

EFFECTS OF EPISTEMIC STYLE ON THERAPY PREFERENCES

By

JOCELYN A. SAFERSTEIN

A THESIS PRESENTED TO THE GRADUATE SCHOOL  
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF SCIENCE

UNIVERSITY OF FLORIDA

2002

## ACKNOWLEDGMENTS

I extend a special thanks to all of my friends and family for their constant love and support. I could not have completed this thesis project without the guidance of my wonderful supervisor, Dr. Greg Neimeyer.

## TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS .....	ii
LIST OF TABLES .....	v
ABSTRACT .....	vi
CHAPTER	
1 INTRODUCTION .....	1
Epistemic Style .....	2
Epistemology and Rationalist-Constructivist Therapies.....	5
2 METHODS .....	10
Participants.....	10
Instrumentation .....	10
Rosenberg Self-Esteem Scale .....	11
Therapist Attitude Questionnaire Short Form (TAQ-SF).....	11
Psychological-Epistemological Profile (PEP) .....	12
Counseling Favorability.....	13
Written Scripts .....	14
Procedure .....	14
3 RESULTS .....	16
Prescreening.....	16
Manipulation Checks .....	16
Analyses.....	18
4 DISCUSSION .....	22

APPENDIX

A GRADUATE STUDENTS' EVALUATION MEASURE FOR REPRESENTATIVENESS OF THERAPY APPROACHES.....26

B THERAPIST ATTITUDE QUESTIONNAIRE SHORT .....27

C MANIPULATION CHECK QUESTIONS FOR PARTICIPANTS .....29

REFERENCES .....30

BIOGRAPHICAL SKETCH .....33

## LIST OF TABLES

<u>Table</u>	<u>page</u>
1 Epistemology (Rationalist/Metaphorist) by Therapy Orientation (Rationalist/Constructivist).....	20
2 Correlation of Psychological-Epistemological Profile with Therapist Attitudes Questionnaire .....	21

Abstract of Thesis Presented to the Graduate School  
of the University of Florida in Partial Fulfillment of the  
Requirements for the Degree of Master of Science

EFFECTS OF EPISTEMIC STYLE ON THERAPY PREFERENCES

by

Jocelyn A. Saferstein

December, 2002

Chair: Dr. Greg J. Neimeyer  
Department: Psychology

This study examined the relationship between epistemic style and therapy preferences. A sample of 58 late adolescents who had been pre-screened for their epistemic style (Rational, Metaphorical) listened to a therapy session depicting two different therapeutic orientations (Rationalist, Constructivist) that focused on a self-relevant topic (self-esteem and social anxiety).

Overall, results indicated that participants favored the Rationalist therapy orientation over the Constructivist therapy orientation, but no interactions were found between epistemic style and therapy preferences. Results are interpreted in relation to the growing literature addressing the relationship between epistemic style and therapy preferences.

## CHAPTER 1 INTRODUCTION

An emergent area of interest in counseling psychology research explores the philosophical underpinnings of many of the 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 has begun looking at how individual differences in philosophical beliefs might actually play a role in people’s preference for different therapy orientations (Lyddon & Adamson, 1992; Neimeyer & Morton, 1997; Neimeyer, Prichard, Lyddon, & Sherrard, 1993; Royce & Mos, 1980; Vincent & LeBow, 1995).

The ensuing framework that has developed from this growing literature explores the possibility of there being a match between certain philosophical commitments and preferences for particular therapies. For the past few decades, research investigating models of client and counselor matching along a variety of characteristics has also been a burgeoning area of study in the counseling field (Lyddon, 1989, 1991; Neimeyer & Morton, 1997; Vincent & LeBow, 1995). According to this “matching hypothesis,”

clients tend towards rating counselors more favorably when they are matched with therapists who have therapy orientations similar to their own particular cognitive and attitudinal styles (Fry & Charron, 1980). The present study further explores this area of matching by examining whether and individual's epistemic style predicts their preferences for particular therapy orientations.

### 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 include clear thinking and rational analysis, as well as synthesizing different notions (Diamond & Royce, 1980; Vincent & LeBow, 1995). Rationalists view pathology as stemming from irrational emotions or behaviors that should and are able to 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; Shact & Black, 1985).

The metaphorist perspective, however, sees knowledge not as firm nor rigid, but rather as more flexible, and as embedded within individualistic 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). The metaphorist is further described as testing the soundness of their perspective by the global or universal nature of their knowledge. In addition, for the metaphorist, cognitive processes are symbolic in nature, with both conscious and unconscious components (Diamond & Royce, 1980; Lyddon, 1989). People with metaphorical epistemic styles see 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 perturbation 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 as a 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). The metaphorist perspective is depicted in constructivist therapy through the therapist's facilitation of the client's perspective taking and the client's rendition of occurrences in an analogical style. In other words, metaphorism is the epistemological worldview that underlies constructivist therapy (Lyddon, 1989; Mahoney, 1991; Neimeyer, 1993; Neimeyer et al., 1993; Schact & Black, 1985).

Royce's conceptual framework holds that the cognitive processes of perceiving, conceptualizing, 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 empirical, rational, and metaphorical component processes, there is a hierarchical order to which people use these processes with one of the three tending to be most dominant.

Thus, Royce's (1964) theory of knowledge and subsequent research paradigm has revealed empirical support for these three basic theories of knowledge: Rationalism, Empiricism, and Metaphorism. The instrument subsequently created by Royce and Mos (1980), called the psychological-epistemological profile (PEP), was based on this philosophical system. Initial research using the PEP looked at the relationship between an individual's epistemic style and their occupations (Royce & Mos, 1980). Rationalists

tended to be found in the occupations of mathematicians and theoretical physicists, empiricists tended to be found in the occupations of biologists and chemists, and metaphorists tended to be found in the occupations of professional musicians and dramatists.

Subsequent epistemological research and more specifically, matching hypothesis studies, have continued to measure individual commitments to epistemic beliefs through the use of the PEP (Arthur, 2000; Kearsley, 1976; Lyddon, 1989; Lyddon, 1991; Neimeyer et al., 1993; Vasco, 1994; Vincent & LeBow, 1995). More recently, Arthur (2000) found a significant difference between the metaphorists and the other two epistemic styles (rationalists and empiricists) for therapy preference (cognitive behavioral vs. psychoanalytic), where psychoanalytic and cognitive behavioral therapists differed significantly on metaphorism and rationalists and empiricists did not. Additional research has shown that the rational and empirical epistemic styles tended to reveal more interdependence with each other than with the metaphorical epistemic style (Neimeyer et al., 1993; Vincent & LeBow, 1995). In addition, Neimeyer et al. (1993) found that the rational and empirical epistemic styles had few, if any, significant correlates to different therapy orientations. Based on these findings, in the present study we did not include the empirical epistemic style in the investigation and thus looked only at the rational and metaphorical epistemic styles as they related to the rational and constructivist therapies, an approach that extends previous research along similar lines.

#### Epistemology and Rationalist-Constructivist Therapies

Current research has looked at the distinctions within the field of cognitive therapy. Mahoney and his colleagues pioneered this literature (1991; Mahoney &

Gabriel, 1987; Mahoney & Lyddon, 1988), which suggests a prominent philosophical dimensions along which different cognitive therapies can be aligned; rationalist vs. constructivist.

Rationalism argues that there is a single, stable, external reality, and that thoughts are held superior to the senses when figuring out 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 therapist's role is thus to instruct the client to think more rationally, meaning to accept the therapist's worldview. Thus, rationalist therapies are more persuasive, analytical, and technically instructive than the constructivist therapies (Neimeyer, 1993). 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; Mahoney, 1990). Lyddon (1989) further notes that rationalist cognitive theories, due to their epistemological basis being a 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, nor external, and instead assert that individual's feelings and actions cannot be meaningfully separated

from human thought (Lyddon, 1988; Mahoney, 1988, 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 (Neimeyer, 1993). Additionally, Lyddon (1990) notes that contrary to the rationalist view of negative emotions depicting problems that need to be controlled, 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 Royce’s metaphorical epistemic style.

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; Neimeyer & Morton, 1997). The primary implications of this research reveal an existing match between the rational epistemic style and rational therapies, as well as between the metaphorical epistemic style and constructivist therapies. Lyddon (1989) notes 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. This further suggests that a compatible worldview between client and therapist could act as a crucial indicator of client preference for therapy.

The need for research in this area of a client's epistemic style (rational vs. metaphorical) serving as a good indicator for therapy preference has been well documented (Arthur, 2000; Berzonsky, 1994; Lyddon, 1989; Lyddon, 1991; Neimeyer & Morton, 1997; Neimeyer et al., 1993; Vincent & LeBow, 1995). In particular, Arthur (2000) notes that

“An area for further research is to investigate the predictive validity of these personality and cognitive-epistemological patterns for orientation choice.” (p.256)

Additionally, Vincent and LeBow (1995) found that a more tangible representation of the therapy context, along with including a particular client issue, challenges the generalizability of the matching hypothesis, suggesting the need to generalize these findings to “real life” therapy.

When considering the findings of Royce and Mos (1980) that people tend to have a leaning towards a dominant epistemic style, it naturally follows suit from the matching hypothesis that the preferred match between client and therapist would consist of the client's epistemology being reflected in the underlying epistemology of the therapy orientation (Vincent & LeBow, 1995).

Thus, in the present study, we investigated the possible relationship between epistemic style (rational vs. metaphorical) and therapy preference (rational emotive therapy vs. constructivist therapy) in a specific context. Epistemic matching effects have been found in relation to constructivist and rational therapies previously, but only in paper-and-pencil contexts (Neimeyer et al., 1993). However, some work suggests that the effects of epistemic matching may be lost as therapy depictions/presentations become

more detailed, focused, or “real life” (Vincent & LeBow, 1995). Vincent and LeBow (1995) found that a tangible presentation of actual therapy approaches (rather than say, a written description of them), along with the inclusion of a specified target problem, might eclipse or “over-ride” the effects of epistemic matching, challenging its generalizability into actual practice. Thus, in the present study we intentionally screened participants for low levels of self-esteem, and asked them to listen to, and evaluate, two therapy sessions dedicated to issues of social anxiety and self-esteem; one session depicted a constructivist orientation and the other depicted a rationalist orientation. Our goal was to extend the findings of Vincent and LeBow (1995), and we hypothesized accordingly that the use of a more “real life” depiction of a therapy session, along with the personal relevance of the therapy topic (i.e., self-esteem), might qualify the operation of the matching hypothesis. Thus, our goal is to test the generalizability of these epistemic matching effects to an analog therapy context in which participants listen to actual therapy sessions that depict constructivist and rationalist therapy orientations in relation to a personally-relevant presenting problem.

## CHAPTER 2 METHODS

### Participants

Participants were volunteers from undergraduate general psychology courses who agreed to volunteer for a study looking at “therapy perceptions.” Participants were pre-screened to assess their levels of self-esteem and therapeutic orientation preferences (Rationalist versus Constructivist, see below). Next, participants whose scores met pre-established cutoff points were called back to fill out the remaining questionnaires. The final participants were 58 students (39 women and 19 men) (Mean age = 18.64 years, age range = 18-21 years). The majority of the participants were Caucasian (67.3%), followed by Hispanic (13.8%), African American (8.6%), Asian (1.7%), and other (8.6%). Students participating in this study received course credits for their participation. All sessions were held at the university’s language lab with approximately 5-15 students run in each one-hour administration, which were conducted in accordance with APA ethical guidelines.

### Instrumentation

Approximately 1,000 students taking the general psychology course were pre-screened for both their levels of self-esteem, using Rosenberg’s (1965) Self-Esteem Scale (SES), and also for their philosophical leanings, using the DisGiuseppe and Linscott (1993) Therapist Attitudes Questionnaire (TAQ), in a shortened form (as described in Neimeyer & Morton, 1997).

### Rosenberg Self-Esteem Scale

The SES (1965) is a 10-item measure designed to assess levels of self-esteem. Participants agree or disagree with each item using a 4-point Likert scale ranging from 1 (strongly agree) to 4 (strongly disagree), e.g., “I feel that I am a person of worth, at least on an equal basis with others.” This instrument was self-administered and designed to take approximately 5-10 minutes to complete. Factor analytic studies of the measure’s construct and discriminant validity have supported the utility of the measure in relation to the prediction of self-esteem using other categorical measures. In addition, the SES contains items designed to minimize scale overlap but still retain high internal consistency, Cronbach’s  $\alpha = 0.77$  to  $0.88$  (Blascovich & Tomaka, 1991).

### Therapist Attitudes Questionnaire-Short Form

The TAQ was developed by DisGiuseppe and Linscott (1993), designed assess the philosophical, theoretical, and technical dimensions of the rationalist and constructivist philosophies. The TAQ is a 38-item self-administered questionnaire that takes approximately 15 minutes to complete. Of the 38 items, 16 items that represent the rationalist philosophy, 16 items that represent the constructivist philosophy, and the additional 6 items measure preferences for targeting client thoughts to be disputed early in therapy. Each item on the TAQ is rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The TAQ-SF, developed by 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 takes approximately 5-10 minutes to complete. Respondents were 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 revealed the basic factor structure of the original TAQ and showed its predictive validity by predicting the therapeutic identifications and descriptions of a group of practicing professionals (Neimeyer & Morton, 1997).

#### Psychological-Epistemological Profile (PEP)

Royce and Mos (1980) created the PEP, which measures epistemic beliefs based on Royce’s (1964) theory of knowledge. The PEP assesses the epistemological dimensions of Rationalism, Empiricism, and Metaphorism. For the present study, we eliminated the items associated with Empiricism and retained only those items corresponding with Rationalism and Metaphorism. There was thus a total of 32 items, which required approximately 15 minutes to complete. Respondents were asked to indicate on a 5-point Likert scale ranging from 1 (complete disagreement) to 5 (complete agreement) the degree to which they agreed with each item. The 1980 manual (Royce and Mos, 1980) reports strong split-half reliability (range = 0.77 to 0.88), and 9-month test-retest reliability (range = 0.66 to 0.87) for each of the subscales, along with support for the measure’s concurrent and construct validity. Concurrent validity of the PEP was revealed by its differentiation between various occupational and professional groups thought to demonstrate specific epistemic profiles. Construct validity of the PEP has

been revealed through both an item factor analysis that corroborates its hypothesized three-dimensional structure (Schopflocher & Royce, 1978) and also through theoretically predicted relationships between the PEP and various occupational and interest scales (Royce & Mos, 1980).

### Counseling Favorability

To assess participant's preferences for each of the two counseling approaches (Rationalist and Constructivist), participants completed an eight-question evaluation of the therapy sessions adapted from Lyddon (1989) and Neimeyer et al., (1993). This eight-item measure is comprised of three subscales: (1) Therapy Evaluation Measure, (2) Session Evaluation, and (3) Therapy Style. Two questions make up the Therapy Evaluation Measure subscale, which is used to assess participant's general ratings of the session that they just listened to, e.g., "Overall, how would you evaluate this session?" answered on a 5-point scale ranging from 1 (Poor) to 5 (Excellent). The three questions that make up the Session Evaluation subscale, looks at how the participants perceive the therapist in the session, e.g., "The therapist sounded knowledgeable and expert in working with the client." from 1 (not at all) to 5 (very much). The last three questions make up the Therapy Style subscale, which is adapted from the Counseling Approach Evaluation Form (CAEF; Lyddon, 1989), e.g., "What is the likelihood that you would seek out this counseling approach if you desired counseling in the future?" from 1 (not at all likely) to 5 (very likely). Although the CAEF has adequate stability (1-week test-retest reliabilities range from 0.87 to 0.91) and internal consistency (alpha coefficients range from 0.93 to 0.96), validity data are currently unavailable (Lyddon & Adamson,

1992). The sum of the items for each of the subscales was used as the dependent measure for counseling favorability.

### Written Scripts

Respondents were asked to read 2 scripts, one that depicted that Rationalist approach and one that depicted the Constructivist approach to therapy. These scripts were based on Mahoney's (1988; Mahoney & Lyddon, 1988) distinction between these two approaches (Rationalist and Constructivist) and have been used in previous research in this area (Lyddon, 1989; Neimeyer & Morton, 1997). Each script is approximately one and a half pages (double-spaced) long and was developed to exemplify the Rationalist and Constructivist counselor's approach to therapy for a new client. Lyddon (1989) used expert raters to determine the extent to which each transcript faithfully represented each approach to therapy. All raters were able to identify correctly the two approaches with 100% accuracy, and both scripts were rated as highly representative of their respective orientations (mean ratings ranging from 4.8 to 5.5), using a 5-point rating scale (1 = low representativeness, 5 = high representativeness). Subsequent research using these scripts has noted their ability to predict epistemic styles (Neimeyer et al, 1993). Participants in the present study were asked to read the script that corresponded to the therapy approach that they would be listening to (Rationalist or Constructivist) prior to hearing the audio recorded therapy session. This was done in an attempt to facilitate the participant's understanding of the therapy approach they were about to hear.

### Procedure

Participants prescreened for low levels of self-esteem and for epistemic style (Rationalist or Constructivist), met at the university language lab. Clients were first

instructed to read brief one-page descriptions of each of the therapy approaches (Rationalist and Constructivist). They were asked to listen to two pre-recorded audio therapy sessions of a client dealing with issues of self-esteem. The same client and therapist were heard in each of the therapy sessions; however the two sessions varied by the type of approach (Rationalist or Constructivist) that the therapist used with the client (manipulation checks were conducted on the tapes to determine the effectiveness of the portrayals: see results). The order in which participants heard the tapes was counterbalanced; half of the participants heard the Rationalist approach to therapy tape first and the other half of the participants heard the Constructivist tape first. Directly following each tape, participants were asked to complete the eight questions making up the dependent measure of therapy preference, and then answer two questions that constituted a manipulation check: (1) The session focused on the client's thoughts, cognitions and beliefs, (2) The session focused on the client's feelings, sensations and embodied experience. Finally participants completed the PEP, turned in their materials, and read a short debriefing, describing the nature of the study.

## CHAPTER 3 RESULTS

### Prescreening

Participants were pre-screened for their levels of self-esteem using the Self-Esteem Scale (Rosenberg, 1965), and for their philosophical leanings using the Therapist Attitudes Questionnaire (DisGiuseppe & Linscott, 1993). Cutoffs were determined with regards to self-esteem first, and then most extreme philosophical leanings (Rationalist or Constructivist) were selected from those low self-esteem individuals. In an attempt to recruit participants that would consider the tape-recorded sessions of a client dealing with issues of low self-esteem as more self-relevant, selected participants had self-esteem scores at or below the mean ( $M = 16.00$ , with scores ranging from 9-16), and philosophical leanings that were most extreme (Rational  $M = 19.02$ , with scores ranging from 19-32; Metaphorical  $M = 20.90$ , with scores ranging from 21-32).

Of the 1,013 prescreened participants, 51.0% ( $N=517$ ) classified themselves as a Rationalist, and 49.0% ( $N=496$ ) classified themselves as a Constructivist using the TAQ-SF (Neimeyer & Morton, 1997).

### Manipulation Checks

Two manipulation checks were conducted to determine the representativeness of the respective therapy orientations (Rationalist or Constructivist). First, five counseling psychology graduate students were recruited to listen to each of the therapy sessions. The graduate students' participation was voluntary, and they were asked to answer the

same four questions after hearing each session. Two questions related to how accurately they thought the session represented Rationalist orientation, and two questions related to how accurately they thought the session represented a Constructivist approach to therapy (see Appendix A). Paired sample t-tests of the Rationalist/Constructivist questions, revealed that graduate students rated the two questions depicting the Rationalist therapy session significantly higher ( $M = 8.80$ ) than they did the two questions depicting the Constructivist therapy session ( $M = 4.40$ ),  $t(3) = 4.68$ ,  $P \leq 0.009$ . The same was true for the graduate student's ratings of the Constructivist session; ratings of the two questions depicting the Constructivist therapy approach were significantly higher ( $M = 8.00$ ) than the two questions depicting the Rationalist approach ( $M = 3.00$ ),  $t(3) = -4.758$ ,  $P \leq 0.009$ . Thus, the graduate students accurately perceived both Rationalist and Constructivist approaches to therapy, supporting the representativeness of each of the therapy approaches.

For the second manipulation check, we included the following two questions at the end of the dependent measure of therapy preference that was completed by all participants in the study: (1) "the session focused on the client's thoughts, cognitions and beliefs" and (2) "the session focused on the client's feelings, sensations and embodied experience." Participants answered these two questions after listening to the Rationalist session and then after listening to the Constructivist session. This was done in an attempt to assure that participants found the sessions to be representative of the particular therapist's approach to therapy (Rationalist or Constructivist). Paired sample t-tests of the questions revealed that participants listening to the Rationalist approach rated question 1 significantly higher ( $M = 4.42$ ,  $SD = 0.85$ ) than participants listening to the

Constructivist approach ( $M = 2.87$ ,  $SD = 1.23$ ),  $t(1, 57) = 6.22$ ,  $P \leq 0.001$ . The same was true for question 2, where participants listening to the Constructivist approach to therapy rated question 2 significantly higher ( $M = 4.39$ ,  $SD = 0.84$ ) than participants listening to the Rationalist approach ( $M = 3.32$ ,  $SD = 1.22$ ),  $t(1, 57) = -3.63$ ,  $P \leq 0.001$ . Thus, participants accurately perceived both Rationalist and Constructivist approaches to therapy.

### Analyses

Of the 58 participants that met the prescreening cutoffs, 55.2% ( $N=32$ ) classified themselves as a Rational epistemic style, and 44.8% ( $N=26$ ) classified themselves as a Metaphorical epistemic style using the Psychological-Epistemological Profile (Royce & Mos, 1980). Among the females in the sample, 20 were categorized as having Rational epistemic style and 19 as having a Metaphorical epistemic style. For men, the numbers were 12 Rational and 7 Metaphorical. No significant gender differences in the distribution of epistemic style was found, Chi Square ( $1, 57$ ) = .39,  $P > 0.05$ .

Primary analyses began with a multivariate analysis of variance (MANOVA) in order to examine the relationship between individuals' epistemic styles (Rational vs. Metaphorical) and their preference for therapy orientation (Rationalist vs. Constructivist) using the three dependent measures of therapy preference: Therapy Evaluation Measure, Session Evaluation, and Therapy Style. The 2 (epistemic styles) X 2 (therapy preference) mixed factorial MANOVA was conducted along the 6 subscale scores of counseling favorability (adapted from Lyddon, 1989; Neimeyer et al, 1993). Table 1 depicts the means and standard deviations of the conditions. Results of this 2 X 2 mixed factorial MANOVA revealed a significant main effect for the therapy orientation,  $F(5, 53) =$

128.81,  $P \leq 0.001$ , but no significant main effect for epistemic style,  $F(1, 57) = 0.24$ ,  $P \leq 0.628$ . There was also no significant two-way interaction found between epistemic style and therapy preference,  $F(5, 53) = 0.68$ ,  $P \leq 0.641$ .

Thus, the Rational and Metaphorical epistemic styles did not rate the Rationalist or Constructivist therapy sessions in a significantly different way. However, across the three subscales, the Rationalist therapy session was rated significantly higher by the Rational ( $M = 30.06$ ,  $SD = 5.78$ ) and Metaphorical ( $M = 30.39$ ,  $SD = 4.95$ ) epistemic styles than the Constructivist therapy session was by the Rational ( $M = 26.59$ ,  $SD = 6.34$ ) and Metaphorical epistemic styles ( $M = 27.58$ ,  $SD = 6.60$ ).

An additional analysis was done to compare participants' scores on the PEP and the TAQ. Pearson Product Moment correlations revealed significant positive correlations between the PEP Rational style and the TAQ Rational style,  $r = 0.28$ ,  $P \leq 0.05$ , and the PEP Metaphorical style and the TAQ Metaphorical style,  $r = 0.28$ ,  $P \leq 0.05$ . In addition, there was a significant negative correlation found between the PEP Metaphorical style and the TAQ Rational style,  $r = -0.45$ ,  $P \leq 0.01$ . Table 2 depicts this correlation table.

Table 1  
Epistemology (Rationalist/Metaphorist) X Therapy Orientation (Rationalist/Constructivist)

	Epistemic style	Mean	Std. deviation	N
Therapy evaluation measure for rationalist session	Rational	11.84	1.76	32
	Metaphorical	12.23	1.58	26
	Total	12.02	1.68	58
Therapy evaluation measure for constructivist session	Rational	10.84	2.46	32
	Metaphorical	11.35	2.67	26
	Total	11.07	2.55	58
Session evaluation for rationalist session	Rational	8.03	1.56	32
	Metaphorical	7.92	1.44	26
	Total	7.98	1.49	58
Session evaluation for constructivist session	Rational	7.50	1.68	32
	Metaphorical	7.38	1.33	26
	Total	7.45	1.52	58
Therapy style for rationalist session	Rational	10.19	3.38	32
	Metaphorical	10.23	2.94	26
	Total	10.21	3.17	58
Therapy style for constructivist session	Rational	8.25	3.02	32
	Metaphorical	8.85	3.53	26
	Total	8.52	3.24	58

Table 2  
Correlation of Psychological-Epistemological Profile with Therapist Attitudes Questionnaire

		PEP rational	PEP metaphorical	TAQ rational	TAQ metaphorical
PEP rational epistemic style	Pearson correlation	1.00	1.00	0.28*	-0.14
	P value	1.00	0.66	0.04	0.30
	N	58.00	58.00	58.00	58.00
PEP metaphorical epistemic style	Pearson correlation	-0.06	1.00	-0.45**	0.28*
	P value	0.66	--	0.00	0.04
	N	58.00	58.00	58.00	58.00
TAQ rational epistemic style	Pearson correlation	0.28*	-0.45**	1.00	-0.24
	P value	0.04	0.00	--	0.07
	N	58.00	58.00	58.00	58.00
TAQ metaphorical epistemic style	Pearson correlation	-0.14	0.28*	-0.24	1.00
	P value	0.30	0.04	0.07	--
	N	58.00	58.00	58.00	58.00
* Correlation is significant at the 0.05 level (2-tailed).					
** Correlation is significant at the 0.01 level (2-tailed).					

## CHAPTER 4 DISCUSSION

Overall, the results of the present study do not support our original hypothesis regarding the effects of epistemic style on therapy preferences. Overall, participants favored the Rational Emotive Therapy session more than they did the Constructivist session, but this did not vary by the participants' epistemic style. Instead, results revealed participants' epistemic styles (Rational vs. Metaphorical) did not "match" with corresponding preferences for therapy orientation (Rationalist vs. Constructivist). One explanation for this finding is the possibility that providing participants with a more "real life" therapy context (i.e., audio recording) to evaluate, along with a personally relevant-presenting problem (i.e., self-esteem, social anxiety) washed out the "matching" effects that have been found in previous research (Fry & Charron, 1980; Lyddon, 1989). This lack of finding a "matching hypothesis" in the present study supports the assertion of Vincent and LeBow (1995), who stated that a more tangible presentation of actual therapy approaches, with the addition of a specified target problem, could "over-ride" the effects of epistemic matching. Future research should attempt to replicate these findings to see if there are in fact, variations according to specified target problems and a more real life therapy context. One possible avenue for further investigation would be to add in a higher self-esteem group into the current conditions, to see if results tend to vary according to degree of personal relevance of target problem. Another possibility would be to add in another fully-crossed condition where participants rated the written

orientations prior to hearing the therapy session, at which point they rated the session that they heard. This could potentially provide insight into the differences between the less “real life” depictions (e.g., written descriptions) versus more “real life” therapy contexts (e.g., audio recordings), as well as tapping how the degree of self-relevance (low vs. high self-esteem participants) affects overall ratings of the therapy sessions.

The overall higher ratings of the Rationalist therapy session by both epistemic styles across the three subscales could be interpreted as a result of (1) the participants (non-clinical, adolescent population with a mean age of 18.64 years), or/and (2) the nature of the target problem (self-esteem, social anxiety). With regards to the first possible interpretation, Lyddon and Adamson (1992) suggested that a person’s relative philosophical commitments could be age related. Studies investigating adult cognitive development reveal that during the late adolescent and early adulthood years, cognitive development could be better seen as philosophical shifts in the direction of more relativistic and dialectical thought (Kramer & Woodruff, 1986). Thus, the participants in this study could have been more drawn to the Rationalist therapy orientation due to its inherent claims of a more single, stable, external reality, rather than the more relativistic claims inherent in the Constructivist therapy orientation.

An alternative explanation might be the participant’s relative familiarity with Rationalist versus, Constructivist therapy, which may, in turn, have affected their overall favorability ratings.

A different explanation for the participants’ higher ratings of the Rationalist therapy session might focus on the target problem of self-esteem/social anxiety issues that were presented in the therapy sessions. Perhaps Rationalist therapy orientations

present with a more plausible initial treatment (first session) than the Constructivist therapy orientation does. Future research could address these various possibilities by (1) testing different age groups, such as older adults who could possibly have more concrete philosophical beliefs, and (2) assessing prior knowledge concerning Rationalist and Constructivist therapies, and (3) comparing different target problems that have self-relevance to participants (e.g., body image concerns).

Fortunately, the present study does suggest the potential utility of the PEP and TAQ in future research efforts similar to those presented in this study. The correlations found between these two measures of epistemology provide support for their representativeness of the Rational and Metaphorical epistemic styles.

There are some limiting aspects of this study that compromise the external validity of the findings. First, the analogue design of the study, while possibly closer to a “real life” therapy session than a written description, still cannot be interpreted as equivalent to an actual client-therapist experience. Second, the use of a non-clinical sample population additionally limits the generalizability of these findings into the actual therapy context. Thus, the findings of this study should be seen as preliminary and awaiting future research in actual clinical trials.

Another limiting factor to the present study is the representativeness of the two therapy orientations in the session. Although, we were careful to assess for the representativeness of each orientation, the subjective nature of the therapist’s presentation of the two orientations could still pose a problem with regards to the accuracy of the therapist’s representations in each of the sessions.

However, despite the apparent limitations in the present study, the study does contribute to the preliminary understanding of the relationship between epistemic style and preferences for particular therapy orientations. More specifically, the current study extends the findings of Vincent and LeBow (1995), who stated that with regards to the matching hypothesis, “additional moderating variables may be potentially important in kind and degree” (p.93). This opens up a fruitful area of research to investigate the potential role that specific self-relevant issues play in matching a client’s epistemic style with their preferences for therapy orientations. In addition, this study highlights the importance of future investigations looking at the generalizability of this research into real-life therapy contexts, and what role this matching actually plays in therapy outcomes.

APPENDIX A  
GRADUATE STUDENTS' EVALUATION MEASURE FOR  
REPRESENTATIVENESS OF THERAPY APPROACHES

**Session #1**

1. To what extent does this session accurately represent a Rational Emotive orientation to therapy?  
Very accurately 5 4 3 2 1 Very inaccurately
2. To what extent does this session accurately represent a Constructivist orientation to therapy?  
Very accurately 5 4 3 2 1 Very inaccurately
3. To what extent does this session focus on the client's thoughts and beliefs?  
Very much 5 4 3 2 1 Very little
4. To what extent does this session focus on embodied experience and personal meaning?  
Very much 5 4 3 2 1 Very little

**Session #2**

1. To what extent does this session accurately represent a Rational Emotive orientation to therapy?  
Very accurately 5 4 3 2 1 Very inaccurately
2. To what extent does this session accurately represent a Constructivist orientation to therapy?  
Very accurately 5 4 3 2 1 Very inaccurately
3. To what extent does this session focus on the client's thoughts and beliefs?  
Very much 5 4 3 2 1 Very little
4. To what extent does this session focus on embodied experience and personal meaning?  
Very much 5 4 3 2 1 Very little

APPENDIX B  
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 of 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.

APPENDIX C  
MANIPULATION CHECK QUESTIONS FOR PARTICIPANTS

1. The session focused on the client's thoughts, cognitions and beliefs.

Not at all                    1        2        3        4        5                    Very much

2. The session focused on the client's feelings, sensations and embodied experience.

Not at all                    1        2        3        4        5                    Very much

## REFERENCES

- Arthur, A. R. (2000). The personality and cognitive-epistemological traits of cognitive behavioral and psychoanalytic psychotherapists. *British Journal of Medical Psychology, 73*, 243-257.
- Beronsky, M. D. (1994). Individual differences in self-construction: the role of constructivist epistemological assumptions. *Journal of Constructivist Psychology, 7*, 263-281.
- Blascovich, J., & Tomaka, J. (1991). Measures of self-esteem. In J.P. Robinson, P.R. Shaver, & L.S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes. Measures of social psychological attitudes* (pp. 115-160). San Diego: Academic Press, Inc.
- 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 constructivisms: 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.
- Fry, P. S., & Charron, P. A. (1980). Effects of cognitive style and counselor-client compatibility on client growth. *Journal of Counseling Psychology, 27*, 529-538.
- Kramer, D. A., & Woodruff, D. S. (1986). Relativistic and dialectical thought in three adult age groups. *Human Development, 29*, 280-290.

- 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.
- Lyddon, W. J., & Adamson, L. E. (1992). Worldview and counseling preference: An analogue study. *Journal of Counseling and Development*, 71, 41-47.
- 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., & 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.
- 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.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- 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.
- Shact, T. E., & Black, D. A. (1985). Epistemological commitments of behavioral and psychoanalytic therapists. *Professional Psychology: Research and Practices, 16*, 316-323.
- Schopfloch, D., & Royce, J. R. (1978). *An item factor analysis of the Psycho Epistemological Profile*. Unpublished master's thesis, University of Alberta, Edmonton, Canada.
- 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. (1995). 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

I was born in Cleveland, Ohio, on December 15, 1978. In 1982 my family moved to St. Petersburg, Florida, where I resided until I was eighteen years old and went off to college.

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

I joined the Department of Psychology at the University of Florida as a counseling psychology graduate student In August of 2001. I completed my Master of Science degree in December of 2002.