B., & Jessiman, W. C. (1999). Empathy has not been measured in clients' terms or effectively taught: A review of the literature. *Journal of Advanced Nursing, 30*, 1177-1185.

Rogers, C. R. (1940). The process of therapy. *Journal of Consulting Psychology, 4*, 161-164.

Rogers, C. R. (1951). *Client-centered therapy: Its current practice, implications, & theory.* Boston: Houghton Mifflin.

Rogers, C. R. (1957a). A note on the "nature of man." *Journal of Counseling Psychology, 4*, 199-203.

Rogers, C. R. (1957b). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting and Clinical Psychology, 21*, 95-103.

Rose, E. M., Westefeld, J. S., & Ansley, T. N. (2001). Spiritual issues in counseling: Clients' beliefs and preferences. *Journal of Counseling Psychology, 48*, 61-71.

Rosenzweig, S. (1936). Some implicit common factors in diverse methods in psychotherapy. *American Journal of Orthopsychiatry*, 6, 412-415.

Saucier, G. (1994). Mini-makers: A brief version of Goldberg's Unipolar Big-Five Markers. *Journal of Personality Assessment, 63*, 506-516.

Saucier, G. & Skrzypińska, K. (2006). Spiritual but not religious? Evidence for two independent dispositions. *Journal of Personality, 74*, 1257-1292.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences, 25*, 167-177.

Shapiro, J., & Rucker, L. (2004). The Don Quixote effect: Why going to the movies can help develop empathy and altruism in medical students and residents. *Families, Systems, & Health, 22*, 445–452.

Steiger, J. H. (2001). StatPower Noncentral Distribution Calculator [Computer software]. Retrieved June 29, 2007, from http://www.statpower.net/page5.html

Stein, D. M. & Lambert, M. J. (1995). Graduate training in psychotherapy: Are therapy outcomes enhanced? *Journal of Consulting and Clinical Psychology, 36*, 182-196.

Stiles, W. B., Shapiro, D. A., & Elliot, R. (1986). "Are all psychotherapies equivalent?" *American Psychologist, 42(2)*, 165-180.

Sue, D.W., & Sue, S. (2003). *Counseling the culturally diverse: Theory and practice* (4th Ed.). New York: Wiley and Sons.

Summers, R. F. & Barber, J. P. (2003). Therapeutic alliance as a measurable psychotherapy skill. *Academic Psychiatry, 27(3)*, 160-165.

Thomas, S. E. G., Werner-Wilson, R. J., & Murphy, M. J. (2005). Influence of therapist and client behaviors on therapy alliance. *Contemporary Family Therapy, 27*, 19-35.

Tracey, T. J. & Kokotovic, A. N. (1989). Factor structure of the Working Alliance Inventory. *Psychological Assessment: A Journal of Consulting and Clinical Psychology, 1*, 207-210.

Truax, C. B. & Carkhuff, R. F. (1967). *Toward effective counseling and psychotherapy*. Chicago: Aldine Publishing Company.

Worthington, E. L., Kurusu, T. A., McCullough, M. E., & Sandage, S.J. (1996). Empirical research on religion and psychotherapeutic processes and outcomes: A 10-year review and research prospectus. *Psychological Bulletin, 119*, 448-487.

Worthington, E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W., et al. (2003). The Religious Commitment Inventory—10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology, 50(1)*, 84-96.

Yutrzenka, B. A. (1995). Making a case for training in ethnic and cultural diversity in increasing treatment efficacy. *Journal of Consulting and Clinical Psychology, 63*, 197-206.

Zar, J. H. (1984). *Biostatisical Analysis* (2nd Ed.). Englewood, NJ: Prentice Hall.

APPENDIX A: MANIPULATION CHECK QUESTIONNAIRE

Please, answer the following questions.

1. How different do you feel were the eight clips? _____

   (1) Not different at all
   (2) Only a bit different
   (3) Somewhat different
   (4) Very different

2. What were the most obvious differences (if any) between the eight clips?

_____

_____

_____

_____

3. How realistic or believable do you feel was each clip?

   (1) Not at all realistic or believable
   (2) Only a bit realistic or believable
   (3) Somewhat realistic or believable
   (4) Very realistic or believable

   1st Clip (Female Self-disclosure Client Religiosity, Counselor None) _____

   2nd Clip (Female Self-disclosure Client Religiosity, Counselor Religiosity) _____

   3rd Clip (Female Self-disclosure Client $, Counselor $) _____

   4th Clip (Female Self-disclosure Client $, Counselor Religiosity) _____

   5th Clip (Male Self-disclosure Client Religiosity, Counselor None) _____

   6th Clip (Male Self-disclosure Client Religiosity, Counselor Religiosity) _____

   7th Clip (Male Self-disclosure Client $, Counselor $) _____

   8th Clip (Male Self-disclosure Client $, Counselor Religiosity) _____

4. To what degree did the counselor reveal information about his or herself?

(1) Did not reveal any information about her/himself at all
(2) Only revealed a bit of information about her/himself
(3) Revealed some information about her/himself
(4) Revealed a great deal of information about her/himself

1st Clip (Female Self-disclosure Client Religiosity, Counselor None) _____

2nd Clip (Female Self-disclosure Client Religiosity, Counselor Religiosity) _____

3rd Clip (Female Self-disclosure Client $, Counselor $) _____

4th Clip (Female Self-disclosure Client $, Counselor Religiosity) _____

5th Clip (Male Self-disclosure Client Religiosity, Counselor None) _____

6th Clip (Male Self-disclosure Client Religiosity, Counselor Religiosity) _____

7th Clip (Male Self-disclosure Client $, Counselor $) _____

8th Clip (Male Self-disclosure Client $, Counselor Religiosity) _____

5. How similar were the client and counselor dyad pairings for each clip?

(1) Not similar at all
(2) Only a bit similar
(3) Somewhat similar
(4) Very similar

1st Clip (Female Self-disclosure Client Religiosity, Counselor None) _____

2nd Clip (Female Self-disclosure Client Religiosity, Counselor Religiosity) _____

3rd Clip (Female Self-disclosure Client $, Counselor $) _____

4th Clip (Female Self-disclosure Client $, Counselor Religiosity) _____

5th Clip (Male Self-disclosure Client Religiosity, Counselor None) _____

6th Clip (Male Self-disclosure Client Religiosity, Counselor Religiosity) _____

7th Clip (Male Self-disclosure Client $, Counselor $) _____

8th Clip (Male Self-disclosure Client $, Counselor Religiosity) _____

6. Comparing the simulated dyad pairings of male counselors and clients to the simulated dyad pairings of female counselors and clients, how similarly would you rate their attractiveness? _____

(1) Not similar at all
(2) Only a bit similar
(3) Somewhat similar
(4) Very similar

APPENDIX B: SONA SYSTEM ONLINE SIGNUP SCREEN

Study Information

Study Name Exp#7 Religiosity and Therapeutic Empathy

2-Part Study This is a two-part study to be completed at least 3 days apart.

Web Study This study is an online survey administered by the system.

Description This is a two-part analogue study examining how potential and past counseling clients' view role-enacted counselors' level of therapeutic empathy. The entire study will take place online. The first part of the study includes filling out a series of five questionnaires as well as several demographic questions. The second part of the study, which must be scheduled to occur 3 days after the first part, involves watching a brief video-clip of a simulated counseling session and answering two questionnaires about your views on the video-clip. The second part may be scheduled to occur at any time after you have received an e-mail invitation with the video-clip's web address.

Course Restrictions Participants must be in at least one of these courses:

- Psy101
- Psy230
- Psy280

Eligibility Requirements You must be 18 years old to participate in this study.

Duration 50 minutes or less (Part 1)
50 minutes or less (Part 2)

Credits 1 Credit (Part 1)
1 Credit (Part 2)

Researchers Scott Young
Email: spy18@iastate.edu

Principal Investigator Norman Scott

Participant Sign-Up Deadline 1 minute before the study is to occur

Study Status Not open to students

IRB Approval Code IRB approval number 06-369; date 8/23/06

View Time Slots for This Study

APPENDIX C: IRB APPROVAL LETTER

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office of Research Assurances
Vice Provost for Research
1138 Pearson Hall
Ames, Iowa 50011-2207
515 294-4566
FAX 515 294-4267

DATE: August 28, 2006

TO: Scott P. Young
W 113 Lagomarcino Hall

CC: Dr. Norman Scott
W271 Lagomarcino Hall

FROM: Jan Canny, IRB Administrator
Office of Research Assurances

SUBJECT: IRB ID 06-369

Approval Date: 23 August 2006 **Date for Continuing Review:** 22 August 2007

The Co-Chair of the Institutional Review Board Committee of Iowa State University has reviewed and approved the protocol entitled: "Religiosity and Therapeutic Empathy." The protocol has been assigned the following ID Number: 06-369. Please refer to this number in all correspondence regarding the protocol.

Your study has been approved from August 23, 2006 to August 22, 2007. The **continuing review date** for this study is no later than August 22, 2007. Federal regulations require continuing review of ongoing projects. Please submit the form with sufficient time (i.e. three to four weeks) for the IRB to review and approve continuation of the study, prior to the continuing review date.

Failure to complete and submit the continuing review form will result in expiration of IRB approval on the continuing review date and the file will be administratively closed. All research related activities involving the participants **must stop** on the continuing review date, until approval can be re-established, except when necessary to eliminate immediate hazard to research participants. As a courtesy to you, we will send a reminder of the approaching review prior to this date.

Please remember that any **changes in the protocol or consent form** may not be implemented without prior IRB review and approval, using the "Continuing Review and/or Modification" form. Research investigators are expected to comply with the principles of the Belmont Report, and state and federal regulations regarding the involvement of humans in research. These documents are located on the Office of Research Assurances website or available by calling (515) 294-4566, www.compliance.iastate.edu.

You must promptly report any of the following to the IRB: (1) **all serious and/or unexpected adverse experiences** involving risks to subjects or others; and (2) **any other unanticipated problems involving risks** to subjects or others.

Upon completion of the project, please submit a Project Closure Form to the Office of Research Assurances, 1138 Pearson Hall, to officially close the project.

APPENDIX D: INFORMED CONSENT DOCUMENT

Title of Study: Religiosity and Therapeutic Empathy
Primary Investigator: Scott P. Young, BA
Supervisor: Norman Scott, PhD

This is a research study. Please take your time in deciding if you would like to participate. Please feel free to ask questions at any time. As indicated on your course syllabus, participation in experiments is one of the options for earning experimental points.

INTRODUCTION

The purpose of this study is to explore former and potential future clients' perceptions of how empathic a counselor is in a simulated therapy session. You are being invited to participate in this study because you are a student who has been or may someday be in counseling.

DESCRIPTION OF PROCEDURES

If you agree to participate in this study, your participation will last for approximately 50 minutes or less for the first part of the study and approximately 50 minutes or less for the second part of the study. During the study you may expect the following study procedures to be followed. In the first part of the study, you will be asked to complete an online questionnaire and to provide some demographic information about yourself. After three days you will receive an invitation to complete the second portion of the study. You will then be directed to a website containing a video clip of a simulated therapy session. After you have watched the clip, you will be asked to fill out a questionnaire related to the clip. You will not be asked to share about the nature or content of any counseling experiences you may have had. You may skip any question that you do not wish to answer or that makes you feel uncomfortable.

RISKS

There are no foreseeable risks at this time from participating in this study.

BENEFITS

If you decide to participate in this study there may be no direct benefit to you. It is hoped that the information gained in this study will benefit society by increasing psychological science's understanding of therapeutic empathy, which may improve the counseling process.

COSTS AND COMPENSATION

You will not have any costs from participating in this study. You will be compensated for participating in this study with extra credit points towards your grade in Psych 101, Psych 230, or Psych 280 classes consistent with Psychology Department guidelines. You will receive one point for your participation in the first part of the study and an additional point for your participation in the second part of the study.

PARTICIPANT RIGHTS

Your participation in this study is completely voluntary and you may refuse to participate or leave the study at any time. If you decide to not participate in the study or leave the study early, it will not result in any penalty or loss of benefits to which you are otherwise entitled.

CONFIDENTIALITY

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, federal government regulatory agencies and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy your records for quality assurance and data analysis. These records may contain private information.

To ensure confidentiality to the extent permitted by law, the following measures will be taken. Participant responses will be assigned an arbitrary identification number and all personal identifying information such as name will be deleted from ensuing data sets. Electronic data sets will be treated as private and confidential information. These data will be stored on password-protected computers in the psychology department and access will be restricted by password to the PI and the faculty supervisor. The data security provisions associated with the Sona system as specified in the approved IRB proposal will also apply to this system. If the results are published, your identity will remain confidential.

QUESTIONS OR PROBLEMS

You are encouraged to ask questions at any time during this study. For further information about the study contact Scott Young at 294-8794 or spy18@iastate.edu or Dr. Norman Scott at 294-1509 or nascott@iastate.edu. If you have any questions about the rights of research subjects or research-related injury, please contact Jan Canny, the IRB Administrator, (515) 294-4566, jcs1959@iastate.edu, or Diane Ament, Director, Office of Research Assurances (515) 294-3115, dament@iastate.edu.

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PARTICIPANT SIGNATURE

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered. You will receive a copy of the written informed consent prior to your participation in the study.

Participant's Name (printed) _____

_____ _____

(Participant's Signature) (Date)

INVESTIGATOR STATEMENT

I certify that the participant has been given adequate time to read and learn about the study and all of their questions have been answered. It is my opinion that the participant understands the purpose, risks, benefits and the procedures that will be followed in this study and has voluntarily agreed to participate.

_____ _____

(Signature of Person Obtaining Informed Consent) (Date)

APPENDIX E: DEMOGRAPHIC QUESTIONNAIRE

Please, answer the following questions by selecting the appropriate alternative

1. What is your gender?
   (1) male (2) female

2. What is your age?
   (1) 18 (2) 19 (3) 20
   (4) 21 (5) 22 (6) 23
   (7) 24 (8) 25-35 (9) 36-55
   (10) 56 or older

3. What is your ethnicity?
   (1) Caucasian (2) African American (3) Asian American
   (4) Latino/ Latina American (5) Native American/Inuit (6) Pacific Islander
   (7) Multiracial
   (8) International student (specify country and ethnic group)_____
   _____
   (9) Other (specify) _____

4. What is your school standing or year in school?
   (1) 1st year (freshmen) (2) 2nd year (sophomore) (3) 3rd year (junior)
   (4) 4th/+ year (senior) (5) graduate student (masters or doctoral)
   (6) other (specify) _____

5. What is your religious affiliation?
   (1) Buddhism (2) Christianity (3) Hinduism
   (4) Islam (5) Judaism (6) Neo-pagan
   (7) Protestant Christianity (8) Roman Catholicism or Orthodox
   (9) Nonreligious
   (10) Other (specify) _____

APPENDIX F: DEMOGRAPHIC INFORMATION BY SESSION

Variable	Session I		Session II	
Level	n	(%)	n	(%)
Age				
18	88	(22.1)	46	(24.3)
19	152	(38.1)	70	(37.0)
20	80	(20.1)	38	(20.1)
21	41	(10.3)	18	(9.5)
22	19	(4.8)	9	(4.8)
23	6	(1.5)	2	(1.1)
24	3	(0.8)	2	(1.1)
25-35	7	(1.8)	3	(1.6)
36-55	2	(0.5)	1	(0.5)
56+	0	(0.0)	0	(0.0)
Decline to Answer	1	(0.3)	0	(0.0)
Race/Ethnicity				
African American	8	(2.0)	2	(1.1)
Asian American	11	(2.8)	5	(2.6)
Caucasian	351	(88.0)	174	(92.1)
International Student	3	(0.8)	0	(0.0)
Latina/o American	4	(1.0)	1	(0.5)
Multiracial	4	(1.0)	1	(0.5)
Native American/Inuit	2	(0.5)	1	(0.5)
Pacific Islander	4	(1.0)	2	(1.1)
Other	5	(1.3)	2	(1.1)
Declined to Answer	7	(1.8)	1	(0.5)
Year in School				
First	189	(47.4)	93	(49.2)
Second	98	(24.6)	48	(25.4)
Third	49	(12.3)	26	(13.8)
Fourth and Fourth+	24	(6.0)	10	(5.3)
Graduate School	1	(0.3)	0	(0.0)
Other	13	(3.3)	4	(2.1)
Decline to Answer	25	(6.3)	8	(4.2)
Sex				
Male	199	(49.9)	85	(45.0)
Female	200	(50.1)	104	(55.0)
Religious Affiliation				
Buddhism	3	(0.8)	1	(0.5)
Christianity	287	(71.9)	143	(75.7)
Hinduism	2	(0.5)	2	(1.1)
Islam	2	(0.5)	0	(0.0)
Judaism	2	(0.5)	1	(0.5)
Neo-pagan	1	(0.3)	0	(0.0)
Nonreligious	60	(15.0)	26	(13.8)
Other	24	(6.0)	14	(7.4)
Decline to Answer	18	(4.5)	2	(1.1)

APPENDIX G: RELIGIOUS COMMITMENT INVENTORY—10 (RCI-10)

Below are some statements about attitudes toward religion and religious activities. Please rate how well each statement applies to you with the number system below.

1 = Not at all true of me
2 = Somewhat true of me
3 = Moderately true of me
4 = Mostly true of me
5= Totally true of me

_____ 1. I often read books and magazines about my faith.
_____ 2. I make financial contributions to my religious organization.
_____ 3. I spend time trying to grow in understanding of my faith.
_____ 4. Religion is especially important to me because it answers many questions about the meaning of life.
_____ 5. My religious beliefs lie behind my whole approach to life.
_____ 6. I enjoy spending time with others of my religious affiliation.
_____ 7. Religious beliefs influence all my dealings in life.
_____ 8. It is important to me to spend periods of time in private religious thought and reflection.
_____ 9. I enjoy working in the activities of my religious organization.
_____ 10. I keep well informed about my local religious group and have some influence in its decisions.

APPENDIX H: SELF-REPORT EMOTIONAL INTELLIGENCE TEST

Please use the following scale to respond to the questions that follow and click on the number that corresponds to your response or feeling about each particular question:

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

I know when to speak about my personal problems to others.

1 **2** **3** **4** **5**

When I am faced with obstacles, I remember times I faced similar obstacles and overcame them.

1 **2** **3** **4** **5**

I expect that I will do well on most things I try.

1 **2** **3** **4** **5**

Other people find it easy to confide in me.

1 **2** **3** **4** **5**

I find it hard to understand the non-verbal messages of other people.

1 **2** **3** **4** **5**

Some of the major events in my life have led me to re-evaluate what is important and not important.

1 **2** **3** **4** **5**

When my mood changes, I see new possibilities.

1 **2** **3** **4** **5**

Emotions are one of the things that make my life worth living.

1 **2** **3** **4** **5**

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

I am aware of my emotions as I experience them.

1 2 3 4 5

I expect good things to happen.

1 2 3 4 5

I like to share my emotions with others.

1 2 3 4 5

When I experience a positive emotion, I know how to make it last.

1 2 3 4 5

I arrange events others enjoy.

1 2 3 4 5

I seek out activities that make me happy.

1 2 3 4 5

I am aware of the non-verbal messages I send to others.

1 2 3 4 5

I present myself in a way that makes a good impression on others.

1 2 3 4 5

When I am in a positive mood, solving problems is easy for me.

1 2 3 4 5

By looking at their facial expressions, I recognize the emotions people are experiencing.

1 2 3 4 5

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

I know why my emotions change.

1	2	3	4	5

When I am in a positive mood, I am able to come up with new ideas.

1	2	3	4	5

I have control over my emotions.

1	2	3	4	5

I easily recognize my emotions as I experience them.

1	2	3	4	5

I motivate myself by imagining a good outcome to tasks I take on.

1	2	3	4	5

I compliment others when they have done something well.

1	2	3	4	5

I am aware of the non-verbal messages other people send.

1	2	3	4	5

When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself.

1	2	3	4	5

When I feel a change in emotions, I tend to come up with new ideas.

1	2	3	4	5

When I am faced with a challenge, I give up because I believe I will fail.

1	2	3	4	5

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

I know what other people are feeling just by looking at them.

1	2	3	4	5

I help other people feel better when they are down.

1	2	3	4	5

I use good moods to help myself keep trying in the face of obstacles.

1	2	3	4	5

I can tell how people are feeling by listening to the tone of their voice.

1	2	3	4	5

It is difficult for me to understand why people feel the way they do.

1	2	3	4	5

APPENDIX I: FIVE-FACTOR MINI-MARKERS

How Accurately Can You Describe Yourself?

Please use this list of common human traits to describe yourself as accurately as possible.

Describe yourself as you see yourself at the present time, not as you wish to be in the future.

Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age. Before each trait, please select a number indicating how accurately that trait describes you, using the following rating scale:

1	2	3	4	5	6	7	8	9
Extremely Inaccurate	Very Inaccurate	Moderately Inaccurate	Slightly Inaccurate	Neither Inaccurate nor Accurate	Slightly Accurate	Moderately Accurate	Very Accurate	Extremely Accurate

____ Bashful	____ Energetic	____ Moody	____ Systematic
____ Bold	____ Envious	____ Organized	____ Talkative
____ Careless	____ Extraverted	____ Philosophical	____ Temperamental
____ Cold	____ Fretful	____ Practical	____ Touchy
____ Complex	____ Harsh	____ Quiet	____ Uncreative
____ Cooperative	____ Imaginative	____ Relaxed	____ Unenvious
____ Creative	____ Inefficient	____ Rude	____ Unintellectual
____ Deep	____ Intellectual	____ Shy	____ Unsympathetic
____ Disorganized	____ Jealous	____ Sloppy	____ Warm
____ Efficient	____ Kind	____ Sympathetic	____ Withdrawn

APPENDIX J: THE EMPATHY QUOTIENT (EQ)

	Definitely agree	Slightly agree	Slightly disagree	Definitely disagree
1. I can easily tell if someone else wants to enter a conversation.				
2. I prefer animals to humans.				
3. I try to keep up with the current trends and fashions.				
4. I find it difficult to explain to others things that I understand easily, when they don't understand it first time.				
5. I dream most nights.				
6. I really enjoy caring for other people.				
7. I try to solve my own problems rather than discussing them with others.				
8. I find it hard to know what to do in a social situation.				
9. I am at my best first thing in the morning.				
10. People often tell me that I went too far in driving my point home in a discussion.				
11. It doesn't bother me too much if I am late meeting a friend.				
12. Friendships and relationships are just too difficult, so I tend not to bother with them.				
13. I would never break a law, no matter how minor.				
14. I often find it difficult to judge if something is rude or polite.				
15. In a conversation, I tend to focus on my own thoughts rather than on what my listener might be thinking.				
16. I prefer practical jokes to verbal humor.				
17. I live life for today rather than the future.				

18. When I was a child, I enjoyed cutting up worms to see what would happen.				
19. I can pick up quickly if someone says one thing but means another.				
20. I tend to have very strong opinions about morality.				
21. It is hard for me to see why some things upset people so much.				
22. I find it easy to put myself in somebody else's shoes.				
23. I think that good manners are the most important thing a parent can teach their child.				
24. I like to do things on the spur of the moment.				
25. I am good at predicting how someone will feel.				
26. I am quick to spot when someone in a group is feeling awkward or uncomfortable.				
27. If I say something that someone else is offended by, I think that that's their problem, not mine.				
28. If anyone asked me if I liked their haircut, I would reply truthfully, even if I didn't like it.				
29. I can't always see why someone should have felt offended by a remark.				
30. People often tell me that I am very unpredictable.				
31. I enjoy being the centre of attention at any social gathering.				
32. Seeing people cry doesn't really upset me.				
33. I enjoy having discussions about politics.				
34. I am very blunt, which some people take to be rudeness, even though this is unintentional.				

35. I don't tend to find social situations confusing.				
36. Other people tell me I am good at understanding how they are feeling and what they are thinking.				
37. When I talk to people, I tend to talk about their experiences rather than my own.				
38. It upsets me to see an animal in pain.				
39. I am able to make decisions without being influenced by people's feelings.				
40. I can't relax until I have done everything I had planned to do that day.				
41. I can easily tell if someone else is interested or bored with what I am saying.				
42. I get upset if I see people suffering on news programs.				
43. Friends usually talk to me about their problems as they say that I am very understanding.				
44. I can sense if I am intruding, even if the other person doesn't tell me.				
45. I often start new hobbies but quickly become bored with them and move on to something else.				
46. People sometimes tell me that I have gone too far with teasing.				

47. I would be too nervous to go on a big roller coaster.				
48. Other people often say that I am insensitive, though I don't always see why.				
49. If I see a stranger in a group, I think that it is up to them to make an effort to join in.				
50. I usually stay emotionally detached when watching a film.				
51. I like to be very organized in day-to-day life and often make lists of the chores I have to do.				
52. I can tune in to how someone else feels rapidly and intuitively.				
53. I don't like to take risks.				
54. I can easily work out what another person might want to talk about.				
55. I can tell if someone is masking their true emotion.				
56. Before making a decision I always weigh up the pros and cons.				
57. I don't consciously work out the rules of social situations.				
58. I am good at predicting what someone will do.				
59. I tend to get emotionally involved with a friend's problems.				
60. I can usually appreciate the other person's viewpoint, even if I don't agree with it.				

APPENDIX K: BALANCED INVENTORY OF DESIRED RESPONDING VERSION 6 - FORM 40A

Using the scale below as a guide, select a number for each statement to indicate how true it is.

1	2	3	4	5	6	7
not true			somewhat			very true

_____ 1. My first impressions of people usually turn out to be right.

_____ 2. It would be hard for me to break any of my bad habits.

_____ 3. I don't care to know what other people really think of me.

_____ 4. I have not always been honest with myself.

_____ 5. I always know why I like things.

_____ 6. When my emotions are aroused, it biases my thinking.

_____ 7. Once I've made up my mind, other people can seldom change my opinion.

_____ 8. I am not a safe driver when I exceed the speed limit.

_____ 9. I am fully in control of my own fate.

_____ 10. It's hard for me to shut off a disturbing thought.

_____ 11. I never regret my decisions.

_____ 12. I sometimes lose out on things because I can't make up my mind soon enough.

_____ 13. The reason I vote is because my vote can make a difference.

_____ 14. My parents were not always fair when they punished me.

_____ 15. I am a completely rational person.

_____ 16. I rarely appreciate criticism.

_____ 17. I am very confident of my judgments

_____ 18. I have sometimes doubted my ability as a lover.

_____ 19. It's all right with me if some people happen to dislike me.

1	2	3	4	5	6	7
not true			somewhat			very true

_____ 20. I don't always know the reasons why I do the things I do.

_____ 21. I sometimes tell lies if I have to.

_____ 22. I never cover up my mistakes.

_____ 23. There have been occasions when I have taken advantage of someone.

_____ 24. I never swear.

_____ 25. I sometimes try to get even rather than forgive and forget.

_____ 26. I always obey laws, even if I'm unlikely to get caught.

_____ 27. I have said something bad about a friend behind his/her back.

_____ 28. When I hear people talking privately, I avoid listening.

_____ 29. I have received too much change from a salesperson without telling him or her.

_____ 30. I always declare everything at customs.

_____ 31. When I was young I sometimes stole things.

_____ 32. I have never dropped litter on the street.

_____ 33. I sometimes drive faster than the speed limit.

_____ 34. I never read sexy books or magazines.

_____ 35. I have done things that I don't tell other people about.

_____ 36. I never take things that don't belong to me.

_____ 37. I have taken sick-leave from work or school even though I wasn't really sick.

_____ 38. I have never damaged a library book or store merchandise without reporting it.

_____ 39. I have some pretty awful habits.

_____ 40. I don't gossip about other people's business.

APPENDIX L: E-MAIL INVITATION AND REMINDER

You are receiving this e-mail because you volunteered to participate in the first portion of a study about therapeutic empathy; your participation in this study is very much appreciated! This e-mail is to remind you that you may also participate in the second portion of the study if you so wish, and may receive an additional credit toward your Psychology course for your willing participation in the entire study.

If you wish to participate in this second portion of the study for an additional credit, you are invited to visit this web site www. , which contains a short video-clip of part of a simulated counseling session. After you have viewed the video-clip, you may then log back into the Sona system and complete the remainder of the study by answering some questions about your thoughts about the video.

Thank you for considering your participation,

APPENDIX M: SCRIPT FOR UNDISCLOSIVE COUNSELOR CONTROL GROUP

Counselor: Well welcome back. How are you doing today?

Client: Oh, I'm doing ok I guess. About the same as last time.

Counselor: Umhmm. And are you still having some concerns about your relationship with your fiancé?

Client: Yeah, I think that's why I'm not feeling much better today than the last time. I still don't feel like [he] understands why I get so worked up about the details of the wedding ceremony. I think [he] just thinks I'm over-reacting, that I'm making mountains out of mole-hills.

Counselor: But you don't feel like your concerns about the wedding are trivial.

Client: No, I think this is really important and…

Counselor: And?

Client: Well, I guess I feel like this is typical of us. We agree on lots of things like having kids or where we want to live, but we've discussed those things a lot so we each know how the other feels about it. The one big thing, to me at least, that we haven't really talked much about is religion.

Counselor: I noticed you said that religion is important to you, at least.

Client: Yeah, I guess I don't feel like [he] is very religious. [He] almost never talks about religion or what [he] believes, and when I try to talk with [him] about that stuff, [he] doesn't really say anything to keep the conversation going. It's almost like I'm just talking at [him], like [he] doesn't want to discuss the topic so if [he] just ignores it I'll stop talking to [him] about it.

Counselor: So you feel ignored when you want to share this part of yourself with [him] and [he] doesn't respond in the way you want.

Client: Yeah, being Christian is a huge part of my life.

Counselor: So I'm hearing that your beliefs are very important in your life and that when you've tried to talk with your fiancé about being a Christian, you didn't have a very good experience. Does that fit?

Client: Yup, that about sums it up.

Counselor: Wow, you know, it sounds like that really hurts you when you try to talk to you're fiancé about being a Christian, and [he] doesn't seem to understand how much a part of your life that is and just how important it is for you be able to share your beliefs them with [him].

Client: I think that's why we've been fighting so much lately about the wedding. I want to make sure the ceremony fits my religious beliefs and [he] doesn't get that. All [he] sees is me making a big deal about who performs the ceremony and where it happens. [He] doesn't see that getting married outside on the beach by a justice of the peace isn't what I was raised to believe a wedding should be like. I really need a church and a pastor involved! [He] doesn't get that. [He] just sees me disagreeing with [his] vision of this great Hawaiian luau wedding extravaganza. [He] doesn't understand that the reason I don't want our wedding to be like that isn't that I don't think it would be fun, but that I really want to start our marriage off right. I want God involved somewhere in the ceremony, and I want [him] to understand why I do. I want to be able to, like you said, share my beliefs with [him] and maybe even have [him] share what [he] believes with me. I mean, isn't that what marriage is supposed to be about?

Counselor: I'm really sensing the disappointment you feel in not being able to be as open with your fiancé as you'd like and the frustration in not being able to express your needs to [him].

Client: Yeah, it just makes me mad that there's this big part of me that I don't feel like I can share with [him].

Counselor: And maybe a little scared?

Client: Yeah, I'm scared that if we start off this way that things won't work between us. If God isn't in the equation, and communication isn't open, what's that leave us?

Counselor: What do you think the answer to that is?

Client: I don't know, and that scares me.

APPENDIX N: SCRIPT FOR MATCHED RELIGIOUS SELF-DISCLOSURE TREATMENT GROUP

Counselor: Well welcome back. How are you doing today?

Client: Oh, I'm doing ok I guess. About the same as last time.

Counselor: Umhmm. And are you still having some concerns about your relationship with your fiancé?

Client: Yeah, I think that's why I'm not feeling much better today than the last time. I still don't feel like [he] understands why I get so worked up about the details of the wedding ceremony. I think [he] just thinks I'm over-reacting, that I'm making mountains out of mole-hills.

Counselor: But you don't feel like your concerns about the wedding are trivial.

Client: No, I think this is really important and…

Counselor: And?

Client: Well, I guess I feel like this is typical of us. We agree on lots of things like having kids or where we want to live, but we've discussed those things a lot so we each know how the other feels about it. The one big thing, to me at least, that we haven't really talked much about is religion.

Counselor: I noticed you said that religion is important to you, at least.

Client: Yeah, I guess I don't feel like [he] is very religious. [He] almost never talks about religion or what [he] believes, and when I try to talk with [him] about that stuff, [he] doesn't really say anything to keep the conversation going. It's almost like I'm just talking at [him], like [he] doesn't want to discuss the topic so if [he] just ignores it I'll stop talking to [him] about it.

Counselor: So you feel ignored when you want to share this part of yourself with [him] and [he] doesn't respond in the way you want.

Client: Yeah, being Christian is a huge part of my life.

Counselor: So I'm hearing that your beliefs are very important in your life and that when you've tried to talk with your fiancé about being a Christian, you didn't have a very good experience. Does that fit?

Client: Yup, that about sums it up.

Counselor: Wow, you know, I'm a Christian too and I have certainly felt there were times in my life when people didn't understand just how important my beliefs are to me. In times like that, I really felt hurt and misunderstood, and I'm wondering if that's sort of the way you've been feeling toward your fiancé.

Client: I think that's why we've been fighting so much lately about the wedding. I want to make sure the ceremony fits my religious beliefs and [he] doesn't get that. All [he] sees is me making a big deal about who performs the ceremony and where it happens. [He] doesn't see that getting married outside on the beach by a justice of the peace isn't what I was raised to believe a wedding should be like. I really need a church and a pastor involved! [He] doesn't get that. [He] just sees me disagreeing with [his] vision of this great Hawaiian luau wedding extravaganza. [He] doesn't understand that the reason I don't want our wedding to be like that isn't that I don't think it would be fun, but that I really want to start our marriage off right. I want God involved somewhere in the ceremony, and I want [him] to understand why I do. I want to be able to, like you said, share my beliefs with [him] and maybe even have [him] share what [he] believes with me. I mean, isn't that what marriage is supposed to be about?

Counselor: I'm really sensing the disappointment you feel in not being able to be as open with your fiancé as you'd like and the frustration in not being able to express your needs to [him].

Client: Yeah, it just makes me mad that there's this big part of me that I don't feel like I can share with [him].

Counselor: And maybe a little scared?

Client: Yeah, I'm scared that if we start off this way that things won't work between us. If God isn't in the equation, and communication isn't open, what's that leave us?

Counselor: What do you think the answer to that is?

Client: I don't know, and that scares me.

APPENDIX O: SCRIPT FOR MATCHED FINANCIAL SELF-DISCLOSURE TREATMENT GROUP

Counselor: Well welcome back. How are you doing today?

Client: Oh, I'm doing ok I guess. About the same as last time.

Counselor: Umhmm. And are you still having some concerns about your financial situation?

Client: Yeah, I think that's why I'm not feeling much better today than the last time. I still don't know what I'm going to do.

Counselor: You're feeling very uncertain and anxious that you don't have the money situation figured out.

Client: I'm just feeling so much pressure! My parents told me that I needed to pay my own way to college so that I'd appreciate it and work hard. I understand why my parents that way, but I just don't see how a student can pay this much money by [himself].

Counselor: It sounds like you wish your parents had a better understanding of how hard it is for you to support yourself financially while in school.

Client: The thing that's really frustrating me is I'm struggling to come up with money now, and it's only going to get that much worse because tuition keeps going up every year! I already have over $12,000 worth of debt, and I still have at least another two years to go.

Counselor: This really sounds like you wonder how you'll make ends meet.

Client: Yeah! Like you said, it's really hard to make ends meet. That's why I've got a job working at Red Lobster, to make enough to cover what's left after my students loans. The problem is that I'm spending so much time working that I don't have enough time to study. My grades have really started slipping since I started working 30 hours a week.

Counselor: Wow, that sounds like a lot of hours to be working while going to school full time.

Client: Yeah, way too many. It's kinda stupid in a way. I pay all this money to go here to get an education, and I'm working so much to pay those bills that I'm not really learning anything.

Counselor: You know, I can really relate to what you're saying. I finished school a while back, so I know I didn't have half the bills you do, but I had to pay my way through school too. I worked throughout college and I remember feeling really stressed sometimes trying to balance work and school. I was always worrying about the future, how I was going to pay the next bill.

Client: Yeah, it's funny that you mention worrying about the future, because that's another thing that all tied into this. I'm came in determined to get out in 4 years, but getting all those classes in has been really hard to do. They don't have classes I need offered all the time so I have to take a pretty heavy courseload to get everything worked in.

Counselor: So I'm hearing you say that because you want to try to finish school in 4 years that you feel pressured to take lots of classes because you don't know when you'll be able to take them again later.

Client: You know, sometimes I almost feel like it's some sort of trap. They make it so we can't easily get the classes we need when we need them, so we end up staying an extra semester or year or whatever. Then, since they raise tuition every time you turn around, they stick you for just a little bit more money you don't have.

Counselor: I'm just struck by how let down you seem to feel. You mentioned wishing your parents were more involved in helping to pay for your schooling, and now you mention feeling as if the university is trapping you in some way.

Client: Well I know why my parents aren't helping more, they just never made it a priority to save money for college for me because of their feelings responsibility. And I know that the university isn't really trying to trap me personally, but yeah, you're right I guess I do feel let down because of the situation. No matter whether it's personal and understandable or not, I still get stuck with the bill that I can't figure out how to pay.

APPENDIX P: SCRIPT FOR MISMATCHED CLIENT FINANCIAL AND COUNSELOR RELIGIOUS SELF-DISCLOSURE TREATMENT GROUP

Counselor: Well welcome back. How are you doing today?

Client: Oh, I'm doing ok I guess. About the same as last time.

Counselor: Umhmm. And are you still having some concerns about your financial situation?

Client: Yeah, I think that's why I'm not feeling much better today than the last time. I still don't know what I'm going to do.

Counselor: You're feeling very uncertain and anxious that you don't have the money situation figured out.

Client: I'm just feeling so much pressure! My parents told me that I needed to pay my own way to college so that I'd appreciate it and work hard. I understand why my parents that way, but I just don't see how a student can pay this much money by [himself].

Counselor: It sounds like you wish your parents had a better understanding of how hard it is for you to support yourself financially while in school.

Client: The thing that's really frustrating me is I'm struggling to come up with money now, and it's only going to get that much worse because tuition keeps going up every year! I already have over $12,000 worth of debt, and I still have at least another two years to go.

Counselor: This really sounds like you wonder how you'll make ends meet.

Client: Yeah! Like you said, it's really hard to make ends meet. That's why I've got a job working at Red Lobster, to make enough to cover what's left after my students loans. The problem is that I'm spending so much time working that I don't have enough time to study. My grades have really started slipping since I started working 30 hours a week.

Counselor: Wow, that sounds like a lot of hours to be working while going to school full time.

Client: Yeah, way too many. It's kinda stupid in a way. I pay all this money to go here to get an education, and I'm working so much to pay those bills that I'm not really learning anything.

Counselor: You know, I can really relate to what you're saying. I finished school a while back, so I know I didn't have half the bills you do, but I had to pay my way through school too. I was always worrying about the future, how I was going to pay the next bill. At times like that I found praying really helped put things in perspective for me.

Client: Yeah, it's funny that you mention worrying about the future, because that's another thing that all tied into this. I'm came in determined to get out in 4 years, but getting all those classes in has been really hard to do. They don't have classes I need offered all the time so I have to take a pretty heavy courseload to get everything worked in.

Counselor: So I'm hearing you say that because you want to try to finish school in 4 years that you feel pressured to take lots of classes because you don't know when you'll be able to take them again later.

Client: You know, sometimes I almost feel like it's some sort of trap. They make it so we can't easily get the classes we need when we need them, so we end up staying an extra semester or year or whatever. Then, since they raise tuition every time you turn around, they stick you for just a little bit more money you don't have.

Counselor: I'm just struck by how let down you seem to feel. You mentioned wishing your parents were more involved in helping to pay for your schooling, and now you mention feeling as if the university is trapping you in some way.

Client: Well I know why my parents aren't helping more, they just never made it a priority to save money for college for me because of their feelings responsibility. And I know that the university isn't really trying to trap me personally, but yeah, you're right I guess I do feel let down because of the situation. No matter whether it's personal and understandable or not, I still get stuck with the bill that I can't figure out how to pay.

APPENDIX Q: COUNSELOR EMPATHY AND PERSONALITY QUESTIONNAIRE

Below are listed a variety of ways one person could feel or behave in relation to another person. Please consider each statement with respect to whether you think it is true or not true based on your present relationship with your therapist. You may not know for certain how your therapist feels or behaves, but please respond with your best guess based on what you know of how they are. Please indicate how strongly you feel each statement is or is not true using the following scale:

- 3 = I strongly feel it is not true
- 2 = I feel it is not true
- 1 = I feel it is probably untrue, or more untrue than true
1 = I feel it is probably true, or more true than untrue
2 = I feel it is true
3 = I strongly feel it is true

_____ 1). She/He understands my words but does not know how I feel.
_____ 2). She/He understands me.
_____ 3). She/He is the life of the party.
_____ 4). She/He feels little concern for others.
_____ 5). She/He understands exactly how I see things.
_____ 6). She/He is always prepared.
_____ 7). She/He may understand me but she/he does not know how I feel.
_____ 8). She/He gets stressed out easily.
_____ 9). She/He often misunderstands what I am trying to say.
_____ 10). She/He has a rich vocabulary.
_____ 11). Sometimes she/he will argue with me just to prove she/he is right.
_____ 12). She/He ignores some of my feelings.
_____ 13). She/He doesn't talk a lot.
_____ 14). Even when I cannot say quite what I mean, she/he knows how I feel.
_____ 15). She/He is interested in people.
_____ 16). She/He usually help me to know how I am feeling by putting my feelings into words for me.
_____ 17). She/He must understand me, but I often think she/he is wrong.
_____ 18). She/He leaves belongings laying around.
_____ 19). She/He seems relaxed most of the time.
_____ 20). She/He seems to follow almost every feeling I have while I am with her/him.
_____ 21). She/He has difficulty understanding abstract ideas.
_____ 22). She/He usually uses just the right words when she/he tries to understand how I am feeling.
_____ 23). She/He feels comfortable around people.
_____ 24). Whatever she/he says usually fits right in with what I am feeling.
_____ 25). She/He sometimes seems more interested in what she/he herself/himself says than in what I say.
_____ 26). She/He insults people.

_____ 27). She/He sometimes pretends to understand me, when she/he really does not.
_____ 28). She/He usually knows exactly what I mean, sometimes even before I finish saying it.
_____ 29). She/He pays attention to details.
_____ 30). She/He worries about things.
_____ 31). I can learn a lot about myself from taking with her/him.
_____ 32). She/He has a vivid imagination.
_____ 33). When she/he sees me she/he seems to be "just doing a job."
_____ 34). She/He keeps in the background.
_____ 35). She/He sympathizes with others' feelings.
_____ 36). She/He never knows when to stop talking about something which is not very meaningful to me.
_____ 37). There are lots of things I could tell her/him, but I am not sure how she/he would react to them, so I keep them to myself.
_____ 38). If I had a chance to see a different counselor, I would.
_____ 39). She/He uses the same words over and over again, till I'm bored.
_____ 40). She/He makes a mess of things.
_____ 41). Usually I can lie to her/him and she/he never knows the difference.
_____ 42). She/He seldom feels blue.
_____ 43). She/He is not interested in abstract ideas.
_____ 44). I don't think she/he knows what is the matter with me.
_____ 45). She/He starts conversations.
_____ 46). There are times when I don't have to speak, she/he knows how I feel.
_____ 47). She/He knows what it feels like to be ill.
_____ 48). There are times when she/he is silent for long periods, and then says things that don't have much to do with what we have been talking about.
_____ 49). She/He is not interested in other people's problems.
_____ 50). She/He Get gets work done right away.
_____ 51). She/He will talk to me, but otherwise he seems to be just another person to talk with, an outsider.
_____ 52). She/He is easily disturbed.
_____ 53). She/He tries to see things through my eyes.
_____ 54). She/He has excellent ideas.
_____ 55). She/He has little to say.
_____ 56). She/He understands my words but not the way I feel.
_____ 57). She/He is interested in knowing what my experiences mean to me.
_____ 58). She/He nearly always knows exactly what I mean.
_____ 59). She/He has a soft heart.
_____ 60). She/He often forgets to put things back in their proper place.
_____ 61). At times she/he jumps to the conclusion that I feel more strongly or more concerned about something than I actually do.
_____ 62). She/He gets upset easily.
_____ 63). Sometimes she/he thinks that I feel a certain way, because she/he feels that way.
_____ 64). She/He doesn't have a good imagination.

_____ 65). Her/His own attitudes toward some of the things I say, or do, stop her/him from really understanding me.
_____ 66). She/He talks to a lot of different people at parties.
_____ 67). She/He understands what I say, from a detached, objective point of view.
_____ 68). She/He is not really interested in others.
_____ 69). She/He likes order.
_____ 70). She/He appreciates what my experiences feel like to me.
_____ 71). She/He does not realize how strongly I feel about some of the things we discuss.
_____ 72). She/He responds to me mechanically.
_____ 73). She/He changes her/his mood a lot.
_____ 74). She/He is quick to understand things.
_____ 75). She/He doesn't like to draw attention to her/himself.
_____ 76). She/He takes time out for others.
_____ 77). She/He shirks her/his duties.
_____ 78). She/He understands all of what I say to her/him.
_____ 79). She/He has frequent mood swings.
_____ 80). She/He uses difficult words.
_____ 81). She/He doesn't mind being the center of attention.
_____ 82). When I do not say what I mean at all clearly she/he still understands me.
_____ 83). She/He feels others' emotions.
_____ 84). She/He tries to understand me from her/his own point of view.
_____ 85). She/He follows a schedule.
_____ 86). She/He gets irritated easily.
_____ 87). She/He does not understand me.
_____ 88). She/He spends time reflecting on things.
_____ 89). She/He is quiet around strangers.
_____ 90). She/He makes people feel at ease.
_____ 91). She/He is exacting in her/his work.
_____ 92). She/He often feels blue.
_____ 93). She/He is full of ideas.
_____ 94). She/He can be deeply and fully aware of my most painful feelings without being distressed or burdened by them herself/himself.

APPENDIX R: WORKING ALLIANCE INVENTORY

Below are statements that describe some of the different ways a person might think or feel about his or her therapist or counselor. Below each statement there is a seven point scale. If the statement describes the way you always feel (or think) select the number 7; if it never applies to you select the number 1. Use the numbers in between to describe the variations between these extremes.

1 = Not at all true
2 = A little true
3 = Slightly true
4 = Somewhat true
5 = Moderately true
6 = Considerably true
7 = Very true

_____ 1. I feel uncomfortable with my therapist.
_____ 2. My therapist and I agree about the things I will need to do in therapy to help improve my situation.
_____ 3. I am worried about the outcome of these sessions.
_____ 4. What I am doing in therapy gives me new ways of looking at my problem.
_____ 5. My therapist and I understand each other.
_____ 6. My therapist perceives accurately what my goals are.
_____ 7. I find what I am doing in therapy confusing.
_____ 8. I believe my therapist likes me.
_____ 9. I wish my therapist and I could clarify the purpose of our sessions.
_____ 10. I disagree with my therapist about what I ought to get out of therapy.
_____ 11. I believe the time my therapist and I are spending together is not spent efficiently.
_____ 12. My therapist does not understand what I am trying to accomplish in therapy.
_____ 13. I am clear on what my responsibilities are in therapy.
_____ 14. The goals of these sessions are important to me.
_____ 15. I find what my therapist and I are doing in therapy are unrelated to my concerns.
_____ 16. I feel like the things I do in therapy will help me to accomplish the changes that I want.
_____ 17. I believe my therapist is genuinely concerned for my welfare.
_____ 18. I am clear as to what my therapist wants me to do in these sessions.
_____ 19. My therapist and I respect each other.
_____ 20. I feel that my therapist is not totally honest about his/her feelings toward me.
_____ 21. I am confident in my therapist's ability to help me.
_____ 22. My therapist and I are working towards mutual agreed upon goals.
_____ 23. I feel that my therapist appreciates me.
_____ 24. We agree on what is important for me to work on.
_____ 25. As a result of these sessions I am clearer as to how I might be able to change.
_____ 26. My therapist and I trust one another.

_____ 27. My therapist and I have different ideas on what my problems are.
_____ 28. My relationship with my therapist is very important to me.
_____ 29. I have the feeling that if I say or do the wrong things, my therapist will stop working with me.
_____ 30. My therapist and I collaborate on setting goals for my therapy.
_____ 31. I am frustrated by the things I am doing in therapy.
_____ 32. We have established a good understanding of the kind of changes that would be good for me.
_____ 33. The things that my therapist is asking me to do don't make sense.
_____ 34. I don't know what to expect as the result of my therapy.
_____ 35. I believe the way we are working with my problem is correct.
_____ 36. I feel my therapist cares about me even when I do things that he/she does not approve of.

APPENDIX S: DEBRIEFING INFORMATION FORM

Thank you for your participation in the present study concerning your view of counselor self-disclosure of religious similarity on empathy within the therapeutic relationship. In this study you were placed in one of eight groups according to your reported gender, a rating of your religiosity (Religious Commitment Inventory– 10, Worthington et al., 2003), and random assignment to view a video clip of a simulated counseling session either with or without a counselor self-disclosure of religious similarity to the client.

Prior research has shown perceived empathic understanding within the therapeutic relationship is related to improvement in therapy, but little is known about what counselors can do to convey that empathy to their clients. Since previous research has suggested that highly religious clients want to discuss religious issues in therapy, and that they are most comfortable doing so with a counselor of their same faith, this study attempts to determine if participant observers placing themselves in the role of the client perceive the counselors' efforts to be empathic differently if the counselor self-discloses religious similarity to their client. If this study can begin to establish whether counselor self-disclosure of religious similarity improves therapeutic empathy, it may help improve the way therapists provide counseling to clients.

Your generosity and willingness to participate in this study are greatly appreciated. Your input will help contribute to the advancement of the field of counseling research. Although this was not the intent of the study, sometimes people find the subject matter of the video clip and these questionnaires may bring up some feelings. If any part of your participation in this study raised questions or feelings that you would like to discuss with a counselor, please contact one of the following free resources:

Iowa State University Student Counseling Center.	294-5056
The Clinic for Group Counseling and Research.	294-1455

We would ask you to maintain confidentiality about the purpose of the experiment since any pre-knowledge of the purpose will bias the data for that person and thus cannot be used.

If you have questions or concerns about this research please contact either the primary investigator Scott Young (spy18@iastate.edu, 689-8724) or faculty supervisor Dr. Norman Scott (nascott@iastate.edu, 294-1509). If your concerns are not resolved you may contact the Director of Research Assurances, Diane Ament (dament@iastate.edu, 294-3115).

If you are interested in this area of research, you may wish to read the following references:

Duan, C. & Hill, C. E. (1996). The current state of empathy research. *Journal of Counseling Psychology, 43(3)*, 261–274.

Greenberg, L. S., Elliot, R., Watson, J. C., & Bohart, A. C. (2001). Empathy. *Psychotherapy, 38(4)*, 380–384.

Burkard, A. W., Knox S., Groen, M., Perez, M., & Hess, S. A. (2006). European American therapist self-disclosure in cross-cultural counseling. *Journal of Counseling Psychology, 53(1)*, 15–25.

Worthington, E. L., Kurusu, T. A., McCullough, M. E., & Sandage, S.J. (1996). Empirical research on religion and psychotherapeutic processes and outcomes: A 10-year review and research prospectus. *Psychological Bulletin, 119*, 448-487.

Thank you very much for participating!

APPENDIX T: MEANS AND STANDARD DEVIATIONS FOR PILOT QUESTIONNAIRE INTERCLIP COMPARISONS

Descriptive statistics for ratings of each video from the total pilot study

Question	Clip # and Sex	*n*	*M*	*SD*
3	1 Female	39	2.898	0.821
3	2 Female	39	2.846	0.961
3	3 Female	39	2.872	0.864
3	4 Female	40	2.632	0.819
3	1 Male	40	2.737	0.860
3	2 Male	39	2.590	0.850
3	3 Male	40	2.790	0.843
3	4 Male	39	2.436	0.821
4	1 Female	39	1.897	0.852
4	2 Female	40	2.526	0.830
4	3 Female	39	2.436	0.754
4	4 Female	40	2.568	0.781
4	1 Male	40	1.868	0.875
4	2 Male	39	2.564	0.912
4	3 Male	40	2.553	0.760
4	4 Male	39	2.872	0.801
5	1 Female	39	2.539	0.884
5	2 Female	39	2.795	0.864
5	3 Female	39	2.692	0.893
5	4 Female	40	2.526	0.762
5	1 Male	40	2.421	0.826
5	2 Male	39	2.744	0.938
5	3 Male	40	2.868	0.704
5	4 Male	39	2.512	0.721

Note[a]. For purposes of analysis, clip conditions were as follows: #1 = Client religious – counselor neutral response, #2 = Client religious – counselor religious self-disclosure, #3 = Client financial – counselor financial self-disclosure, #4 = Client financial – counselor religious self-disclosure

Note[b]. Question 3 asked, "How realistic or believable do you feel was each clip?"

Responses for this question ranged from 1 (Not at all realistic or believable) to 4 (Very realistic or believable).

Note[c]. Question 4 asked, "To what degree did the counselor reveal information about his or herself?"

Responses for this question ranged from 1 (Did not reveal any information about her/himself at all) to 4 Revealed a great deal of information about her/himself).

Note[d]. Question 5 asked, "How similar were the client and counselor dyad pairings for each clip?"

Responses for this question ranged from 1(Not similar at all) to 4 (Very similar).

APPENDIX U: SCALE ALPHA COEFFICENTS AND INTERSCALE CORRELATIONS

Table 6.

Correlation matrix for key variables from both sessions (Coefficients Alpha displayed in bold along the diagonal)[a]

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. RCI-10	**.95**												
2. SREIT	.17*	**.88**											
3. MM-E	.15*	.61**	**.87**										
4. MM-A	.15*	.50**	.39**	**.84**									
5. MM-C	.24**	.32**	.35**	.49**	**.81**								
6. MM-ES	.09	.27**	.25**	.29**	.38**	**.81**							
7. MM-I/OE	.09	.55**	.41**	.25**	.24**	.18*	**.76**						
8. EQ	.12	.63**	.39**	.65**	.27**	.18*	.42**	**.87**					
9. SDE	.07	.17*	.15*	.15*	.27**	.23**	.08	.20**	**.73**				
10. IM	.07	.09	-.05	.16*	.20**	.10	.04	.17*	.56**	**.74**			
11. WAI-36	-.03	.04	.08	-.18*	.12	.23**	.04	-.11	.10	.00	**.96**		
12. AES-28	.01	.15*	.06	.21**	.24**	.09	.11	.17*	.10	.01	.45**	**.92**	
13. EUS	.01	.13	.05	.16*	.21**	.03	.10	.16*	.06	-.03	.42**	.86**	**.83**

Note*. $p < .05$; **. $P < .01$

Note[a]. Scale coefficients alpha in bold along the diagonal

APPENDIX V: RESULTS OF THE SERIES OF ANCOVAS WITH TREATMENTS VS. CONTROL AS FIXED FACTOR

Dependent Variable				
Covariate	*f*	df	*P*	η^2
WAI				
RCI-10	3.19	(2,189)	0.044	0.03
SREIT	3.25	(2,189)	0.041	0.03
MM-E	3.39	(2,189)	0.036	0.04
MM-A	6.39	(2,189)	0.002	0.06
MM-C	4.15	(2,189)	0.017	0.04
MM-ES	7.97	(2,189)	0.001	0.08
MM-I/OE	3.17	(2,189)	0.044	0.03
EQ	4.33	(2,189)	0.014	0.05
SDE	3.73	(2,189)	0.026	0.04
IM	3.14	(2,189)	0.046	0.03
AES				
RCI-10	1.61	(2,189)	0.203	0.02
SREIT	3.75	(2,189)	0.025	0.04
MM-E	1.76	(2,189)	0.175	0.02
MM-A	5.60	(2,189)	0.004	0.06
MM-C	6.81	(2,189)	0.001	0.07
MM-ES	2.10	(2,189)	0.125	0.02
MM-I/OE	2.39	(2,189)	0.094	0.03
EQ	4.28	(2,189)	0.015	0.04
SDE	2.24	(2,189)	0.109	0.02
IM	1.60	(2,189)	0.205	0.02
EUS				
RCI-10	0.49	(2,189)	0.617	0.01
SREIT	1.93	(2,189)	0.148	0.02
MM-E	0.64	(2,189)	0.527	0.01
MM-A	2.81	(2,189)	0.063	0.03
MM-C	4.70	(2,189)	0.010	0.05
MM-ES	0.51	(2,189)	0.603	0.01
MM-I/OE	1.29	(2,189)	0.278	0.01
EQ	2.80	(2,189)	0.063	0.03
SDE	0.69	(2,189)	0.505	0.01
IM	0.57	(2,189)	0.565	0.01

Note: Religious Commitment Inventory-10 (RCI-10), Self-report Emotional Intelligence Test (SREIT), Mini-Markers Extroversion (MM-E), Mini-Markers Agreeableness (MM-A), Mini-Markers Conscientiousness (MM-C), Mini-Markers Emotional Stability (MM-ES), Mini-Markers Intellect/Openness to Experience (MM-I/OE), Empathy Quotient (EQ), Self-deception Enhancement (SDE), Impression Management (IM), Working Alliance Inventory-Full Scale (WAI), Accurate Empathy Scale-Short Form (AES), Empathic Understanding (EUS).