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Explicitly and Implicitly Assessed Personality Traits of Practicing Clinicians

by

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Doctor of Philosophy Degree in Clinical Psychology

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An Abstract of

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The major goal of the study was to better understand the personalities of practitioners of psychology. Of particular interest was the relationship between one’s relative therapeutic directiveness and his or her personality attributes. This construct was assessed indirectly by asking clinicians to identify the extent to which their work is influenced by various theoretical orientations, each of which was characterized as either directive (i.e., behavioral, cognitive-behavioral) or nondirective (i.e., psychodynamic/psychoanalytic, humanistic/existential, experiential, common factors, eclecticism/integration) in nature. This allowed the 123 participating doctoral-level clinicians to be assigned a standard score targeting the extent to which they identified with therapeutic methods characterized in the present study as less directive in nature. This score was calculated by subtracting participants’ directiveness z-scores from their nondirectiveness z-scores. This construct (identification with less directive methods) was also assessed by using factor scores. There were four sets of hypotheses. First, that identification with less directive methods would be associated with self-reported neuroticism and disagreeableness; secondly, that IAT-assessed neuroticism and agreeableness would not be associated with identification with less directive methods; thirdly, that identification with less directive methods would be
associated with increased method alignment (absolute z-score difference between IAT-assessed traits and self-reported traits); and, lastly, that, identification with less directive methods would moderate the strength of association between self-reported and IAT-assessed neuroticism and agreeableness. None of these hypotheses were supported. However, the study did find that identification with less directive methods was negatively associated with IAT-assessed neuroticism ($r = -0.19, p < 0.05$), and positively associated with IAT-assessed agreeableness ($r = 0.26, p < 0.01$). In applying a principal components factor analysis to clinician endorsement of theoretical orientation, the first factor extracted appeared to follow our directive-nondirective categorization, and contrasted behavioral (-0.63) and cognitive-behavioral (-0.60) orientations with Humanistic/Existential (0.75), Experiential (0.64), and Psychoanalytic/Psychodynamic (0.51) orientations. Integrated/Eclectic (0.37) and Common Factors (0.33) orientations maintained smaller loadings on the factor. Although hypothesized relationships were not found, the present IAT finding provides evidence that, like prior studies of clinician personality, personality traits do in fact differ with preferred theoretical orientation. But in contrast to previous studies, the therapists’ self-reported personality characteristics did not differ with preferred theoretical orientation. Future studies should replicate our methodology using IAT-assessment personality characteristics to determine the reliability of this finding. Implications of this phenomenon are discussed in terms of psychotherapy research and training in psychology. Limitations of the present study are also discussed, including the low survey response rate (4.4%).
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Chapter 1

1 Introduction

1.1 Background

At the most basic level, "theoretical orientation" might be thought of as a philosophy through which human suffering and its alleviation is understood. More specifically, it has been described as a “conceptual framework that clinicians use to understand their patients’ therapeutic needs” (Ponzanski & McLennan, 1995, p.411). According to Norcross (1985), a clinician’s theoretical orientation signifies a set of theories or assumptions upon which interventions are based. However, specific interventions are not equal to theoretical orientation; rather, they represent its logical derivatives. Thus, the ideas and assumptions that clinicians orient to most, and from which specific interventions are borne, represent their preferred theoretical orientations.

Much of the research into theoretical orientation has involved comparing the relationship between particular philosophies (e.g., behaviorism v. psychoanalysis, medical models v. non-medical models) and treatment outcome. This area of research – “the great psychotherapy debate” – is one of the more contentious issues in the field (see
Wampold, 2015). While clinical psychology and related fields adhere to scientific methods and strive to make valid comparisons between different methodologies, a clear understanding of the relative values of different therapeutic techniques remains elusive. In a certain way, this is surprising. Given the field’s scientific values and the empirical research into treatment comparison, one might rightly expect something like a field-wide consensus regarding exactly what best treatment is for a given psychiatric disorder.

Empirically Supported Treatments (ESTs) were introduced in 1995 by the APA Task Force on Promotion and Dissemination of Psychological Procedures, and meant to meet this expectation, precisely. Efforts to examine the efficacy of psychological treatment were aimed at providing both psychologists and consumers with a method to select treatments based solely on scientific findings (e.g., see Woody, Weisz, & McLean, 2005). There was a need from insurance providers and cost-containment perspectives to establish psychotherapy as an effective, efficient method in the treatment of psychiatric disorders, using the same methods by which psychopharmacologic treatment had been established (e.g., see Barlow, 1996; Beutler, 1998). Barlow (1996) and others warned that psychotherapy had no choice but to demonstrate its effectiveness, lest it be relegated to a last resort in the eyes of the public as well as the healthcare industry. Thus, in defense of psychological treatment, the EST movement adopted FDA (Food and Drug Administration) standards for characterizing pharmacological treatments (e.g., a blood pressure medicine) as effective: to constitute an EST, a treatment must show effectiveness in randomized control trials (RCTs). Results of RCTs land particular treatments in categories depicting the extent to which they are supported by evidence (e.g., “well-established;” see Chambless et al., 1998 and also the website of APA’s
In order to identify a particular therapy as “empirically supported,” different treatments are tested against each other to identify a package of specific interventions (e.g., Dialectical Behavioral Therapy; DBT, Linehan, 1993) that, independent of context, remove or reduce some psychological ailment (see Budd & Hughes, 2009).

Although well-intentioned in its attempt to publicly legitimize psychotherapy, this methodology has been criticized on several grounds. Westen, Novotny, and Thompson-Brenner (2004) argue that several assumptions of EST methodology are faulty. These authors argue that ESTs are artificially short treatments (e.g., 16 sessions) in order to maximize internal validity, but this comes at a great cost – mainly, that external validity is sacrificed. They cite evidence that significant and sustained change with fewer relapses is more likely to result from longer treatments (Hollon, Thase, & Markowitz, 2002). For Westen et al., EST methodology makes little room for the reality that most patients have more than one problem, and perhaps less room for processes of personality. Proponents of the EST methodology refute arguments like these, claiming that any treatment proven effective could be considered an EST regardless of length, and that several EST-driven studies actually use comorbid samples (Crits-Christoph, Wilson, & Hollon, 2005).

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1 While a treatment must meet specific experimental criteria to be considered an “empirically supported treatment,” “empirically based practice” is a term that refers to a particular method of making clinical decisions. EBP is utilized when practitioners make use of (a) available research evidence, (b) their clinical experience and/or skill, and (c) patient factors in determining what is called for in a given clinical interaction (see Lilienfeld, Ritschel, Lyn, Cautin, & Latzman, 2013). Thus, adherence to this approach is probably less limiting as clinician behavior is theoretically determined by more than simply experimental findings.
1.2 Common Factors: An Argument for the Therapy Relationship

While there is certainly debate to be had around the scientific legitimacy of ESTs, the heart of the disagreement may have been best captured by Norcross and Lambert (2011): “Do treatments cure disorders or do relationships heal people?” (p. 4). Proponents of the “common factors” approach have shown that the therapy relationship (and its associated characteristics) is more responsible for psychological improvement than the particular technique or specific intervention utilized by the clinician (Wampold, 2005, 2015) – the same techniques upon which ESTs place primary importance. From this perspective, not only is the highly controlled nature of EST methodology unrealistic (as argued by Westen et al., 2004 among others), but these designs also happen to conceptualize as a contaminant the most important factor in psychotherapy outcome: the relational/social context (i.e., the relationship between patient and therapist; see Norcross, 2011).

While not without critics (Chwalisz, 2001; Maltzman, 2001), research into the relational components of psychotherapy has yielded strong support for the power of patient-therapist bond and its component parts, which exists across all modalities (see Ahn & Wampold, 2001; Messer & Wampold 2002; Wampold, 2001). It has been found that the strength of the helping relationship (i.e., working alliance; see Castonguay & Beutler, 2005; Castonguay, Constantino, & Grosse Holtforth, 2006) is one of the key common factors responsible for patient improvement (see Norcross, 2002). In defining what the “working alliance” is, Constantino, Castonguay, and Schut (2002) write that it “is generally agreed that the alliance represents interactive, collaborative elements of the relationship (i.e., therapist and patient abilities to engage in the tasks of therapy and to
agree on the targets of therapy) in the context of an affective bond or positive attachment” (p. 86). In 2001 and 2011 important issues of *Psychotherapy* were dedicated to identifying the most crucial elements of effective psychotherapy relationships via a series of meta-analyses (2011 served as an update). According to this and other research (e.g., Norcross, 2002), factors that contribute to strong therapeutic alliances include authenticity or genuineness on the part of the therapist (Kolden, Klein, Wang, & Austin, 2011); personality similarity between patient and therapist (Taber, Leibert, & Agaskar, 2011); therapist empathy (Elliot, Bohart, Watson, & Greenberg, 2011), patient depth of elaboration, which is fostered by therapist behavior (Lingiardi, Colli, Gentile, & Tanzilli, 2011); and positive regard (Farber & Doolin, 2011).

1.3 *Theoretical Orientation: How We See Ourselves*

A recent trend toward integrative therapy and reported use of diverse techniques by clinicians (Norcross & Goldfried, 2005; Norcross, Hedges, & Prochaska, 2002; Melchert, 2013; Thoma & Cecero, 2009) may well represent some acknowledgment that common factors carry more weight in patient improvement than specific interventions. However, only 22% of clinicians currently identify with the “integrative or eclectic” designation (Norcross & Karpiak, 2012). Other approaches with which clinicians identify include Cognitive (31%), Psychodynamic (18%), Behavioral (15%), Interpersonal (4%), Other (3%), Humanistic (2%), Rogerian (2%), Systems (2%), and Constructivist (1%). We as clinicians differentially identify with specific techniques – even though, in general, *it is at least arguable* (but see Chambless & Ollendick, 2001) that specific techniques are not differentially associated with treatment success (Ahn & Wampold, 2001).
Then what drives these identifications? It could be that clinicians are endorsing a particular approach, perhaps a way of conceptualizing patients they align with, all the while knowing that the atheoretical ingredients common to all forms of psychotherapy account for the preponderance of change variance. But this would mean that the techniques one uses is something of a *personal preference* as opposed to a cold, empirically driven conclusion. Some research has in fact shown that empirical evidence is not a major determinant of theoretical orientation (Bitar, Bean, & Bermudez, 2007; Vasco & Dryden, 1994). This begins to explain how, despite a plethora of research into the relative equivalence of different orientations, most clinicians (all but 22%, see above) remain allegiant to one (Norcross & Karpiak, 2012).

On one hand, this phenomenon could be thought of as immaterial: if these orientations are equivalent, or arguably equivalent, why is it of interest where our preferences lie? That is, in light of certain treatment outcome research (e.g., Wampold, 2005, 2015), one might think our choice of approach matters less and less (i.e., to whatever extent prevailing approaches produce equivalent outcomes). In fact, much research suggests this precisely – that the specific techniques and strategies clinicians come to prefer are less important than the nonspecific, shared elements of psychotherapy (see Wampold, 2005). If this is generally true, though, the phenomena of preference and conviction (for certain approaches) becomes difficult to account for. What exactly goes into our preferred theoretical orientation, and what is at stake in the great psychotherapy debate? The answer to both questions appears to be, ourselves.
Chapter 2

2 A Review of the Literature: Evidence of a Link between Theoretical Orientation and Personality

2.1 Introduction

The question of how clinicians arrive at their theoretical orientation of choice has not been heavily researched. The field first officially addressed the issue was in 1978, when a special issue of *Psychotherapy: Theory, Research, and Practice* was devoted to the topic (Barron, 1978); however, some had addressed this question prior to then (e.g., Henry, Sims, & Spray, 1971; Patterson, Levene, & Breger, 1971). A large majority of the articles in the 1978 special section were not quantitative investigations though, prompting critiques and more systematic investigations (Arthur, 2001). The majority of authors contributing to the special issue argued that theoretical orientation is a product of the clinician’s personality, though some emphasized the role of training models and experiences, supervisor influence, and economic and political factors (Cummings & Lucchese, 1978; Lazarus, 1978; Schwartz, 1978; Steiner, 1978). Of all studies that identified non-personality predictors of orientation, Schwartz’ was the only empirical investigation. In surveying 30
psychotherapists, she found that they ranked their own therapist’s orientation and coursework as the most influential factors predictors of their own orientation. Cummings and Lucchese (1978) argued that personality is not a factor; rather, they argued accidental factors in the training environment lead to an endorsement of a particular ideology, and that preferred ideologies may or may not conflict with one’s dispositional traits. From Lazarus’ (1978) point of view, psychotherapists do not, as a function of their own personalities, gravitate toward particular ideologies; rather, they mold their own therapeutic style such that it conforms to their personality.

Walton (1978) found evidence for a relationship between theoretical orientation and personality. In his survey, psychodynamic, rational-emotive (RE), behavioral, and eclectic therapists were asked to complete a 98-item questionnaire in which they made ratings in the following domains: my intuition; my best friend; my initial reaction to strangers; my style of relating to friends; my rationality; and, myself. For example, they were asked to rate their “intuition” on a scale ranging from “good” to “bad.” Different adjective pairs were used for the different domains. Responses to the measure were factor analyzed. It was found that psychodynamic clinicians reported being more complex and more serious than RE therapists; RE therapists reported being more rational than eclectic therapists; behaviorists reported having low intuition; and, eclectic therapists generally reported low rationality. However, orientations did not always cluster together. Thus, although significant differences were found between groups, variability was present within orientations. In the same special issue, Herron (1978) examined the relationship between self-reported personality traits and orientation in 21 graduate students in clinical psychology. It was found that one’s acceptance and sensitivity to one’s own emotions was
associated with preferences for psychodynamic and humanistic preferences more so than behavioral preferences.

In his review, Arthur (2000) notes that the 1978 special issue prompted researchers to employ more empirical designs with more standardized measures to further explore the issue. Tremblay, Herron, and Schultz (1986) used the Personal Orientation Inventory (POI; Shostrom, 1964) to identify differences between self-ascribed behaviorists, psychoanalysts, and humanists. The POI is a 150-item self-report measure that maintains 12 domains, which are thought to characterize well-adjusted, self-actualized individuals (e.g., Acceptance of Aggression, Capacity for Intimate Contact, Self-Regard). On all twelve scales, Humanists scored higher than both psychoanalysts and behaviorists; the authors conclude that this makes sense given the humanistic conceptualization of the scale. Humanists were also significantly more optimistic about the nature of human beings than the other two groups. The humanist group and the psychodynamic group also reported more acceptance of their own aggression, more sensitivity to their own feelings, and more openness to warm, interpersonal relations. Those in the psychodynamic group and the behaviorist group were more outer-directed (more reactive to social than internal motivation), less inclined to value self-actualization, and more limited in their spontaneous expression of emotion than those in the humanist group. Behavioral therapists scored lower on the POI measure than the other two groups. They endorsed limited flexibility in the application of values, limited acceptance of their feelings, and less capacity for intimate relationships. The authors note that despite differences across groups, there appears to be a “therapist personality” marked by a focus on the present, high self-acceptance and self-
regard, and a constructive view of the nature of humanity (the belief that man is essentially
good and the ability to resolve dichotomies in human nature).

Some researchers have examined preferred theoretical orientation in conjunction
with the five factor model of personality, which arose in the early part of the twentieth
century. Personality researchers (e.g., Klages, 1926; Allport & Odbert, 1936) aimed to
identify the major components of personality based on the “lexical hypothesis,” which was
first offered by Francis Galton (Atkinson, Atkinson, Smith, Bem, & Nolen-Hoeksema,
2000). The idea behind this hypothesis is that if one wished to identify the full spectrum of
personality traits, language would be the best place to look; that is, if a behavior is socially
meaningful, it probably has a corresponding symbol in human language since language is
the medium by which humans communicate salient aspects of experience to each other.
Using this approach, Allport and Odbert (1936) identified over 17,000 words that reflected
personality traits, but neatly categorizing them proved difficult, and researchers who
attempted to do so utilized varying conceptual schemes (e.g., Norman, 1967).

Through factor analysis, Raymond Cattell distilled this list of words into 16 factors
which he believed comprised personality (Cattell, 1943). Several researchers have used
Cattell’s list of words as a starting point in order to further delineate the factor structure of
personality traits. Finally, Digman (1990) established the five factor model as one that best
classified human personality traits. In several studies both before and after Digman’s
seminal paper (e.g., see Fiske, 1949; Tupes & Christal, 1961; Goldberg, 1990; Saucier &
Goldberg, 1996) the same five factors were approximated. Though they have been given
different names at different times, they are contemporarily referred to as openness to
experience, conscientiousness, extraversion, agreeableness, and neuroticism (Costa & McRae, 1992; Digman, 1990).

Scandell, Wlazelek, and Scandell (1997) used the NEO-Personality Inventory-Revised (NEO-PI-R; Costa & McRae, 1992), a commonly used measure of the five factors, to identify differences between therapists of different orientations. These authors found that cognitive therapists reported more agreeableness, including this domain’s facet of Straightforwardness and Altruism. Humanistic therapists reported more openness to experience, including this domain’s facets of openness to fantasy and openness to action. Finally, the Gestalt orientation was also significantly correlated with openness to experience, including the facet of openness to fantasy.

Poznanski and McLennan (2003) explored the relationship between self-ascribed theoretical orientation (psychodynamic, cognitive-behavioral, family-systemic, and experiential) and personality (NEO-FFI) in a sample of Australian psychologists. Participants also completed an open-ended interview that focused on issues related to their personal history and training. On the NEO-FFI, psychodynamic practitioners reported significantly more neuroticism than cognitive-behavioral practitioners while cognitive behavioral practitioners reported significantly less openness to experience than the other three groups. Results of the interview indicated that CBT practitioners were lower in emotional expressivity than PDT practitioners and were more likely to be the product of a stable family of origin. Regarding the neuroticism finding, it has also been found that psychoanalytically oriented psychiatrists maintain higher levels of depression, anxiety, and introversion than psychiatrists who conceptualize from a medical model (organic) standpoint (Kreitman, 1962).
Arthur (2000) compared psychodynamic practitioners to behaviorists and found similar results, using the Millon Index of Personality Styles (MIPS; Millon, 1994) to assess personality. It was found that psychodynamically oriented practitioners scored higher on the MIPS scales Preserving, Intuiting, Feeling, and Innovation, while the behaviorally oriented practitioners scored higher on Individuating, Sensing, Thinking, Retiring, Conforming, and Adjustment. These findings uphold the notion that the personalities of these groups differ; specifically, psychodynamic clinicians report more anxiety and distress, and are more feelings-driven than behaviorally-oriented clinicians. Keinan, Algamor, and Ben-Porath (1989) found that behaviorists report higher activity, assertiveness, dominance, and extraversion than both PD practitioners, and eclectics. This aligns with both Arthur (2000) and Kreitman (1962) to the extent that analytically or eclectically minded practitioners might generally have an introersive cognitive style. Per Keinan et al. (1989), this trait may also manifest interpersonally (i.e., passivity, low initiative).

Several other investigations have examined the personality profiles of students drawn to different orientations. Scragg, Bor, and Watts (1999) examined self-reported personality traits of applicants to the Master of Science in Counseling Psychology program at City University, London, using the Millon Index of Personality Styles (MIPS; Millon et al., 1994). Applicants’ theoretical preferences were categorized as either “directive” or “non-directive or interpretive.” Results demonstrated that applicants interested in non-directive or interpretive approaches reported an intuitive style of cognizing, which indicates a preference for intangible versus concrete phenomena, while, on the other hand, applicants interested in directive approaches reported a systematizing style of cognizing,
which indicates a tendency to rely on established perspectives such that new and novel information is fit into an existing knowledge base. The study also found that applicants interested in directive approaches reported more assertiveness and conformity than the other group. The authors note that MIPS’ intuition variable (endorsed by applicants interested in less directive approaches) maps onto five factor model’s openness to experience variable, while MIPS’ assertiveness and conformity variables (endorsed by applicants interested in directive approaches) are associated with the five factor variable, conscientiousness.

In another examination of trainees, Murdock, Banta, Stromseth, Viene, and Brown (1998) examined self-reported interpersonal style and its relationship with preferred theoretical orientation. Results showed that of the five groups in the study (psychoanalytic, cognitive-behavioral/behavioral, systems/interpersonal, person-centered, and existential/gestalt), the psychoanalytic group characterized themselves as more dominant than any other group; however, no group characterized itself as strongly dominant or submissive.

Using the NEO-PI-R, Boswell, Castonguay, and Pincus (2009) examined 46 graduate students (in both clinical and counseling doctoral programs) to identify personality differences across preferred orientations. To identify trainee orientation, authors used a dimensional measure, the Development of Psychotherapist Common Core Questionnaire (DPCCQ; Orlinsky et al., 1991), which allows respondents to rate the degree to which a given philosophy influences their work. A cluster analysis led to a three group solution: humanistic/systems/dynamic, psychodynamic, and cognitive-behavioral. Regarding these clusters, the authors found that individuals who strongly endorsed CBT
philosophy were particularly disenchanted with psychodynamic philosophy, just as those highly endorsing Humanistic or Psychodynamic philosophies were particularly disenchanted with the cognitive-behavioral approach. Each of the three clusters endorsed humanistic principles, which might speak to the widely understood importance of positive regard and empathic attunement. Regarding personality, differences were found across groups. The psychodynamic and humanistic/systems/dynamic groups reported significantly more Angry Hostility, Impulsivity, and Openness to Feelings than the CBT group. The authors note that this falls in line with the theoretical underpinnings of the theories; that is, psychodynamic and humanistic theory encourage experiencing, understanding, and acceptance of subjective emotional states, whereas cognitive-behavioral theory employs cognition to mitigate emotion. The possibility is raised that openness to experience itself accounts for these differences, rather than real differences in Anger and Impulsivity – the non-CBT clusters may simply be more open to emotion and, therefore, more aware of their emotional states or more willing to admit to them. In another recent study of trainees, Buckman and Barker (2010) found similar results. Here, a preference for CBT was positively correlated with conscientiousness and negatively correlated with openness to experience (as measured by the NEO). The opposite pattern was found for those with a preference for psychodynamic therapy (i.e., high openness and low conscientiousness).

In an investigation of both practitioners and students, Ogunfowora and Drapeau (2008) utilized multiple regression procedures to identify personality factors that predicted different theoretical preferences. The authors used the short version of the HEXACO Personality (HEXACO-PI; Lee and Ashton, 2004) to assess personality. In the practitioner
sample, it was found that a cognitive behavioral orientation was incrementally predicted by conscientiousness, while the humanistic/existential and psychodynamic orientations were incrementally predicted by openness. In addition, increased conscientiousness was negatively associated with humanism/existentialism. Multicultural, Feminist, and Family Systems orientations were also examined in this study, each of which were incrementally predicted by agreeableness. Similar results were found in the student sample, except that openness did not predict the psychodynamic orientation.

2.2 Summary of Positive Findings

In light of the above literature review, there appears to be a link between one’s preferred theoretical orientation and personality. The studies discussed above employed different methods of assessing theoretical orientation (i.e., simple self-ascriptions v. a multidimensional measure); did not investigate the same orientations; categorized orientations differently (e.g., Directive; Non-directive/Interpretive as in Scragg et al., [1999] v. categorizing explicitly by identified orientation as in Ogunfowara & Drapeau, [2008]); and used different measures to assess personality. Despite the differences, however, certain themes appear to consistently manifest.

Individuals identifying as behavioral or cognitive-behavioral tend to see themselves as orderly and conscientious (Arthur, 2000; Buckman & Barker, 2010; Ogunfowara & Drepeau, 2010; Scragg et al., 1999), rational as opposed to intuitive (Arthur, 2000; Buckman & Barker, 2010; Scragg et al., 1999; Walton, 1978), and well-adjusted (Arthur, 2000; Patterson et al., 1971). There is also evidence that individuals espousing these approaches see themselves as more agreeable (Scandell et al., 1997) and more conforming (Arthur, 2000; Scragg et al., 1999). Finally, this brand of clinician reports the least
openness to experience compared to other orientations (Arthur, 2000; Buckman & Barker, 2010; Ogunfowara & Drepeau, 2010; Poznanski & McLennan, 2003).

Humanistically inclined individuals (Arthur, 2000; Boswell et al., 2008; Scandell et al., 1997; Scragg et al., 1999; Tremblay et al., 1996; Ogunfowora & Drapeau 2008) and to a lesser extent, psychodynamically-inclined individuals (Boswell et al., 2008; Buckman & Barker, 2010); Ogunfowora & Drapeau, 2008; Poznanski & McLennan, 2003) report high levels of openness to experience. These groups also report the acceptance of their own feelings (Herron, 1978; Tremblay et al., 1986), and perhaps as a consequence (as suggested by Boswell et al., 2009), they report more negative emotion, including depression, anxiety, and hostility (Arthur, 2000; Boswell et al., 2008; Kreitman, 1962; Tremblay et al., 1986). Another factor that these groups appear to have in common is they both report a tendency toward oppositionality. Ogunfowara and Drapeau (2008) conclude that the Humanist’s openness to experience is the most common personality-orientation association in the literature and that this trait could be driven by a tendency to challenge “conventional beliefs about human nature” (p. 156). In the same study, authors found that the psychodynamic orientation was predicted by disagreeableness. These orientations appear to share a spirit of questioning, if not a rejection of that which is normative. The opposite spirit (e.g., agreeableness, conformity) appears to characterize individuals who utilize more directive approaches.

One final finding that appears more than once throughout the literature is that expression of emotion differs across groups. Humanists are generally the group who report being most open to emotional expression (Tremblay et al., 1986) while behaviorally or cognitive-behaviorally inclined individuals report being least open to it (Poznanski &
McLennan, 2003). Psychodynamic clinicians have reported emotional expression levels both consistent with (Poznanski & McLennan, 2003) and lower than that of Humanists (Tremblay et al., 2003), but reliable findings do not appear to exist across studies.

Regarding personality trends among practitioners who identify as integrative and eclectic, there are fewer firm findings. This could be the case for a couple of reasons. First, on logical grounds, it makes sense that the personalities of these groups would be understudied. That is, given the typical way that psychoanalysts as compared to behaviorists, for example, understand human suffering, it is logical to think of these groups as being comprised by different types of people (i.e., people with disparate personality traits/styles). Probably for this reason, research in this area has tended to compare practitioners who have a clearly identifiable and distinct approach – it is precisely the distinctiveness between modalities that leads to speculation that characterological distinctiveness may too exist. But with integrated and eclectic therapists, who represent less pure variants of a given approach, distinctiveness is lost. Probably by virtue of this, integrative and eclectic therapists have been studied less frequently in this literature (see Table 2.1). Secondly, “integrative” or “eclectic” can mean several things and has meant different things over the years (Jones-Smith, 2012). This would mean that we might not expect reliable findings because both across groups (over time) and within groups (individuals in the same study), the differences between these practitioners are probably greater than differences that exist between groups of practitioners who identify with a meaningful and well-understood label (e.g., behaviorists).
<table>
<thead>
<tr>
<th>Study</th>
<th>TO Measure</th>
<th>TO Categories</th>
<th>Personality Measure</th>
<th>Orientation &amp; Personality Findings</th>
</tr>
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<tr>
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<td>Adjectives Checklist (created by author)</td>
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<tr>
<td>Tremblay et al. (1986)</td>
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<td>PD; Humanistic; Behavioral</td>
<td>Personal Orientation Inventory</td>
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<td>Scandell et al. (1997)</td>
<td>Self-Designated (Multidimensional Measure)</td>
<td>Cognitive; Humanistic; Gestalt</td>
<td>NEO-PI-R</td>
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<td>Poznanski &amp; McLennan (2003)</td>
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<td>NEO-FFI</td>
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<td>Ogunfowora and Drapeau (2010)</td>
<td>Self-Designated (Multidimensional Measure)</td>
<td>PD; C-B; Family Systems; Feminist; Multicultural; Neuropsychological; Humanistic</td>
<td>HEXACO-PI</td>
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<td>Arthur (2000)</td>
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<td>MIPS</td>
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<tr>
<td>Keinan et al. (1989)</td>
<td>Self-Designed</td>
<td>PD; Behavioral; Eclectics</td>
<td>Personality Measure (created by authors)</td>
<td>MMPI; Guilford Personnel Inventory; Myers-Briggs Type Indicator</td>
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<tr>
<td>Kreitman (1962)</td>
<td>Attitude Questionnaire</td>
<td>Psychiatrists with medical model view of psychiatry versus psychoanalytic view</td>
<td>Psychoanalytic MDs Thinking Introversion, Depression, and Anxiety &gt; Medical Model MDs</td>
<td></td>
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<tr>
<td>Scragg et al. (1999)</td>
<td>Self-Designed</td>
<td>Directive; Non-directive/Interpretive</td>
<td>MIPS</td>
<td>Non-Directive/Interpretive Intuition &gt; Directive; Directive Systematizing, Asserting and Conforming &gt; Non-Directive/Interpretive PD positively correlated with Openness to Experience and negatively correlated with Conscientiousness; CBT negatively correlated with Openness to Experience and positively correlated with Conscientiousness</td>
</tr>
<tr>
<td>Buckman &amp; Barker (2010)</td>
<td>Self-Designed (Multidimensional Measure)</td>
<td>CBT; PD; Systems</td>
<td>NEO-PI-R</td>
<td>PD and Humanistic Sensitivity to Own Feelings &gt; Behavioral</td>
</tr>
<tr>
<td>Herron (1978)</td>
<td>Self-Designed</td>
<td>PD; Humanistic; Behavioral</td>
<td>Personal Orientation Inventory</td>
<td>PD Interpersonal Dominance &gt; other groups</td>
</tr>
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<td>Murdock et al. (1998)</td>
<td>Self-Designed</td>
<td>PD; C/C-B, Systems/Interpersonal; Person-Centered; Existential-Gestalt</td>
<td>Impact Message Inventory</td>
<td>Humanistic/Systems/Dynamic and PD Angry Hostility, Impulsivity, and Openness to Experience &gt; C-B</td>
</tr>
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<td>Boswell et al. (2008)</td>
<td>Self-Designed (Multidimensional Measure)</td>
<td>Humanistic/Systems/Dynamic; PD; C-B</td>
<td>NEO-PI-R</td>
<td>C-B predicted by Conscientiousness; Humanistic predicted by Openness and low Conscientiousness; Feminism predicted by Openness; Family Systems predicted by Extraversion</td>
</tr>
<tr>
<td>Ogunfowora and Drapeau (2010)</td>
<td>Self-Designed (Multidimensional Measure)</td>
<td>PD; C-B; Family Systems; Feminist; Multicultural; Neuropsychological; Humanistic</td>
<td>HEXACO-PI</td>
<td></td>
</tr>
</tbody>
</table>
All in all, though, it appears that there is a sturdy link between preferred theoretical orientation and personality. Contemporary researchers interested in this phenomenon have come to the same conclusion (Arthur, 2000, 2001; Ogunfowora & Drapear, 2008). In short, clinicians who report using less directive treatment methods report less conventionality and a broader range of emotional experiences (including negative experiences) than clinicians who report using more directive methods. Practitioners identifying with more directive methods report more conventionality, more conscientiousness, and a more limited range of emotional experiences. The next important question is, why would this be so? It has been argued though that one factor, above all others, predisposes individuals to being inclined to one orientation over another: their vision of reality.

2.3 *Think Epistemology, not Personality?*

Certain researchers have worked extensively to delineate the key philosophical differences across theoretical orientations. Coan (1979) developed the Theoretical Orientation Survey (TOS; Coan, 1979), a multi-item, self-report questionnaire intended to identify where individuals of different orientations fall on important dimensions of orientation. In doing so, it was first necessary to identify these dimensions; he consulted...
the published literature so as to locate the distinguishing features of different orientations, or movements. In describing this process, he writes, “It is apparent that the notion of theoretical orientation encompasses many different kinds of variables. It includes philosophical assumptions and it includes biases that affect the subject matter on which one focuses attention, the way in which one gathers information, and the way in which one formulates theory” (p. 30). Coan identified four domains that differentiate orientations: Content Emphasis (e.g., sensation and perception, Motivation, unconscious processes), Methodological Emphasis (e.g., introspective report of experience, armchair speculation), Basic Assumptions (e.g., Voluntarism, Determinism), and Mode of Conceptualization (e.g., Quantitative, Qualitative). TOS items assessed predilections in each area. Through administering the questionnaire to 866 psychologists and subjecting responses to factor analytic methods, Coan found 5 bipolar and 3 unipolar factors. Poznanski and McLennan (1995) describe these factors as follows:

Factual (v. Theoretical) Orientation, which measures the extent to which a counselor employs an empirical view of psychology as opposed to a speculative and interpretive approach; (b) Impersonal Causality (v. Personal Will), which evaluates the degree to which a therapist views human behavior as either predictable and characterized by lawful regularity at one pole or as a consequence of an individual’s choice at the other pole; (c) Behavioral (v. Experiential) Content Emphasis, which assesses the extent to which a therapist values personal conscious experience as the most important psychological data; (d) Elementarism (v. Holism), which examines a therapist’s regard for theoretically based global patterns and relationships, as opposed to regard for research strategies focusing on elementary relationships of specific variables; (e) Biological Determinism, which measures
the degree to which a therapist attributes behavioral differences among people to inborn predispositions (e.g., genetic factors); (f) Environmental Determinism, which on the other hand, measures the degree to which a therapist emphasizes the social environment as a source of individual differences; (g) Physicalism, which assesses whether a therapist views behavior in terms of observable physical conditions; and (h) Quantitative (v. Qualitative) Orientation, which evaluates the degree to which a therapist favors the systematic research methodology (p. 415).

Coan (1979) also reports identifying two second-order factors: Objectivism v. Subjectivism and Endogenism v. Exogenism, of which he places more importance on this first (i.e., this factor accounts for most of the variance between theoretical orientations). But, what is this factor? It represents a dichotomy that philosophers have long discussed. Empiricism is rooted in the objectivist tradition, and built on the assumption that there is an independent reality that lies beyond the person observing it. It places prime importance on sensory experience (i.e., observation) in coming to know what is “true” about the world. Perhaps the most important assumption of this philosophy is that knowledge is a thing that is separate from the knower, meaning that the reality exists “independently of being perceived” (see Mahoney, 1989, p. 1374). This allows for human beings to observe the environment and characterize their observations as objective truths.

Subjectivists take issue with this assumption, or at the very least, find it to violate the tenets of rationalism (i.e., it is not illogical). They argue that if there is in fact an independent reality, separate from the observer, we would need to weigh our observations against it to gauge the accuracy of what our senses are telling us (i.e., to measure the extent

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2 See Aschieri, Finn, & Bevillacqua (2010) for a discussion of epistemology as it relates to psychological assessment.
to which what we observe reflects this fixed reality). However, we cannot know this reality in the absence of observing it; therefore, it is logically not possible for observers to know if their observations map onto, or align with, the independent reality alleged to exist beyond them (see Gergen, 1985). In this vein, Ibanez (1992) argues that knowledge cannot be logically viewed as a representation of reality because in order to know whether something (knowledge) sufficiently represents something else (reality), we would need to have independent access to both (i.e., to compare them). But since we cannot access reality independent of observing it, it is not possible to “know reality” in any objective sense. While we may think we can know it through observation, we are only constructing it in terms of our language, our concepts, and our observations. What we find (knowledge, truth, etc.) can never be mapped against an independent reality because we cannot know independent reality; we can only know ours, the one we construct. This is the heart of subjectivism. Throughout history, philosophers have championed both objectivist (e.g., Locke, Hume, Rand) and subjectivist (e.g., Kant, Nietzsche) philosophies, without much resolution, perhaps because at their extremes they are mutually exclusive (i.e., there is no possibility to know the thing if your epistemological premises prohibit you from ever seeing the “thing in itself” [Kant, 1929]).

Buss (1978) contends that the key difference is that one view (objectivist philosophy) holds that reality constructs the person, while the other (subjectivist philosophy) holds that the person constructs reality. One can see how these epistemological viewpoints would be associated with logical positivism and social constructionism, respectively. Unger, Draper, and Pendergrass (1986) theorize that individuals falling in Coan’s objective category would be inclined toward the former and likely to endorse the
idea that improved observational and measurement techniques leads to (an independent) reality being “increasingly uncovered” (p. 70). On the other hand, they propose that subjectively oriented individuals prefer the former because of its emphasis on a shared, consensual reality that is not independent of the knower; rather, it is created by the knower through language and social process (also see Gergen, 1985).

It is important to emphasize that although the factors identified by Coan (1979) and revisited by Poznanski & McLennan (2003) could be considered categorical in theory, their application in clinical practice cannot be an “either/or” matter. That is, it could be reasonably argued that one cannot maintain a philosophical outlook that is simultaneously “endogenous” and “exogenous” because these views are defined by conceptualizing outcomes as a function of processes that are mutually exclusive (i.e., internal v. external events); however, clinicians are aware that, in actuality, this perspective falsely pits internal and external against each other inasmuch as these processes work together and interact to produce behavioral and psychological outcomes (e.g., nature versus nurture is an erroneous dichotomy; see Bronfenbrenner & Ceci, 1994). Still, the scientific reality is that the specific manner in which biological, psychological, and sociological factors contribute to (and interact with each other) to produce a given behavior of interest (e.g., externalizing) is not, at present, fully understood and may even vary from person to person. In other words, there is no “final word” on the extent to which both processes contribute to given psychological phenomena. This means that clinicians can know that it is invalid to endorse either endogeny or exogeny, and also maintain a particular bent or preference for one.

For example, ego psychologists and existential psychologists emphasize intrapsychic conflict and freedom of choice, respectively. In general, then, one might
expect these groups to think endogenously in terms of the causes of and solutions for psychopathology (i.e. both causes and solutions reside within internal processes, which reside within the individual). On the other hand, since behavioral psychologists place great weight on environmental factors (e.g., reinforcement and punishment contingencies), one might expect that they see pathological behavior and its solutions as externally based. Or, they may not concern themselves with understanding etiology, on the grounds that it is immaterial to modifying problematic behavior; even so, it seems reasonable to assume that looking to the properties of the environment for solutions (as opposed to the properties of the person) reveals a way of thinking that is better classified as endogenous (than exogenous).

The key point is that despite one’s bent, perspicacious clinicians are aware that behavior is multiply determined and good treatment and solutions may involve techniques drawn from diverse philosophical underpinnings (e.g., the self-exploration typically associated with endogeny and humanism and the manipulation of environmental factors typically associated with exogeny and behaviorism). Though these concepts can appear philosophically distinct (as in Poznanski and McLennan’s portrayal, above), they are probably not, in practice (see Wachtel, 1977 for example). Still, it would make sense that certain clinicians lean in a certain direction on the endogeny-exogeny continuum.

Similarly, Coan’s factors (listed above) that speak more directly to in-session behavior as opposed to philosophical inclinations (e.g., content emphasis as behavioral v. experiential) are not mutually exclusive. That is, a therapist, over the course of a session, gathers both behavioral and experiential information, and values both to some degree. However, the relative attractiveness of these sources of information is dependent on the
extent to which the therapists accepts the assumptions that warrant their use. For example, although a committed behaviorist and a committed humanist may end up hearing about 1) what their patient “felt like” when her husband was yelling at her, and how she felt in response to having those feelings (i.e., her response to herself), and 2) the environmental antecedent and consequences, these clinicians will differentially attend to and value these data. One clinician may be concerned with what the conflict meant to the patient, while another may be more concerned with what led to it so a similar situation can be prevented in the future.

Importantly, though, the value they attribute to 1 (meaning) versus 2 (identifiable causes) is defined by the theoretical importance of both pieces of data, which is defined by the clinician’s personal assumptions and not facts. In fact, neither experiential nor behavioral data has some “objective level of importance.” “Level of importance” is determined by the therapist, or maybe more accurately, by the theoretical orientation employed by the therapist; but if the former determines the latter, it is probably incorrect to claim an important distinction here. As with the exogenous-endogenous continuum, experiential-behavioral content emphasis represents a continuum, not a dichotomy; therapists attend to both sources of information differentially, but neither is disregarded. Still, in both cases (endogenous-exogenous orientation, experimental-behavioral content focus) something about the therapist lands him or her on a particular position on the continua found by Coan (1979).

2.4 Empirical Links: Preferred Philosophies and Theoretical Orientation

Given descriptions of Coan’s factors, especially the objective-subjective dimension, it becomes easier to understand why one’s relative standing position it would
have important implications. Coan (1979) and others (Arthur, 2000; Buckman & Barker, 2010; Conway, 1992; Johnson, Germer, Efran, & Overton, 1988; Johnson & Miller, 1990; Royce & Mos, 1980) have investigated the relationship that one’s epistemological preference – or, one’s inclination to favor objectivity versus subjectivity – maintains with both one’s professional/occupational outcomes and personality traits.

Joseph Royce was also interested in epistemology, and the implications of having a preferred way of truth-seeking, of coming to “know” things. He contended (1975) that there are three ways of knowing, each of which associated with specific cognitive processes, and consequent understandings of reality, which are all valid or true in some sense – when keeping in mind their premises: Empiricism, Rationalism, and Metaphorism. Empiricism is based on a commitment to observation or perceiving. Here, “reality” is defined by those observations (sensory data) that are reliable and valid. Rationalism is based on a commitment to reason and logic. Here, “reality” is defined by that which stands to reason. Metaphorism is based on a commitment to metaphorical experience. Here, “reality” is defined by idiosyncratic meaning, which is understood through use of symbols and analogical reasoning.

Royce (1975) did not believe that these ways of knowing were, in practice, mutually exclusive; rather, he argued that people maintain “psycho-epistemological hierarchies,” which constitute their preferred modes of attaining knowledge, but people use some combination of the three. Based on this theory, Royce and Mos created the Psycho-Epistemological Profile (PEP; Royce & Mos, 1980), a self-report inventory, which, by way of factor analytic methods, captures one’s psycho-epistemological preferences: one’s relative preference for empiricism, rationalism, and metaphorism. Royce and Mos (1980)
found that the PEPs of behaviorists and psychoanalysts differed in theoretically expected ways. A majority of psychoanalysts (86%) and a minority of behaviorist (33%) reported that metaphorism was their preferred epistemological stance. Behaviorists reported only a slightly larger penchant for rationalism than psychoanalysts, while endorsements of empiricism as one’s preferred method differed significantly (33% for behaviorists, 6% for psychoanalysts).

Other research has shown similar patterns of relationships between epistemological leanings and theoretical orientation. Schacht and Black (1985) utilized Royce and Mos’ PEP to compare psychoanalysts and behaviorists. Eighty-six percent of psychoanalysts identified metaphorism, while only six percent identified empiricism as their as primary epistemological orientation. Contrary to the authors’ hypotheses, behaviorists did not endorse empiricism as their preferred epistemological; rather, the endorsements of the categories (i.e., Metaphorism, Rationalism, and Empiricism) occurred at equivalent rates for this group, indicating they do not prefer one to the others. However, behaviorists did produce significantly higher mean Empiricism scores and significantly lower Metaphorism than the psychoanalysts.

Epistemological beliefs have also been measured with instruments (Organicism-Mechanism Paradigm Inventory [OMPI], Germer, Efran, & Overton, 1982; World Hypotheses Scale [WHS], Bethel, 1975) based on Pepper’s (1942) World Hypotheses, in which he lays out distinct conceptual schemes through which people can understand reality. These include formism, organicism, mechanism, and contextualism. Like Royce, one of Pepper’s main contentions was that to objectively know something, or to know something in the absence of some type of interpretation or taken-for-granted assumption is not
possible; rather, facts need to be understood in terms of the conceptual scheme that they were borne from, which differ across worldviews. He identifies four schemes. Briefly, formism is based on the existence of similarities among things (or *types* of things); mechanism is predicated on the assumption that the world is akin to a machine with unique systems having unique functions (similar to Coan’s objectivism); organicism assumes that all events, more or less, represent the unfolding of a dynamic, context-mediated, developmental course; and contextualism maintains that to understand phenomena or events, it is chiefly important to understand the arena in which they take place (similar to Coan’s subjectivism).

Examining a broader group than solely clinicians, Johnson et al. (1988) examined the relationship between discipline of choice (in the study of human behavior) and worldview, using both the OMPI and WHS. Individuals in the following specialties were included: sociobiology, Skinnerian behaviorism, personality psychology, and human development. Johnson et al. (1988) hypothesized that given the tenets of each group’s subdiscipline, their worldviews would differ. As an instrument, the OMPI locates individuals’ worldview on an organicism-mechanism continuum. The scale measures the extent to which one conceptualizes phenomena as developing as a whole, dynamically and systemically (organismic) versus developing via the interaction of cause-effect relations between discrete, constituent elements (mechanistic). As predicted, and highly relevant to the discussion of therapeutic orientation, behaviorists most aligned with mechanism. Human developmentalists least aligned with mechanism (i.e., highest organicism score).

Regarding the WHS measure, results demonstrated that personality psychologists most endorsed formism while behaviorists most endorsed mechanism (as they did with the
OMPI). Overall, these results map onto the objective-subjective continuum (as identified by Coan, 1979) to the extent that behaviorists (objectivists) understand behavior as a function of impersonal causality (i.e., exogeny) whereas subjectivists conceptualize it more as a function factors residing within the person (e.g., endogeny). Indeed, the personality psychologist’s endorsement of formism, which emphasizes similarities between things and shared characteristics (e.g., Jung’s types), and the behaviorist’s endorsement of mechanism, which emphasizes antecedent-consequence relationships (e.g., operant conditioning) may be reflective of the typical disagreements between behaviorally and personality oriented clinicians (i.e., the situation v. person dilemma; or, exogenous v. endogenous per Coan, 1979).

Vasco and Dryden (1997) utilized both the PEP and OMPI to comparing clinicians with Behavioral, Cognitive, Eclectic, Humanist, Psychodynamic, and Systems orientations. They found results similar to Royce and Mos (1980) and results one might expect given findings from Johnson et al. (1988). In particular, behaviorists reported the lowest endorsement of metaphorism on the PEP (psychodynamic practitioners reported the highest), and the highest endorsement of empiricism (humanistic practitioners reported the lowest). Regarding the OMPI, behaviorists endorsed the most mechanism (i.e., and least organicism) of all the groups. Relatedly, recent study of psychology trainees found that the OMPI differentiated between the behaviorally and psychodynamically inclined (Buckman & Barker, 2010). Again, the former maintained a worldview consistent with mechanism, and the latter with organicism. The same study found that CBT-oriented trainees identified as (epistemologically) more objective and rational while their psychodynamic counterparts identified as more subjective and intuitive.
Finally, some of the studies discussed above, linking theoretical orientation with certain personality traits, concurrently examined the relationship between orientation and epistemological characteristics. Arthur (2000) examined the philosophical assumptions of behaviorists and psychoanalysts, using both the OMPI and PEP. Results showed that behaviorists (and cognitive behaviorists) espouse worldviews more consistent with mechanism while analysts are more inclined toward organicism (OMPI dimension). Like Schacht and Black (1985), psychoanalysts scored significantly higher on metaphorism than the (more mechanistically inclined) behavioral/cognitive behavioral group. Poznanski and McLennan (2003) also utilized the TOS (Theoretical Orientation Scale; Coan, 1979) to examine the relative objectivity-subjectivity with which clinicians with different orientations understand reality. The authors found that cognitive-behavioral practitioners identified significantly more with an objectivity approach (i.e., a focus on factors external to the patient) than a subjective approach (i.e., a focus in the patient’s inner world). The opposite was found to be the case for psychodynamic, family systems, and experiential practitioners. Finally, Murdock et al. (1988) utilized the TOS to examine the participants (counseling trainees) in their study. They report that the eight first-order subscales fell in expected directions. Trainees inclined to existentially- and Gestalt-oriented modalities reported being most focused on experiential content (as opposed to behavioral), while systems and interpersonally inclined reported being most focused on behavior. Psychoanalytic respondents reported being least concerned with physicalism (observable factors) and most interested in mental processes.
2.5 *Empirical Links: Preferred Philosophy and Personality*

In addition to theoretical orientation, Coan (1979) examined the relationship between one’s position on the objectivism-subjectivism continuum and personality traits. The Experience Inventory (see Coan, 1974) was constructed to reflect openness to a variety of human experiences (e.g., ideas, impulses, fantasies). It was found that the subjective-objective dimension of the TOS (with higher scores designating objective) was significantly correlated with three factors from the Experience Inventory: Aesthetic Sensitivity ($r = -.22$), Unconventional views of reality ($r = -.30$), and Use of Fantasies and Dreams ($r = -.20$).

The subjective-objective dimension also correlated with three factors of Coan’s (1974) Personal Opinion Survey (POS), which is means to assess one’s experience of control; specifically, the perception that achievement can be attained through conscientious effort ($r = .12$); the feeling that one has the capacity to achieve mastery through his or her own effort ($r = .27$); and the capacity of humanity to control its fate ($r = .38$). Coan (1979) notes that the endorsement of an objectivist, empirical approach to “knowing” itself betrays a need for control to the extent that it is premised on the assumption that with the right methods, the truth about reality can in fact be attained. This suggests that predictability and certainty are values for the objectivist. In particular, the POS factor, called “capacity of humanity” largely targets one’s feeling that humanity is capable of engineering a just society, eliminating war, and controlling natural physical phenomena. Built into these items is an endorsement of science and its utility in human achievement.

Coan (1979) also examined the subjective-objective dimension and its relationship with the Myers-Briggs Type Indicator (MBTI; Myers-Briggs, 1962), suggesting that the
subjective-objective dimension most strongly maps onto the Thinking-Feeling dimension of the MBTI. Coan writes, “the responses scored for Thinking stress logic, consistency, impartiality, deliberateness, and firmness, while those scored for Feeling refer to such qualities as compassion, sentiment, devotion, and gentleness” (p. 142). Results showed that the first-order factor of the TOS (see above) that this test’s Thinking-Feeling dimension correlated with was the Behavioral-Experiential Content Emphasis. This factor, of which Behavioral belongs to Objectivism and Experiential belongs to Subjectivism, contrasts an approach to truth-finding characterized by commitment to inner, phenomenological experience (Experiential) with an approach characterized by scientific and value-free analysis (Behavioral).

In addition to philosophical predilections, Johnson et al. (1988) examined the relationship that one’s worldview has with personality traits. Using several self-report measures of personality (e.g., MBTI, California Psychological Inventory [CPI; Gough, 1975]; Bipolar Adjectives Rating Scales [BARS; Johnson, 1991]), differences were found across individuals espousing an organismic (epistemologically subjective) versus mechanistic (epistemologically objective) worldview. The authors found that individuals who prefer organismic philosophy reported having higher levels of intellectuality, sensation-seeking, imagination, intuitiveness, social skill, anti-conformity. Individuals who prefer mechanistic philosophy report being more conventional, orderly, conforming, realistic, and interpersonally passive. Citing Royce (1964) and others, the authors conclude that personality traits mirror one’s epistemological assumptions to the extent that the organismically-inclined are “interactive and constructivistic” while the mechanistically-
inclined are “reactive, passive, estranged from – yet determined by – their environments” (p. 833).

2.6 The Grand Dimension: Driving it all?

The interrelationship between these three factors (theoretical orientation, personality, and preferred philosophy) was organized and discussed in terms of bivariate associations above (e.g., the correlation between personality and preferred philosophical assumptions); however, the reader has probably already determined that a strong case can be made that they go together. That is, that they might serve as proxies for one another or that each is a component of some broader, underlying factor. In fact, the literature appears to suggest that knowledge of where an individual falls on one of these three variables (e.g., theoretical orientation) also provides information about where he or she falls on the other two (e.g., personality traits and philosophical assumptions about reality). That is, those preferring directive therapeutic orientations maintain more conventional personalities and more objectivist epistemological outlooks than those who prefer nondirective therapeutic orientations, who maintain more unconventional personalities and more subjectivist epistemological outlooks. In condensing the literature reviewed above, it appears that, in general, two basic types of therapists with basic philosophies and basic personality traits exist (see Table 2.2).

Conway (1992) describes this divide among psychologists in detail, making clear that it is not a new one. He argues that it has always been, and though it has been called different things by different people, it has always referred to the same basic thing: the scientist-humanist dimension. For example, such influential psychologists as William
James (1907) and Henry Murray (1938) discussed this individual difference before it had been empirically demonstrated (see especially Johnson & Miller, 1990).

Table 2.2 The “Grand Dimension” and its characteristics

<table>
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<tr>
<th>Characteristic</th>
<th>Scientism</th>
<th>Humanism</th>
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<td>Nondirective</td>
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<tr>
<td>Favored Models&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Behavioral, Cognitive-Behavioral</td>
<td></td>
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<td>Conscientious; non-neurotic; less thinking and introversion; conforming and conventional; concrete and realistic in cognitive style; preference for thinking over intuiting</td>
<td>Open to experience; accepting of broad range of feelings; non-conforming; neurotic; more thinking and introversion; abstract; imaginative in cognitive style; inclined toward intuiting</td>
</tr>
</tbody>
</table>

Note: 1Conway (1992) proposes that this is the theoretical dimension that accounts for all of the reliable differences between directive and non-directive clinicians (see also Johnson & Miller, 1990); <sup>2</sup>in each study of therapeutic orientation and personality/epistemology, the superordinate dichotomy was always directive v. directive (see Table 1); <sup>3</sup>these models were most commonly examined in reviewed studies and each time belonged to same basic psychotherapeutic orientation category (i.e., directive or non-directive); <sup>4</sup>evidence for the relationship between these models and epistemological preferences comes from Arthur (2000, 2001), Coan (1979), Johnson et al., (1988), Johnson and Miller (1990), Murdock et al. (1998), Poznanski & McLennan (2003), Royce & Mos (1980), Schacht & Black (1985), and Vasco and Dryden (1994); <sup>5</sup>evidence for the relationship between these models and preferred method of knowledge acquisition comes from Coan (1979), Johnson et al., (1988), Johnson & Miller (1990), and Royce & Mos (1980); <sup>6</sup>evidence for the relationship between these models and content emphasis comes from Coan (1979), Murdock et al. (1998), Poznanski & McLennan (2003); <sup>7</sup>see Poznanski & McLennan (1995) and Sundland and Barker (1962): the classical forms of psychoanalysis (e.g., Freudian psychoanalysis) would be considered analytic in content emphasis, not experiential; <sup>8</sup>see Table 1 and also Arthur (2000).

James (1907) dubbed empiricists “tough-minded” and rationalists “tender-minded.” Although rationalism is predicated on logic, which connotes emotional detachment, it appears that James saw in rationalism the human need to explain things by
way of factors other than just our senses (i.e., the observations empiricism hinges on). This allows for hope, perhaps a belief in God, and maybe most importantly for the tender-minded, meaning. The tough-minded empiricist, in James’ view, did not have the same emotional need to put meaning to experience; rather, empiricists yearn not for meaning, but for objective truth – objective to the extent that it is based on careful observation. The key difference here is that empiricist ideology allows for no conclusions to be drawn outside of what is observed whereas rationalist ideology does. James seemed to be arguing that perhaps the latter is better for the characterologically sensitive inasmuch as certain knowledge (or maybe certain “myths,” according to empiricism; e.g., knowledge that God exists) can be comforting to the human soul, whether or not this knowledge is derived through what we can see or touch. Incidentally, James experienced emotional maladjustment, which he attributed in-part to deeply feeling this divide within himself.

Murray (1938) described peripheralists, who were more objectively-oriented, mechanistic, and concerned with elementary pieces, and centralists, who were subjectively-oriented, intuitive, and holistic in their understanding of the world. He also argues that the source of learning about oneself and others takes different forms across these groups. Favoring observational data and positivism, the peripheralists “limit their concepts to symbols which stand directly for the facts observed,” indicating that they can only learn about things, including themselves and others, through mechanism. Of the centralists, Murray writes, “Craving to know the inner nature of other persons as they know their own, they have often felt their wish was realized, not by making conscious inferences from items of observation but by an unanalysable act of empathic intuition.”
Certain personality traits appear to be consistently associated with certain theoretical persuasions. In addition, higher levels of particular traits (e.g., unconventionality v. conformism) in certain practitioners (e.g., humanistic v. behavioral), makes good sense given the philosophical assumptions one would need to subscribe to in order to adopt that given orientation (e.g., epistemological subjectivism and an inclination to earnestly question the nature of reality v. epistemological objectivism and an inclination to accept reality as independent from the self and objectively knowable). Philosophers and now researchers (e.g., Arthur, 2001) have conceptualized epistemology and personality as factors that go together; that is, whether A leads to B, B leads to A, or something altogether leads to both, they tend to co-vary. Despite these findings, some limitations have been raised throughout the literature reviewed above, especially related to measurement.

2.7 The Measurement of Theoretical Orientation

One critique of this area of literature that has been offered more than once (e.g., Murdock et al., 1998; Boswell et al., 2008) revolves around the methods used to assess both treatment orientation and personality. In their review, Poznanski and McLennan (2003) report that most studies have simply asked clinicians to choose the orientation to which they belong, either through selecting one or rank-ordering several. Johnson and Brems (1991) view this strategy as a problem to the extent that broad interpretation of both certain orientations and certain in-session techniques could lead to a group (grouped by self-ascriptions) that has little in common regarding their actual practices (i.e., their in-session behavior). Hill and O’Grady (1985) suggest that a multidimensional approach should be used, wherein clinicians rate their use of several orientations on a Likert scale (as opposed so simply selecting one that best fits). The driving force behind this suggestion
is that the multidimensional approach may better capture what the therapist does in session than the self-ascription approach.

Based on a large body of evidence (e.g., Coan, 1979; Sundland & Barker, 1962), Poznanski and McLennan (2003) suggest that theoretical orientation is a concept that is comprised both by an *ideological* dimension (one’s philosophical preferences) and a *behavioral* dimension (the nature of one’s in-session behavior). This would mean that to classify therapist orientation, these dimensions would need to be objectively assessed, including by observation, as opposed to relying on self-ratings.

However, if the goal is to look at correlates of *identification with one orientation*, then the extent to which therapists’ espoused orientation aligns with that orientation’s agreed upon criteria becomes less important. In other words, there could be scenarios in which the identification itself is of more interest than the clinician’s category as determined by objective criteria (e.g., observation if in-session behavior). For example, if it is generally agreed upon (whether true or not) that behaviorists are more rational, more logical, and less susceptible to whimsicality than their humanistic counterparts, it calls into question the extent to which self-ascribed behaviorists are endorsing *having* these personality characteristics versus *actually using* specific behavioral interventions. This identification could indicate that the therapist truly utilizes primarily behavioral techniques (i.e., alignment with objective criteria per Poznanski & McLennan, 2003), but it could also represent the wishes, ideals, or values he or she holds in highest regard (i.e., rationality), independent of in-session behavior.

Under this conceptualization, the relationship between self-ascribed orientation and personality may even be best explained by redundancy. For example, someone who values
conformity and order might be drawn to CBT for its directive nature, and also elevate the conscientiousness scale of the NEO, but both declarations may be better attributed to self-concept than actual behavior. Given findings that clinicians stereotype the content emphasis associated with modalities with which they do not identify (Larsson, Broberg, & Kaldo, 2013), it would not be a leap to assume they hold certain notions about the personalities of those with different orientations. If this is true, self-designated theoretical orientation is inherently something of a personal statement (i.e., “this is what I am and this is what I am not”). Keen to this idea, Tremblay et al. (1986) utilized a self-ascription method, noting that they were seeking a sample of “believers.” They sought out the truest believers (most aligned with one modality per their report), aiming to identify correlates of the belief in one theory.

In this light, factors such as social desirability and demand characteristics must be considered when understanding the research above linking self-reported personality with self-reported theoretical orientation. Consider a clinician who considers him- or herself “behavioral” in orientation, but – if observed in session (e.g., using procedures as in Hill & O’Grady, 1985) – would be characterized first as “cognitive,” next as “humanistic,” and only thirdly as “behavioral.” Even though their in-session behavior is decidedly misaligned with behaviorism, their sense of themselves is not; thus, self-ascriptions would lead them to endorse behaviorism as their “orientation.” In addition, the same self-concept reservoir may manifest as he or she completes personality questionnaires from the perspective of a behaviorist as that is “what they are” (i.e., what they believe themselves to be).

One can also imagine factors other than philosophical predilections weighing into one’s “preferred” theoretical orientation – factors such as the demands of one’s institution
and historical era. For example, some believe that psychodynamic theory is antiquated and its practitioners will soon cease to exist (see Norcross & Karpiak, 2012). In addition, research shows that over the last twenty years, the field of clinical psychology has become less intellectually diverse (Levy & Anderson, 2013). Over this time, cognitive-behaviorists have become far more represented in doctoral programs than all other orientations. In 1991 approximately 40% of doctoral program faculty identified as CBT; this number has increased to nearly 70% since then. Over the same period, psychodynamic faculty have become less represented (from almost 30% to under 20%); behavioral and humanistic representation has not changed (both at approximately 10%); and family therapy faculty have seen a slight increase in representation (from approximately 10% to 20%). Levy and Anderson (2013) argue that clinical psychology is becoming an “intellectual monoculture,” (i.e., CBT-dominated), which is problematic for any field.

One consequence of this trend is that today’s students are necessarily exposed to a fraction of the theories, ideas, and philosophies that students of previous eras were. Contemporary students who value broad-thinking and understand intellectualism as being defined by the consideration of all ideas, no matter how radical, may find themselves with “choices” regarding their eventual theoretical orientation. However, other students who are in doctoral programs strictly “to be trained” and to become expert in what’s “true” are unlikely to land on anything other than CBT given the state of training in clinical psychology. But thinking of CBT as their chosen orientation is probably a misnomer as “intellectual monocultures” (Levy & Anderson, 2013) necessarily furnish limited (if any) options from which to “choose.”
In the ways discussed above and others, self-reported theoretical orientation can be influenced by factors (i.e., self-concept, demand characteristics, prevailing ideology) other than simply how one interacts with patients. Measurement of personality has also been raised as a potential limitation in the research linking personality with theoretical orientation.

2.8 The Measurement of Personality

Another common critique regarding this area of literature involves the method by which personality has been measured. A preponderance of the investigations in this area, and all of the studies mentioned thus far, have employed self-report or introspective measures to assess personality. Authors have suggested that this raises questions about the conclusions that can be drawn (e.g., Boswell et al., 2008; Murdock et al., 1998) due to the nature and limitations of the self-report method. For example, Boswell et al. note that it may not be the case that nondirective clinicians are actually angrier than directive clinicians as their results suggest; rather, it is possible that these groups differ in their self-awareness and openness to experiencing negative emotionality, which would lead to differential reports of the construct.

In other words, studies like these reveal only the extent to which one reports having a certain trait. The contemporary monoculture of psychology also has implications here. It is logical to think that, contemporarily, individuals studying clinical psychology who are conformists by nature, and less independent in their thinking, will identify with CBT, almost as a rule. Similarly, people who question the status quo and maintain more independence of thought, will be drawn to (or at least interested in) non-prevailing theories, and therefore, have a larger pool of theories with which to identify. However, it is possible
that the conventionalism and conscientiousness that today is associated with adoption of CBT, and openness to ideas (and perhaps oppositionality) that today is associated with adoption of humanism and psychodynamic theory may have – in past eras – resulted in the reverse. Therefore, links between self-reported theoretical orientation and self-reported personality should not lead to transcendent conclusions about these groups. For example, the cognitive therapists who rejected radical behaviorism long ago may share something important with contemporary psychoanalytic or humanistic practitioners (i.e., those identifying outside of mainstream).

2.9 The Nature of Self-Report

Psychological research of all kinds has consistently shown that people have difficulty making self-assessments. In other words, there is only a modest correlation between a given construct (e.g., anger) as measured by self-attribution versus non-introspected methods. “Non-introspected methods” can refer to any method of deriving information about an individual other than asking them to report on themselves. These might include asking close others (i.e., other reports), observing actual behavior (i.e., behavioral observation), or measuring the construct through performance (e.g., the WAIS to assess intelligence or the Rorschach to assess psychotic cognitive processes). Across several domains including intelligence (Chemers, Hu, & Garcia, 2001; Hansford & Hattie, 1982), job performance (Zenger, 1992), personality (Connelly & Ones, 2010; McClelland, Koestner, & Weinberger, 1989; Mihura, Meyer, Dumitrascu, & Bombel, 2013; Greenwald, Poehlman, Uhlmann & Banaji, 2009), and others (see Mabe & West, 1982), it has been reliably demonstrated that self-report does not generally align with non-introspected methods of assessment.
Regarding this phenomenon and personality, McClelland et al. (1989) is a seminal study and illustrative example. The authors utilized the Thematic Apperception Test (TAT) as a non-introspective method to assess power, affiliation, and achievement drives and compared these to participant self-reports of the same constructs. In coding the language used to put stories to TAT cards (i.e., interpersonal or intrapersonal scenes), these drives are measured in a more implicit way. McClelland et al. found that explicit and implicit measurement of each of these three domains (need for power, need for affiliation, and need for achievement) did not align (also see Spangler, 1992). What does it mean if an individual reports having no use for power (i.e., self-reported denial of need for power) but consistently uses power-related words or creates power-related interpersonal scenarios on the TAT? McClelland et al. conclude that self-attributed motives and implicit motives represent different classes of information. Self-attributed motivation reflects information that can be readily and willfully accessed whereas implicit motivation is the consequence of engrained, affective networks that began to develop prior to language. Implicit motivation tends to predict behavior over the long-term because intrinsically rewarding behaviors are consistently carried out even without social reward. Self-attributed motives, on the other hand, (e.g., “I am someone who is achievement-oriented”) manifest more in response to external cues or rewards.

The respective properties of both classes of information have implications for one’s ability to be aware of them. Implicit motivation is more innate, less influenced by external factors, and connected to more primitive brain regions (McClelland, 1987). Therefore, asking an individual about their motivation is less useful (in assessing motivation) because their response is necessarily mediated by cognitive elaboration (i.e., putting thought and
language to nature-driven, innate physiological processes). This class of information yielded by “just asking them” (i.e., self-attributed) is a function of organized thought, which is inherently non-innate and removed from one’s nature. The following example demonstrates how self-attributed versus implicit motives can differentially affect behavior.

A person may naturally behave as if power-attainment is important to them. They may, for example, seek out leadership positions and dominate group conversations. This represents implicit motivation because they perform these behaviors in an automatic way that is not governed by effortful, conscious planning (i.e., it’s “how they are”). That is, tracking this person from a bird’s eye view would produce these kinds of attributions (e.g., power-seeking). However, if this person’s self-conception does not include “power-driven,” then the trait may systematically not manifest in response to structured social stimuli. For example, the person may turn down a leadership position when asked to hold one because in being made to consciously consider their desire for power, their implicit motivation (strong power-drive) is filtered through cognitive processes that, for example, weigh factors like social appropriateness and social desirability. In the absence of conscious consideration, though, their latent, implicit power drive reigns.

One can imagine this particular individual arranging for, coordinating, and monitoring an election (at work or school) in which they plan to run and win (implicit power-drive), but in their mind doing these things in the name of a “passion for volunteer-work,” “a concern for the group” or “democratic values,” – all of which are self-attributions that plausibly account for a strong, but latent power drive. Thus, the discrepancy in what we say about ourselves (e.g., our self-reported power-needs) and what we do (e.g., power-needs as measured by implicit means) is really a discrepancy in awareness that exists as a
function of two motivational systems: hard-wired and socially mediated motivation. When asked, we are more likely to report the stories we tell ourselves (self-attributed) whether or not they reflect our intrinsically driven behavior (implicitly motivated).

2.10 Understanding What’s Unconscious: Psychoanalysis and Social Cognition

McClelland et al.’s (1989) conceptualization that self-attributed motives and implicit motives represent different classes of information falls in line with psychoanalytic theory to the extent that it places primacy on affect; that is, the affective experiences that occurred early in our lives are thought to drive behavior – reward and punishment in an intrinsic sense begin here. However, the cognitive processes used to elaborate and explain our lives are out of touch with what is latently and intrinsically so because they are driven by external (not internal) factors (i.e., socially-defined reward and punishment contingencies; e.g., that out-and-out power-seeking is less than socially acceptable). Implicit and self-attributed motives explain how someone can simultaneously believe that power-seeking is unacceptable, even detest it, and also seek power, continually. A person implicitly motivated to seek power does so naturally – in the absence of thinking about it. This means that although power-seeking is in their nature, it is not necessarily on their mind as they carry it out. And when their relationship with power-seeking is on their mind, its legitimacy is considered in conjunction with social variables, which influences how one’s mind paints oneself (e.g., I am not someone who seeks power more than others) and what one does (e.g., to refuse a power position so as to not appear power-seeking).

In support of this conceptualization, research has shown that when individuals become more aware that a specific behavior (asking for help) reflects a particular trait (dependency), the likelihood that they engage that behavior is predicted by self-attributed
reports of the trait at hand. On the other hand, when individuals are less aware of this link, latent or implicit motivation predicts behavior (Bornstein, 1998). This is more evidence that the way we think of ourselves and the way we are do not always align. Specifically, unless the environment demands displays of our self-conceptions (e.g., McClelland et al.’s “respondent” behavior) or our self-conceptions become particularly salient (Bornstein, 1998), we generally defer to implicit motives. “Operant” or “spontaneous” (McClelland et al., 1989) behaviors then – behavior in the absence of a well-defined stimulus or behavior that occurs in the absence of the actor linking specific behavior with associated trait – are a function of intrinsic, implicit motivation. In fact, McClelland et al. found that over the long-term, implicit motivation better predicts behavior than self-attributed motives.

From a psychoanalytic perspective, the disparity between conscious self-conception and more latent traits is fundamental to the human mind. In short, emotionally painful experiences cause people precisely to not see latent motivation, which creates cognitive conceptions of self and other that are, by necessity, misaligned with emotional conceptions of self and other. As an example, a child who was made to play caretaker for irresponsible parents may consciously believe that loving relationships are defined by the extent to which he or she behaves selflessly (i.e., putting others before self). This person might also report having no anger and endorsing altruism as their primary value. This is their conscious, cognitive conception of relationships. However, given the minimal care received by the child, it is likely disappointment and hostility are also ingredients in “loving relationships.” But since experiencing authentic anger at parents is emotionally painful, this individual may never endorse having that type of anger, either at parents or future close others. This person may engage a passive-aggressive stance when they feel as if their needs
have not been met, despite never consciously reporting anger and perhaps denying the presence of needs, altogether.

In this example, latent motivations (e.g., to be cared about, having a strong allegiance to the self, representing people as selfish) plays out in relationships despite the fact that this person cannot acknowledge these things, consciously. Thus, it is not a coincidence that this person conceives of oneself (i.e., self-attributions) as one who is happy to serve others. It is done to avoid acknowledging the more painful reality that he or she wishes for something quite different. This person might not report having anger, for example, but to live more peacefully with self and others they must become aware of what is latently true, even if it raises a great deal of pain (see Freud, 1936 for psychoanalytically derived phenomena [defenses] that function to reduce emotional pain).

Although the psychoanalytic unconscious largely fell out of favor with the onset of behaviorism, contemporary researchers in cognitive, social, and physiological psychology have paid special interest to many of the automatic mental processes first proposed by Freud (Anderson et al., 2004; Custers & Aarts, 2010; Fiske & Taylor, 1991; McClelland et al., 1989; Smith & DeCoster, 2000). Social cognition has emerged as a contemporary area of psychological research that maintains substantial overlap with some of the earliest psychoanalytic principles and is particularly attendant to non-conscious processing. Social and cognitive psychology’s dual process models (see Smith & Decoster, 2000) distinguish between controlled, effortful processing and automatic, nonconscious processing. Research in this area suggests that mental processes that occur “behind the scenes” so-to-speak are crucial in a variety of domains including perception, motor learning, personality, attitudes, and self-esteem (see Wilson & Dunn, 2004).
A key difference, however, between psychodynamic theory and social-cognitive psychology’s dual process models is that in the latter, repression (and other defense mechanisms) do not drive certain material into the unconscious (as Freud postulated). Rather, the mind is arranged - in all individuals - such that a significant amount of mental activity occurs nonconsciously or outside of awareness (Bargh, 1999; Wilson, 2002) because functioning would be impossible otherwise. These models are built on the assumption that what keeps certain mental processes unconscious is the sheer volume of what needs to be processed in daily living: we could not possibly function if each of our determinations, movements, perceptions, and attitudes were subjected to controlled, effortful processing. There is simply too much to process (Bargh, 1999; Fiske & Taylor, 1991). In short then, the social cognitive unconscious is a reservoir of adaptive and necessary functions necessitated by the demands of information-processing, whereas the psychoanalytic unconscious consists of material that is too painful for consciousness. In general, the latter makes more room for idiographic, emotional experience in its conception of what drives automatic processing and implicitly motivated behavior (see Westen, 1991).

2.11 Dual Process Models and Personality

Related to the work of McClelland and colleagues and more recent dual process theorists (see Smith & Decoster, 2000 for a review), Strack and Deutsch created the reflective-impulsive model (RIM; Strack & Deutsch, 2004) to explain how unconscious and conscious mental processes impact actual social behavior. The model distinguishes between reflective mental processes, which are controlled (e.g., reasoning, weighing options), and the processes that occur by impulse when associative networks activate behavioral schemas (i.e., automatic or unconscious behaviors). The authors theorize that
when a behavioral schema becomes sufficiently salient - through both types of processes - social behavior ensues. Back, Schmukle, and Egloff (2009) identify the role of both processes in creating an explicit self-concept of personality versus an implicit self-concept of personality.

Explicit self-concept of personality consists of what one thinks of oneself and is based on what one consciously concludes during reflective processes. The authors argue that the propositional statements one maintains about oneself (e.g., “I am outgoing”) are necessarily a product of the deliberative piece of social behavior. If in one’s mind they view social situations as fun and feel drawn to people, they will likely represent themselves as “outgoing.” Implicit self-concept of personality, on the other hand, is derived from automatic mental processes. That is, automatic processing of the environment and the (impulse-driven) behavior that ensues is not represented in words or language because this type of processing is not subject to controlled reasoning (i.e., cognition and language). Instead, implicit links between the self and some trait (e.g., outgoing) exist to the extent that these concepts (self and trait) are chronically activated as part of one associative network. Here, the impulsive (automatic) behavior that one actually acts out in relevant scenarios (e.g., going to a party as opposed to not going, initiating conversations with others as opposed to not) produces a link, or lack thereof, between self and some concept (in this case, “outgoing”). Given this conception of explicit versus implicit self-understanding, as others have argued in the past (Baumeister, Vohs, & Funder; 2007; Funder, 2001), the taken-for-granted relationship between self-reported behavior and actual behavior is problematic for psychology, as a discipline. One method that has attempted to remedy this problem is the Implicit Association Test.
2.12 The IAT

The Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) was designed to assess the nature of individuals’ automatic associations. This method generally aims to compare two groups of people (e.g., Blacks v. Whites, Men v. Women, etc.) to determine if individuals represent (implicitly) one group as more positive than the other. To this end, participants are asked to categorize stimuli that appear on a screen into one of four categories by pressing one of two keys (e.g., the “S” key for categories A and B, and the “L” key for categories C and D). Scoring the measure is done by comparing response times on two tasks: one in which participants are instructed to classify positively valenced words with one group (e.g., Whites) and negatively valenced words with the other group (e.g., Blacks), and another in which they are instructed to do the opposite (i.e., in this case, to classify positively valenced words with Blacks and negatively valenced words with Whites). The test is based on ideas related to associative memory: as two concepts (e.g., “African-American” & “Dangerous;” “Female” & “Weak”) are more associated in memory, it should take less time for people to classify them. Thus, if a participant’s response times are faster on the Blacks=negative, Whites=positive task than on the Whites=negative, Blacks=positive task, he or she is thought to maintain stronger automatic preferences for Whites.

The nature of what indirect measures like the IAT capture has been a common topic of debate in social cognition (see De Houwer et al., 2009). Some have suggested that indirect measures like the IAT represent a “bona-fide pipeline” to individual’s real or true attitudes (Fazio, Jackson, Dunton, & Williams, 1995). However, this assertion and others have since been challenged. Blanton et al. (2009) argue that despite the instrument having
been assumed to predict behavior (i.e., latent attitudes manifest in spontaneous, less-controlled behavior), few IAT studies examine actual behavior as a criterion and the ones that do utilize behavioral criteria with poor reliability. These authors reanalyzed data from two studies supporting the idea that the IAT validly predicts discriminatory behavior and found that IAT information added very little to regression equations meant to account for real-world behavior.

This finding supports assertions by Tetlock and his colleagues that the link between reaction time (the IAT variable of interest) and racism or malevolence toward certain groups is a tenuous one. Tetlock and Mitchell (2008) argue that it does not make sense to conclude that faster associations between “blacks” and “poor” than “white” and “poor” is indicative of racism. From a construct validity perspective, they wonder why these findings could not reflect sympathy for blacks regarding current socioeconomic truths; or just an awareness that, unfortunately, a fair read of statistics – and not unconscious racism – could lead to this association. Like Blanton et al., these authors also point out that meta-analytic investigations into IAT construct validity (i.e., the relationship between IAT scores and discrimination) do not include studies that examine actual discrimination as a criterion; however, there is an assumption that the criteria used (e.g., non-verbal signs of discomfort or tension in cross-racial settings) translates into real-world discrimination. If it does or does not is an empirical question with no available data (see Oswald, Mitchell, Blanton, Jaccard, & Tetlock, 2013 for a meta-analysis of IAT criterion studies). From a more methodological angle, these authors have also found that the IAT has a high false positive rate (Mitchell & Tetlock, 2006) due to the impact of outlier respondents, but once removed, the IAT effect diminishes significantly.
In challenging “three common assumptions” about implicit measures, Gawronski, LeBel, and Peters (2007) also express concern about the construct validity of those instruments like the IAT. They provide evidence that indirect measures (a) are not necessarily measuring attitudes that reside outside of conscious awareness, (b) are more susceptible to “faking” and attempts at social desirable responding than is generally thought to be the case, and (c) can fluctuate depending on experimental manipulation, suggesting this method does not capture old, engrained representations. The authors propose an alternative model to understand implicit measures (like the IAT) that is in line with Strack and Deutsch’s (2004) dual process model of social behavior. Gawronski et al. argue that a measure like the IAT is measuring something, but it is not necessarily an *unconscious construct, a construct that is impossible to manipulate* (i.e., fake good or bad), or *a construct that is necessarily old*. Rather, they believe that indirect measures provide a proxy for the level of activation that associations in memory maintain, whereas self-report measures assess the extent to which these associations are accepted (also see Devine, 1989).

According to Strack and Deutsch (2004), Gawronski et al. (2007), and dual process models, in general, implicit associations should be more related to impulsive (automatic) behavior than propositional knowledge about the self that is amassed through reflective, deliberative processes. In other words, operant (as opposed to respondent) and spontaneous (as opposed to reasoned) behaviors ought to be correlated with IAT findings since the instrument alleges to be measuring mental processes of these qualities (impulsive, not reflective). In their meta-analysis of the IAT’s predictive validity, Greenwald et al. (2009) found a correlation between behavioral, judgment, and physiological measures and IAT
They found that the self-report method was also correlated with the same criteria $r = .36$. However, for topics that are socially sensitive and pull for positive impression management (i.e., interracial and intergroup behavior), the IAT maintained better predictive validity than self-report measures. At the very least, the IAT is assessing something about a person that is different than what he or she explicitly reports.

### 2.13 The IAT and Personality

As reflected above, much of the IAT literature has been devoted to the study of implicit (automatic) and explicit (controlled) attitudes. This type of investigation examines self-reported attitudes alongside attitudes as assessed by “indirect measures” (De Houwer et al., 2009) to identify and understand discrepancies. Studies like this have examined racial attitudes (Sekaquaptewa, Espinoza, Thompson, Vargas, & von Hippel, 2003), health-behavior attitudes (Sherman, Rose, Koch, Presson, & Chassin, 2003), consumer attitudes (e.g., Scarabis, Florack, & Gosejohann, 2006), and several other domains related to social phenomena. Investigations into “implicit self-concept of personality” (Back et al., 2009) are fewer, but there is evidence that the IAT method is predictive of actual behavior. IATs meant to assess implicit anxiety and shyness have been predictive of external ratings of these constructs, overt displays of nervousness, and have incremented self-reported measures in terms of predicting behavior (Egloff & Schmukl, 2002; Schnabel, Banse, & Asendorpf, 2006). Other studies have found evidence that IATs intended to measure implicit

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3 In administrations where the construct under investigation is implicit self-concept of personality, participants simultaneously classify words associated with certain categories related to personality (e.g., aggressive and non-aggressive) and words associated with self and others (e.g., “me” and “others;” see Schnabel, Banse, & Asendorpf, 2006).
aggression (Banse & Fischer, 2002), agreeableness, and conscientiousness (Steffens & Konig, 2006) are correlated with real-world behavior. Overall then, researchers in experimental psychology have recently moved toward using the IAT as a tool to assess personality traits in addition to social attitudes.

In their study, Back et al. (2009) chose 10 words per Big Five trait: 5 that were associated with the presence of the trait (e.g., for neuroticism, anxious, nervous, fearful, uncertain, and afraid) and 5 that were associated with the absence of the trait (e.g., for neuroticism, calm, relaxed, restful, at ease, and balanced). Participant self-report of the same 50 traits were measured, as were several behavioral indicators of the traits. Results indicated that self-reported information predicted behavior in all five domains, while the IAT predicted behavior in the domains of neuroticism and extraversion. The authors note that it makes sense that one’s implicit associations regarding these two traits would be linked to actual behavior because these types of behaviors have a strong “impulsive” component (affectively driven and automatic) as is required by Strack and Deutsch’s (2004) model for an implicit association to be made between two concepts (e.g., “me” and “nervous”). They argue that in the social world, conscientiousness and openness are more deliberative and reflective (i.e., when one engages these behaviors it is purposeful and not automatically motivated). As for agreeableness, the authors did not find that the IAT predicted actual behavior, but they note that other studies have (Banse & Fischer, 2002; Schnabel et al., 2006).

The authors suggest that identifying components of traits that are more automatic and less reflective might lead to positive findings using indirect measures. An example of this might be seen with the construct, conscientiousness. Perhaps choosing to work more
than is necessary is a conscious choice (i.e., driven by reflective, not impulsive processes), and, therefore, “hard-working” may not be considered “impulsive” in terms of Strack and Deutsch’s model. However, in carrying out more work than is necessary, one might develop associative links between the self and other constructs. For example, overachievers can be disliked by others for “ruining the curve,” which might lead to interactions where others see them as condescending or pompous, which in turn could create a link between “me” and “condescending” that would not, on its face, appear to be related to conscientiousness. However, if this occurred repeatedly, the relationship between conscientious behavior and condescension would be chronically activated in the social world, and implicitly linked.

2.14 Implicit-Explicit Discrepancies

In different domains of psychology, it has been shown that discrepancy between implicit and explicit measurement of personality can be problematic for well-being (Baumann, Kaschel & Kuhl, 2005; Kehr, 2004; Shedler & Westen, 2007). In fact, the foundation of psychoanalytic therapy is to help individuals recognize and appreciate their more implicit motivation. The idea is that as people see the implicitly (McClelland et al., 1989) or impulsively (Strack & Deutsch, 2004) motivated patterns, they can begin to understand themselves more, including the reasons they make the attributions (McClelland et al.) or the reflectively derived conclusions (Strack & Deutsch, 2004) of self and other they do.

From a psychoanalytic standpoint, the inability to see patterns is a protective mechanism of the mind, and bringing people in touch with both their implicit and explicit motives is thought to improve their subjective well-being. In general, social cognitive
scientists do not view implicit-explicit discrepancies as the products of emotional conflicts or defenses; rather, their stance is that dual-process models are something of an evolutionary adaptation that allows for efficiency in processing, but leads to certain mental functions necessarily residing outside of awareness (see Westen, 1991).

2.15 Implicit-Explicit: What Moderates Agreement?

While the self-report method is valuable, one serious shortcoming is that, ultimately, it reveals only the extent to which someone believes they possess a trait, and not necessarily the extent to which someone actually does possesses a trait. One key phenomenon in the clinical assessment of personality and psychological assessment more broadly is that information from various methods are in general only modestly correlated (Meyer, 1997; Meyer et al., 2001, Mihura & Graceffo, 2014). In the course of a complex, clinical personality assessment, for example, a main goal is to help the patient understand why such discrepancies exist when they do – to account for them in a way that considers all idiographic information about the patient. Thus, in the area of multimethod personality assessment, understanding what causes such discrepancies across methods, and making sense of them, is as important as determining which method (e.g., self-report v. other report) is most “accurate” in some objective sense. Various methods of psychodynamic psychotherapy (e.g., see Clarkin, Fonagy, & Gabbard, 2010) and Therapeutic Assessment (Finn, 2007) rest on the idea that impediments in relating to certain parts of the self can commonly account for the misalignment between internally and externally assessed personalities traits (also see “self-estrangement” in Shapiro, 1965).

While disagreement across methods may be more pronounced for psychologically troubled individuals (e.g., those people diagnosed with Personality Disorder [see Westen
and Shedler, 2007); those people participating in psychodynamic psychotherapy or multimethod personality assessment), it is by no means unique to psychiatric patients. Rather, difficulty in fully and accurately understanding the self appears to be a function of the human mind, in general (e.g., see Wilson & Dunn, 2004). But, even so, shouldn’t implicit-explicit alignment be different for different people? In other words, it seems reasonable that certain factors (e.g., individual differences) could moderate the extent to which people can accurately introspect. Thrash, Elliot, and Schultheiss (2007) set out to identify such factors, two of which are relevant to this discussion – “private body consciousness” and “self-monitoring.”

These authors posit, in line with McClelland et al. (1989), that because implicit motivation is rooted in affective and physiological processes, it is not readily accessible via simple cognitive introspection; however, they make a distinction between those processes that lead to introspection (and higher-order cognition) and those that foster an awareness of non-verbal and experiential bodily states. The idea is that the latter would allow for an understanding of one’s implicit attributes, which are affective, engrained, and physiological as opposed to understanding attributes by way of elaborated cognition (also see Brunstein, 2010). This type of awareness of inner experience could put someone in touch with that which is latently true about themselves because one would be tapping into the bodily and affective correlates of implicit motivation. To connect with this material though, a person would need to be consistently open to and aware of their internal affective and physiological states, so as to deduce one’s own implicit features.

Thrash et al. (2007) write, “Consistent with the importance of experiential and non-verbal processes, we propose that implicit motives may be accessed, indirectly, through the
process of attending to the nonverbal bodily feeling of implicit motive arousal” (p. 963). They borrow the term, “private body consciousness” (Miller, Murphy, & Buss, 1981) to refer to an awareness of internal bodily states and differentiate it from “private self-consciousness” (Fenigstein, Scheier, & Buss, 1975), which involves an attention to inner-experience that focuses not necessarily on physiological and affective shifts, but on one’s elaborated self-concept. They argue that the former would grant one access to their implicit motives while the latter would not provide information beyond one’s conscious self-appraisal (i.e., one’s self-concept as usual).

In thinking of “private body consciousness,” one can imagine a person who experiences anxiety when talking in front of large groups and thusly concludes that they are an anxious and neurotic person. However, if the same individual becomes excited and volunteers to engage in public speaking at every turn – and is aware of their associated physiological arousal – reflecting on their relationship with public speaking would conjure up self-conceptions other than just “anxious.” Rather, they would be forced to consider that their affective networks are prone to activation at the opportunity for “attention” and “achievement” (both of which could drive repeated public speaking engagements), despite that anxiety is produced by the very attention and achievement they seek. But an individual who represents the self as “neurotic” may be hesitant to see these motivations because drives for “power,” “attention,” and “success” do not fit so neatly into a self-concept that is also defined by things like “nervousness,” “anxiety,” and “meekness.” As hypothesized, Thrash et al. (2007) found that a tendency to pay close attention to internal affective and physiological states can afford people a path to knowing their implicit characteristics,
which may not align with their taken-for-granted self-concepts, thus moderating implicit-explicit agreement.

Thrash et al. (2007) also hypothesize that the variable, “self-monitoring,” moderates implicit-explicit congruence. This construct is defined as the tendency to monitor behavior in order to behave in a socially appropriate manner, and in accordance with maintaining good appearances (i.e., to produce that behavior which is socially expected or called for) and inhibiting that expression which would be deemed inappropriate (Snyder, 1974). The authors propose that individuals high in self-monitoring maintain a “social orientation,” meaning that they have a strong allegiance to being appropriate. They also note that individuals whose parents promoted self-monitoring (i.e., suppression of expression in the name of social appropriateness) learn that, that which is internal is not an appropriate behavioral guide (see Eisenberg, Fabes, Schaller, Carlo, & Miller, 1991).

Due to significant concern with appropriateness and traditional standards, those highest in self-monitoring may even share traits characteristics with the “authoritarian personality” (Adorno, Frenkel-Brunswik, Daniel Levinson, & Sanford, 1950; Fromm, 1957; also see, Rokeach, 1960), a style of being that denies, rejects, and even punishes important aspects of living (e.g., affective states; less than “appropriate” feelings and thoughts; subjective experience) in self and other, in the name of appropriate conduct and rules. Whether at a level of authoritarianism or not, the self-reported attributes of individuals with a “social orientation” are probably a reflection of what would be considered socially appropriate or socially accepted, and this variable should be related to “conventionality.” Thrash et al. propose that high levels of self-monitoring would create a discrepancy in implicit-explicit alignment to the extent that one’s reported values are
necessarily externally derived. That is, the values these individuals espouse came *disproportionately* from the outside world, while their idiosyncratic motivation had a chance to manifest only inasmuch as it satisfied some externally imposed standard (e.g., social appropriateness, traditional codes of conduct).

In sum, people high in “self-monitoring” tend to be very in touch with social appropriateness and appearances at the cost of being out of touch with their implicit motives and latent characteristics. On the other hand, Thrash et al. hypothesize that individuals lacking this “social orientation” (less devoted to appearances or social appropriateness) are low in self-monitoring, and less inclined to suppress implicit motives for the sake of social harmony and “appropriate” action. They are therefore theorized to be more aware of their implicit motives; they act on them and their allegiances are not to the external. Findings supported the hypothesis that low self-monitoring is associated with increased implicit-explicit agreement.

### 2.16 Furthering our Understanding of Practicing Clinicians

Taken together, findings and limitations from the literatures reviewed above warrant further investigation into the relationship between clinician personality and preferred theoretical orientation. One’s basic preference in terms of theoretical orientation (i.e., nondirective v. directive) seems to have correlates in other domains including worldview (i.e., epistemology) and personality traits (i.e., conscientiousness, openness to experience, agreeableness). However, these personality traits have only been measured via self-report. Given the limits of self-reported information, this area of research needs to be expanded to include externally assessed measurement of clinician personality. Given findings that (a) these methods (implicit v. explicit assessment) tend to produce discrepant
information, (b) certain factors mitigate discrepancy, and (c) dispositional differences exist across different brands of clinicians, some hypotheses can be reasonably made regarding both the explicit and implicit characteristics of clinicians identified with differing theoretical orientations.

The present study aims first to replicate existing findings related to self-reported personality and clinician orientation; and secondly, to expand on this literature by assessing clinician personality, implicitly, and investigating its relationship with self-reported personality.
Chapter 3

3 Goals of the Present Study

The rationale and goals of this study will be discussed here, as will specific hypotheses.

3.1 Goal 1 and Rationale for Hypotheses 1 and 2.

The first goal of the present study is to further explore two findings from the existing literature on the relationship between clinician personality and theoretical orientation. The first is that clinicians who prefer less directive methods of psychotherapy report higher levels of neuroticism. Kreitman (1962) and Poznanski and McLennan (2003) found that nondirective clinicians report more neuroticism per se, while other findings have shown that this group reports traits associated with neuroticism (e.g., sensitivity to their own emotions, see Arthur, 2000; Herron, 1978; Walton, 1978; also, see Arthur 2001 for a review). Taken together, findings indicate that clinicians who prefer less directive methods report having more neurotic features than those who prefer more directive methods.

Secondly, some research has shown that psychodynamic and humanistic practitioners report significantly less agreeableness than other practitioners (Ogunfowora
& Drapeau, 2010), and cognitive-behavioral practitioners report significantly more agreeableness than other practitioners (Scandell et al., 1997). Given that nondirective clinicians (e.g., psychodynamic, humanistic) understand the world differently than directive clinicians (humanistic, subjective, organismic v. scientific, objective, mechanistic), and that nondirective clinicians question convention and norms (e.g. Ogunfowora & Drapeau, 2010), it stands to reason that they might see themselves as somewhat disagreeable by nature. That is, agreeableness and critically evaluating the nature of reality do not necessarily go hand-in-hand. However, this finding has not been found consistently or specifically examined in terms of level of directivity.

3.2 Goal 2 and Rationale for Hypotheses 3 and 4.

The second goal of the present study is to build on the literature examining clinician personality and preferred theoretical orientation, which until now has utilized only self-report instruments to assess personality. The current study will use the IAT to assess implicit self-concepts of practicing clinicians. It has been suggested in the literature (Boswell et al., 2009) that one reason psychodynamic and humanistic clinicians report more negative emotionality than behaviorists or cognitive behaviorists is that they are more open to experience, and, therefore, more accepting of their emotions (i.e., more in touch with these parts of themselves); however, this explanation says little about whether or not these group would fare differently on performance-based measures of personality. In fact, there is little data or theory from which differences could be hypothesized in this realm. Since the present study’s IAT assessment of clinician personality is exploratory in nature, null hypotheses are expected to be upheld.
3.3 Goal 3 and Rationale for hypotheses 5 – 8.

The last major goal of this study is to test the idea that practitioners identified with less directive methods are better able to report on their implicit characteristics than those identified with more directive methods. Although these types of therapists are different in many ways, perhaps the most important to this discussion is seen in the conceptualization of behavior as a product of internal versus external factors (this difference would be most pronounced in comparing clinicians on opposite ends of the continuum). This is a difference that not only produces disparate therapeutic methods – it has implications for how the therapist relates to him- or herself. The directive clinician may have gravitated to this method because looking inward was not particularly pleasing or useful in understanding the self. Or, perhaps introspection was never attempted to begin with as opposed to attempted and decided against.

Thus, a behavioral orientation in psychology might be associated with precisely a lack of internal exploration. Given what directive clinicians attend to in session (i.e., the rational and observable; Coan, 1979), their preferred methods of knowing reality (i.e., mechanistic, exogenous philosophy; Johnson et al., 1988; Royce & Mos, 1980), and what we know of the link between the person and the person’s epistemological leanings (see especially Johnson et al., 1988), it would be quite surprising if directive, objectively oriented practitioners (e.g., behavioral, cognitive-behavioral orientations) were inclined to analyze their own internal dynamics, experiential material, or phenomenological experience to the same extent as the nondirective, subjectively inclined (e.g., humanistic, psychodynamic orientations).
If nondirective clinicians do in fact have more access to their implicit motives (due to fruitful self-examination) than directive practitioners, they would be more aware of their associations in memory (associations between themselves and certain personality traits; e.g., [Me and Neurotic]), which are tapped by the IAT (Gawronski et al., 2009). As a consequence, (a) the alignment between self-reported and IAT-assessed information would be greater for nondirective than for directive practitioners, and (b) the strength of association between self-reported and IAT-assessed personality traits would vary depending on one’s identification with less directive methods.

3.4 Hypotheses

There are eight main hypotheses addressed in this dissertation.

**Hypothesis 1:** Practitioner identification with less directive methods will be significantly associated with self-reported neuroticism.

**Hypothesis 2:** Practitioner identification with less directive methods will be negatively associated with self-reported agreeableness.

**(Exploratory) Hypothesis 3:** IAT-assessed neuroticism will not vary as a function of practitioner identification with less directive methods. This relationship has not been studied before and therefore is considered exploratory. The hypothesis is consonant with the idea that those people drawn to the same field and practicing the same craft (though differently) are probably not significantly different (implicitly), despite that some are better able to report on their characteristics.

**(Exploratory) Hypothesis 4:** IAT-assessed agreeableness will not vary as a function of practitioner identification with less directive methods. This relationship has not been studied before and therefore is considered exploratory. The hypothesis is consonant with
the idea that those people drawn to the same field and practicing the same craft (though differently) are probably not significantly different (implicitly), despite that some are better able to report on their characteristics.

**Hypothesis 5:** Practitioner identification with less directive methods be associated with increased agreement across self-reported neuroticism and IAT-assessed neuroticism.

**Hypothesis 6:** Practitioner identification with less directive methods will be associated with increased agreement across self-reported agreeableness and IAT-assessed agreeableness.

**Hypothesis 7:** Practitioner identification with less directive methods as assessed by factor analysis will produce factor scores that moderate the strength of association between self-reported and IAT-assessed neuroticism.

**Hypothesis 8:** Practitioner identification with less directive methods as assessed by factor analysis will produce factor scores that moderate the strength of association between self-reported and IAT-assessed agreeableness.
Chapter 4

4 Methods

4.1 Participants

Of the studies reviewed above related to personality and theoretical orientation, the large majority utilized samples consisting of doctoral-level, practicing professionals (e.g., as opposed to academicians). Since the rationale for the present study is based on this literature, this study also sought professionals in practice as participants. The requirements for participation were a) having a doctoral degree, and b) working with patients in a therapy setting. To reach this group, psychological associations were identified in which practitioners constituted a large contingent of the membership and whose member email addresses were easily accessible. These groups included APA’s Division 42 (Psychologists in Independent Practice), and the state psychological associations of California, Colorado, Pennsylvania, Massachusetts, and Texas.

Division 42 and the state psychological associations of California and Colorado published their members’ contact information, generally including email addresses. To identify members of the state psychological associations of Pennsylvania, Massachusetts,
and Texas, the “search for a psychologist” function of their websites were used. In each case this returned the email addresses of hundreds of practicing psychologists. In total, the names and email addresses of 2,894 clinicians were attained and contacted with a request for participation. Approximately 100 of these emails were returned (addresses were either incorrect or no longer working). Thus, approximately 2,800 clinicians were emailed with an initial participation requests and one follow-up request.

A total of 123 doctoral level practitioners completed both the survey portion of the study (via PsychData software) and the IAT portion of the study (via Inquisit software). One Masters level clinician and one experimental psychologist also completed the study, but their data was removed as doctoral level practitioners constituted the desired population. Also of note is that 102 individuals completed the survey portion, but not the IAT portion of the study. In corresponding with several of these participants as well as Inquisit’s technical support, it was determined that certain computers and networks were less able to support the required plug-in than others. For example, the IATs failed to launch for several Macintosh users as well as for users who were connected to certain private networks (e.g., hospital networks). It is also possible that participants dropped out of the study by their own volition after having completed the survey portion. Another reason for the study’s low response rate (4.4% of people emailed completed the entire study) could be that emails were sent using the BCC (blind carbon copy) function, which, upon receipt, can cause emails to be funneled into junk or spam folders.
4.2 Measures

4.2.1 Identification with Less Directive Methods (ILDM)

The self-ascription method was utilized to assess clinician identification with less directive methods. Using a 1 – 4 Likert scale, clinicians were asked to rate the extent to which different theoretical perspectives influence their clinical work. These perspectives included behavioral, cognitive-behavioral, psychodynamic/psychoanalytic, humanistic/existential, experiential, common factors, eclecticism/integration. Likert scale points were as follows: 1 = not at all influenced; 2 = slightly influenced; 3 = fairly influenced; 4 = highly influenced. To provide participants with an ILDM score, each theoretical perspective was first categorized as reflecting a directive (i.e., behavioral, cognitive-behavioral) or nondirective (psychodynamic/psychoanalytic, humanistic/existential, experiential, common factors, eclecticism/integration) approach. Scores for both categories were summed and transformed into z-scores. Then, directiveness z-scores were subtracted from nondirectiveness z-scores. Thus, the magnitude and sign of these values represented the strength and direction of self-reported identification with less directive methods (i.e., self-reported endorsement of nondirective theoretical perspectives). Increasingly positive scores represented more identification with less directive methods while increasingly negative scores represented less identification with less directive methods. At that point, each participant possessed a standardized ILDM score.

4.2.2 Method Alignment

Method alignment (MA) is meant to characterize the extent to which participant self-reported neuroticism and agreeableness corresponded to IAT assessment of the same
traits. This variable was calculated by converting the raw scores of self-reported data and IAT data into standardized scores (z-scores). Thus, each participant possessed a z-score for self-reported neuroticism, self-reported agreeableness, IAT-assessed neuroticism, and IAT-assessed agreeableness. At that point z-scores associated with one method were subtracted from z-scores associated with the other method (e.g., IAT-assessed neuroticism – self-reported neuroticism). These values were then converted into absolute values, which left each participant with a method alignment (MA) score with zero representing perfect alignment and increasing values representing more misalignment. Finally, the association between identification with less directive methods and method alignment (MA) was examined by way of a Pearson correlation (r).

4.2.3 Identification with Less Directive Methods as Assessed by Factor Analysis (ILDM-FA)

A correlation matrix was first created to identify the associations that theoretical orientations maintained with each other. Principal component factor analytic methods were then used so as to identify the first underlying or latent dimension that produced the observed pattern of relationships. Each participant then possessed an Anderson-Ruben score, which is a standardized (z) score, representing his or her location on that factor.

4.2.4 Explicit Assessment of Neuroticism and Agreeableness

The constructs, neuroticism and agreeableness, were assessed through self-report following the procedure used in Back et al. (2009). Participants were asked to rate the extent to which 20 adjectives (10 for each trait) applied to them, using a 0-5 Likert scale, (0 = not at all, 5 = very much). The selected adjectives included 5 words that indicate the presence of the trait and 5 words (the second five in the lists below) that indicate the
absence of it (e.g., the presence of disagreeableness). Neuroticism was comprised by the following words: anxious, nervous, fearful, uncertain, afraid, calm, relaxed, restful, at ease, and balanced. Agreeableness was comprised by the following words: trusting, well-meaning, friendly, helpful, good-natured, obstinate, quarrelsome, hostile, hard-hearted, and resentful. See Table 4.1.

Table 4.1 Words selected for given personality traits

<table>
<thead>
<tr>
<th>Constructs assessed by IAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implicit self-concept of Neuroticism-Well-Adjustedness</td>
</tr>
<tr>
<td>Implicit self-concept of Agreeableness-Disagreeableness</td>
</tr>
</tbody>
</table>

*Note: All words taken from Back et al. (2009)*

4.2.5 Implicit Assessment of Neuroticism and Agreeableness

These constructs were assessed using the Implicit Association Test (IAT; Greenwald et al., 1998). This is a task of categorization which measures the strength of association between two concepts. Applied to personality, or “implicit self-concept,” Back et al. (2009) utilize two categories, me and others, and two other categories representing different ends of bipolar personality traits (e.g., kind and cruel). In this present study, the category, “others,” was modified to “not me.” (See Table 4.2 for details).
### Table 4.2 Schematic depiction of IAT procedure for implicit self-concept of agreeableness-disagreeableness

<table>
<thead>
<tr>
<th>Block</th>
<th>Task Description</th>
<th>Task instructions</th>
<th>Pool of stimuli</th>
<th>Number of trials in block</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Initial target-concept discrimination</td>
<td>Disagreeable ■ Me ■ Agreeable Not me ■</td>
<td>□ trusting □ well-meaning □ friendly □ helpful □ good-natured obstinate □ quarrelsome □ hostile □ hard-hearted resentful □</td>
<td>20: each randomly presented twice</td>
</tr>
<tr>
<td>2</td>
<td>Associated attribute discrimination</td>
<td>■ Me ■ Agreeable Not Me ■</td>
<td>□ me □ my □ own □ my □ self □ my □ they □</td>
<td>20: each randomly presented twice</td>
</tr>
<tr>
<td>3 – 4</td>
<td>Initial combined task</td>
<td>Not Me ■ Disagreeable ■ Agreeable ●</td>
<td>□ trusting □ well-meaning □ friendly □ helpful □ good-natured □ trusting □</td>
<td>60 total: each randomly presented once in 3; each randomly presented twice in 4</td>
</tr>
<tr>
<td>5</td>
<td>Reversed target-concept discrimination</td>
<td>■ Disagreeable ■ Agreeable ■ Not Me ■</td>
<td>□ obstinate □ quarrelsome □ hostile □ hard-hearted □ resentful □ □ me □ my □ own □ self □</td>
<td>20: each word randomly presented twice</td>
</tr>
<tr>
<td>6 – 7</td>
<td>Reversed combined task</td>
<td>■ Disagreeable ■ Me ■</td>
<td>□ trust □ well-meaning □ friend □ helpful □ good-natured □ theirs □</td>
<td>60 total: each randomly presented once in 6; each randomly presented twice in 7</td>
</tr>
</tbody>
</table>

**Note:** This table was constructed in line with Greenwald et al., 2008, Table 2.1. In the first 2 blocks, participants identify words associated with the personality trait under investigation (Block 1) and words associated with self and other (Block 2). In Blocks 3 and 4, participants are instructed to classify Me words and Agreeable words using the same key (E), and Others words and Disagreeable words using the same key (I). In Blocks 6 and 7, participants are instructed to do the opposite – classify Me words and Disagreeable words using the same key (E), and Others words and Agreeable words using the same key (I).
Block 5 is meant to control for any differences between blocks 3 and 4, and 6 and 7 that could be caused by the altered position of Agreeable and Disagreeable. IAT administrations assessing neuroticism and openness to experience will be identical to this, except that the words used to capture agreeableness and disagreeableness (column one of table) will be replaced with words meant to capture neuroticism and openness to experience (see Table 4.1).

The goal of the task is to determine the extent to which a person associates a certain trait with the self, whether or not he or she associates it with others. Thus, “not me” represents a more useful descriptor than “others” because an adjective’s association or lack of association with the self is the targeted construct; therefore, introducing the need to consider its association with others brings an unwanted construct into the task. For example, if an individual implicitly represents both self and others as “hostile,” using “others” would produce an outcome indicating that this person does not represent themselves as particularly hostile. But, this would only be so in comparison to others (who he or she represents as equally hostile). In the same situation “not me” better represents an absence of hostility in the self. This better targets the extent to which one sees themselves as hostile or not hostile – regardless of how they see others.

Participants completed a neuroticism IAT and an agreeableness IAT. The layout of the Agreeableness IAT is described below.4

**Block 1 (attribute-concept discrimination).** In the first Block, the word, agreeable, is in the top left hand corner of the screen and the word, disagreeable, is in the top right hand corner of the screen. These words are written in white font against black background. Before the administration begins (it begins when participants understand the instructions and are ready) the following instructions appear on the screen:

---

4 Procedures identical for assessment of neuroticism, except associated words change. See Table 3.
"Put your middle or index fingers on the E and I keys of your keyboard. Words representing the categories at the top will appear one-by-one in the middle of the screen. When the item belongs to a category on the left, press the E key; when the item belongs to a category on the right, press the I key. Items belong to only one category. If you make an error, an X will appear - fix the error by hitting the other key.

This is a timed sorting task. GO AS FAST AS YOU CAN while making as few mistakes as possible. Going too slow or making too many errors will result in an uninterpretable score. This task will take about 5 minutes to complete."

Press the spacebar to begin

When participants press the spacebar (to begin), words begin to appear on center of the screen, one at a time, written in white font. When a word belongs to the category, agreeable, respondents press the E key as agreeable is positioned on the left side of the screen. When a word belongs to the category, disagreeable, respondents press the I key as disagreeable is positioned on the right side of the screen. In this block there are 20 trials. Ten words appear two times in random order each on the center of the screen and must be categorized (Table 4.1). Words meant to reflect agreeableness include trusting, well-meaning, friendly, helpful, and good-natured. Words meant to reflect disagreeableness include obstinate, quarrelsome, hostile, hard-hearted, and resentful.

**Block 2 (me-not me discrimination).** Block 2 is the same as Block 1, except that concepts and associated words change. Instead of agreeable and disagreeable, the concepts are me (left side) and not me (right side). Here, the format of the administration and the instructions are identical to Block 1. One difference is that while the screen background is again black, all words are presented in green font. Words meant to reflect me include me,
my, own, my, self. Words meant to reflect not me include they, them, their, yours, others.

Again, there are 20 trials. Each word is presented twice in random order.

**Block 3 (initial combined task).** In Block 3, concepts that had previously appeared separately will appear together. Participants will see two words (one written above the other) on the top, left-hand side of the screen [i.e., me (still presented in white font), and agreeable (still written in green font)], and two words (one written above the other) on the top, right-hand side of the screen [others (still written in green font), and disagreeable (still presented in white font)]. During the task, one word belonging to one of the four categories still appears in the center of the screen, and is presented in the associated font (i.e., green for me-other words and white for agreeable-disagreeable words). Participants are now asked to categorize the words that appear on the center of the screen as belonging to one of the four categories present. This block consists of 20 trials (each of the words representing all four categories is used once). Before the trial begins, the instructions are written as follows:

“See above, the four categories you saw separately now appear together. Remember, each item belongs to only one group. The green and white labels and items may help to identify the appropriate category. Use the E and I keys to categorize items into four groups left and right, and correct errors by hitting the other key."

Press the spacebar to begin.

**Block 4 (second combined task).** Block 4 is exactly the same as Block 3, except that each of the words representing all four categories is used twice in random order (40 trials).
**Block 5 (reversed attribute-concept discrimination).** Block 5 is exactly the same as Block 1, except that the concepts into which participants place words have switched positions (i.e., disagreeable is positioned on the top, left-hand side of the screen and agreeable is positioned on the top, right-hand side of the screen).

**Block 6 (initial reversed-combined task).** Block 6 is exactly the same as Block 3, except the four concepts are paired differently. Disagreeable and agreeable maintain the same positions as in Block 5 (left, right, respectively), but now each is paired with the opposite of what it was paired with in Block 3. Thus, participants are now pressing the same key to categorize disagreeable words and me words, and the same key to categorize agreeable words and not me words. Like Block 3, there are 20 trials.

**Block 7 (second reversed-combined task).** Block 7 is exactly the same as Block 6, except that each of the words representing all four categories is used twice in random order (40 trials).

The rationale behind these blocks is straightforward. The first and second blocks are to ensure that respondents are correctly classifying words into the 4 categories (i.e., agreeable, disagreeable, me, not me). Comparing the speed with which one completed trials on blocks three and four to the speed with which one completed trials on blocks six and seven demonstrates the relative strength or ease of association (as measured by response time) between these categories that are paired together. That is, did the participant respond faster when me words were categorized on the same side as agreeable words (Blocks 6 and 7) or on the same side as disagreeable words (Blocks 3 and 4)? If there is a difference, it implies that participants associates oneself with one of these attributes (i.e., are Blocks 3 and 4 or Blocks 6 and 7 easier for the participant?). The difference between these blocks is
called the IAT-effect (Greenwald et al., 1998). The purpose of Block 5 is to ensure that any difference between blocks 3 and 4 (me as agreeable, not me as disagreeable) and 6 and 7 (me as disagreeable, not me as agreeable) is not due to the reversed positions of disagreeable and agreeable (i.e., in Blocks 3 and 4 words indicating disagreeableness are to be placed on the right [I key] and words indicating agreeableness are to be placed on the left [E key] categorized in the right, while in Blocks 6 and 7, words indicating agreeableness are to be placed on the left [E key] and words indicating disagreeableness are to be placed on the right [I key]). See Table 4.2 for a schematic depiction of the IAT.

4.3 Scoring the IAT

The IAT will be scored in line with recommendations put forth by Greenwald et al. (2003). The IAT effect statistic is called a “D-score” and represents the size of the disparity in mean latency (i.e., response time) across different blocks. In comparing two test blocks, their means are divided by the standard deviation of all the latencies within both blocks. Dividing mean differences by standard deviation controls for the relationship (positive correlation) that treatment means can have with the level of variability within the data from which they came. Conceptually, this statistic represents the difference in time it takes participants to respond when concepts are paired one way (e.g., me with agreeable; not me with disagreeable) versus another way (e.g., me with disagreeable; not me with agreeable). Thus, the D-score, or IAT effect is conceptually similar to Cohen’s d, with one key distinction. For the IAT D-score, the standard deviation (denominator) is computed from all latencies from both conditions. This is not the case for Cohen’s d, which utilizes a pooled, within-treatment standard deviation (i.e., condition membership is taken into account). It is important to note that Inquisit® software follows Greenwald et al (2003) by
deleting trials wherein latency times indicate participants were not devoting sufficient cognitive energy to the task (see Greenwald et al., 2003 for more detail).

Inquisit®, the software program being used to create, administer, and score IATs for this study, calculates d-scores as recommended by Greenwald et al. (2003). Within each block, this software tracks and records response times, trial-by-trial. The software reports three different d-scores. The first, reported as expressions.da by the software, is the d-score contrasting the initial combined task (Block 3 above) and the initial reversed-combined task (Block 6 above). These blocks are separated out as they are considered “practice” for the “tests” which follow them, and maintain more trials. The second, reported as expressions.db by the software, is the d-score contrasting the second combined task (Block 4 above) and the second reversed-combined task (Block 7 above). Finally, expressions.d is reported, which combines the prior two d-scores (i.e., d-score for 3 v. 6 and 4 v. 7) into one. This is the IAT effect that is used for analyses in the literature. The same was done in this study. D-scores range from -2 to 2, where 0 indicates no difference in mean latency across blocks. This would suggest a neutral implicit self-concept of agreeableness, for example. The magnitude of the d statistic indicates the size of the difference and the sign indicates the direction of the difference. Inquisit® software also automatically deletes trials wherein latency times indicate participants were not devoting sufficient cognitive energy to the task (see Greenwald et al., 2003 for more detail).

4.4 Procedure

Doctoral-level practitioners were identified via the organizations listed above. Each potential participant was sent an initial email inviting them to participate in the study, as well as one reminder email (see Appendix A). These emails were sent in February and
March of 2014, respectively. At the end of each email, a link to the PsychData® survey was provided. Clicking on the link signified participant consent. The survey contained questions related to demographic data, as well as those related to theoretical orientation and personality traits (see Appendix B). A link was placed at the bottom of the survey form, which redirected them to the IAT portion of the procedure. Participants were asked to provide a unique ID prior to completing both the survey section of the procedure and the IAT portion so that participant data from both sources could be linked. Participants were also asked to provide their email address as five participants were randomly selected to receive a $50 gift card for Amazon, Inc.

The entire procedure, including reading the email, and completing both the survey and IAT portions of the study, requires approximately 15-20 minutes. Upon completion of data collection, participant survey data and IAT data were merged into one file using the unique identifier provided by each participant.
Chapter 5

5 Results

5.1 Sample characteristics and preliminary analyses

The sample consisted of 123 doctoral level practitioners. Approximately 4.5% of all individuals emailed completed both the survey and IAT portions of the study. As noted above, 100 individuals completed the survey portion, but not the IAT portion; therefore, 8% of all individuals emailed began the study. Of the 123 participants, 30.9% were male (N = 38) and 69.1% were female (N = 85).

The sample was comprised of 56 practitioners with a Ph.D. in clinical psychology (45.5%); 31 practitioners with a Psy.D. in clinical psychology (25.2%); 20 practitioners with a Ph.D. in counseling psychology (16.3%); three practitioners with a Psy.D. in counseling psychology (2.4%); seven practitioners with an Ed.D (5.7%); and, six practitioners (4.9%) with other degrees. These degrees included Ph.D.s in rehabilitation psychology; school psychology; combined counseling and school psychology; counselor education, and health psychology and behavioral medicine. The practitioners in the sample
had held their degree for an average of 19.4 years (S.D. = 12.03). They earned their degrees as early as 1958 and as recently as 2013. See Table 5.1 below.

Table 5.1 Demographic data for sample

<table>
<thead>
<tr>
<th>Demographic Category</th>
<th>N (% of sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>38 (30.9)</td>
</tr>
<tr>
<td>Female</td>
<td>85 (69.1)</td>
</tr>
<tr>
<td>Type of Degree</td>
<td></td>
</tr>
<tr>
<td>Ph.D. Clinical</td>
<td>56 (45.2)</td>
</tr>
<tr>
<td>Psy.D. Clinical</td>
<td>31 (25.2)</td>
</tr>
<tr>
<td>Ph.D. Counseling</td>
<td>20 (16.3)</td>
</tr>
<tr>
<td>Psy.D. Counseling</td>
<td>3 (2.4)</td>
</tr>
<tr>
<td>D. Education</td>
<td>7 (5.7)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (4.9)</td>
</tr>
<tr>
<td>Years Since Doctoral Degree</td>
<td></td>
</tr>
<tr>
<td>1-10</td>
<td>35 (28.5)</td>
</tr>
<tr>
<td>11-20</td>
<td>31 (25.2)</td>
</tr>
<tr>
<td>21-30</td>
<td>34 (27.6)</td>
</tr>
<tr>
<td>31-40</td>
<td>17 (13.8)</td>
</tr>
<tr>
<td>41+</td>
<td>6 (4.9)</td>
</tr>
</tbody>
</table>

Note: Total N = 123

In the next preliminary analysis, the extent to which the entire sample (N = 123) endorsed each theoretical orientations of interest, was assessed. See Table 5.2, below.

Table 5.2 Sample’s Identification with Theoretical Orientations

<table>
<thead>
<tr>
<th>Theoretical Orientation</th>
<th>Mean (S.D.)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral</td>
<td>2.90 (.83)</td>
<td>1 – 4</td>
</tr>
<tr>
<td>Cognitive-Behavioral</td>
<td>3.34 (.80)</td>
<td>2 – 4</td>
</tr>
<tr>
<td>Psychodynamic/Psychoanalytic</td>
<td>2.77 (.91)</td>
<td>1 – 4</td>
</tr>
<tr>
<td>Humanistic</td>
<td>2.85 (.87)</td>
<td>1 – 4</td>
</tr>
<tr>
<td>Experiential</td>
<td>2.28 (.91)</td>
<td>1 – 4</td>
</tr>
<tr>
<td>Common Factors</td>
<td>1.90 (.91)</td>
<td>1 – 4</td>
</tr>
<tr>
<td>Integrated or Eclectic</td>
<td>2.99 (.94)</td>
<td>1 – 4</td>
</tr>
</tbody>
</table>

Note: Participants endorsed the extent to which these theories influence them, using a 1 – 4 Likert scale.
Descriptive statistics for the study’s main independent variable, *Identification with Less Directive Methods* (ILDM) are reported next. To create this variable, clinician endorsements of directive orientations were subtracted from their endorsements of nondirective orientations, resulting in a variable where ascending values indicated increasing identification with less directive methods. However, since the survey afforded greater opportunity to endorse nondirectiveness than directiveness (i.e., a majority of the theoretical orientations on the survey were considered nondirective), these categories were transformed into z-scores after being summed, and before subtraction took place. This controlled for the unequal number of nondirective versus directive orientations, so as to allow this value (Nondirective $z$ – Directive $z$) to represent one’s relative identification with less directive versus more directive approaches (0 = no preference).

Below, the means and standard deviations for identification with less directive methods and its component parts, prior to z score transformation, are presented in Table 5.3.

Table 5.3 Descriptive Statistics for Identification with Less Directive Methods (ILDM) and Component Parts

<table>
<thead>
<tr>
<th></th>
<th>ND$^1$</th>
<th>D$^2$</th>
<th>ILDM$^3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (S.D.)</td>
<td>12.80 (2.77)</td>
<td>6.25 (1.46)</td>
<td>6.55 (3.40)</td>
</tr>
</tbody>
</table>

Note: ND = Endorsed Nondirectiveness; D = Endorsed Directiveness; ILDM = Identification with Less Directive Methods (computed by subtracting D from ND). $^1$Scores on ND variable range from 4-20; $^2$Scores D variable range from 2-8; $^3$Scores on ILDM variable range from -4-18.

5.2 **Reliability statistics for self-report personality measures**

Survey items constituting Neuroticism and Agreeableness were sufficiently internally consistent ($\alpha = .86$ and .71, respectively). See Tables 5.4 and 5.5 for inter-item correlation matrices for these variables.
Table 5.4 Inter-Item Correlations for Self-Reported Neuroticism

<table>
<thead>
<tr>
<th></th>
<th>Af</th>
<th>F</th>
<th>An</th>
<th>U</th>
<th>N</th>
<th>Calm</th>
<th>Rel</th>
<th>R</th>
<th>AE</th>
<th>B</th>
<th>Corrected²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afraid (Af)</td>
<td>1</td>
<td>.83</td>
<td>.52</td>
<td>.28</td>
<td>.56</td>
<td>.27</td>
<td>.38</td>
<td>.11</td>
<td>.27</td>
<td>.32</td>
<td>.59</td>
</tr>
<tr>
<td>Fearful (F)</td>
<td>.83</td>
<td>1</td>
<td>.56</td>
<td>.32</td>
<td>.56</td>
<td>.26</td>
<td>.38</td>
<td>.15</td>
<td>.27</td>
<td>.30</td>
<td>.61</td>
</tr>
<tr>
<td>Anxious (An)</td>
<td>.52</td>
<td>.56</td>
<td>1</td>
<td>.32</td>
<td>.76</td>
<td>.36</td>
<td>.52</td>
<td>.25</td>
<td>.45</td>
<td>.30</td>
<td>.68</td>
</tr>
<tr>
<td>Nervous (N)</td>
<td>.28</td>
<td>.32</td>
<td>.32</td>
<td>1</td>
<td>.29</td>
<td>.06</td>
<td>.06</td>
<td>.09</td>
<td>.17</td>
<td>.24</td>
<td>.29</td>
</tr>
<tr>
<td>Uncertain (U)</td>
<td>.56</td>
<td>.56</td>
<td>.76</td>
<td>.29</td>
<td>1</td>
<td>.35</td>
<td>.53</td>
<td>.34</td>
<td>.51</td>
<td>.41</td>
<td>.74</td>
</tr>
<tr>
<td>Calm¹</td>
<td>.27</td>
<td>.26</td>
<td>.36</td>
<td>.06</td>
<td>.35</td>
<td>1</td>
<td>.59</td>
<td>.44</td>
<td>.63</td>
<td>.39</td>
<td>.55</td>
</tr>
<tr>
<td>Relaxed¹ (Rel)</td>
<td>.38</td>
<td>.39</td>
<td>.52</td>
<td>.06</td>
<td>.53</td>
<td>.59</td>
<td>1</td>
<td>.50</td>
<td>.61</td>
<td>.36</td>
<td>.67</td>
</tr>
<tr>
<td>Restful¹ (R)</td>
<td>.11</td>
<td>.15</td>
<td>.25</td>
<td>.09</td>
<td>.34</td>
<td>.44</td>
<td>.50</td>
<td>1</td>
<td>.39</td>
<td>.33</td>
<td>.42</td>
</tr>
<tr>
<td>At Ease¹ (AE)</td>
<td>.27</td>
<td>.27</td>
<td>.45</td>
<td>.17</td>
<td>.51</td>
<td>.63</td>
<td>.61</td>
<td>.39</td>
<td>1</td>
<td>.43</td>
<td>.62</td>
</tr>
<tr>
<td>Balanced¹ (B)</td>
<td>.32</td>
<td>.30</td>
<td>.30</td>
<td>.24</td>
<td>.41</td>
<td>.39</td>
<td>.36</td>
<td>.33</td>
<td>.43</td>
<td>1</td>
<td>.50</td>
</tr>
</tbody>
</table>

Note: ¹Correlations based on reverse coding for these items. ²This value represents the correlation between that particular item and the other 9 items. For entire scale, Cronbach’s alpha (α) was .86.

Table 5.5 Inter-Item Correlations for Self-Reported Agreeableness

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>W-M</th>
<th>F</th>
<th>H</th>
<th>G-N</th>
<th>O</th>
<th>Q</th>
<th>H</th>
<th>H-H</th>
<th>R</th>
<th>Corrected²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trusting (T)</td>
<td>1</td>
<td>.13</td>
<td>.10</td>
<td>.36</td>
<td>.42</td>
<td>.11</td>
<td>.02</td>
<td>.09</td>
<td>.25</td>
<td>.31</td>
<td></td>
</tr>
<tr>
<td>Well-Meaning (W-M)</td>
<td>.13</td>
<td>1</td>
<td>.25</td>
<td>.32</td>
<td>.42</td>
<td>.06</td>
<td>.15</td>
<td>.19</td>
<td>.22</td>
<td>.06</td>
<td>.34</td>
</tr>
<tr>
<td>Friendly (F)</td>
<td>.10</td>
<td>.25</td>
<td>1</td>
<td>.21</td>
<td>.08</td>
<td>.12</td>
<td>.11</td>
<td>.21</td>
<td>.13</td>
<td>.02</td>
<td>.24</td>
</tr>
<tr>
<td>Helpful (H)</td>
<td>.36</td>
<td>.32</td>
<td>.21</td>
<td>1</td>
<td>.23</td>
<td>.22</td>
<td>.24</td>
<td>.16</td>
<td>.16</td>
<td>.29</td>
<td>.44</td>
</tr>
<tr>
<td>Good-Natured (G-N)</td>
<td>.42</td>
<td>.42</td>
<td>.08</td>
<td>.23</td>
<td>1</td>
<td>.13</td>
<td>.22</td>
<td>.02</td>
<td>.22</td>
<td>.16</td>
<td>.35</td>
</tr>
<tr>
<td>Obstinate¹ (O)</td>
<td>.11</td>
<td>.06</td>
<td>.12</td>
<td>.22</td>
<td>.13</td>
<td>1</td>
<td>.45</td>
<td>.20</td>
<td>.28</td>
<td>.32</td>
<td>.41</td>
</tr>
<tr>
<td>Quarrelsome¹ (Q)</td>
<td>.15</td>
<td>.15</td>
<td>.10</td>
<td>.24</td>
<td>.22</td>
<td>.45</td>
<td>1</td>
<td>.48</td>
<td>.3</td>
<td>.26</td>
<td>.52</td>
</tr>
<tr>
<td>Hostile¹ (H)</td>
<td>.02</td>
<td>.19</td>
<td>.21</td>
<td>.16</td>
<td>.02</td>
<td>.20</td>
<td>.48</td>
<td>1</td>
<td>.33</td>
<td>.29</td>
<td>.42</td>
</tr>
<tr>
<td>Hard-Hearted¹ (H-H)</td>
<td>.09</td>
<td>.22</td>
<td>.13</td>
<td>.16</td>
<td>.22</td>
<td>.28</td>
<td>.32</td>
<td>.33</td>
<td>1</td>
<td>.17</td>
<td>.40</td>
</tr>
<tr>
<td>Resentful¹ (R)</td>
<td>.25</td>
<td>.06</td>
<td>.02</td>
<td>.29</td>
<td>.16</td>
<td>.32</td>
<td>.26</td>
<td>.29</td>
<td>.17</td>
<td>1</td>
<td>.37</td>
</tr>
</tbody>
</table>

Note: ¹Correlations based on reverse coding for these items. ²This value represents the correlation between that particular item and the other 9 items. For entire scale, Cronbach’s alpha (α) was .72.
5.3 Descriptive statistics and intercorrelations between self-reported and IAT-assessed personality variables, per sample and per theoretical orientation

In Table 5.6, means and standard deviations for the sample’s self-reported neuroticism, self-reported agreeableness, IAT-assessed neuroticism, and IAT-assessed agreeableness are reported. The right hand column of Table 5.6 also reports correlations between self-reported and IAT-assessed traits for the entire sample \((N = 123)\). See Table 5.7 for relationship between identification with theoretical orientations and both self-reported and IAT-assessed personality traits.

<table>
<thead>
<tr>
<th>Table 5.6 Descriptive statistics and intercorrelations for self-reported and IAT-assessed personality traits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
</tr>
<tr>
<td>Agreeableness</td>
</tr>
</tbody>
</table>

Note: \(N = 123\). For self-reported traits, means and standard deviations are based on questionnaire data, with a possible range of 0 to 5. For IAT-assessed traits, means and standard deviations reflect the IAT’s “D” measure, which is an effect size indicating the magnitude of one’s strength of association.
Table 5.7 Correlations between personality traits and endorsed theoretical orientation

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>CB</th>
<th>PD/PA</th>
<th>H/E</th>
<th>E</th>
<th>CF</th>
<th>E/I</th>
<th>ILDM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-N</td>
<td>-.07</td>
<td>-.11</td>
<td>.01</td>
<td>.14</td>
<td>.06</td>
<td>.12</td>
<td>-.01</td>
<td>.13</td>
</tr>
<tr>
<td>SR-A</td>
<td>.01</td>
<td>.05</td>
<td>-.02</td>
<td>.07</td>
<td>.05</td>
<td>-.08</td>
<td>.14</td>
<td>.02</td>
</tr>
<tr>
<td>IAT-N</td>
<td>.25**</td>
<td>.18*</td>
<td>-.09</td>
<td>-.07</td>
<td>-.01</td>
<td>-.08</td>
<td>-.02</td>
<td>-.19*</td>
</tr>
<tr>
<td>IAT-A</td>
<td>-.17</td>
<td>-.22*</td>
<td>.20*</td>
<td>.20*</td>
<td>.09</td>
<td>-.07</td>
<td>.17</td>
<td>.26**</td>
</tr>
</tbody>
</table>

Note: B = Behavioral; CB = cognitive behavioral; PD/PA = psychodynamic/psychoanalytic; H/E = Humanistic/Existential; E = Experiential; CF = Common Factors; E/I = Eclectic/Integrated; ILDM = Identification with Less Directive Methods; SR-N = self-reported neuroticism; SR-A = self-reported agreeableness; IAT-N = IAT-assessed neuroticism; IAT-A = IAT-assessed agreeableness; * = significant at p < .05; ** = significant at p < .01.

5.4 Correlations among endorsed theoretical approaches.

The endorsement of a behavioral orientation was correlated with the endorsement of a cognitive-behavioral orientation (r = .61, p < .01); negatively correlated with the endorsement of a psychodynamic/psychoanalytic orientation (r = -.33, p < .05); and, negatively correlated with the endorsement of an existential/humanistic orientation (r = -.23, p < .05). The endorsement of a cognitive-behavioral orientation was negatively correlated with the endorsement of a psychodynamic/psychoanalytic orientation (r = -.21, p < .05), and negatively correlated with the endorsement of a humanistic/existential orientation (r = -.26, p < .01). The endorsement of a humanistic/existential orientation was correlated with the endorsement of experiential (r = .53, p < .01), common factors (r = .21, p < .01), and eclecticism/integration (r = .31, p < .05) orientations. Its relationship with psychodynamic/psychoanalytic nearly reached significance (r = .18, p = .052). See Table 5.8 below.
Table 5.8 Correlation Matrix for Endorsed Theoretical Orientations

<table>
<thead>
<tr>
<th></th>
<th>Behavioral</th>
<th>CB</th>
<th>PD/PA</th>
<th>Humanistic/Existential</th>
<th>Experiential</th>
<th>Common Factors</th>
<th>Eclecticism/Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral</td>
<td>1</td>
<td>.61**</td>
<td>-.33**</td>
<td>-.23*</td>
<td>-.11</td>
<td>.03</td>
<td>-.03</td>
</tr>
<tr>
<td>Cognitive-Behavioral</td>
<td>.61**</td>
<td>1</td>
<td>-.21*</td>
<td>-.26*</td>
<td>-.11</td>
<td>.00</td>
<td>.04</td>
</tr>
<tr>
<td>PD/PA</td>
<td>-.33**</td>
<td>-.21*</td>
<td>1</td>
<td>.18*</td>
<td>.17</td>
<td>.09</td>
<td>.07</td>
</tr>
<tr>
<td>Humanistic/Existential</td>
<td>-.23*</td>
<td>-.26*</td>
<td>.18*</td>
<td>1</td>
<td>.53**</td>
<td>.21*</td>
<td>.31**</td>
</tr>
<tr>
<td>Experiential</td>
<td>-.11</td>
<td>-.11</td>
<td>.17</td>
<td>.53**</td>
<td>1</td>
<td>.25**</td>
<td>.22*</td>
</tr>
<tr>
<td>Common Factors</td>
<td>.03</td>
<td>.00</td>
<td>.09</td>
<td>.21*</td>
<td>.25**</td>
<td>1</td>
<td>.16</td>
</tr>
<tr>
<td>Eclecticism/Integration</td>
<td>-.03</td>
<td>.04</td>
<td>.07</td>
<td>.31**</td>
<td>.22*</td>
<td>.16</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: ** = significant at the .05 level. * = significant at the .01 level. PD/PA = Psychodynamic/Psychoanalytic

5.5 Demographic data and study variables.

Next, analyses were carried out to assess the extent to which demographic variables (gender, type of degree, and years since attaining doctoral degree) were associated with all of the study’s variables (self-reported neuroticism [SR-N]; self-reported agreeableness [SR-A]; IAT-assessed neuroticism [IAT-N]; IAT-assessed agreeableness [IAT-A]; identification with less directive methods [ILDM]; neuroticism method alignment [MA-N]; and, agreeableness method alignment [MA-A]). Significant results will be described below, but see Table 5.9 for findings from all analyses.

Both gender and type of degree showed a significant effect on identification with less directive methods (ILDM). Males were more identified with directive methods than females, $F(1, 121) = 4.12, p < .05$. Type of degree also had a significant effect on this variable, $F(5, 117) = 4.1, p = .05$. 

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### Table 5.9 Means and SDs by Demographic Variable

<table>
<thead>
<tr>
<th>Demographic Category</th>
<th>N (% of sample)</th>
<th>SR-N</th>
<th>SR-A</th>
<th>IAT-N</th>
<th>IAT-A</th>
<th>ILDM</th>
<th>MA-N</th>
<th>MA-A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>38 (30.9)</td>
<td>-1.18</td>
<td>-0.2</td>
<td>-0.31</td>
<td>-0.04</td>
<td>-0.42</td>
<td>1.11</td>
<td>1.2</td>
</tr>
<tr>
<td>Female</td>
<td>85 (69.1)</td>
<td>0.08</td>
<td>0.01</td>
<td>0.14</td>
<td>0.02</td>
<td>0.19</td>
<td>1.06</td>
<td>1.03</td>
</tr>
<tr>
<td>F Statistic (p)</td>
<td></td>
<td>1.9</td>
<td>0.01</td>
<td>5.3</td>
<td>0.10</td>
<td>4.1</td>
<td>0.06</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Type of Degree</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D. Clinical</td>
<td>56 (45.2)</td>
<td>0.15</td>
<td>-0.11</td>
<td>0.01</td>
<td>0.06</td>
<td>-0.30</td>
<td>1.30</td>
<td>1.12</td>
</tr>
<tr>
<td>Psy.D. Clinical</td>
<td>31 (25.2)</td>
<td>-0.20</td>
<td>0.19</td>
<td>0.07</td>
<td>0.11</td>
<td>0.34</td>
<td>0.77</td>
<td>1.09</td>
</tr>
<tr>
<td>Ph.D. Counseling</td>
<td>20 (16.3)</td>
<td>-0.19</td>
<td>0.05</td>
<td>0.07</td>
<td>-0.20</td>
<td>0.51</td>
<td>1.18</td>
<td>1.03</td>
</tr>
<tr>
<td>Psy.D. Counseling</td>
<td>3 (2.4)</td>
<td>-0.31</td>
<td>0.16</td>
<td>-0.05</td>
<td>-0.54</td>
<td>0.94</td>
<td>1.10</td>
<td>1.29</td>
</tr>
<tr>
<td>D. Education</td>
<td>7 (5.7)</td>
<td>0.25</td>
<td>-0.10</td>
<td>-0.70</td>
<td>0.61</td>
<td>0.71</td>
<td>1.07</td>
<td>0.75</td>
</tr>
<tr>
<td>Other</td>
<td>6 (4.9)</td>
<td>0.14</td>
<td>-0.07</td>
<td>0.10</td>
<td>0.22</td>
<td>-1.92</td>
<td>0.27</td>
<td>1.08</td>
</tr>
<tr>
<td>F Statistic (p)</td>
<td></td>
<td>0.81</td>
<td>0.40</td>
<td>0.76</td>
<td>1.00</td>
<td>3.9</td>
<td>2.78</td>
<td>0.29</td>
</tr>
<tr>
<td><strong>Years Since Doctoral Degree</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-10</td>
<td>35 (28.5)</td>
<td>0.11</td>
<td>0.20</td>
<td>0.14</td>
<td>-0.24</td>
<td>0.27</td>
<td>0.87</td>
<td>1.32</td>
</tr>
<tr>
<td>11-20</td>
<td>31 (25.2)</td>
<td>0.16</td>
<td>-0.01</td>
<td>0.14</td>
<td>-0.01</td>
<td>-0.33</td>
<td>1.33</td>
<td>0.85</td>
</tr>
<tr>
<td>21-30</td>
<td>34 (27.6)</td>
<td>-0.06</td>
<td>-0.12</td>
<td>-0.10</td>
<td>0.18</td>
<td>-0.07</td>
<td>1.04</td>
<td>0.99</td>
</tr>
<tr>
<td>31-40</td>
<td>17 (13.8)</td>
<td>-0.14</td>
<td>-0.13</td>
<td>-0.06</td>
<td>0.21</td>
<td>0.39</td>
<td>1.27</td>
<td>0.98</td>
</tr>
<tr>
<td>41+</td>
<td>6 (4.9)</td>
<td>-0.69</td>
<td>-0.07</td>
<td>-0.84</td>
<td>-0.13</td>
<td>-0.60</td>
<td>0.66</td>
<td>1.67</td>
</tr>
<tr>
<td>F Statistic (p)</td>
<td></td>
<td>1.15</td>
<td>0.58</td>
<td>1.55</td>
<td>1.02</td>
<td>1.13</td>
<td>1.75</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**Note:** Means and S.D.s are presented in terms of standardized (Z) scores. SR-N = Self-reported Neuroticism; SR-A = Self-Reported Agreeableness; IAT-N = IAT-assessed Neuroticism; IAT-A = IAT-assessed Agreeableness; ILDM = Identification with less directive methods; MA-N = Method Alignment-Neuroticism; MA-A = Method Alignment-Agreeableness. ¹ ILDM was significantly different across gender at p = .045. ² Type of Degree showed a significant effect on ILDM, F (5, 117) = 4.1, p = .045. Since homogeneity of variance was met (Levine’s Statistic = 1.3, p = .26), and group Ns differed, a contrast analysis was used which implemented Tukey’s HSD (Honestly Significant Difference) Test revealed that ILDM was significantly higher in Other than in Psy.D. Clinical (p = .03) or Ph.D. Counseling (p = .04). No other comparisons reached significance.
Type of degree showed a significant effect on MA-N, $F(5, 117) = 2.78, p = .02$. Homogeneity of variance was not violated (Levine’s statistic = 2.05, $p = .08$). Tukey’s HSD test revealed that means of the six groups were significantly different. Years Since Doctoral Degree showed a significant effect on MA-A, $F(5, 117) = 2.5, p = .046$. As Levine’s statistic was nonsignificant (1.58, $p = .58$), Tukey’s HSD was utilized to further examine group differences. As with the last 2 analyses, no group mean was found to be significantly different from any other.

To further understand these differences, a post-hoc test was performed. Given that the assumption of heterogeneity was not violated (Levine’s statistic = 1.3, $p = .26$) and groups were unequal in number, Tukey’s HSD (Honestly Significant Difference) test was chosen. Results of the analysis revealed participants in the group, Other, endorsed theoretical orientations with more directiveness than participants in the Psy.D. Clinical group ($p = .03$) or the Ph.D. Counseling group. ($p = .04$). No other mean differences reached significance.

Initial results of analyses of variance (ANOVAs) suggested that Type of Degree had a significant effect on MA-N, $F(5, 117) = 2.78, p = .02$), as did years since doctoral degree on MA-A ($F(5, 117) = 2.5, p = .046$. However, in both cases a post-hoc Tukey’s HSD test found that group means were not significantly different. In both instances, the presence of a significant $F$ statistic, but nonsignificant pairwise comparisons was probably due to alpha corrections (from Tukey’s) being applied to groups with small $Ns$. Differences that the omnibus $F$ uncovered were no longer present once this correction was made.

5.6 Results of Hypotheses 1-6 Using Identification with Less Directive Methods Variable (ILDM) as Assessed by Difference Scores

Hypotheses 1 and 2 stated that identification with less directive methods (ILDM) would be positively correlated with neuroticism and negatively associated with
agreeableness. Results did not support either of these hypotheses: the ILDM variable was not associated with self-reported neuroticism \((r = .13, p = .16)\) or self-reported agreeableness \((r = .02, p = .86)\). As a marker of reliability, it would be important to know if the self-reported neuroticism and agreeableness among participants who completed only the self-report portion of the study, and not the IAT \((N = 102)\), differed from those participants who completed both measures \((N = 123)\). Unfortunately, once the final database was created \((N = 123)\), which did not include participant identifying information, it was not possible to examine the survey data and determine which participants had completed the IAT and which had not. Therefore, it was not possible to compare the means of these groups.

Hypotheses 3 and 4 stated that IAT-assessed neuroticism and agreeableness would be uncorrelated with the identification with less directive methods (ILDM). Contrary to both hypotheses, the ILDM variable was negatively associated with IAT-assessed neuroticism \((r = -.19, p < .05)\), and positively associated with agreeableness \((r = .26, p < .01)\). Hypotheses 5 and 6 state that identification with less directive methods would be associated with greater alignment between IAT-assessed and self-reported traits (neuroticism and agreeableness). These hypotheses were not supported: the ILDM variable was associated with neither method alignment for neuroticism \((r = .05, p = .56)\) nor method alignment for agreeableness \((r = -.03, p = .71)\).

A visual depiction of the study’s hypothesized relationships and results can be seen in Table 5.10, below. For each hypothesis and across each row, the study variables predicted to maintain bivariate relationships with each other are denoted by “X.” The “Predicted” column is meant to remind the reader of the hypothesized strength and
direction of the relationship. Finally, the actual Pearson correlation found and its associated significance level is listed in the “r (p)” column.

Table 5.10 Results of Hypotheses 1 – 6

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Study Variables Involved</th>
<th>Predicted</th>
<th>r (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SR-N</td>
<td>SR-A</td>
<td>IAT-N</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: SR-N = Self-reported Neuroticism; SR-A = Self-Reported Agreeableness; IAT-N = IAT-assessed Neuroticism; IAT-A = IAT-assessed Agreeableness; ILDM = Identification with Less Directive Methods; MA-N = Method Alignment-Neuroticism; MA-A = Method Alignment-Agreeableness. Sig (+) = significant, positive relationship predicted; Sig (-) = significant, negative relationship predicted; NS = nonsignificant relationship predicted.

5.7  Reevaluating Hypotheses 1-6 Using Identification with Less Directive Methods Variable (ILDM) as Assessed by Factor Analysis

5.7.1 Using Factor Analysis to Create Improved Summary Variable

In this section, each of the first six hypotheses will be addressed again, but the summary score used to reflect identification with less directive methods (ILDM) will be derived through factor analyzing the theoretical orientation correlation matrix (see Table 5.8, above). A principal component analysis (PCA) was used to identify the first underlying dimension accounting for the observed pattern of relationships. Given that the Kaiser-Meyer-Olkin measure of sampling adequacy was .628 (.6 or above is considered reasonable), Bartlett’s test of sphericity was significant ($\chi^2 (21) = 145.75, p < .001$), and the determinant value was .29, the minimum standard to conduct a principal component analysis was met.

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The first factor of the principal components analysis maintained an eigenvalue of 2.2, and accounted for 31.7% of the variance in the pattern of observed relationships, while a second factor maintained an eigenvalue of 1.5 and accounted for 21.9% of the variance in the pattern of observed relationships. However, only the first dimension was extracted, whose associated loadings contrasted Behavioral (-.63) and Cognitive-Behavioral (-.60) orientations with Humanistic/Existential (.75), Experiential (.64), and Psychodynamic/Psychoanalytic (.51) orientations. Common Factors (.33) and Integrated/Eclectic (.37), which represent less straightforward and possibly multifaceted orientations did not load as strongly on either end of the latent dimension; however, it is worth noting that these orientations are positively correlated with the factor, indicating that they share more with Humanistic/Existential, Experiential, and Psychodynamic/Psychoanalytic than with Behavioral and Cognitive-Behavioral. In conceptualizing what is being captured by this factor, it is useful to note that the factor loadings do in fact follow the method of categorizing originally meant to assess identification with nondirective methods (i.e., B/CBT are negatively associated while all other orientations are positively associated with the latent factor). Therefore, the first factor extracted can be thought of as participant identification with less directive methods as assessed by factor analysis.

See Tables 5.11 for a summary of the model and Table 5.12 for factor loadings and communalities associated with the PCA.
Table 5.11 Summary of Principal Component Analysis Applied to Theoretical Orientation Correlation Matrix

<table>
<thead>
<tr>
<th>Factor</th>
<th>Initial Eigenvalues</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>% of Variance</strong></td>
<td><strong>Cumulative %</strong></td>
</tr>
<tr>
<td>1</td>
<td>2.22</td>
<td>31.7</td>
<td>31.7</td>
</tr>
<tr>
<td>2</td>
<td>1.53</td>
<td>21.9</td>
<td>53.6</td>
</tr>
<tr>
<td>3</td>
<td>.87</td>
<td>12.5</td>
<td>66.0</td>
</tr>
<tr>
<td>4</td>
<td>.825</td>
<td>11.8</td>
<td>77.8</td>
</tr>
<tr>
<td>5</td>
<td>.748</td>
<td>10.7</td>
<td>88.5</td>
</tr>
<tr>
<td>6</td>
<td>.438</td>
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<td>94.8</td>
</tr>
<tr>
<td>7</td>
<td>.366</td>
<td>5.2</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5.12 Factor Loadings and Communality Values based on Principal Components Analysis Applied to Theoretical Orientation Correlation Matrix

<table>
<thead>
<tr>
<th>Theoretical Orientation</th>
<th>ILDM Factor Loading</th>
<th>Communality Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral</td>
<td>-.63</td>
<td>.39</td>
</tr>
<tr>
<td>CB</td>
<td>-.60</td>
<td>.36</td>
</tr>
<tr>
<td>PD/PA</td>
<td>.51</td>
<td>.26</td>
</tr>
<tr>
<td>Humanistic/Existential</td>
<td>.75</td>
<td>.56</td>
</tr>
<tr>
<td>Experiential</td>
<td>.64</td>
<td>.41</td>
</tr>
<tr>
<td>Common Factors</td>
<td>.33</td>
<td>.11</td>
</tr>
<tr>
<td>Integrated/Eclectic</td>
<td>.37</td>
<td>.14</td>
</tr>
</tbody>
</table>

Note: ILDM Factor Loading = Identification with less directive methods factor loading. Communality values represent the degree of variation in each item (theoretical orientation) accounted for by the extracted factor.
5.7.2 Applying Participant Factor Scores to Hypotheses 1 – 6

In applying a PCA to the theoretical orientation matrix, each participant was assigned an Anderson-Rubin factor score; these are standardized values ($M = 0$, $SD = 1$) that locate participants on the extracted dimension. That is, participants’ patterns of theoretical orientation endorsement produces a score that indicates where they fall on the latent dimension produced by the PCA. In the following paragraph, results of the six original hypotheses are reported, but the original ILDM variable is replaced by a new ILDM variable reflecting latent factor values. Conceptually, the new variable represents participant scores on the underlying factor that most accounts for endorsed theoretical preferences. The correlation that this variable has with the (unreduced) ILDM variable is $r = .98$, $p < .01$.

Replacing the original ILDM variable with ILDM factor scores, hypotheses 1 and 2 would state that participant standing on the latent factor will be positively associated with self-reported neuroticism and negatively associated with self-reported agreeableness. Neither hypothesis was supported; $r = .13$ ($p = .15$) and $r = .03$ ($p = .73$), respectively.

Hypothesis 3 and 4 would state that participant standing on the latent factor would be unassociated with IAT-assessed neuroticism and IAT-assessed agreeableness. The null hypothesis was retained in hypothesis 3 as the relationship between participant standing on the latent factor and IAT-assessed neuroticism failed to reach statistical significance ($r = -.17$, $p = .07$). However, the effect size here is very near the value produced when the original ILDM variable was used and the analysis yielded significant results (i.e., $r = -19$). Regarding hypothesis 4, participant standing on the latent factor was positively associated with agreeableness ($r = .26$, $p = <.01$).
Hypothesis 5 and 6 would state that participant standing on the latent factor would be positively associated with method alignment (absolute z-score agreement across IAT- and self-report methods), for both neuroticism and agreeableness, respectively. Neither hypothesis 5 \((r = .09, p = .35)\) nor 6 \((r = .09, p = .35)\) was supported. See Table 5.13 for visual depiction of these results.

Table 5.13 Results of Hypotheses 1 – 6 using ILDM Factor Values in place of original ILDM Values

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Study Variables Involved</th>
<th>Predicted</th>
<th>(r (p))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SR-N</td>
<td>SR-A</td>
<td>IAT-N</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Note: SR-N = Self-reported Neuroticism; SR-A = Self-Reported Agreeableness; IAT-N = IAT-assessed Neuroticism; IAT-A = IAT-assessed Agreeableness; ILDM-FA = Identification with less directive methods as assessed by factor analysis; MA-N = Method Alignment-Neuroticism; MA-A = Method Alignment-Agreeableness. Sig (+) = significant, positive relationship predicted; Sig (-) = significant, negative relationship predicted; NS = nonsignificant relationship predicted.

5.8 Results of Hypotheses 7 and 8

Hypotheses 5 and 6 stated that identification with less directive methods would be associated with increased agreement across self-reported neuroticism and IAT-assessed neuroticism (hypothesis 5), and increased agreement across self-reported neuroticism and IAT-assessed neuroticism (hypothesis 6). To test these hypotheses, standard score values self-reported values were subtracted from standard score IAT-assessed values. The resulting value represented “method alignment,” and was the statistic expected to show associations \(r\) with practitioner identification with less directive methods (ILDM).
Therefore, a Pearson correlation was carried out to determine the extent to which ILDM was associated with method alignment.

For hypotheses 7 and 8, identification with less directive methods as assessed by factor analysis (ILDM-FA), which was derived from participant endorsement of theoretical orientation, will be examined as a possible moderator of the strength of association between self-reported and IAT-assessed personality traits (neuroticism and agreeableness). This analysis shares with the original analysis the idea that one’s self-identified theoretical orientation has implications for the extent to which introspected and externally assessed personality information relate. The main difference is that whereas the “Method Alignment” variable consisted of absolute values (i.e., absolute z-score difference between self-reported trait and IAT-assessed trait), regression analyses produce the extent to which one variable(s) predicts another variable(s). Thus, “strength of method association” is the being targeted in the present analysis, as opposed to the “difference across method values.”

5.8.1 Regression Analysis for Neuroticism

To test the hypothesis that the relationship between practitioner IAT-assessed neuroticism and self-reported neuroticism is moderated by practitioner location on the ILDM factor, a latent factor derived via self-reported theoretical orientation, a hierarchical multiple regression analysis was conducted. IAT-assessed neuroticism served as the dependent variable. Predictor variables included practitioner’s self-reported neuroticism, practitioner’s ILDM factor values, and an interaction term consisting of their product (self-reported neuroticism values x ILDM factor values). In accordance with convention (see Cohen, Cohen, West, & Aiken, 2003), each of the variables was first centered, or demeaned, such that their values were expressed in terms of their deviation from the mean.
(directive-nondirective factor scores already in this form). Multicollinearity diagnostics were assessed and were within an acceptable range (tolerance ranged from .96 to .98). See Table 5.14 for correlations among variables.

**Table 5.14 Intercorrelations for Centered Variables Used in Neuroticism**

<table>
<thead>
<tr>
<th></th>
<th>ILDM-FA</th>
<th>Centered SR-N</th>
<th>Centered IAT-N</th>
<th>Interaction Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILDM-FA</td>
<td>1</td>
<td>.13</td>
<td>-.16</td>
<td>.13</td>
</tr>
<tr>
<td>Centered SR-N</td>
<td>.13</td>
<td>1</td>
<td>.04</td>
<td>.00</td>
</tr>
<tr>
<td>Centered IAT-N</td>
<td>-.16</td>
<td>.04</td>
<td>1</td>
<td>-.04</td>
</tr>
<tr>
<td>Interaction Term</td>
<td>.13</td>
<td>.00</td>
<td>-.04</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: ILDM-FA = Identification with less directive methods as assessed by factor analysis; Centered SR-N = De-meaned self-reported neuroticism scores; Centered IAT-N = De-meaned IAT-assessed neuroticism scores; Interaction term = the product of ILDM factor scores and Centered SR-N scores.

In this first step, self-reported neuroticism and ILDM factor scores were included as predictors. These variables did not account for a significant amount of variance IAT-assessed neuroticism, $R = .14$, $F(2, 120) = 1.2$, $p = .29$. Next, the interaction term between self-reported neuroticism and ILDM factor scores was added to the regression model; this added little to the model, $R^2$ change = .01, $F$ change $(3, 119) = .63$, $p = .89$, indicating that the relationship between IAT-assessed neuroticism and self-reported neuroticism is not being moderated by practitioner location on the ILDM dimension.

**5.8.2 Regression Analysis for Agreeableness**

To test the hypothesis that the relationship between practitioner IAT-assessed agreeableness and self-reported agreeableness is moderated by practitioner location on the
ILDM factor, a latent factor derived via self-reported theoretical orientation, a hierarchical multiple regression analysis was conducted. IAT-assessed agreeableness served as the dependent variable. Predictor variables included practitioner’s self-reported agreeableness, practitioner’s ILDM factor values, and an interaction term consisting of their product (self-reported agreeableness values x ILDM factor values). In accordance with convention (see Cohen, Cohen, West, & Aiken, 2003), each of the variables was first centered, or demeaned, such that their values were expressed in terms of their deviation from the mean (ILDM factor scores were already in this form). Multicollinearity diagnostics were assessed and were within an acceptable range (tolerance ranged from .98 to .99). See Table 5.15 for correlations among variables.

**Table 5.15 Intercorrelations for Centered Variables Used in Agreeableness Regression Analysis**

<table>
<thead>
<tr>
<th></th>
<th>ILDM-FA</th>
<th>Centered SR-A</th>
<th>Centered IAT-A</th>
<th>Interaction Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILDM-FA</td>
<td>1</td>
<td>.03</td>
<td>.26**</td>
<td>-.14</td>
</tr>
<tr>
<td>Centered SR-A</td>
<td>.03</td>
<td>1</td>
<td>.09</td>
<td>.00</td>
</tr>
<tr>
<td>Centered IAT-A</td>
<td>.26**</td>
<td>.09</td>
<td>1</td>
<td>-.04</td>
</tr>
<tr>
<td>Interaction Term</td>
<td>-.14</td>
<td>-.06</td>
<td>-.04</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: ILDM-FA = Identification with less directive methods as assessed by factor analysis; Centered SR-A = De-meaned self-reported agreeableness scores; Centered IAT-A = De-meaned IAT-assessed agreeableness scores; Interaction term = the product of ILDM factor scores and Centered SR-A scores. ** = correlation significant at $p = .01$.

In this first step, self-reported agreeableness and ILDM factor scores were included as predictors. These variables accounted for a significant amount of variance in IAT-assessed agreeableness, $R = .28$, $F = (2, 120) = 5.0$, $p < .01$. Next, the interaction term between self-reported agreeableness and ILDM factor scores was added to the regression
model; this addition did not account for any additional variance in IAT-assessed agreeableness, $R = .28$, $F$ change (1, 119) = .04, $p = .85$. This indicates that the relationship between IAT-assessed agreeableness and self-reported agreeableness is not being moderated by practitioner location on the ILDM dimension. The significance of the overall model was largely produced by the strong relationship IAT-assessed agreeableness maintained with the ILDM factor ($r = .26$, $p < .01$).
6 Discussion

6.1 Brief Review: Rationale and Procedure

The present study was concerned with the extent to which preferences for certain models or approaches are associated with distinct personality traits. Given that different metapsychologies, or different ways of understanding psychopathology, rely on divergent philosophical underpinnings (e.g., epistemological assumptions) and concern themselves with contrasting subject matter (e.g., experimental, environmental), questions have been raised about personality differences among those adhering to them. That is, the differences that exist across theoretical orientations have led some to reasonably assume that the people drawn to them are different, as well. This line of research, carried out over approximately the last 50 years, has examined the relationship between self-reported personality and preferred theoretical orientation, and found that clinicians of different philosophical persuasions do in fact report having different psychological characteristics. At different times in the history of psychology, self-reported personality has been examined as a
correlate of different theoretical orientations, including the then dominant and prevailing one(s) (see Table 2.1).

In the present study, clinician identification with less directive methods (ILD M) was hypothesized as a variable that would be related to clinician personality. To measure this variable (the study’s main IV), clinicians were surveyed and asked to rate the extent to which they adhere to different theoretical orientations. Though no theoretical orientation is purely directive or purely nondirective, each was classified, a priori, as a nondirective or directive orientation. Clinician endorsements of different theoretical approaches (e.g., psychodynamic theory, behaviorism) were used as to assign participants a ILDM score. The relationship between this value and two personality traits (neuroticism and agreeableness), as measured by both self-report and IAT, was examined.

6.2 Understanding Present Findings

6.2.1 Self-reported Neuroticism

The present study hypothesized that those practitioners drawn to nondirective therapy modalities would also endorse personality traits associated with neuroticism. This association did not reach statistical significance ($r = .13, p = .16$); however, it is worth noting that the orientations characterized as directive (behavioral, cognitive-behavioral) were negatively correlated with neuroticism, while all orientations characterized as nondirective (except experiential), were positively correlated with neuroticism.

The present null finding could be due to measurement – this particular set of words has not been used in past studies finding associations between less directive orientations and self-reported neuroticism; however, it has been used to study undergraduate neuroticism (Back et al., 2009). In that study, the sample’s mean neuroticism was higher
and its variability lower \((M = 2.22, S.D. = .75)\) than in the present study \((M = 2.00, S.D. = .44)\), producing a d-score of .36. This suggests that the present sample was one that, in general, thought of themselves as better adjusted than the sample of German undergraduates \((M = 2.00 \text{ v. } 2.22; \ d = .36)\), and were more similar in their conscious understanding of themselves \((S.D. = .44 \text{ v. } .75)\).

The present finding is difficult to explain in light of the fact that studies examining personality and theoretical orientation have consistently found that more directive clinicians (e.g., behavioral) report more neuroticism than less directive clinicians. In fact, no study to date has found the opposite. However, due to the file-drawer phenomenon (i.e., null findings are not published), it is impossible to know how many studies have found null findings, which means that the reliability of the neuroticism finding is unknown, no matter how often it surfaces in journal articles.

6.2.2 Self-reported Agreeableness

The present study hypothesized that practitioners endorsing less directive techniques would also report less agreeableness; however, this was not found. Identification with less directive methods (ILDM) was not negatively (or significantly) associated with agreeableness \((r = .02, p = .86)\). There could be many explanations for this, one of which is that the present findings reflect reality; that is, nondirective practitioners are no more disagreeable (per their self-report) than directive practitioners. In viewing the reviewed studies (see Table 2.1) one can see that only about a quarter of them found differences in agreeableness across practitioners. While it is true that, when found, these differences indicated that nondirective practitioners report less agreeableness and directive
practitioners report more, it should be taken into account that most studies reported no differences on this trait.

Another explanation for this finding is related to the sample. Given the number of clinicians asked to participate in the present study, and the percentage of those who actually did so (4.4%), it is possible that the present sample is more acquiescent in general than the rest of the population regardless of theoretical orientation; in other words, the most agreeable nondirective and directive clinicians completed the study. However, this may not be so since another study using the same words to assess agreeableness among German undergraduates (Back et al., 2009), found a higher sample mean ($d = .62$) than the present study ($M = 3.8$ v. $M = 3.3$)

All in all, the relationship between self-reported agreeableness and theoretical orientation is unclear. While some studies have found differences, others have not. An interesting question is whether the openness to ideas and experience reported by less directive clinicians are an agent for agreeableness or discord? In their sample of practicing clinicians, Ogunfowora and Drapeau (2010) found that psychodynamic practitioners followed by humanistic practitioners reported the least agreeableness. The authors suggest that this finding may be attributable to the openness to ideas and experience reported by nondirective clinicians – the most consistent finding within this literature. The idea that openness breeds disagreeableness may seem counterintuitive at first glance; that is, openness ought to foster harmony as opposed to discord. However, it also seems reasonable that extreme openness to ideas might create a proneness to “question,” which could manifest behaviorally as a tendency to disagree, or, less visibly, as a disenchantment with blind acceptance of all that prevails.
One interesting possibility is that theoretical orientation (or identification with less directive methods; ILDM) is not the variable that most distinguishes clinician agreeableness. In the present study, eclecticism/integration maintained the strongest association with agreeableness ($r = .13$, $p = .12$). This is important given that, in theory, this group holds each perspective lightly, arguably the “lightest.” For example, we might expect an eclectic to possess fewer convictions about psychosexual stages than a psychoanalyst and fewer convictions about exposure-response prevention than a behaviorist. In fact, we might expect them to have fewer convictions in general than those who consider themselves purists. Thus, *strength of conviction about one’s preferred philosophy* as opposed to the philosophy itself may be the most predictive of disagreeableness. Whether an individual is an extreme Skinnerian or an extreme Freudian, the label itself may bear less influence on one’s disagreeableness (and proneness to discord) than relative strength of the identification. In other words, people with very strong views necessarily see more to disagree with – this could foster disagreeableness irrespective of the actual content of the view.

### 6.2.3 Past and Current Self-Reported Findings

One final explanation for the present study’s failure to replicate past self-reported findings (self-reported neuroticism, self-reported agreeableness) is that the present sample is importantly different from prior samples (i.e., the samples that present hypotheses were based on). In their 2000 review, Cook, Heath, and Thompson found that across different areas of academia (political science, sociology, and marketing), the mean response rate to online surveys was about 39%. In more recent research that employs online survey methodology to reach professional psychologists, response rates appear generally to be at
or above 33% (e.g., see Delaney, Miller, & Bisono, 2013; Norcross & Karpiak, 2012). The present response rate was just 4.4%. On these grounds alone, it may have been unreasonable to assume the present study could have replicated past findings. Although it would have been useful to know how those participants who completed only the self-report section of the study, and not the IAT ($N = 102$), fared on these measures; their data was not available after the final database had been created. This is unfortunate as including these participants’ data in the analyses could have increased confidence in the present findings.

6.2.4 IAT-assessed Neuroticism and Agreeableness

Neuroticism and agreeableness were also assessed using the IAT. In an exploratory hypothesis it was predicted that these traits, as assessed by the IAT, would not be associated with identification with less directive methods (ILDM). This was based on the idea that practitioners of different theoretical orientations may report differences in personality, but may not be different in terms of implicit characteristics. For example, Boswell et al. (2008) interpreted their results, which were based on self-report, as an indication that certain groups of practitioners (dynamically oriented) are more able or willing to report anger and hostility – not that these groups are necessarily angrier or more hostile. Contrary to what was hypothesized, IAT results demonstrated that ILDM was associated with IAT differences; in particular, identification with less directive methods was correlated with an implicit self-concept marked by well-adjustedness (as opposed to neuroticism) and agreeableness (as opposed to disagreeableness) and. Since the IAT has not been used with clinicians until now, these results need to be replicated before firm conclusions can be drawn.
While it is true that these findings are challenging to contextualize since no prior studies have utilized the IAT to measure clinician personality, it is important to consider why participant identification with less directive methods might be associated with an implicit self-concept marked by well-adjustedness and agreeableness. Theoretically (see Gawronski et al., 2007), this finding indicates that this variable is associated with stronger associations in memory between self and well-adjusted (than between self and neurotic), as well as stronger associations in memory between self and agreeable (than between self and disagreeable). This could mean that those who are more identified with less directive methods maintain histories of behaving less neurotically and more agreeably. That is, this group possesses more instances in memory of “self” behaving non-neurotically and agreeably than neurotically and disagreeably than individuals identified with more directive methods. However, since there are legitimate questions as to whether or not IAT results reflect past or present behavior (e.g., see De Houwer et al., 2009; Tetlock & Mitchell, 2008), alternative explanations need to be considered.

One is that the strength of associations in memory between self and some concept (e.g., well-adjustedness) are probably also influenced by the relative time one spends devoting cognitive energy to that concept. In plain terms, if a certain concept is “on one’s mind a lot,” it stands to reason that the person would associate that concept with the self as it is the “self’s” mind that the concept occupies. Since IAT difference could reflect differences in what occupies the minds of certain practitioners, it could be that therapists reporting use of nondirective therapies, and who – in theory – identify with humanistic ideals (Conway, 1992; Kimble, 1984), associate “self” with those traits that are generally thought to reflect health and optimal functioning (i.e., agreeableness, well-adjustedness) as
compared to those more associated with maladjustment (i.e., disagreeableness, neuroticism). While it is true that scientific orientation does not prohibit one from devoting thought to health and optimal functioning, humanistic psychology fundamentally concerns itself with human potential and the psychological growth of individual persons (May, 1975; Rogers, 1961). This optimism for mankind that is seen as one’s values move toward the humanistic end of the science-humanism continuum (see Coan, 1979) may have produced disproportionate associations between self and positively-valenced constructs due to an essentially hopeful outlook. This conceptualization would not necessarily mean that nondirective practitioners “are” this way in their behavior, nor does it speak to the reasons or causes for this kind of association. In fact, it could be argued that excessive mental devotion to constructs like positivity, growth, and optimal functioning are largely defensive (e.g., denial), serving to prevent one from adopting a colder and possibly more realistic perspective.

6.2.5 The Relationship between Identification with Less Directive Methods (ILDM) and Method Alignment

Results demonstrated that ILDM was not correlated with method alignment (hypotheses 5 and 6), which was a dependent variable reflecting the extent to which IAT values and self-reported values (for agreeableness and neuroticism) aligned on a z-score metric, nor did its first latent dimension moderate the relationship between self-reported personality and IAT-assessed personality in a hierarchical regression analysis (hypotheses 7 and 8). Conceptually, the goal of both of these analyses was to assess the extent to which identification with less directive methods (ILDM) contributed to a self-awareness factor,
as defined by stronger agreement between self-reported and IAT-assessed personality traits. This idea was not supported.

Assuming each variable in the present study validly captured its intended construct, one could conclude that identification with less directive methods (ILDM) is not associated with increased knowledge of one’s implicit characteristics. If this were true it would corroborate the foundation of psychoanalytic thought as well as modern research demonstrating that, rather logically, introspection is ineffective in producing knowledge about the self that exists outside one’s awareness (e.g., see Bargh, 1999; Dunning, Heath, & Sulls, 2004), regardless of how much one wants it to. From this lens, if the IAT is truly targeting a class of information distinct from introspected information, one should not expect its findings to align with self-reported findings (see McClelland et al., 1989; Meyer, 1997). However, since it has been shown that certain factors moderate implicit-explicit agreement (e.g., Thrash et al., 2007), it seems plausible that achieved implicit-explicit agreement is a matter of individual difference. Present findings suggest that identification with less directive methods (ILDM), as operationalized in this study, is not one of the individual difference variables moderating implicit-explicit alignment.

6.3 Limitations

There are several methodological limitations to the current study, all of which may have affected its utility in answering the research questions. The present study utilized online survey methodology to reach practicing clinicians. The first and most glaring limitation is seen in the study’s response rate: unfortunately, less than 5% of people emailed completed the study (though around 8% attempted do). The response rate alone is reason enough to cautiously interpret the findings, especially with respect to generalizability. As
noted above, it is possible that this group of practitioners were different in some important way (e.g., higher conscientiousness or higher agreeableness) than other samples of clinicians. Relatedly, it is difficult to ascertain the extent to which respondents put forth maximal effort while completing the IAT, despite that Inquisit® software utilizes Greenwald et al.’s (2003) scoring algorithm, which deletes trials with aberrant response latencies. Further, the test requires substantial concentration, and even good faith efforts to concentrate could have been hindered if the participant completed the test in particular settings (e.g., an office shared with colleagues or at home with family nearby).

A second methodological limitation deals with the manner in which theoretical orientation was assessed – via self-report (see Appendix B). Although the preponderance of studies within this literature have taken the same approach, it is conceivable that there are individuals who report using one set of techniques (e.g., nondirective), but, in fact, use the opposite (e.g., directive), or use them less often than they purport to. This is a problem for any study that aims to differentiate clinicians by the way they practice (e.g., directivity level as in the present study) to whatever extent self-reported clinical behavior differs from actual clinical behavior. It is conceivable that if “practitioner use of less directive methods” had been directly measured (e.g., through observation), it would have homed in on people who, theoretically (Conway, 1992; Kimble, 1984), are increasingly inclined toward the importance of subjectivity, empathic attunement, and understanding – thereby, resulting in the method alignment results that were hypothesized (hypotheses 5-8).

A final and important limitation to the present study is the use of the IAT as the method of externally assessing personality. Given some of the evidence regarding the construct that is actually targeted by this instrument, it may be less predictive of actual
behavior than was desired for the present study (e.g., Tetlock & Mitchell, 2008). This could have been an impediment to hypotheses four and five of the present study, which proposed that certain clinicians are more aware of their implicit self-concepts than others. It was put forth that increased alignment between self-reported and externally assessed personality represents an awareness factor; that is, that it demonstrates a capacity to see into one’s own behavior, or to know oneself, with little defensiveness. Since nondirective clinicians have been found to be internally and subjectively oriented (Arthur, 2001; Coan, 1979), it was hypothesized that this group would be more “in touch” with their “actual behavior” than nondirective clinicians. While it was found that identification with less directive methods (ILD) was not related to method alignment, it would be premature to consider this question answered given the debate surrounding IAT construct validity (see Tetlock and Mitchell, 2008). Other methodologies could be used to more directly assess this hypothesis.

One such approach would involve the use of informant-reports. Several factors including the valence and visibility of the trait in question, and the level of intimacy between the observer and the observed impact the ability of people to accurately assess another’s personality; however, meta-analytic data suggests that other-reports are a generally accurate reflection of behavior (Connelly & Ones, 2010). This would warrant comparing practitioner self-report to the reports of close others (e.g., spouses or best-friends). This version of method alignment (self-report and other report) may closer approximate self-awareness than did the current study’s (self-report and IAT data). In fact, research indicates that decreased self-awareness is associated with discrepant self- and other-reports (Shedler & Westen, 2007).
In addition, self-reports could be used in conjunction with the Rorschach Inkblot Test (Rorschach, 1921/1942) to assess implicit-explicit alignment (Mihura et al., 2013). Although the Rorschach (R-PAS; Meyer, Viglione, Mihura, Erard, & Erdberg, 2011) does not directly assess any of the Big Five personality traits, some of its variables should be theoretically related to them. For example, space reversal (SR) can be interpreted as oppositionality, which shares some overlap with disagreeableness. In addition, it may be useful to examine R-PAS variables meant to assess Stress and Distress (see Meyer et al., 2011) alongside self-reported neuroticism as the Rorschach maintains utility in tapping latent stress and dysfunction (see Finn, 2011 for illustrative case example). One potential problem with this idea is that many clinicians are familiar with the Rorschach, and responses may be impacted. However, this type of methodology may be productive in understanding the personalities of trainees drawn to certain theoretical orientations (as they are yet to be trained in psychological assessment).

### 6.4 Implications

**What we know: The forest through the trees**

The aim of this study was to further understand the relationship between personality traits (neuroticism and agreeableness) and preferred theoretical orientation. Past findings suggesting that self-reported personality would vary as a function of one’s identification with less directive methods (ILDM) were not replicated, whereas IAT-assessed self-concept did in fact vary with ILDM. Finally, this study’s most novel hypotheses (5-8) were not supported as ILDM was unrelated to the strength of relationships across methods (self-report and IAT assessment), and its first latent factor did not moderate the relationship between self-reported and IAT-assessed personality traits. While its methodological
shortcomings (e.g., response rate, measurement of theoretical orientation) and novelty (i.e., employing IAT with clinician population) prohibit firm conclusions regarding the hypotheses put forth, some knowledge can be extracted from the present study. First and foremost, certain findings support one very important but overlooked fact in the world of psychological research and clinical practice: clinicians are not a homogenous group.

In viewing Table 5.12, one can quickly identify a trend demonstrating that as clinicians become more identified with methods characterized here as “directive” (behavioral, cognitive-behavioral), they become less identified with those methods characterized as “nondirective” (e.g., psychodynamic psychotherapy), and vice versa. Thus, while the present study’s identification with less directive methods variable (ILDM) cannot be considered a reflection of in-session behavior, it seems to have homed in on some divide in the way clinicians see themselves. This harkens back to and supports some of the first research in this area (e.g., Coan, 1979) indicating that the philosophical assumptions associated with different theoretical orientations are sufficiently divergent to serve as limiting factors in how clinicians can self-identify (e.g., one’s relative appreciation for endogeny v. exogeny leads to adopting particular theories and not others).

While these preferences appeared to manifest in self-reported theoretical orientation (see Tables 5.3 and 5.12), and generally follow the present study’s directive-nondirective demarcation, they were not associated with specific self-reported personality traits. However, identification with less directive methods (ILDM) did in fact show associations with IAT-assessed self-concept; that is, increased identification with less directive methods was marked by (implicit) agreeableness and well-adjustedness. This indicates that how clinicians identify, theoretically, has implications for how they
implicitly represent the self, and vice versa. Since this is the first study to examine clinician self-concept implicitly, it is challenging to explain why these particular differences exist, and the methodology should be replicated. However, the fact alone that they do exist is grounds for more research into clinicians and their individual differences.

Despite differences that did manifest across the present sample of clinicians (i.e., theoretical preferences; IAT findings), clinicians did not differ on the “method alignment” variable (hypotheses 5-6), nor did the sample’s relative preference for directive versus nondirective methods (the extracted ILDM factor) impact (moderate) the strength of association between self-reported and IAT-assessed personality. While it is true that this null finding could be attributed to methodological shortcomings (see above), it is also possible that clinician awareness (this variable’s intended construct) really does not vary as a function of theoretical preference. This would counter the idea that nondirective therapists, as a function of their own self-exploration and interest in subjectivity, actually know more about themselves than directive therapists. Importantly, it would still leave room for the possibility that therapists possess different levels of self-awareness, only it would rule out theoretical orientation as a variable that distinguishes them on this characteristic. And if this were true, the nature of this discussion would shift in that we would need to consider that self-knowledge exists disproportionately in certain therapists, as opposed to disproportionately in certain theoretical orientations.

6.5 Recommendations

The most critical point to take away from the present study is, rather simply, that psychologists are not a homogeneous group. This means that if we are interested in maximally helping our patients, it is incumbent on the field of psychology to understand
which clinician traits are most effective in working with patients. Although it is not
precisely understood what exactly better therapists do differently (Del Re, Fluckiger,
Horvath, Symonds, & Wampold, 2010), the crucial role of relational factors in patient
improvement cannot be denied (see Norcross, 2011), and suggest that the properties of the
therapist that matter most in psychotherapy have primarily to do with their ability to foster
a healing connection. It is important to recognize that a healing connection may not
necessarily be unique to any particular theoretical orientation. That is, presumably,
regardless of the intervention the therapist is using (e.g., behavioral activation, interpreting
conflict, restructuring cognition), the interaction between therapist and patient can satisfy
key relational elements laid out by Norcross and colleagues (2011). Therefore, it might be
argued, and has been, that the most important prerequisite for performing good
psychotherapy is not what one knows; how one was trained; or even what approach one
uses; but who one is. Evidence supports the importance of the person of the therapist. It
has been shown that therapist variability accounts more for patient improvement than
patient variability (e.g., Del Re et al., 2012; Wampold, 2006).

Mayer, Panter, and Caruso (2012) aim to know if people are differentially skilled
at making inferences about the personalities and personality processes of self and other –
is “personal intelligence” a real construct? It would be especially interesting to know if this
is an individual difference that varies among practitioners. At first glance, it seems logical
to think that personal intelligence is a trait that fits better with the cluster of characteristics
defining humanistic orientations (e.g., self-knowing, empathic attunement with self and
others) than scientific orientations (e.g., objectivity, rationality). However, personal
intelligence is conceptualized as an ability whereas humanistic values function more like
ideals. Thus, someone may truly possess a much deeper desire than the average person to understand others (a humanistic trait) but, in reality, possess little capacity to do so (low personal intelligence).

On the other hand, it seems reasonable to conclude that humanistic practitioners were drawn to certain kinds of therapies precisely because they are, for whatever reason, skilled at understanding people. In order to better understand which clinicians are most adept at understanding people, psychotherapy research might include Mayer and colleagues’ (2012) personal intelligence construct. It would be surprising if therapist effects, the ability to foster “relationships that work,” and good personal intelligence did not go together. But one can also imagine a scenario in which the desire alone to understand another, regardless of the capacity to do so, is a characteristic that fosters a highly empathic therapeutic environment.

As alluded to by Westen et al. (2004), the best practitioners are probably people who are able to “read” or understand other people and understand and apply empirical findings. The first property, which amounts to the capacity to make sense of someone is akin to personal intelligence (Mayer et al., 2012), and may be disproportionately possessed by the humanistically oriented – a group driven to understand and empathize with the experience of others; the second property, however, which amounts to a more cerebrally driven ability to synthesize objective information may be disproportionately possessed by the scientifically inclined – a group for whom objective data is prioritized (Conway, 1992; Kimble, 1984).

It may turn out then, that in terms of the humanism-scientism continuum, people near the middle make the best therapists; that is, one needs to have a healthy appreciation
for both humanism and science. Or, slightly differently, that the best psychologists can call on either end of the continuum when necessary. Alternatively, it is possible that, once operationalized, better treatment outcomes could be attained by matching patients and therapists on this variable (humanism-science). The idea of “matching” is present in the psychotherapy literature, but regarding things like demographic and cultural variables (Maltzman, 2001) and attachment styles (Wiseman & Tishby, 2014). In the case of the theoretical humanism-science continuum, one can envision a (mis)match between an introspective patient who wants to better understand his or her motivation and a therapist who aims to effect behavioral change through altering the environment. It is likely that from the outset, the two may have different ideas of what improvement actually looks like (i.e., improved self-understanding v. immediate, observable shifts in behavior).

However, if there are therapists who can adapt to the patient’s needs, “matching” may be less important. In fact, it has been argued that one component of highly effective practitioners is the ability to know which method will most afford a given patient the opportunity to change (see Frank, 1961). This could mean that the truest of believers on both sides of the “psychotherapy war” are especially compromised in their ability to help to the extent that the patient characteristics (and not theoretical allegiances) inform what “good therapy” looks like (see Miller, Duncan, & Hubble, 2004).

6.6 Conclusion

This study aimed to further understand the personality traits of practitioners of psychology. Hypothesized relationships were generally not found; however, the study maintains some important findings. First, the sample’s identification with theoretical orientation followed an expected pattern (e.g., preference for characteristically directive
methods were inversely correlated with preferences for characteristically nondirective methods). Secondly, although self-reported personality traits (agreeableness and neuroticism) went uncorrelated with practitioners’ relative identification with directive versus nondirective methods, the same traits as assessed by the IAT were in fact associated with his variable. These findings highlight that, at the very least, “clinicians” are not a homogeneous group. Unfortunately, the personality differences of clinicians go largely unconsidered in modern psychotherapy research (Wampold, 2006), and this ought to change.

This study also proposed the novel hypotheses (hypotheses 5-8) that clinician identification with less directive methods (ILDM) would be associated with stronger cross-method agreement (i.e., self-report and IAT-assessed personality). While these results were not found, there are many possible reasons for this, including methodological shortcomings. Therefore, this line of research needs to be continued, and, ideally, as part of a larger effort to identify clinician characteristics that produce best treatment outcomes. If it can be established which types of people with which types of traits are best at psychotherapy, psychology and related fields ought to do what they can to train these people.
References


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*American Psychologist, 40*, 266-275. doi: 10.1037/0003-066X.40.3.266


Appendix A

Sample email to contact potential participants

Dear practicing psychologist,

The purpose of this email is to invite you to be a participant in my doctoral dissertation (it takes 15-20 minutes to complete). The basic goal of the study is to better understand the personality traits of practicing clinicians – a group that is, ironically, understudied in psychological research.

Your email address was attained through the website of the Texas Psychological Association. If you are not a practicing clinician, I am sorry; this message has reached you in error. However, if your professional activities include working with patients in therapy, please participate in the study.

STUDY PROCEDURE:

There are two parts to the study and in total it takes 15-20 minutes. The first part of the study is a survey that asks you to provide some professional information (e.g., type of degree, preferred theoretical orientation), and then to rate yourself on 20 personality
traits. At the end of the survey, a link will appear that will redirect you to take 2 Implicit Association Tests (IATs), which is a task-based method of measuring these same traits.

2 Important Notes re Study Procedure:

- **Before starting both the Survey and the IATs we ask you to provide a unique ID.**

  *Please make sure you use the same ID each time you are asked for it; this is how we link your data.*

  *To take the IATs you will need to allow a "plug-in" to run on your computer. You will simply be asked to allow it to run, and immediately after you've finished the tasks you are given the option to remove it. The plug-in is safe for your computer, and several web-based studies are now using this technology (please see Inquisit software's website for more information if you'd like: millisecond.com). Data is stored on the web using PsychData and Inquisit software.*

**INCENTIVE:**

We very much appreciate that your time is valuable. Once 100 clinicians have completed the study we will randomly select 5 participants and distribute $50 Amazon Gift Cards. To do so, we ask for your email address as part of the survey – we ask for your email only so we can randomly select participants and distribute Gift Cards. In addition, all participants will be provided their IAT results as soon as they finish with the task. In theory, these results reveal one's unconscious/automatic self-appraisals.
Lastly, we thank you very much for your time and help. It is greatly appreciated. Though this email is rather long, the study is not (approximately 20 minutes). Please participate and help us better understand the personalities of practicing clinicians.

To consent to participate, click the link below. It will bring you to the survey. https://www.psychdata.com/s.asp?SID=157990&ident=EnterData

This project has been approved by the University of Toledo's Institution Review Board: #0000200022

If you have questions or feedback, feel free to contact:

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Appendix B

Replication of psychdata.com survey

1) Please create a unique ID - up to 10 characters. No names are required; just something you can remember. When again prompted to enter your ID (before beginning IATs), please enter this exact ID again. Thank you!

2) Please identify the degree you hold.
   A) PhD, Clinical Psychology
   B) PsyD, Clinical Psychology
   C) PhD, Counseling Psychology,
   D) PsyD Counseling Psychology
   E) Doctorate in Education (EdD)
   F) Other, Please specify:

3) In what year did you earn your degree?

4) Please identify your gender.
5) Please provide your email address below (optional). Note that address will not be used as an identifier. Once we reach 100 participants, 5 people will be randomly selected to receive a $50 Amazon gift card via the email address provided.

6) Please rate the extent to which the following theories inform your clinical work (1-4 Likert).

   A) Behavioral
   B) Cognitive-Behavioral
   C) Psychodynamic/Psychoanalytic
   D) Humanistic
   E) Common Factors
   F) Experiential
   G) Integration/Eclecticism

7) In the last section of the survey you will be provided with personality attributes. Please rate the extent to which they apply to you (1-4 Likert). Please remember that after the survey there are 2 more short tasks for you to complete (2 IATs – approximately 5 minutes each).

   A) Obstinate
   B) Calm
   C) At Ease
   D) Nervous
   E) Balanced
   F) Uncertain
   G) Helpful
H) Hostile
I) Well-meaning
J) Relaxed
K) Quarrelsome
L) Friendly
M) Resentful
N) Anxious
O) Good-natured
P) Afraid
Q) Fearful
R) Restful
S) Trusting
T) Hard-hearted

End of Survey. Thank you!

Link to IAT here.