THE RELATIONSHIP BETWEEN THERAPISTS' EPISTEMOLOGY AND THEIR THERAPY STYLE, WORKING ALLIANCE, AND USE OF SPECIFIC INTERVENTIONS

By

JOCELYN A. SAFERSTEIN

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
UNIVERSITY OF FLORIDA
2006

ACKNOWLEDGMENTS

I extend special thanks to my husband and all of my friends and family for their constant love and support. I am also grateful to Dr. Ken Rice for his unending patience in answering all of my many questions. I could not have completed this dissertation project without the guidance of my extraordinary supervisor, Dr. Greg Neimeyer.

TABLE OF CONTENTS

LIST OF TABLES

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

THE RELATIONSHIP BETWEEN THERAPISTS' EPISTEMOLOGY AND THEIR
THERAPY STYLE, WORKING ALLIANCE, AND USE OF SPECIFIC
INTERVENTIONS

By

Jocelyn A. Saferstein

December 2006

Chair: Greg J. Neimeyer
Major Department: Psychology

The current study examined the relationship between therapists' epistemic style and

their (1) therapy style, (2) emphasis on the working alliance, and (3) use of specific

interventions. The study aimed to discover whether or not therapists' epistemologies can

predict how therapists report their practice of therapy (e.g., therapy style, working

alliance, and use of therapy techniques).

The most robust findings provide provisional support for the notion that there are

specific differences in the personal style of the therapist according to the therapists'

epistemic assumptions (rationalist versus constructivist). Additionally, therapist

epistemology was a significant predictor of their emphasis on the working alliance (Bond

subscale), as well as, their use of specific interventions (cognitive behavioral versus

constructivist).

The current study extends the developing literature investigating the translation of

epistemology in to practice, specifically looking at therapists' self-reports. Further work

is needed to see if client reports corroborate therapists' self-report and to investigate

whether or not therapists' epistemology affects the outcome of therapy work.

CHAPTER 1
INTRODUCTION

A growing area of interest in counseling psychology research explores the philosophical underpinnings of different approaches to counseling and psychotherapy (Beronsky, 1994; DisGiuseppe & Linscott, 1993; Erwin, 1999; Lyddon, 1990; Mahoney, 1991; Mahoney & Gabriel, 1987; Mahoney & Lyddon, 1988; Okun, 1990; Polkinghorne, 1991; Vasco, 1994). More specifically, recent literature has investigated the translation of "epistemology into practice," exploring the relationship between philosophical commitments on the one hand, and theories and concepts related to change processes, on the other (Arthur, 2000; Botella & Gallifa, 1995; Chiari & Nuzzo, 1996; Lyddon, 1989, 1988). One expression of this work looks at the epistemic assumptions that underpin the theory and practice of cognitive therapy (Lyddon, 1991). In particular, a developing literature addresses the distinct differences between contemporary cognitive therapies according to their epistemic assumptions: rationalist, empiricist, and constructivist epistemologies (Hollon & Beck, 1986; Lyddon, 1991).

The notion that counselors maintain different perspectives regarding the processes and methods of human change due to differing philosophical commitments has been considered in the epistemic style literature (Lyddon, 1989). Personal epistemological commitments have been linked to a variety of different features in psychotherapy, such as preferences for particular types of therapy (Arthur, 2000; DisGiuseppe & Linscott, 1993; Lyddon, 1989; Mahoney & Gabriel, 1987; G. Neimeyer & Morton, 1997) and specific

1

therapeutic interventions (Granvold, 1996; Mahoney & Lyddon, 1988; Winter & Watson, 1999).

The link between personal epistemologies and particular therapist behaviors is just beginning to receive attention. In fact, there has been relatively little empirical research addressing the translation of therapist epistemological leanings into corresponding therapeutic practices. The purpose of such exploration would be to gain a better understanding of therapist epistemic style and how it relates to the methods and processes of therapy. In particular, there is reason to believe that specific epistemic commitments would be related to, and potentially direct, a) particular psychotherapeutic styles, b) the structuring of particular types of therapeutic relationships, and c) the selection of particular forms of psychotherapy interventions.

To develop these ideas, a review of the epistemic style literature in general will be conducted first, followed by a specific review of the literature investigating therapist epistemic style as a predictor of therapist variables, including therapy style, the therapeutic relationship and the selection of specific therapeutic interventions. This literature review will conclude with a set of specific predictions regarding the relationship between epistemic style and these various therapeutic behaviors. This will be followed, in turn, by a description of the methods used to test these predictions, the results of the study and, finally a discussion that provides an understanding of the study's findings within the context of the existing literature, highlighting its implications and limitations, as well.

CHAPTER 2
LITERATURE REVIEW

This chapter provides a review of the literatures that support specific predictions regarding the relationship between epistemic style and a range of therapist variables. The review first provides a broader overview of the epistemic style literatures and then, more specifically, the translation of epistemology into the practice of therapy. Next will be a review of research looking at conceptual differences in therapists' therapy style according to their epistemic assumptions, followed by an overview of the working alliance literature and, more specifically, how different epistemological assumptions maintain notable differences in the nature of the working alliances they form with their clients. Finally, there will be a discussion of the relationship between specific therapeutic interventions and the epistemic commitments that may inform or direct their selection. Each section of this literature review will end with an outline of specific predictions concerning epistemic style and aspects of therapist style, working alliance, and therapeutic interventions, respectively.

Epistemic Style

Royce has developed a long-standing line of research investigating people's "ways of knowing" (1964; Diamond & Royce, 1980; Royce & Powell, 1983). Throughout this extensive program of research, Royce and his colleagues have developed a conceptual model that specifies three fundamental classes of knowing. These three primary approaches to knowing are referred to as the three epistemic styles: rationalism, empiricism, and metaphorism.

Rationalism maintains the dominant assertion that thought has superiority over the senses with regards to obtaining knowledge. Those with a rational epistemic style are devoted to testing their views of reality in terms of logical consistency. The primary underlying cognitive processes for the rational epistemic style includes clear thinking and rational analysis, as well as synthesizing different notions (Diamond & Royce, 1980; Vincent & LeBow, 1995). Rationalists view psychopathology as stemming from irrational emotions or behaviors that can be controlled by rational thought. Cognitive-rational therapy depicts this process of deductively analyzing and rejecting personal beliefs and arguments, while instead preferring a more rational option. In other words, rationalism is the epistemological worldview that underlies cognitive-rational therapy (Lyddon, 1989; Mahoney, 1991).

Empiricism is primarily concerned with sensory experience as the main way of knowing, where people know to the extent that they perceive accurately. The empirical view of knowledge is primarily inductive and determined mostly by the reliability and validity of observations (Diamond & Royce, 1980; Vincent & LeBow, 1995). Psychological problems are considered as learned and measurable dysfunctional behavior, where the reduction of psychological distress would be attained through behavioral contracting or conditioning which empiricists believe promotes changes in affect and cognitions. In other words, empiricism is the epistemological worldview that underlies behavioral therapy (Mahoney, 1991; Schacht & Black, 1985).

The metaphorist perspective sees knowledge neither as firm nor rigid, but rather as more flexible, and as embedded within individually and socially constructed symbolic processes. Metaphorism thus takes the stance that reality is personal and mutable, rather

than fixed, and that individuals construct their bases of knowledge from their personal

learning histories, external experience, and their own personally constructive processes

(Vincent & LeBow, 1995). Metaphorists are further described as testing the soundness of

their perspectives in relationship to the viability, or pragmatic utility within a given

context. In addition, for the metaphorist, cognitive processes are symbolic in nature, with

both conscious and unconscious components (Diamond & Royce, 1980; Lyddon, 1989).

Metaphorical epistemic styles cast psychological dysfunction as an unsuccessful effort to

change or develop, or an inability to adequately adjust to a situation or circumstance.

From this perspective, psychological dysfunction is viewed as a perturbance in an

individual's customary way of knowing, with emotional distress reflecting a person's

limited ability to adapt to life circumstances. The emphasis is placed on adjustment and

the novel construction of new ways of knowing within an ongoing process of

developmental change, rather than the correction of dysfunction or the restoration of a

more valid correspondence between reality and one's view of that reality (Mahoney,

1991; Vincent & LeBow, 1995). In other words, metaphorism is the epistemological

worldview that underlies constructivist therapy (Lyddon, 1989; Mahoney, 1991; G.

Neimeyer, Prichard, Lyddon, & Sherrard, 1993; R. Neimeyer, 1993b; Schacht & Black,

1985).

Royce's conceptual framework holds that the processes of conceptualizing,

perceiving, and symbolizing are interdependent processes, where the meaningful

convergence of these three processes makes up a person's view of reality or worldview.

Although interdependent, people tend to show a leaning towards a dominant epistemic

style (Royce & Mos, 1980; Royce & Powell, 1983). Thus, although knowing is

comprised of rational, empirical, and metaphorical component processes, there is a hierarchical order to which people use these processes, with one of the three tending to be relatively dominant for each individual.

Assessing Epistemic Style

The research program following from Royce (1964) demonstrates support for these three basic theories of knowledge: rationalism, empiricism, and metaphorism. Initial research looked at the relationship between an individual's epistemic style and their occupations (Royce & Mos, 1980). Using the instrument developed to assess these epistemic styles (The Psychological-Epistemological Profile, Royce & Mos, 1980), rationalists tended to be represented in the occupations of mathematicians and theoretical physicists, empiricists tended to be represented in the occupations of biologists and chemists, and metaphorists tended to be represented in the occupations of professional musicians and dramatists.

Further research on epistemic style investigated how philosophical commitments relate to the theories, methods and approaches to therapeutic change (Botella & Gallifa, 1995; Lyddon, 1988, 1989, 1990; Mahoney, 1991; R. Neimeyer, 1993b). Research based on Royce's (1964) taxonomy of epistemic styles suggests that therapists with different epistemic styles demonstrate differences in their theoretical orientations (Arthur, 2000). Schacht and Black (1985), for example, found that behavioral therapists were found to be more inclined towards an empirical epistemic style, while psychoanalytic therapists revealed a greater commitment to a metaphorical epistemic style.

Additionally, Arthur (2000) looked at a sample of therapists and how their epistemic style differed according to their therapy orientation (cognitive behavioral versus psychoanalytic). In this study, psychoanalytic therapists scored significantly

higher on the metaphorist scale compared to the cognitive behavioral therapists.

Cognitive behavioral therapists were found to prefer thinking to feeling and to be more

reliant on reason, logic, and reducing emotional input, whereas psychoanalytic therapists

relied more on their feelings to understand a client. Thus, results from this study

supported the notion of differences between psychoanalytic and cognitive behavioral

therapists according to their epistemic styles.

Mahoney (1991) has further distinguished between rationalist and constructivist

epistemologies, underscoring some of the distinctions outlined by Royce and his

colleagues, and has provided the groundwork for additional investigations of the

relationship between epistemic style and therapy orientation.

Epistemology and Rationalist-Constructivist Therapies

Mahoney (1991) distinguishes between, and extends, epistemic style research by

suggesting that current cognitive therapies are distinguished by their differing

epistemological commitments (rationalism and constructivism). Rationalism argues that

there is a single, stable, external reality, and that thoughts are held superior to the senses

when determining the accuracy of knowledge (Mahoney, 1991; Mahoney & Gabriel,

1987, Mahoney & Lyddon, 1988). Winter and Watson (1999) further depict rationalists

as believing that individuals passively perceive an independently existing reality, and that

with regards to therapy, clients are seen as making cognitive errors, which causes them to

have a less accurate perception of reality. The therapists' role is thus to instruct the client

to think more rationally, increasing the correspondence between an individual's

perceptions and the reality of the events they are confronted with. Thus, rationalist

therapies are more persuasive, analytical, and technically instructive than the

constructivist therapies (R. Neimeyer, 1993b). Successful rationalist therapy occurs

when clients are able to control their negative emotions through rational thinking (Mahoney & Lyddon, 1988). Ellis' Rational Emotive Therapy (RET) has been considered the approach that best depicts the rationalist perspective (DisGiuseppe & Linscott, 1993). Lyddon (1989) further notes that rationalist cognitive theories, due to their epistemological commitment to reason and logical-analytic processes, depict a rational epistemic style.

Constructivism, however, argues that individuals are proactive in their personal constructions of their realities. From this point of view, knowledge is comprised of meaning making processes where the individual is in charge of organizing his or her experiences. Constructivists believe that reality is not single, stable, or external, and instead assert that individuals' feelings and actions cannot be meaningfully separated from human thought (Lyddon, 1988; Mahoney, 1991; Mahoney & Gabriel, 1987; Mahoney & Lyddon, 1988). Unlike rationalist therapists, Winter and Watson (1999) point out that constructivist therapists see clients as taking a proactive position in constructing their own personal realities. Thus, constructivist therapies are more personal, reflective, and elaborative than the rationalist therapies (R. Neimeyer, 1993b).

Additionally, Lyddon (1990) notes the differential role that emotions play in psychotherapy for rational and constructivist therapists. Rationalists view negative emotions as representing problems that need to be controlled, or eliminated, whereas constructivist therapists see emotion as playing a functional role in the change process and "encourage emotional experience, expression, and exploration" (p.124). Thus, constructivist therapists attempt to facilitate client's personal construction of new meanings in the context of a safe and caring relationship. Lyddon (1989) further notes

that constructivist cognitive theories, due to the primacy placed on the construction and alteration of personal meanings, is most representative of a constructivist epistemic style.

Epistemic Style and Preferences

The influence of epistemic style on preference for rational and constructivist therapies have been noted in recent research (Arthur, 2000; DisGiuseppe & Linscott, 1993; Lyddon, 1989; Mahoney & Gabriel, 1987; G. Neimeyer & Morton, 1997). The primary implications of this research reveal an existing match between the rational epistemic style and rational therapies, as well as a match between the constructivist epistemic style and constructivist therapies. Lyddon (1989) noted that, for example, people with a dominant rational epistemic style tend to prefer rationalist therapy because rational therapy facilitates clients approaching emotional and personal troubles in a rational and logical way that is congruent with their ways of dealing with difficulties in other aspects of their lives. Thus, when considering the findings of Royce and Mos (1980), that people tend to have a leaning towards a dominant epistemic style, it naturally follows that a match would exist between therapists' epistemology and their theoretical orientation, reflected in the underlying epistemology of that therapy orientation (Lyddon, 1989).

In considering the epistemology literature, a much broader range of theoretical, strategic, and technical distinctions have been conceptualized in relation to differing epistemological positions than have actually been documented in research literatures (Mahoney & Lyddon, 1988; R. Neimeyer, 1993b). These conceptual differences include expected differences in the characteristic style of therapy, differences in the nature and enactment of the therapeutic relationship (R. Neimeyer, 1995), and differences in the actual interventions associated with different therapy orientations (Lyddon, 1990).

Despite the many different conceptual differences that have been noted, relatively few of these have received careful empirical documentation (G. Neimeyer, Saferstein, & Arnold, 2005).

Working on the basis of current conceptual distinctions that have been made in the literature, it is possible to identify and test expected differences between rational and constructivist therapists in relation to (1) therapy style (2) the therapeutic relationship, and (3) the selection of specific therapeutic interventions. Each of these three therapist variables (style, relationship, and interventions) will now be discussed in further detail in relation to the respective epistemological differences (rationalist versus constructivist) noted in the literature.

Therapy Style

There has been some literature investigating conceptual differences in therapists' therapy style according to their epistemic assumptions. Granvold (1996), for example, suggests that traditional cognitive behavioral therapists tend to target irrational beliefs for modification, educate the client, guide the client, and take an active and directive position with the client. On the other hand, a constructivist therapy style is characterized by the therapist being less directive, providing less information to clients, and engaging in more exploratory interaction in their behavior with clients.

More specifically, R. Neimeyer (2005) indicates that constructivist therapists invoke a sense of "openness" which he describes more specifically here:

> I mean not overly structuring the agenda for the session by my own preconceptions of what my client requires, particularly to the extent that such an agenda is driven by some diagnostic or classificatory system about the experience of an abstract group of people who report some of the same symptoms or difficulties. (p. 78)

This highlights the importance of less versus more structure when considering cognitive behavioral versus constructivist therapies, respectively.

In addition, provisional empirical work has begun to explore differences in therapy style according to epistemic assumptions. For example, Winter & Watson (1999) conducted an empirical investigation looking at the differences between constructivist and rationalist therapists. They looked at the work of four personal construct therapists (i.e., constructivist) and six rationalist therapists across a range of clients in an outpatient mental health setting. Both types of therapy were conducted on the basis of a 12-session renewable contract. Results from audio taped recordings of the sessions revealed an interesting perspective on the distinctive procedural and relational components of these two orientations. In general, the rationalist therapists showed a more negative attitude towards their clients, while the personal construct therapists showed greater regard for them. Additionally, clients involved in personal construct therapy showed greater overall involvement in therapy. These differences are in line with the credulous and collaborative nature of the personal construct therapist originally depicted by Kelly (1955).

In another study (G. Neimeyer & Morton, 1997), 49 practicing psychotherapists were recruited to investigate the relationship between therapy orientation and epistemic style. Two samples of therapists were recruited in this study, one group of rational-emotive therapists who were members in the Institute of Rational Emotive Therapy, and one group of personal construct therapists, who were members of the International Network of Personal Construct Theorists. Therapists from both groups were asked to do three things. First, therapists were asked to complete a copy of the Therapist Attitude

Questionnaire (TAQ) created by DisGiuseppe and Linscott (1993) to assess Mahoney's distinction between rationalist and constructivist therapy orientations. Second, therapists were asked to compare their own therapy orientations to six prominent psychotherapists known for their predominantly rationalist (e.g., Aaron Beck, Albert Ellis) or constructivist (e.g., George Kelly; Michael Mahoney) orientations. And third, therapists were asked to rate their therapeutic style along descriptors associated with a rationalist orientation (e.g., logical, directive, educational) and with a constructivist orientation (e.g., symbolic, metaphorical, meaning-oriented).

Results from this study were consistent with the translation of epistemic commitments into the practice of therapy. For example, personal construct therapists demonstrated a significantly higher commitment to a constructivist epistemology, and a lower commitment to a rationalist perspective, compared with rational-emotive therapists. Additionally, personal construct therapists demonstrated a stronger identification with notable constructivist therapists, and had a tendency to depict their therapeutic styles along dimensions more closely aligned with constructivist therapy.

Further efforts to build upon these findings can be developed in relation to the conceptualization by Fernandez-Alvaraez, Garcia, Bianco, & Santoma (2003) of therapists' personal style. These authors describe therapists' personal style as the, ". . . imprint left by each professional in his work" and note that it "has a relevant impact on the outcomes of the treatment" (p. 117). Given that therapy style is a general principle for any theoretical orientation, Fernandez-Alvaraez et al. (2003) define the personal style of the therapist as,

> the set of characteristics that each therapist applies in every psychotherapeutic situation, shaping its basic attributes. It is made up of the peculiar conditions that

lead the therapist to behave in a particular way in the course of his professional work. (p.117)

This definition can be considered in relation to how therapy style manifests differently in various theoretical approaches. For example, Granvold (1996) notes the marked differences between cognitive behavioral and constructivist therapy styles regarding how these different orientations view treatment goals. Whereas cognitive behavioral therapists target cognitions for modification and subsequently educate the client on the impact of cognitions in functioning and change in a more directive manner, constructivist therapists are less directive, more exploratory, less problem-focused, and more experiential (Granvold, 1996). While these differences in therapy style according to cognitive behavioral versus constructivist therapy orientations have been noted in the literature, their has not been a clear investigation and discussion in the literature regarding the connection between differences in therapists' epistemic styles (rationalist versus constructivist) and how that may translate into differences in therapists' therapy style.

Such differences in therapy style have been measured by an instrument designed to assess "the set of characteristics" (Fernandez-Alvaraez et al., 2003) of each therapist that make up their therapy style. Fernandez-Alvaraez et al. (2003) created such a measure of therapists' personal style (Personal Style of the Therapist Questionnaire) that measures five specific dimensions of therapists' style (Instructional, flexibility-rigidity; expressive, distance-closeness; engagement, lesser degree-greater degree; attentional, broad focused-narrow focused; operative, spontaneous-planned). This measure is used in the current study to investigate the influence of therapists' epistemic style (rationalist versus constructivist) on their therapy style according to these subscales.

Thus, the first hypothesis makes predictions regarding the influence of therapist epistemology on therapists' particular therapy style. According to these authors' definitions, our first hypothesis is that therapist epistemology will be a significant predictor of their therapy style. More specifically, therapists with rational epistemologies would have a therapy style depicting more rigidity on the Instructional subscale, more distance on the expressive subscale, a lesser degree of engagement, more narrow focus on the attentional subscale, and more planned on the operative subscale, compared to therapists with a constructivist epistemology. By comparison, therapists with constructivist epistemologies would have a therapy style reflecting more flexibility on the Instructional subscale, more closeness on the expressive subscale, a greater degree of engagement, more broad focus on the attentional subscale, and more spontaneous on the operative subscale compared to therapists with rationalist epistemologies. This first hypothesis is based on the notion that rationalist therapists tend to be more instructive, persuasive, analytical, and technically instructive than the constructivist therapies (R. Neimeyer, 1993b). Additionally, constructivist therapies are thought to be more personal, reflective, and elaborative than the rationalist therapies, with constructivist therapists attempting to facilitate clients' personal construction of new meanings in the context of a safe and caring relationship. (Lyddon, 1990).

Working Alliance

These differences in therapy style reflect broader differences regarding the nature and role of the therapeutic relationship. In addition to therapy style, cognitive behavioral and constructivist therapies maintain notable differences in the nature of the working alliances they form with their clients. The notion of the working alliance is pantheoretical, with working alliance being considered a common factor in different

types of therapies (Horvath & Luborsky, 1993). While therapy style refers to the characteristic patterns of behavior that typify the therapists' behavior, the working alliance specifically addresses the nature of the interaction and relationship occurring between the therapist and their clients.

Working alliance is defined by Bordin (1979) as the combination of (a) client and therapist agreement on goals (Task), (b) client and therapist agreement on how to achieve the goals (Goal), and (c) the development of a personal bond between the client and therapist (Bond). According to Bordin (1979), Tasks are the therapeutic processes that take place during each session, with the development of the Task component occurring when the therapist and client both comprehend significance and effectiveness of the tasks. Goals are stated to be the mutually agreed upon outcomes of therapy by the client and therapist. The Bond component represents the key elements of rapport: trust, acceptance, and confidence. Bordin's (1979) definition underlies a measure of working alliance developed by Horvath & Greenberg (1986), which assess these three specific dimensions of the working alliance in counseling and psychotherapy.

While rationalist and constructivist therapies both value the working alliance, empirical literature has suggested that rationalist and constructivist therapies value different qualities within the working alliance. For example, a conceptual depiction of the differences between cognitive behavioral and constructivist therapists in the therapeutic relationship comes from Beck, Rush, Shaw, and Emery (1979), who state that the therapist is a "guide who helps the client understand how beliefs and attitudes influence affect and behaviour" (p.301). This assertion highlights the differences

between cognition, affect and behavior in Beck's approach, compared to the holistic

perspective maintained in the constructivist approach.

Faidley and Leitner (1993) further note that in constructivist therapy,

the therapist is not the guru leading the client to health. Both the client and
therapist embark on an uncharted journey that will require them to enter unknown
territory, to struggle, to bear fear and pain, and hopefully, to grow. (p. 6-7)

Further empirical studies have addressed key distinctions between cognitive

behavioral and constructivist therapies with regard to emphasis on working alliance. For

example, a study by Winter and Watson (1999) provided support for the assertion that

there are, in fact, differences between constructivist and rationalist cognitive therapies in

relation to therapist perceptions of the therapeutic relationship. These authors found that

constructivist therapists were "less negatively confrontative, intimidating, authoritarian,

lecturing, defensive, and judgmental" (p.17). In addition, constructivist therapists had

greater use of exploration, silence, open questions and paraphrase, along with lower use

of approval, information and direct guidance, compared to cognitive behavioral

therapists.

Another example comes from Mahoney & Lyddon (1988) who point out key

conceptual differences between rationalist and constructivist therapies in relation to the

working alliance. These authors suggest that rationalist therapists conceptualize the

therapeutic relationship as involving "the service or delivery of direct guidance and

technical instruction" (p. 221). Thus, for rationalist therapists, G. Neimeyer et al. (2005)

suggest that the

therapeutic relationship is oriented more towards the delivery of guidance,
technical instruction, and behavioral rehearsal regarding the role of cognitions in
the development and maintenance of emotional distress. The use of therapist-
directed exercises, structured interventions, and directed homework assignments

illustrates the relative emphasis placed on the development of technical skills. . . (p. 14)

Additionally, the working alliance has been noted to have an important role in cognitive behavioral therapy (Raue, Goldfried, & Barkham, 1997). Beck (1995), for example, has stipulated that "Cognitive therapy requires a sound therapeutic alliance" (Beck, 1995, p. 5). Further, consensus on the tasks and goals of therapy is inherent in Beck's (1979) basic notion of collaborative empiricism, which highlights the collaboration between client and therapist in achieving therapeutic gains.

This component of the working alliance that is highly valued within the rationalist therapies falls in line with Bordin's (1979) definitions of the *Task* and *Goal* components of the working alliance.

Alternatively, Mahoney & Lyddon (1988) depict constructivist therapists as viewing the human connection within the therapeutic relationship as a crucial component of therapeutic change, a connection that "functions as a safe and supportive home base from which the client can explore and develop relationship with self and world" (p. 222). Similarly, Granvold (1996) notes that

> The development of a quality therapeutic relationship with such characteristics as acceptance, understanding, trust and caring is a prime objective of constructivists. (p. 350)

This is directly in line with Bordin's (1979) depiction of the *Bond* component of the working alliance, as comprising the key elements of rapport: trust, acceptance, and confidence. Additionally, constructivists tend to have less narrowly defined tasks or goals compared to cognitive behavioral therapists (Granvold, 1996).

Thus, there are key distinctions between rationalist and constructivist therapists' conceptualizations regarding the nature and role of the therapeutic relationship or

working alliance in negotiating the therapeutic change. While both cognitive behavioral and constructivist therapies promote a collaborative relationship with the client, there are noted differences in how this manifests in these two therapy orientations (Granvold, 1996).

Thus, the second hypothesis in the current study concerns the relationship between therapist epistemology and their perceived levels of working alliance, according to the subscales of Task, Goal, and Bond. We hypothesize that therapist epistemology will be a significant predictor of working alliance (Task, Bond, and Goal). More specifically, therapists with rationalist epistemologies will have higher scores on the Task and Goal subscales and lower on the Bond subscale than the constructivist epistemologies.

Therapy Interventions

Both rationalist and constructivist therapies view psychotherapy as occurring within a therapeutic relationship, however the nature of this relationship is somewhat different (e.g., instruction versus exploration, correction versus creation, etc.). Thus, the specific techniques use by rationalist and constructivist therapists might be expected to fit within these broad relationship differences.

For example, Mahoney and Lyddon (1988) point out that rationalist interventions tend to focus on the "control of the current problems and their symptomatology" (p.217). In contrast, constructivist interventions tend to focus on "developmental history and current developmental challenges" (p.217). They highlight the key differences between these two therapy interventions as reflecting a "problem-versus-process" distinction that itself is reflected in the implicit and explicit goals of these two types of therapy. Rationalists are noted to guide the direction of therapy according to the presenting issues

and particular goals, compared to constructivists who are more inclined to permit the self-organizing processes of the client to impact the path of therapy.

Additionally, Granvold (1996) notes that cognitive behavioral techniques have a more firm application of methodology and a more directive approach of techniques than constructivist techniques. Traditional cognitive behavioral interventions are geared at controlling, altering or terminating negative emotions (e.g., anxiety, depression, anger, worry, etc.). In contrast, constructivist interventions maintain more creative than corrective interventions (e.g., exploration, examination, and experience).

Empirical evidence for these conceptual distinctions between cognitive behavioral and constructivist therapy techniques have been noted by Winter and Watson (1999). These authors found that "the distinctiveness of the two therapeutic approaches was provided by the blind classification of the therapy transcripts" (p. 17). More specifically, the authors provided transcripts of 2 different types of therapy sessions, rationalist cognitive therapy or personal construct therapy, which were "blindly differentiated by leading proponents of the therapies concerned" (p. 1). Findings indicated that cognitive behavioral therapists used interventions that seemed to be "more challenging, directive and to be offering interpretations that do not always lead directly from what the client has said" (p. 17). Additionally, constructivist therapists were

> much looser in their construing; ask questions rather than make statements; and use interpretation more as a way of checking out their own construing or as a means of helping the client elaborate his or her construing. (p.17)

Therefore, there is tentative empirical work that seems to support the conceptual distinctions made between the underlying epistemologies of these two orientations and possible differences in the techniques used in practice that follow from the different perspectives.

Thus, the third and final hypothesis is in relation to the therapist use of specific therapeutic techniques. When considering traditional cognitive behavioral therapies, interventions are geared at controlling, altering or terminating negative emotions (e.g., anxiety, depression, anger, worry, etc.). In contrast, the constructivist approach tends towards interventions that are more process oriented compared to cognitive behavioral therapies being more focused on surface-structure problem resolution. Constructivist interventions are considered more creative compared to cognitive behavioral interventions being more corrective. Additionally, the cognitive behavioral approach is noted to have a more distinct problem orientation, a stricter adherence to the application of methodology, and a more directive approach, compared to the constructivist approach. Whereas constructivist therapists are considered more metaphoric, approximate, exploratory and intuitive in therapy techniques compared to the cognitive behavioral approach (Granvold, 1996).

Winter and Watson (1999) additionally cite empirical evidence for the distinction between cognitive behavioral and constructivist therapy techniques. In particular, findings suggested that cognitive behavioral therapists used more challenging and directive interventions compared to constructivist therapist. On the other hand, constructivist therapists asked more questions and used interpretation as a means of exploration of the client's meaning making system.

Consequently, psychotherapy research investigations have found a theoretical allegiance according to what techniques therapists use in their practice. In particular, there have been distinctions noted between cognitive behavioral and constructivist therapies in this regard (Winter & Watson, 1999). For example, personal construct

therapists "showed less negative attitudes toward their clients. . . were less negatively confrontative, intimidating, authoritarian, lecturing, defensive, and judgmental" (p. 17) compared to rationalist therapists. Personal construct therapists were also found to use techniques that had greater use of exploration, open questions, and paraphrase, compared to rationalists. The current study plans to extend this line of research according to therapist epistemology.

Thus, for the third hypothesis, epistemology will be a significant predictor of therapy techniques used by the therapists in the sample. More specifically, therapists with rationalist epistemologies are expected to report using techniques associated with cognitive behavioral therapy (e.g., advice giving) more than constructivist epistemologies, and therapists with constructivist epistemologies will report using techniques associated with constructivist therapy (e.g., emotional processing) more than therapists' with rationalist epistemologies. One purpose of the current work is to further examine these differences to determine whether these epistemological differences relate to the selection of specific interventions that fit more with the corrective and directive orientation of rationalist therapists or exploratory and creative orientation of constructivist therapists.

Thus, in the present study, we investigated the potential influence of epistemic style (rational versus constructivist) on therapist therapy style, nature of the working alliance, and use of specific interventions. These therapist variables were included according to their noted importance in translating epistemology into practice (G. Neimeyer, et al. 2005). The specific relationship between these variables and therapists' epistemic styles are summarized below.

Overall, the current study seeks to investigate therapist epistemology (rationalist versus constructivist) as a predictor of (1) therapy style: therapists with rational epistemologies might show more rigidity on the Instructional subscale, more distance on the expressive subscale, a lesser degree of engagement, more narrow focus on the attentional subscale, and more planned on the operative subscale, compared to therapists who might tend towards a therapy style reflecting more flexibility on the Instructional subscale, more closeness on the expressive subscale, a greater degree of engagement, more broad focus on the attentional subscale, and more spontaneous on the operative subscale; (2) emphasis on working alliance: therapists with rationalist epistemologies will have higher scores on the Task and Goal subscales and lower on the Bond subscale than the constructivist epistemologies; (3) use of specific therapy techniques: rationalist epistemologies are expected to report using techniques associated with cognitive behavioral therapy (e.g., advice giving) and therapists with constructivist epistemologies will report using techniques associated with constructivist therapy (e.g., emotional processing) more. The expected direction of the findings is in accordance with the literature discussed that warrants potential distinctions according to therapist epistemology.

CHAPTER 3
METHODS

Participants

Participants were primarily professional psychologists recruited online through membership in different professional organizations. Participants were mostly recruited from the American Psychological Association (APA) - Practice Organization online practitioner directory (approximately 15,057 members).

Participant solicitation emails were also sent to APA Division 17 (Counseling Psychology, 355 members), APA Division 29 (Psychotherapy, approximately 224 members), APA Division 32 (Humanistic Psychology, approximately 130 members), The North American Personal Construct Network (NAPCN) list serve (approximately 95 members), the Albert Ellis Institute email list (approximately 57 members), in addition to a number of APA-approved counseling centers. The solicitation email also encouraged participants to forward the email survey on to other eligible practitioners; therefore the response rate of approximately 13.5% has to be considered with reservations.

Therapist participation was voluntary and all participants were required to provide informed consent form prior to participating in this study. All inventories were completed online and submitted to an online database. It took therapists approximately 30 minutes to complete the instruments, and the study was conducted in accordance with APA ethical guidelines. See procedures below.

The sample consisted of 1151 therapists (733 female, 418 male) with a mean age of 45.09 (SD = 12.54). The sample was primarily Caucasian, 88.8% (N = 1030), followed

by Multiracial, 2.9% (N = 34), Hispanic, 2.7% (N = 31), African American, 2.4% (N = 28), Asian American, 2.1% (N = 24), and Other, 1.1% (N = 13).

Participants were asked to indicate the level of their highest degree, which consisted of primarily PhDs, 60.1% (N = 700), followed by MA/MS, 18.6% (N = 216), PsyD, 11.0% (N = 128), BA/BS, 4.3% (N = 50), EdD, 1.7% (N = 20), MSW, 1.4% (N = 16), and Other, 2.9% (N = 34). Additionally, the average year participants obtained their highest degree was 1992.55 (SD = 11.1), along with the average total number of years spent in clinical practice being 14.01 (SD = 11.03). The majority of participants were no longer in school, 93.5% (N = 1105) and only 6.5% (N = 77) were graduate students.

Participants were additionally asked about their specialty areas with the majority indicating that they were psychologists, 80.8% (N = 939) followed by mental health counselors, 6.0% (N = 70), marriage and family therapists, 2.2% (N = 26), social workers, 1.0% (N = 12), graduate students, 5.2% (N = 60), and Other, 4.8% (N = 55). When asked about their primary employment setting, the largest percentage of participants indicated they were in private practice, 40.4% (N = 466), followed by a university academic department, 11.4% (N = 132), hospital, 10.8% (N = 125), university service delivery department, 10.6% (N = 122), mental health care, 7.7% (N = 89), community center, 4.0% (N = 46), school, 3.4% (N = 39), and other, 11.7% (N = 134).

In addition, participants were asked their dominant theoretical orientation and most participants indicated that their dominant theoretical orientation was cognitive behavioral, 35.9% (N = 414), followed by integrative, 18.1% (N = 209), psychodynamic, 15.2% (N = 175), interpersonal, 7.6% (N = 88), humanistic, 7.2% (N = 83), constructivist, 3.2% (N =

37), existential, 2.2% (N = 25), rational emotive, 1.7% (N = 20), gestalt, 0.7% (N = 8), and other, 8.2% (N = 95).

Procedures

Members from these divisions or organizations were sent an online survey containing an informed consent, a brief demographics sheet, and the five aforementioned measures (TAQ-SF, CAS, PST-Q, WAI-S, & TL). Participants were asked to read and sign the informed consent form. Once participants completed the surveys and submitted their responses, they were directed to read a short debriefing that described the nature of the study. Participants answered one of four different versions of the main questionnaire where the questions were ordered differently to test for the possibility of order effects. Participants were debriefed at the end of the study and were provided with the contact information for further inquiries.

Measures

Therapist Attitudes Questionnaire-Short Form

The TAQ-SF, developed by G. Neimeyer and Morton (1997), is a revision of the Therapist Attitudes Questionnaire (TAQ) developed by DisGiuseppe and Linscott (1993). The TAQ-SF measures philosophical, theoretical, and technical dimensions of rationalist and constructivist therapies. The instrument is self-administered, contains 16 items, eight items pertaining to a Rationalist commitment (e.g., "Reality is singular, stable and external to human experience") and eight items pertaining to a Constructivist commitment, (e.g., "Reality is relative. Realities reflect individual or collective constructions of order to one's experiences"), and requires approximately 5 minutes to complete. Respondents are asked to rate the degree to which they agreed or disagreed with each item on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly

agree). The TAQ-SF replicates the basic factor structure of the original TAQ and has

shown its predictive validity by predicting the therapeutic identifications and descriptions

of a group of practicing professionals (G. Neimeyer & Morton, 1997). TAQ-SF scores in

the present study yielded a Chronbach's alpha of .72 for rationalist scale and a

Chronbach's alpha of .63 for the constructivist scale.

Constructivist Assumptions Scale (CAS)

The Constructivist Assumptions Scale (CAS) was developed by Berzonsky (1994),

and was designed to assess constructivist epistemological assumptions (e.g., "Truth is

relative. What is true at one point in time may not be true at another"). This is a 12-item

self-report measure with each item being rated on a 5-point Likert scale ranging from 1

(strongly disagree) to 5 (strongly agree). The CAS has internal reliability estimated to be

.61, and a 2-month test-retest reliability (N = 78) of .68. CAS scores in the present study

yielded a Chronbach's alpha of .72.

Personal Style of the Therapist Questionnaire (PST-Q)

The Personal Style of the Therapist Questionnaire (PST-Q) was developed by

Fernandez-Alvarez et al. (2003), and was created to assess "the set of characteristics that

each therapist applies in every psychotherapeutic situation, thus shaping the main

attributes of the therapeutic act" (p.117). The questionnaire assesses five different

dimensions: flexibility-rigidity (Instructional subscale), distance-closeness (expressive

subscale), lesser engagement-greater engagement (engagement subscale), broad focused-

narrow focused (attentional subscale) and spontaneous-planned (operative subscale), see

Table 3-1.

This measure is a 36-item self-report measure intended to be filled out by therapists with answers rated on a scale ranging from 1 to 7, where '1' represents total disagreement and '7' represents total agreement with each statement. The measure has shown a test-retest reliability of .79, with Chronbach's reliability coefficients for each subscale, as follows; Instructional, .69; expressive, .75; engagement, .78; attentional, .80; operative, .78. Factor Analysis revealed a KMO = .756.

Working Alliance Inventory-Short Form (WAI-S)

The Working Alliance Inventory (WAI), developed by Horvath & Greenberg (1986), is a 36-item questionnaire that can be administered to both clients and therapists and is rated on a 7-point Likert type scale with (1 = never, 7 = always). Ratings on this measure yield Task, Goal, and Bond subscale scores (12 items for each subscale), along with a total score that consists of the average across all items. Horvath & Greenberg (1986) demonstrated adequate reliability for the WAI, with internal consistency estimates of alpha = .93 for overall client score (with subscale alphas of .85 to .88) and .87 for the overall therapist score (with subscale alphas of .68 to .87). Content validity has been supported through both rational (expert raters agreed that the items reflect the three constructs) and empirical (multi-trait multi-method analyses) methods. Tracey and Kokotovic (1989) proposed a client and therapist Working Alliance Inventory-Short Form (WAI-S), which contains 4 items per subscale (Task, Goal, and Bond), as well as average overall WAI-S scores, demonstrating high reliability with alpha levels similar to, and even better than the WAI for the client subscales and overall average scores (Task, alpha = .90; Bond, alpha = .92; Goal, alpha = .90; and General Alliance, alpha = .98) and therapist subscales and overall average scores (Task, alpha = .83; Bond, alpha = ..91; Goal, alpha = .88; and General Alliance, alpha = .95).

The WAI highlights the collaborative efforts of the client and therapist, and has three parallel forms: Client, Therapist, and Rater (or observer). In the current study, we are interested in a therapist sample and will focus exclusively on the therapists' self-report on this measure. The strengths of the WAI are its usefulness in different therapeutic methods, lack of outcome-related items, and extensive use in the literature (Vandyke, 2003). The WAI-S is used in this study.

Techniques List (TL)

The Techniques List measure was adapted from Hollis (1995), who catalogued an extensive list of counseling and psychotherapy techniques representing a broad spectrum of philosophical bases. In order to refine this extensive list according to techniques used specifically by cognitive behavioral and constructivist therapy orientations, we recruited counseling psychology graduate students to read through the total list of 108 therapy techniques and rate the extent to which each technique is used by each therapeutic approach (cognitive behavioral and constructivist), using a 5-point Likert type scale (1 = Never or Almost Never; 5 = Always or Almost Always).

Sixteen counseling psychology graduate students participated in these ratings (6 males, 10 females), with the average age = 28.44 (SD = 2.67). Results of a paired differences analysis for all 108 items indicated that there were 77 techniques rated as being used with significantly differential frequency by cognitive behavioral and constructivist therapies. We then divided this distribution of 77 techniques into quartiles and retained the top and bottom quartiles. This resulted in 20 cognitive behavioral techniques (e.g., advice giving, rational restructuring) and 20 constructivist techniques (e.g., emotional processing, reflection) that were rated most significantly different (cognitive behavioral versus constructivist). This final list of 40 items of therapy

techniques (20 cognitive behavioral techniques; 20 constructivist techniques) was used in the current study.

These 40 items were listed alphabetically and participants were asked to rate the extent to which they use each technique in their practice of therapy along a 5-point scale (1 = Never or Almost Never; 5 = Always or Almost Always). The ratings of the 20 rationalist items were summed and a mean was calculated to reflect the average frequency of using rationalist interventions (possible range = 1−5), and the same procedure was applied in relation to the 20 constructivist interventions (possible range = 1−5).

The raw data was used to conduct a confirmatory factor analysis on the Techniques List measure. The current analysis was examined for multivariate normalcy and the assumptions were met. All kurtosis estimates for the variables fell between 1 and −1 variables except constructivist items 12, 13, 16, and 20 and cognitive behavioral item 3, which had a kurtosis values between 2 and -2. Consequently, these five items were removed from the measure prior to running the confirmatory factor analysis.

A Confirmatory factor analysis was utilized to fit a model of 2 types of therapy technique factors: constructivist therapy techniques and cognitive behavioral therapy techniques. Thirty-five indicators were included in the model (16 constructivist techniques and 19 cognitive behavioral techniques). After running the analysis with the 35 items, and two factors (constructivist techniques and cognitive behavioral techniques), factor loadings revealed 8 items (6 constructivist items and 2 cognitive behavioral items) loading at less than .40. These 8 items were removed and the confirmatory factor analysis was then re-run with the remaining 27 items (10 constructivist and 17 cognitive

behavioral items). No further model modifications were made because there was no

other compelling theoretical rationale for additional changes and these 27 items were

used in all subsequent analyses using this measure. Items were constrained to load only

on to their respective factors (constructivist techniques and cognitive behavioral

techniques), and the two factors were allowed to correlate.

The measurement model was examined utilizing LISREL (8.7) and was evaluated

based on multiple goodness of fit indices (standardized root mean square residual

(SRMR), normed fit index (NFI), comparative fit index (CFI) and the root-mean-square

error of approximation (RMSEA)), with the maximum likelihood as the estimation

method. Examination of the results revealed that the fit of the model was a fairly good fit

although not necessarily superior fit for the data, χ^2 (323, N = 914), = 2249.37, $p < .001$,

SRMR = .066, RMSEA = .08, NFI = .91, and CFI = .93. Values greater than .90 are

generally accepted as support for a well-fitting model for goodness of fit indices CFI, and

NFI (Grimm & Yarnold, 1998), with a good-fitting model suggested when the SRMR is

.08 or less (Hu & Bentler, 1999). Values of the RMSEA of .05 or less indicate a close fit

and values from .05 to .08 indicate a fair fit. The final standardized solution factor

loadings were all significant ($p < .05$) and ranged from .40 to .81 for the constructivist

techniques and from .47 to .71 for the cognitive behavioral techniques. The correlation

between the two factors was -.30. $p < .03$.

Table 3-1 Personal style of the therapist questionnaire (PST-Q): subscale directions

Subscales	Low	High
1. Instructional	Flexibility	Rigidity
2. Expressive	Distance	Closeness
3. Engagement	Lesser degree	Greater Degree
4. Attentional	Broad focus	Narrow focus
5. Operative	Spontaneous	Planned

CHAPTER 4
RESULTS

Results from the current study are described below. First, I will discuss

measurement issues, followed by sample descriptives, then general correlations, and

finally the regression analyses that address each of the predictions concerning therapist

style, therapeutic relationship and therapeutic interventions in relation to epistemic style.

Descriptive and Preliminary Analyses

Multivariate analyses of variance were conducted on the 5 measures used in the

current study (CAS, TAQ-SF, PST-Q, WAI-S, and TL) suggested that there were no

differences in the mean scores of the variables of interest among the four types of

questionnaire forms (all ps > .003). Thus for all analyses, the data from four different

forms were combined.

Measurement Reliability

Measurement reliabilities for the CAS, TAQ-SF, PST-Q, WAI-S and techniques

list scores appear in Table 4-1. Chronbach's coefficient alpha for the CAS of .72, was

comparable to Berzonsky's (1994) finding (ranging from .61−.65). Reliability findings

for the TAQ-S were alpha of .72 for the rationalist subscale and .63 for the constructivist

subscale. This is comparable to previous reports (G. Neimeyer & Morton, 1997).

Reliability for the PST-Q indicated an alpha level of .65 for the Instructional

subscale, .65 for the expressive subscale, .68 for the engagement subscale, .38 for the

attentional subscale, and .75 for the operative subscale. This is comparable to Fernandez-

Alvarez et al. (2003) (Instructional, .69; expressive, .75; engagement, .78; attentional,

.80; operative, .78) with the exception of the attentional subscale, which was lower in the current study. Due to the weak nature of the alpha level on the attentional subscale, attempts were made to improve the internal reliability by removing poorly inter-related items. However, the removal of any single weak performing item failed to increase the alpha level above a .47. Thus, a decision was made to use the modified 5 item attentional subscale with an alpha level of .47 in all analyses in the study.

Reliability findings for the WAI-S revealed a Chronbach's coefficient alpha of .75 for the overall score, .80 on the Task subscale, .71 on the Bond subscale and .61 on the Goals subscale (all at the $p < .001$ level). This is also comparable to Tracey and Kokotovic (1989) findings (therapist subscales and overall average scores: General Alliance, alpha = .95; Task, alpha = .83; Bond, alpha = .91; and Goal, alpha = .88).

Finally, reliability for the Techniques List revealed a Chronbach's coefficient alpha of .91 for the Cognitive Behavioral Techniques subscale and .84 for the Constructivist Techniques. This was the first reliability estimate on this new measure.

Correlational Analyses

Person Product Moment correlations, using a criterion level of .05 (1-tailed), were computed between the two epistemology subscales (Rationalist and Constructivist) and each of the criterion variables in an attempt to confirm that the relationships were in the predicted directions. A Pearson Product Moment correlation was first conducted between the CAS and the TAQ-SF to verify that therapists with higher scores on the constructivist epistemology subscale scored higher on the CAS compared to therapists with higher scores on the rationalist epistemology subscale. Results were in the predicted directions, revealing a significant positive correlation between the TAQ-SF constructivist subscale and the CAS, r = 0.30, $P \leq 0.001$ and a significant negative correlation between the TAQ-

SF rationalist subscale and the CAS, r = -0.36, P ≤ .001. Additionally, a Pearson Product

Moment correlation was conducted on the TAQ-SF rationalist and constructivist

subscales to justify their use as two separate continuous subscale scores, r = -.09, *P* ≤

.001.

For therapist style, the rationalist subscale was significantly negatively correlated

with the expressive (r = -0.21, *P* ≤ .001) and engagement (r = -0.26, *P* ≤ .001) subscales,

which were in the predicted directions. The rationalist subscale was also significantly

positively correlated with the Instructional (r = 0.07, *P* ≤ .028), attentional (r = 0.41, *P* ≤

.001), and the operative subscale (r = 0.48, *P* ≤ .001), which were also in the predicted

directions. The constructivist subscale was significantly negatively correlated with the

Instructional (r = - 0.10, *P* ≤ .001), attentional (r = -0.15, *P* ≤ .001), and operative

subscales (r = -0.22, *P* ≤ .001), all in the predicted directions. The constructivist

subscale was additionally significantly positively correlated to the expressive (r = 0.34, *P*

≤ .001) and engagement subscales(r = 0.14, *P* ≤ .001) in the predicted directions. See

Table 4-2.

For the WAI-S, rationalist epistemologies were not significantly correlated with

any of the WAI-S subscales (e.g., Task, Bond, and Goal), however, the constructivist

epistemology was significantly positively correlated with the Task (r = 0.12, *P* ≤ .001),

Bond (r = 0.19, *P* ≤ .001), and Goal (r = 0.08, *P* ≤ .012) subscales of the WAI-S, with

subscales in the predicted direction.

Finally, when looking at types of techniques therapists use in therapy, the

rationalist epistemology was significantly negatively correlated with the use of

constructivist techniques (r = -0.32, *P* ≤ .001) and significantly positively correlated with

the use of cognitive behavioral techniques (r = 0.43, $P \leq$ .001), which was in the predicted directions. On the other hand, constructivist epistemologies were significantly positively correlated with the use of constructivist techniques (r = 0.22, $P \leq$ .001), which was in the predicted direction; however, constructivist epistemology was not significantly correlated with cognitive behavioral techniques. See Table 4-2.

Regression Analyses

In order to assess the capacity of the data to be in line with the normality assumptions of multiple regression, the data was subjected to tests of skewness and kurtosis. Results of these analyses indicate that the assumptions for multivariate normalcy were met. All skewness and kurtosis estimates for the variables fell between 1 and −1 except for the constructivist subscale which had a kurtosis value of 1.569.

In addition, alpha levels were protected by conducting Bonferroni corrections (dividing the conventional alpha of .05 by the number of criterion variables), which results in a more conservative test of they hypotheses. Please see Table 4-3 for overall means and standard deviations for each of the measures.

Hypothesis 1

The first hypothesis concerned therapist epistemology as a predictor of therapy style. More specifically, that therapists with rational epistemologies would have a therapy style depicting more rigidity on the Instructional subscale, more distance on the expressive subscale, a lesser degree of engagement, more narrow focus on the attentional subscale, and more planned on the operative subscale compared to therapists with a constructivist epistemology. Thus, for the first hypothesis, a multiple linear regression analysis was conducted to determine if therapist epistemology was a significant predictor

of the criterion variables (therapist therapy style) using the five subscales of the PST-Q (Instructional subscale, expressive subscale, engagement subscale, attentional subscale, and operative subscale). Separate regression analyses were conducted for each of the five PST-Q scores measuring therapy style. As was previously described, epistemology will be operationalized as two separate continuous subscale scores (rationalist and constructivist) in all regression analyses.

Instructional style

The epistemology scores accounted for significant variation in Instructional (therapy style) scores, $F(2, 1061) = 7.06$, $p < .001$ ($R^2 = .013$). The standardized beta coefficient for the rationalist epistemology ($\beta = .053$) was in the positive direction, but was not significant, $t(1061) = 1.73$, $p < .084$. The standardized beta coefficient for the constructivist epistemology ($\beta = -0.097$) was significant and in the negative direction for the Instructional subscale, $t(1061) = -3.15$, $p < .002$. The direction of effect indicated that the more a therapist endorsed constructivist epistemology, the less likely that therapist was to use an instructional approach to therapy. This supported the hypothesis that a constructivist epistemology tends toward the direction of flexibility on the Instructional subscale, however, the small effect size of approximately 1% of the variance needs to be considered.

Expressive style

Epistemology was also a significant predictor of the therapy style along the expressive subscale (e.g., amount of distance versus closeness), $F(2, 1080) = 94.27$, $p < .001$ ($R^2 = .15$). The standardized beta coefficient ($\beta = -0.177$) was significant for the rationalist epistemology $t(1080) = -6.28$, $p < .0001$ and in the negative direction, whereas the significant standardized beta coefficient for the constructivist epistemology ($\beta = $

0.326), was significant $t(1080) = 11.56$, $p < .0001$ and in the positive direction along the expressive subscale. This supported the hypothesis that the rationalist epistemology tends towards distance on the expressive subscale, whereas, the constructivist epistemology tends towards greater closeness on the expressive subscale.

Engagement style

Epistemology was also significant predictor of the therapy style along the engagement subscale, $F(2, 1096) = 47.26$, $p < .001$ ($R^2 = .08$). The significant standardized beta coefficient ($\beta = -0.245$) for the rationalist epistemology, $t(1096) = -8.42$, $p < .001$, was in the opposite direction compared to the significant standardized beta coefficient ($\beta = 0.119$) for the constructivist epistemology, $t(1096) = 4.08$, $p < .001$, along the engagement subscale. This supported the hypothesis that the rationalist epistemology tends towards a lesser degree of engagement on the engagement subscale and the constructivist epistemology tends towards a greater degree of engagement on the engagement subscale.

Attentional style

Epistemology was also significant predictor of the therapy style along the attentional subscale (e.g., broad versus narrow focus), $F(2, 1096) = 118.33$, $p < .001$ ($R^2 = .18$). The significant standardized beta coefficient ($\beta = 0.396$) for the rationalist epistemology $t(1096) = 14.41$, $p < .001$, was in the positive direction; whereas the significant standardized beta coefficient ($\beta = -0.129$) for the constructivist epistemology $t(1096) = -4.12$, $p < .001$, which was in the negative direction along the attentional subscale. This supported the hypothesis that the rationalist epistemology has more of a leaning towards a narrow focus on the attentional subscale, and the constructivist epistemology leans more towards a broad focus on the attentional subscale.

Operative style

Lastly, epistemology was a significant predictor of the therapy style along the operative subscale (e.g., spontaneous versus planned), $F(2, 1093) = 187.86$, $p < .001$ ($R^2 = .256$). The standardized beta coefficient ($\beta = 0.461$) for the rationalist epistemology was significant, $t(1093) = 17.61$, $p < .0001$ and in the positive direction, compared to the significant standardized beta coefficient ($\beta = -0.170$), for the constructivist epistemology, $t(1093) = -6.50$, $p < .0001$, which was in the negative direction along the operative subscale. This supported the hypothesis that the rationalist epistemology tends towards more planning on the operative subscale and the constructivist epistemology tends towards more spontaneity on the operative subscale.

Hypothesis 2

According to the second hypothesis (therapists with rationalist epistemologies will score higher on the Task and Goal subscales and lower on the Bond subscale than the constructivist epistemologies), another multiple linear regression model was conducted to determine if the same predictor variable (therapist epistemology) will influence therapists ratings of the criterion variables (working alliance) according to therapists' scores on the three subscales (Task, Goal, & Bond).

Task

Epistemology was a significant predictor of therapist emphasis on the working alliance along the Task subscale (e.g., client and therapist agreement on goals), $F(2, 1080) = 8.34$, $p < .001$ ($R^2 = .015$). The standardized beta coefficient for the rationalist epistemology ($\beta = 0.042$) was in the positive direction, but was not significant $t(1080) = 1.39$, $p < .164$. The significant standardized beta coefficient ($\beta = 0.120$) for the constructivist epistemology, $t(1080) = 3.96$, $p < .0001$, was also in the positive direction

along the Task subscale. This was inconsistent with the hypothesis that the rationalist epistemology would place a greater emphasis on the Task subscale in the working alliance than therapists with a constructivist epistemology. However, the small effect size of approximately 2% of the variance needs to be considered when interpreting these findings.

Goal

Epistemology was also a significant predictor of therapist emphasis on the working alliance along the Goal subscale (e.g., client and therapist agreement on how to achieve the goals), $F(2, 1093) = 4.92$, $p < .007$ ($R^2 = .009$). The significant standardized beta coefficient ($\beta = 0.065$) for the rationalist epistemology $t(1093) = 2.16$, $p < .031$, was in the positive direction. The significant standardized beta coefficient ($\beta = 0.075$) for the constructivist epistemology $t(1093) = 2.47$, $p < .014$, was also in the positive direction along the Goal subscale. This was again inconsistent with the proposed hypothesis that the rationalist epistemology would have stronger leanings towards the Goal subscale in the therapist emphasis on working alliance compared to therapists with a constructivist epistemology.

Bond

Lastly, epistemology was also a significant predictor of the therapist emphasis on the working alliance along the Bond subscale (the development of a personal bond between the client and therapist), $F(2, 1089) = 19.49$, $p < .001$ ($R^2 = .035$). The standardized beta coefficient for the rationalist epistemology ($\beta = -0.034$) was in the negative direction, but was not significant, $t(1089) = -1.15$, $p < .249$. For the constructivist epistemology, the standardized beta coefficient ($\beta = 0.179$) was significant $t(1089) = 5.99$, $p < .0001$, and in the positive direction along the Bond subscale. This

supported the hypothesis that the rationalist epistemology is less inclined towards

therapist emphasis on working alliance on the Bond subscale than the constructivist

epistemology.

Hypothesis 3

The third and final analysis is designed to address the prediction that epistemology

will be a predictor of therapist use of specific therapy techniques. More specifically, that

the rationalist epistemology will report using techniques associated with cognitive

behavioral therapy (e.g., advice giving) more than constructivist epistemologies, and

therapists with constructivist epistemologies will report using techniques associated with

constructivist therapy (e.g., emotional processing) more than therapists with rationalist

epistemologies). A multiple linear regression analysis was conducted to determine if the

predictor variable (therapist epistemology) will influence therapist ratings of the criterion

variables (therapy techniques).

Cognitive behavioral techniques

Epistemology was a significant predictor of cognitive behavioral therapy

techniques (e.g., advice giving), $F(2, 993) = 112.34$, $p < .001$ ($R^2 = .185$). The

standardized beta coefficient for the rationalist epistemology ($\beta = 0.430$) was significant,

$t(993) = 14.96$, $p < .001$ and in the positive direction. The standardized beta coefficient

for the constructivist epistemology ($\beta = 0.057$) was significant and in the positive

direction $t(993) = 1.98$, $p < .05$. This supported the hypothesis that the rationalist

epistemology would have stronger leanings of therapist use of cognitive behavioral

techniques when conducting therapy than constructivist epistemologies.

Constructivist techniques

Finally, epistemology was a significant predictor of constructivist therapy techniques (e.g., emotional processing), $F(2, 1012) = 80.82$, $p < .001$ ($R^2 = .138$). The standardized beta coefficient for the rationalist epistemology ($\beta = -0.297$) was significant $t(1012) = -10.09$, $p < .0001$ and in the negative direction. The standardized beta coefficient for the constructivist epistemology ($\beta = 0.195$) was significant $t(1012) = 6.63$, $p < .0001$, and in the positive direction. This supported the hypothesis that the constructivist epistemology would place a stronger emphasis on therapist use of constructivist techniques when conducting therapy than rationalist epistemologies.

Table 4-1. Internal consistencies for the CAS, TAQ-SF, WAI-S, PST-Q, and techniques list.

Scale	N	Alpha	P-Value
CAS	1113	0.70	.001
TAQ-Rational	1130	0.72	.001
TAQ-Constructivist	1138	0.63	.001
WAI-S-Total	1107	0.75	.001
WAI-S-Task	1146	0.80	.001
WAI-S-Bond	1145	0.71	.001
WAI-Goals	1149	0.61	.001
PST-Q-Instructional	1114	0.65	.001
PST-Q-Expressive	1135	0.65	.001
PST-Q-Engagement	1148	0.68	.001
PST-Q-Attentional	1148	0.47	.001
PST-Q-Operative	1146	0.75	.001
CBT Techniques	1033	0.91	.001
CON Techniques	1054	0.84	.001

Table 4-2 Pearson correlations for therapy style, working alliance, techniques & years of experience.

		Instructional Subscale	Expressive Subscale	Engagement Subscale	Attentional Subscale	*Operative Subscale*
Rationalist Epistemology	Correlation Sig. (2-tailed) N	.07 .03 1074	-.21 .00 1093	-.26 .00 1109	.41 .00 1109	*.48* *.00* *1105*
Constructivist Epistemology	Correlation Sig. (2-tailed) N	-.10 .001 1085	.34 .001 1104	.14 .001 1120	-.15 .001 1118	*-.22* *.001* *1117*
		Task Subscale	Bond Subscale	Goals Subscale	Cognitive-Behavioral	*Constructivist Techniques*
Rationalist Epistemology	Correlation Sig. (2-tailed) N	.03 .36 1104	-.06 .05 1105	.05 .07 1109	.43 .001 1004	*-.32* *.001* *1024*
Constructivist Epistemology	Correlation Sig. (2-tailed) N	.12 .001 1112	.19 .001 1111	.08 .01 1115	.03 .40 1011	*.22* *.001* *965*
		Years of Experience				
Rationalist Epistemology	Correlation Sig. (2-tailed) N	-.10 .00 1096				
Constructivist Epistemology	*Correlation* *Sig. (2-tailed)* *N*	*-.07* *.00* *1105*				

Table 4-3 Means and standard deviations for epistemology, therapy style, working alliance, and intervention selection.

	Rationalist Epistemology	Constructivist Epistemology	Instructional Subscale	Expressive Subscale	Engagement Subscale	Attentional Subscale	*Operative Subscale*
Mean	22.11	32.74	30.76	41.25	29.16	18.13	*21.55*
SD	5.12	3.42	6.17	6.18	5.11	3.66	*5.83*
N	1130	1138	1114	1135	1148	1148	*1146*
	Task Subscale	Bond Subscale	Goals Subscale	Cognitive-Behavioral Techniques	Constructivist Techniques		
Mean	*21.04*	*23.09*	*17.35*	*61.39*	*53.89*		
SD	*2.65*	*2.20*	*1.80*	*11.85*	*10.36*		
N	*1146*	*1145*	*1149*	*1024*	*983*		

CHAPTER 5
DISCUSSION

The discussion section is structured according to three parts. First, a discussion of the hypotheses and findings of the study are reviewed. Second, a more specific explanation of the findings is given with results interpreted within the context of the current literature on therapists' epistemology in relation to their therapy style, working alliance, and selection of particular therapeutic techniques. Finally, limitations and the implications of the current study were reported, along with suggestions for future research.

Summary of the Results

This study investigated the relationship between therapists' epistemological assumptions (rationalist versus constructivist) and their therapy style, working alliance, and use of particular therapeutic interventions. The specific questions in this study were whether therapist epistemology was a predictor of (1) therapy style, particularly, the extent of rigidity versus flexibility, distance versus closeness, lesser versus greater degree of engagement, narrow versus broad focus, and spontaneous versus planned styles of working with clients, (2) working alliance, in particular, agreement on tasks and goals and the development of a personal bond between the client and therapist, and (3) selection of particular therapeutic interventions, i.e., cognitive behavioral versus constructivist interventions. Each of these three questions will now be discussed in further detail in relation to the current findings, however; overall, most of the results of the current study supported the hypotheses in the predicted directions.

Epistemology (rationalist versus constructivist) was found to be a significant predictor of therapy style. In particular, the most robust findings provide provisional support for the notion that there are specific differences in the personal style of the therapist according to the therapists' epistemic assumptions. More specifically, the current study found that therapists with rationalist epistemologies tended towards more distance, a lesser degree of engagement, more narrow focus, and more planning in their sessions with clients, whereas, the constructivist epistemology tended towards having a greater degree of closeness, a greater degree of engagement, more broad focus, and more spontaneity in their therapy sessions.

Additionally, there was some support for the notion that therapists with constructivist epistemologies tend toward the direction of flexibility rather than rigidity in their therapy style; however this was not a particularly strong finding in the current study. These findings are helpful when considering the potentially inherent differences maintained by rationalist versus constructivist epistemologies according to therapy style. More specifically, current findings support the notion that cognitive-behavioral therapies, which represent the best depiction of the rationalist epistemology, maintain an "active-directive" and systematic approach to therapy (Granvold, 1988) with specific goals used to plan the course of the session (Mahoney & Lyddon, 1988). Additionally, the current study supported the depiction of cognitive-behavioral therapy style as distancing or attempting to control emotional communication between client and therapist through logical analysis (G. Neimeyer et al., 2005). On the other hand, R. Neimeyer (2005) describes the process of constructivist psychotherapy, which represents the clearest depiction of the constructivist epistemology, as,

> The process is something like two hikers laboring together through a deep wood along a footpath that winds gradually up the side of a steep knoll. And suddenly, at a moment that cannot be fully predicted by either hiker, they break upon a clearing that affords a panoramic view of the path they have taken and its relationship to the surrounding terrain. (p. 80)

This metaphorical representation of a constructivist psychotherapists' approach to therapy or therapy style highlights the importance of flexibility and spontaneity. Additionally, R. Neimeyer (2005) uses this metaphor to suggest the constructivist therapists' emphasis on the therapists' engagement or involvement with the client on the therapy endeavor, with the depiction of the therapist and client "laboring together." This image thus extends to the differences found according to epistemology and the therapists' emphasis on the working alliance.

An additional finding in the current study indicated that therapist epistemology (rational versus constructivist) was a significant predictor of at least some aspects of the working alliance. The strongest finding was in relation to the development of a personal bond between the client and therapist (Bond subscale). Therapists with a constructivist epistemology tended to place more emphasis on the personal bond in the therapeutic relationship compared to therapists with a rationalist epistemology. This supports the notion in the literature that constructivist therapists place a greater emphasis on building a quality therapeutic relationship characterized by, "acceptance, understanding, trust, and caring.

Lastly, findings in the current study regarding therapists' epistemology (rationalist versus constructivist) and their use of specific interventions (cognitive behavioral versus constructivist) revealed that therapists' with rationalist epistemologies tended to favor the use of cognitive behavioral techniques and also tended to reject the use of constructivist

techniques. Similarly, therapists' with constructivist epistemologies tended to favor the use of constructivist techniques in their practice of therapy; however they did not as strongly reject the use of cognitive behavioral techniques. This notion is supported by literature that suggests that constructivist therapists value having "a rich set of possibilities that can be engaged at any moment depending on the client's need" (R. Neimeyer, 2005, p. 83). Thus, findings from the current study may suggest that while the constructivist therapist is more likely to use constructivist therapy techniques, they are also more open to using other techniques depending on the individual client compared to rationalist therapists.

Discussion of Results within the Context of Current Literatures

Therapists' Epistemology and Therapy Style

The literature notes several studies suggesting potential differences in therapists' epistemology and their therapy style (Granvold, 1996; Lyddon, 1990; G. Neimeyer & Morton, 1997; R. Neimeyer, 1993b; Winter & Watson, 1999). Granvold (1996) suggests specific distinctions between rationalist and constructivist therapists' epistemologies such that rationalist therapists tend to target cognitions for modification and subsequently educate the client on the impact of cognitions in functioning and change in a more directive manner, whereas constructivist therapists are less directive, more exploratory, less problem-focused, and more experiential. A key goal in the current study was to examine the relationship between therapist epistemology and their therapy style according to the asserted hypotheses and in directions dictated by associated literatures.

Overall, the hypotheses were supported in the predicted directions. One of the more robust findings came from the components of therapy style that Fernandez-Alvarez et al. (2003) term expressive which is described as the "actions carried out by the

therapist to ensure emotional communication with the patient" (p. 118). Therapists' with constructivist epistemologies scored higher on this scale in the positive direction; whereas, therapists with rationalist epistemologies scored lower on this scale and in the negative direction. This finding highlights what the current literature suggests regarding differences between constructivist and rationalist epistemology in relation to close "emotional communication" with the client (e.g., Granvold, 1996; Mahoney & Lyddon, 1988). More specifically, Granvold (1996) suggests that rationalist therapists seek to "control, alter, or terminate emotions. . . emotions are regarded as 'negative. . . Emotional expressions are considered the 'problem' and faulty cognitions the cause" (p.348). Constructivist therapists, on the other hand, "consider emotions to be integral to the personal-meaning process in which…the individual continuously evolves" (p. 348). In addition, Guidano (1987) suggests that for the constructivist therapist, emotional expressions are promoted for the function of second order change. Thus, in the current study this core component of both the rationalist and constructivist epistemology showed through in their therapy style.

The engagement subscale, which Fernandez-Alvarez et al. (2003) term "the set of explicit and implicit behavior connected to the therapist's commitment to. . . . his patients" (p.119), revealed another important finding that supports key distinctions between rationalist and constructivist therapists' therapy style. In the present study, rationalist therapists scored lower and in the negative direction (e.g., lesser degree of engagement), compared to constructivist therapists who scored higher and in the positive direction (e.g., greater degree of engagement). R. Neimeyer (2005) depicts his degree of engagement as a constructivist therapist as,

> Moments of intensive therapeutic engagement are simply a special instance of a larger set of relational experiences in which the more typical subject-object boundaries that constrain our sense of self and other can be transcended to permit something akin to a joint experience. (p. 82)

He further notes that when a client is experiencing deep emotions that, as a therapist, "if I don't at least have moisture in my eyes, then something is wrong" (p. 81). This highlights constructivist therapists' core commitment to a high degree of engagement with a client. In contrast, rationalist therapists' consider their role in therapy to be that of an educator, instructor and to exclude or control emotion via logical analysis (Mahoney & Lyddon, 1988; G. Neimeyer et. al., 2005). A study by Winter and Watson (1999) suggested that rationalist therapists showed a more negative attitude towards their clients and their clients had less overall involvement in therapy compared to clients receiving constructivist therapy. Thus, the current study supports and extends previous research by suggesting that constructivist therapists tend to report a greater degree of engagement in their therapy style compared to rationalist therapists by endorsing more emotional closeness with clients, more involvement in therapy, and more personal concern for clients.

Another strong finding in the current study came from the component of therapy style that Fernandez-Alvarez et al. (2003) term attentional (e.g., more broad versus narrow focus) or "…either stressing his receptive capacity for the information that the patient gives or taking a more active role in order to elicit specific information" (p.119). The rationalist therapists in the current study endorsed a stronger leaning towards a more narrow focus in therapy; whereas the constructivist therapists reported a stronger leaning towards a more broad focus in their therapy style. These findings are consistent with the current literature that has investigated differences between rational and constructivist

therapies suggesting that rationalist therapists prefer a more problem focused approach to therapy, however constructivists take a more open and exploratory approach to therapy (Granvold, 1996; G. Neimeyer et. al., 2005).

Lastly, the most robust finding for therapy style in the current study is in regards to the operative subscale, which is described as the "actions directly connected to the specific therapeutic interventions" (p. 119). Thus, how spontaneous or planned a therapist is in their procedures of therapy. The current study highlighted the distinct differences in rationalist and constructivist epistemologies found in current literature with rationalist therapists scoring higher and in the positive direction (e.g., reporting a more planned procedure of therapy) compared to constructivist therapists who scored lower and in the negative direction (e.g., reporting a more spontaneous procedure of therapy). This notion is expressed in the work of Mahoney and Lyddon (1988) who suggest, "Rationalists tend to guide the course of therapy according to presenting problems and specific goals…" (p.217), whereas, R. Neimeyer (2005) indicates that constructivist therapists aim in,

> not overly structuring the agenda for the session by my own preconceptions of what my client requires, particularly to the extent that such an agenda is driven by some diagnostic or classificatory system. . . (p.78)

Again, a core facet of both rationalist and constructivist therapists' epistemology was supported in the current study regarding how planned versus spontaneous they reported their therapy style to be. These core epistemic assumptions and how they translate into the practice of therapy, also extend into the domain of the working alliance, concentrated on in the next section.

Therapists' Epistemology and Working Alliance

Another important goal of the present study was to investigate the relationship and potential difference between therapists' epistemologies and their emphasis on the working alliance. Results from the current study did not reveal particularly strong connections between therapist epistemology and working alliance. Perhaps one explanation for why there was not a strong relationship between therapist epistemology and the working alliance subscales of Task and Goal in the current study is because both of these subscales focus on client and therapist general agreement on tasks (e.g., My counselor and I agree about the things that I need to do in therapy to help improve my situation) and goals (e.g., We have established a good understanding of the kind of changes that would be good for me), rather than specific qualities of the tasks and goals. For example, both rationalist and constructivist therapist may endorse that they agree with their client about how to help improve the client's situation but how they specifically go about determining that agreement in the working alliance may be very different. For example, the literature suggests that rationalist therapists tend to guide the client towards understanding or agreement on the tasks and goals of therapy (Beck et al., 1979), whereas, the constructivist therapist may tend towards offering more exploration of tasks and goals in therapy and less direct guidance (Winter & Watson, 1999). Thus, the use and/or development of a measure of working alliance that includes more specific items in relation to tasks and goals that would better distinguish between rationalist and constructivist therapists' epistemologies would be an avenue of future research.

Additionally, future work may adapt the set of directions for the participant such that participants are prompted to consider their current client load, and one client that they feel they have a good working relationship with or the most recent clients that they

have seen at least three times, or some other instructions that are more specific to particular clients they are working with rather than general.

Results for the working alliance subscale, *Bond*, however, do provide a preliminary understanding of therapist inclinations by epistemology. For example, the most robust finding was in relation to the *Bond* subscale of the working alliance, and suggested that therapists with constructivist epistemologies more strongly endorsed the importance of the bond component in their practice of therapy compared to therapists with rationalist epistemologies. This finding is supported by conceptual literature that suggests that constructivist therapist values a working alliance characterized by mutual respect (R. Neimeyer, 2005), acceptance, understanding, trust, and caring (Granvold, 1996). Mahoney and Lyddon (1988) indicated that

> For the rationalist, a professional counseling relationship is one that primarily involves the service or delivery of direct guidance and technical instruction. In effective rational psychotherapy it is the imparting of knowledge and information that takes precedence over the therapeutic relationship. (p. 221)

These authors also highlight that when this type of knowledge can be given through "audiovisual and mechanical means" the insignificance of the human relationship in therapy is evident (as cited in Mahoney & Lyddon, 1988). Overall, the present study continues to support key distinctions between rationalist and constructivist therapist in the working alliance, however further research could aim to find more specific measures geared towards the bond component of the working alliance to further tease apart these distinctions.

Therapists' Epistemology and Selection of Specific Techniques

Finally, the last goal in the current study was to better understand the relationship between therapists' epistemologies (rationalist versus constructivist) and their use of

specific techniques (cognitive behavioral versus constructivist) in their practice of

therapy. In particular, the purpose was to examine whether these epistemological

differences relate to the selection of specific interventions that fit more with the

corrective and directive orientation of rationalist therapists or exploratory and creative

orientation of constructivist therapists. It was hypothesized that rationalist therapists

would report using more cognitive behavioral techniques than therapists' with

constructivist epistemologies and that constructivist therapists would report using more

constructivist techniques compared to therapists with rationalist epistemologies.

Winter and Watson (1999) cite both empirical and theoretical support for a

theoretical allegiance to the use of particular techniques, noting key distinctions between

rationalists' use of techniques (e.g., more challenging and directive interventions)

compared to constructivist therapists' use of techniques (e.g., ask more questions and use

interpretation as a means of exploration of the client's meaning making system). While

these hypotheses held true in the current study, an interesting additional finding was that

constructivist therapists were more open to the use of cognitive behavioral techniques

than rationalist epistemologies were of constructivist techniques. This notion is further

supported by R. Neimeyer (2005) who suggests that, "In my view, nothing in this

practice is incompatible with a constructivist therapy" (p. 93). Similarly, Kelly (1969)

suggests, "The relationships between therapists and clients and the techniques they

employ may be as varied as the whole human repertory of relationships and techniques"

(p. 223). For therapists with rationalist epistemologies, Granvold (1996) suggests that

rationalist therapists tend to stick to a problem focus and tend to have a stricter adherence

to methodology compared to constructivist therapists. This supported the findings in the

current study that suggests that therapists' with rationalist epistemologies not only favored the use of cognitive behavioral techniques in their practice, but they also tended to reject the use of constructivist techniques in their practice of therapy, whereas therapists with constructivist epistemologies, while favoring constructivist techniques, were also more open to the use of cognitive behavioral techniques.

Limitations and Future Research

This study is not without limitations. For example, the characteristics of participants in the current study may have compromised the external validity. This study was conducted on a voluntary basis and those who volunteered to participate may have been a biased sample. Rosenthal and Rosnow (1975) suggest that volunteers tend to differ from non-volunteers in behavioral research regarding their level of education, intelligence and desire of social approval. Additionally, the data collection procedure may have compromised the external validity of the current study. For example, the data collection was conducted via the Internet, which may further distinguish the characteristics of the participants who volunteered to participate in the study from non-volunteers. However, in light of these limitations, having an overall sample size of over one thousand practicing psychologists in the fifty United States may have improved the representativeness of the sample and subsequently, the generalizability of the findings.

In addition, greater confidence in the representativeness of the sample in the current study is found by using the closest approximation to what would be a comparison with the bulk of our sample (e.g., psychologists) to members of the American Psychological Association along demographic dimensions (e.g., gender, ethnicity, and age). For example, in the current study, 64 % of the sample was female and 36% of the sample was male, which is roughly comparable to APA members reported to be approximately 53%

female and 47% male. In the current study, the mean age of participants was 45.09 (SD = 12.54), which is again roughly comparable to APA members mean age reported as 53.30 (SD = 13.6). The ethnicities in the current study were Caucasian, 88.8%, Multiracial, 2.9%, Hispanic, 2.7%, African American, 2.4%, and Asian American, 2.1%. Again, this is roughly comparable the APA members reported ethnicities as Caucasian, 67.6%, Multiracial, 0.3%, Hispanic, 2.1%, African American, 1.7%, and Asian American, 1.9% (http://research.apa.org/profile2005t1.pdf, 2005).

Another limitation regarding the generalizability of the findings in the current study is the self-report nature of the study. Rosenthal and Rosnow (1991) indicate that self-reports are subject to distortion and social desirability effects. In addition, self-reports may not correlate well with participants' actual behavior.

It is also important to highlight the fact that the findings in the current study are associations between the variables of interest and do not imply causal relationships. For example, therapists with constructivist epistemologies may tend to place more of an emphasis on the personal bond component of the working alliance, but this does not mean that we can indicate that therapists' constructivist epistemologies cause them to place more of an emphasis on the personal bond component of the working alliance. It may be that the therapist's emphasis on a personal bond predisposed them towards endorsing greater constructivist leanings, or that a third variable accounted for the relationship between personal bond and constructivist commitments. Therefore, current results can only suggest potential relationships and cannot imply causality.

Further research could aim to investigate client's perceptions of cognitive-behavioral and constructivist therapists' therapy style, emphasis on the working alliance,

and use of particular therapeutic interventions to see if clients corroborate therapists' self-reported styles with their experience of the therapists' style.

Finally, while the fit of the two factors (constructivist techniques and cognitive behavioral techniques) to the Techniques List was relatively good, future work on the Techniques List measure might also benefit from some revision of the current instrument and additional psychometrics.

Overall, these finding contribute to the literature addressing the translation of epistemology into practice. The current study provides provisional support for the notion that therapists with rationalist epistemologies are consistently different in their approach to therapy, emphasis on the therapeutic relationship, and use of particular interventions compared to therapists with a constructivist epistemology, in ways consistent with the epistemological underpinnings of these approaches to therapy.

The current findings are important because they (1) demonstrate the translation of epistemology into practices; (2) provide information that could be useful to clients in selecting a therapist whose orientation may enable them to anticipate stylistic features; and (3) provide the opportunity to further study the translation of these perceptions into actual behaviors and behaviors into different impacts or outcomes.

Conclusion

In conclusion, the present study examined the relationship between epistemic style and therapists' therapy style, working alliance, and selection of particular therapeutic interventions. Results of the study suggested that therapists' epistemologies were associated with the levels flexibility versus rigidity, distance versus closeness, degree of engagement, broad versus narrow focus, and spontaneous versus planned components of their therapy style. Therapists with stronger constructivist or rationalist epistemologies

tended to score higher on these subscales according to the nature of their epistemological commitments.

Results of the study also revealed that therapists with constructivist epistemologies were associated with a greater degree of emphasis on the Bond subscale of the working alliance, whereas, both constructivist and rationalist epistemologies tended to place a greater degree of emphasis on the Goal subscale of the working alliance. Additionally, therapists with constructivist epistemologies tended to use more particularly constructivist techniques in their therapy practice, whereas, therapists' rationalist epistemologies tended to use more rationalist techniques in their practice of therapy.

The current study extended the developing literature on therapists' epistemology as a factor relating to psychotherapists' practice of therapy. Further, more outcome related research is required to understand how therapists' epistemology impacts the successfulness of work with clients. The current study was the first empirical investigation of therapists' epistemology and the specific translation of epistemology into the practice of therapy in relation to therapists' style, working alliance, and use of specific techniques. While some of the results failed to support the expected directions for the specified subscales, most results were in the expected directions supporting the overall coherence of the epistemological commitment with therapeutic enactments. Further work may benefit from focusing on how therapists' epistemologies might affect the effectiveness of practicing psychotherapy in accordance with therapists' epistemic commitments.

THERAPIST ATTITUDE QUESTIONNAIRE SHORT FORM (TAQ-SF)

1	2	3	4	5
Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree

1. Reality is singular, stable and external to human experience.

2. Knowledge is determined to be valid by logic and reason.

3. Learning involves the contiguous or contingent chaining of discrete events.

4. Mental representations of reality involve accurate, explicit and extensive copies of the external world, which are encoded in memory.

5. It is best for psychotherapists to focus treatment on clients' current problems and the elimination or control f these problems.

6. Disturbed affect comes from irrational, invalid, distorted or/and unrealistic thinking.

7. Clients' resistance to change reflects a lack of motivation, ambivalence or motivated avoidance and such resistance to change is an impediment to therapy, which the psychotherapist works to overcome.

8. Reality is relative. Realities reflect individual or collective constructions of order to one's experiences.

9. Learning involves the refinement and transformation (assimilation and accommodation) of mental representation.

10. Cognition, behavior and affect are interdependent expressions of holistic systemic processes. The three are functionally and structurally inseparable.

11. Intense emotions have a disorganizing effect on behavior. This disorganization may be functional in that it initiates a reorganization so that more viable adaptive constructions can be formed to meet the environmental demands.

12. Psychotherapists should encourage emotional experience, expression, and exploration.

13. Clinical problems are current or recurrent discrepancies between our external environmental challenges and internal adaptive capacities. Problems can become powerful opportunities for learning.

14. Awareness or insight is one of many strategies for improvement, however, emotional and/or behavioral enactments are also very important.

15. Therapists' relationship with clients is best conceptualized as a professional helping relationship, which entails the service and delivery of technical, instructional information or guidance.

16. Psychotherapists' relationship with clients can best be conceptualized as a unique social exchange, which provides the clients a safe supportive context to explore and develop relationships with themselves and the world.

Reprinted with permission from Neimeyer, G.J., & Morton, R. J. (1997). Personal epistemologies and preferences for rationalist versus constructivist psychotherapies. *Journal of Constructivist Psychology, 10*, 109-123.

CONSTRUCTIVIST ASSUMPTIONS SCALE (CAS)

Please indicate the degree to which you agree or disagree with the following statements using the following scale:

1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

1. Facts speak for themselves.
2. Our understanding of the natural, physical world is influenced by our social values.
3. Scientific facts are universal truths; they do *not change* over time.
4. Nothing is really good or bad, it always depends upon how we think about it.
5. What we see with our own eyes is influenced by our expectations.
6. Truth is relative. What is true at one point in time may not be true at another.
7. Scientific investigations are objective; they are not influenced by social values.
8. We never see the world as it really is. What we perceive depends on what we believe and want to see.
9. Our understanding of human behavior is influenced by our social values.
10. Nothing is really important by itself. A thing is important if we think it is.
11. Seeing is believing.
12. The more people know, the more they are bound to feel that they cannot be completely sure about anything.

PERSONAL STYLE OF THE THERAPIST (PST-Q)

Directions: Please rate the following question along the scale the following 7-point scale:

$$1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7$$

Total Disagreement………………………………….Total Agreement

'1' represents total disagreement with the statement and '7' means total agreement.

1. I tend to be open-minded and receptive in listening rather than narrow-minded and restrictive.
2. I try to get patients to adjust to the regular format of my work.
3. As a therapist I prefer to indicate to patients what they should do in each session.
4. I keep a low profile of involvement with patients in order to be more objective.
5. I find changes in the setting quite exciting.
6. The emotions the patient arouses in me are key to the course of the treatment.
7. I'm more inclined to accompany the patient in exploring than to point out the steps to follow.
8. I avoid communicating through gestures or deeply emotional expressions.
9. I tend to demand strict compliance with schedules.
10. I place little value on planned treatments.
11. Expressing emotions is a powerful tool leading to changes.
12. Many important changes that occur during treatment require the therapist to respond without expressing much emotion.
13. I don't think about patients outside sessions.
14. Changing offices has a negative impact on treatment.
15. Real changes take place during highly emotional sessions.
16. I believe I am a therapist with a flexible setting.
17. I find it useful to reveal something personal about myself during sessions.
18. I like to feel surprised by what each patient brings to the session without having preconceived notions.
19. I often attend patients outside the office.
20. The best intervention in a treatment occurs spontaneously.
21. Whatever happens to my patients has little influence on my own life.
22. My intervention is mostly directive.
23. I think quite a lot about my job even in my spare time.
24. I avoid revealing my emotions to my patients.
25. I can plan an entire treatment from the very outset.
26. Keeping emotional distance from patients favors change.

27. I never change how long a session lasts, unless absolutely necessary.
28. If something bothers me during a session I can express it.
29. Emotional closeness with patients is essential to bring about therapeutic change.
30. I prefer to know in advance what things I should pay attention to in sessions.
31. I prefer treatments where everything is programmed.
32. I like working with patients who have clearly focused problems.
33. I can give my entire attention to everything that takes place during sessions.
34. I think about patients' problems even after sessions.
35. I'm quite flexible with schedules.
36. Right from the beginning of the session I allow my attention to float.

APPENDIX D
WORKING ALLIANCE INVENTORY SHORT FORM (WAI-S)

Following are sentences that describe some of the different ways a person might think or feel about his or her clients. As you read the sentences mentally consider the clients that constitute your current client load.

Using the following 7-point scale, please indicate how you feel about your relationship with your clients. If the statement describes the way you *always* feel (or think) mark the number 7; if it *never* applies to you mark the number 1. Use the numbers in between to describe the variations between these extremes.

Please respond to **every** item with your first impressions.

1	2	3	4	5	6	7
Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always

_____1.	My clients and I agree about the steps to be taken to improve his/her situation.

_____2.	My clients and I both feel confident about the usefulness of our current activity in therapy.

_____3.	I believe my clients like me.

_____4.	I have doubts about what my clients and I are trying to accomplish in therapy.

_____5.	I am confident in my ability to help my clients.

_____6.	My clients and I are work towards mutually agreed upon goals.

_____7.	I appreciate my clients as a people.

_____8.	My clients and I agree on what is important for this client to work on.

_____9.	My clients and I have built a mutual trust.

_____10.	My clients and I have different ideas on what his/her real problems are.

_____ 11.   My clients and I establish a good understanding between us of the kind of changes that would be good for this client.

_____ 12.   My clients believe the way we work with their problem is correct.

Reprinted with permission from Horvath, A. O., & Greenberg, L. S. (1986). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology, 36*, 223-233.

Directions:
Please rate the extent to which you use each therapy technique in your practice of therapy.

1	2	3	4	5
Never or Almost Never Always	Seldom	Sometimes	Often	Always or Almost

Technique

active imagination	1 2 3 4 5
advice giving	1 2 3 4 5
alter ego	1 2 3 4 5
analyzing symbols	1 2 3 4 5
assertive training	1 2 3 4 5
aversion-aversive conditioning	1 2 3 4 5
behavior modification	1 2 3 4 5
catharsis	1 2 3 4 5
conditioning techniques	1 2 3 4 5
contractual agreements	1 2 3 4 5
crying	1 2 3 4 5
desensitization	1 2 3 4 5
diagnosing	1 2 3 4 5
dream interpretation	1 2 3 4 5
dreaming	1 2 3 4 5
environmental manipulation	1 2 3 4 5
fantasizing	1 2 3 4 5
first memory	1 2 3 4 5
free association	1 2 3 4 5
homework	1 2 3 4 5

irrational behavior identification   1 2 3 4 5

modeling   1 2 3 4 5

negative reinforcement   1 2 3 4 5

play therapy   1 2 3 4 5
problem solving   1 2 3 4 5
processing   1 2 3 4 5
psychodrama   1 2 3 4 5

rational   1 2 3 4 5
reciprocity of affect   1 2 3 4 5
reflection   1 2 3 4 5
reinforcement   1 2 3 4 5
reward   1 2 3 4 5

self-monitoring   1 2 3 4 5
shaping   1 2 3 4 5
sociodrama   1 2 3 4 5
systematic desensitization   1 2 3 4 5

transference   1 2 3 4 5

value clarification   1 2 3 4 5
value development   1 2 3 4 5

warmth   1 2 3 4 5

Reprinted with permission from Hollis, J. W., (1995). Techniques used in counseling and psychotherapy. In *Practicum and Internship Textbook, 1*73-177.

APPENDIX F
DEMOGRAPHIC INFORMATION

Please tell us a little about yourself. This information will be used only to describe the sample as a group.

1. Gender: Male Female

2. Age:

3. Ethnic background: White/Caucasian, Black/African-American, Hispanic/Latino/a
Black, Hispanic/Latino/a - White, Asian-American-Pacific Islander, American Indian /Native-American, Multiracial, Other.

4. Name of your highest degree: BA/BS, MA/MS, MSW, PsyD, PhD, Other

5. The year you obtained your highest degree (e.g., 1985):

6. Total number of years you spent in clinical practice:

7. Specialty area: Psychologist, Mental Health Counselor, Marriage and Family therapist, Social worker, Psychiatrist, Other

8. Primary job responsibility: Practice/Clinical work, Research, Academic, Administrative, Other.

9. Primary employment setting: Private practice, University academic department, University service delivery department, Hospital, Mental health care, School setting, Research setting, Community Center, Other.

10. Please state your dominant therapy orientation: Psychodynamic, Humanistic/Person centered, Cognitive Behavioral, Rational Emotive, Constructivists, Interpersonal, Existential, Gestalt, Integrative, Other.

11. Average number of clients you see weekly:

12. Country you live in: US, Canada, Other.

LIST OF REFERENCES

American Psychological Association Website, Demographic characteristics of APA members by membership status, 2005, http://research.apa.org/profile2005t1.pdf, 04/06.

Arthur, A. R. (2000). The personality and cognitive-epistemological traits of cognitive behavioral and psychoanalytic psychotherapists. *British Journal of Medical Psychology, 73*, 243−257.

Beck, A. T., Rush, A. J., Shaw, B. F. & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford.

Beck, A. T. (1995). *Cognitive therapy: Basics and beyond*. New York: Guilford.

Beronsky, M. D. (1994). Individual differences in self-construction: the role of constructivist epistemological assumptions. *Journal of Constructivist Psychology, 7*, 263−281.

Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice, 16*, 252−260.

Botella, L., & Gallifa, J. (1995). A constructivist approach to the development of personal epistemic assumptions and word views. *Journal of Constructivist Psychology, 8*, 1−18.

Chiari, G., & Nuzzo, M. L. (1996). Psychological constructivism: A metatheoretical differentiation. *Journal of Constructivist Psychology, 9*, 163−184.

Diamond, S. R., & Royce, J.R. (1980). Cognitive abilities as expressions of three "ways of knowing." *Multivariate Behavioral Research, 15(1),* 31−56.

DisGiuseppe, R. & Linscott, J. (1993). Philosophical differences among cognitive behavioral therapists: Rationalism, constructivism, or both? *Journal of Cognitive Psychotherapy, 7*, 117−130.

Erwin, E. (1999). Constructivist epistemologies and therapies. *British Journal of Guidance & Counselling, 27*, 353−364.

Faidley, A. J., & Leitner, L. M. (1993). Assessing experience in psychotherapy: Personal construct alternatives. Westport, CT: Praeger.

Fernandez-Alvarez, H. Garcia, F., Bianco, J. L., Santoma, S. C. (2003). Assessment questionnaire on the personal style of the therapist PST-Q. *Clinical Psychology and Psychotherapy, 10,* 116−125.

Granvold, D. K. (1996). Constructivist psychotherapy. *Families in Society: The Journal of Contemporary Human Services, 77*(6), 345−359.

Guidano, V.F. (1987). *Complexity of the self.* New York: Guilford.

Hollis, J. W. (1995). Techniques used in counseling and psychotherapy. In J. C. Boylan, P. B. Malley, & J. Scott (Eds), *Practicum and internship: Textbook for counseling and psychotherapy* (pp. 182−189). Washington, DC: Taylor & Francis.

Hollon, S. D. & Beck, A.T. (1986). Research on cognitive therapies. In S. L. Garfield & A. E. Bergin (Eds.), Handbook of psychotherapy and behavior change (3rd ed., pp. 443−482). New York: Wiley.

Horvath, A. O., & Greenberg, L. S. (1986). The development of the working alliance inventory. In L. S. Greenberg & W. M. Pinsof (Eds.), *The psychotherapeutic process: A research handbook* (pp. 529−556). New York: Guilford.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1−55.

Kelly, G. (1955). The psychology of personal constructs. New York: Norton.

Kelly, G. A. (1969). The psychotherapeutic relationship. In B. Maher (Ed.). *Clinical Psychology and Personality: The selected papers of George Kelly.* New York: Wiley.

Lyddon, W. J. (1988). Information-processing and constructivist models of cognitive therapy: A philosophical divergence. *The Journal of Mind and Behavior 9*, 137−166.

Lyddon, W. J. (1989). Personal epistemology and preference for counseling. *Journal of Counseling Psychology, 36*, 423−429.

Lyddon, W. J. (1990). First- and second-order change: Implications for rationalist and constructivist cognitive therapies. *Journal of Counseling & Development, 69*, 122−127.

Lyddon, W. J. (1991). Epistemic style: implications for cognitive psychotherapy. *Psychotherapy, 28*, 588−597.

Mahoney, M. J. (1991). *Human change processes.* New York: Basic Books, Inc.

Mahoney, M. J., & Gabriel, T. J. (1987). Psychotherapy and the cognitive sciences: An evolving alliance. *Journal of Cognitive Therapy: An International Quarterly, 1*, 39−59.

Mahoney, M. J., & Lyddon, W. J. (1988). Recent developments in cognitive approaches to counseling and psychotherapy. *The Counseling Psychologist, 16*, 190−234.

Neimeyer, G. J., Saferstein, J. and Arnold, W. (2005). Personal construct psychotherapy: Epistemology and practice. In D. Winter and L. Viney (Eds.) *Advances in personal construct psychotherapy*. London: Whurr Publishers.

Neimeyer, G. J., & Morton, R. J. (1997). Personal epistemologies and preferences for rationalist versus constructivist psychotherapies. *Journal of Constructivist Psychology, 10*, 109−123.

Neimeyer, G. J., Prichard, S., Lyddon, W. J., & Sherrard, P. A. D. (1993). The role of epistemic style in counseling preference and orientation. *Journal of Counseling and Development, 71*, 515−523.

Neimeyer, R. A. (2005). The construction of change: Personal reflections on the therapeutic process. *Constructivism in the Human Sciences, 10*, 77−98.

Neimeyer, R. A. (1995). Constructivist psychotherapies: Features, foundations, and future directions. In R. A. Neimeyer & M. J. Mahoney (Eds.) *Constructivism in psychotherapy* (pp.11−38). Washington DC: American Psychological Association.

Neimeyer, R. A. (1993). Constructivism and the cognitive psychotherapies: Some conceptual and strategic contrasts. *Journal of Cognitive Psychotherapy, 7,* 159 171.

Okun, B. F. (1990). *Seeking connections in psychotherapy.* San Francisco: Jossey-Bass Publishers.

Polkinghorne, D. E. (1991). Two conflicting calls for methodological reform. *The Counseling Psychologist, 19*, 103−114.

Raue, P.J., Goldfried, M.R., & Barkham, M. (1997). The therapeutic alliance in psychodynamic-interpersonal and cognitive-behavioral therapy. *Journal of Consulting and Clinical Psychology, 65(4),* 582−587.

Rosenthal, R., & Rosnow, R.L. (1991). *Essentials of behavioral research: Methods and data analyses* (2nd Edition). Boston: McGraw-Hill.

Rosenthal, R., & Rosnow, R.L. (1975). *The volunteer subject.* New York: John Wiley.

Royce, J. R. (1964). *The encapsulated man: An interdisciplinary search for meaning.* Princeton, NJ: Van Nostrand.

Royce, J. R., & Mos, L. P. (1980). *Psycho-epistemological profile manual.* Edmonton, Canada: University of Alberta Press.

Royce, J. R., & Powell, A. (1983). Theory of personality and personal differences: Factors, systems, processes. Englewood Cliffs, NJ: Prentice Hall.

Schacht, T. E., & Black, D. A. (1985). Epistemological commitments of behavioral and psychoanalytic therapists. *Professional Psychology: Research and Practices, 16,* 316−323.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). New York: Harper Collins.

Tracey, T. J. & Kokotovic, A. M. (1989). Factor structure of the Working Alliance Inventory. *Psychological Assessment, 1,* 207−210.

Vandyke, M. M. (2003). Contribution of the working alliance to manual-based treatment of social anxiety disorder. Dissertations and Abstracts, DAI-B 63/09, p. 4390.

Vasco, B. (1994). Correlates of constructivism among Portuguese therapists. *Journal of Constructivist Psychology, 7,* 1−16.

Vincent, N., & LeBow, M. (1995). Treatment preference and acceptability: Epistemology and locus of control. *Journal of Constructivist Psychology, 8,* 81−96.

Winter, D. A., & Watson, S. (1999). Personal construct psychotherapy and the cognitive therapies: Different in theory but can they be differentiated in practice? *Journal of Constructivist Psychology, 12,* 1−22.

BIOGRAPHICAL SKETCH

Jocelyn A. Saferstein was born in Cleveland, Ohio, on December 15, 1978. In 1982 her family moved to St. Petersburg, Florida, where she resided until she was eighteen years old.

She attended the University of Florida in 1997 majoring in psychology as an undergraduate. In 2001, she graduated earning highest honors with a Bachelor of Science in psychology and a minor in education.

She joined the Department of Psychology at the University of Florida as a counseling psychology graduate student in August of 2001. She completed her Master of Science degree in May of 2003 and her Doctor of Philosophy in December of 2006.