EMPATHY AND OPENNESS TO EXPERIENCE IN COUNSELOR TRAINEES

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CHAPTER I

Introduction

Introduction

Empathy is widely regarded as an important component of successful counseling in most theoretical approaches to psychotherapy (Bohart & Greenberg 1996; Kohut, 1984; Rogers, 1975). The study of empathy as a component of human personality has yielded information about other correlated traits. Creativity has been found to be positively correlated with empathy (Carlozzi, Bull, Eells, & Hurlburt, 1995; Gallo, 1989; Kalliopuska, 1992) and dogmatism has been found to be negatively correlated with empathy (Carlozzi et al. 1995; Carlozzi, Campbell, & Ward, 1982; Carlozzi, Edwards, & Ward, 1978; Harris & Rosenthal, 1986; Kemp, 1962; Mezzano, 1969; Milliken & Paterson, 1967; Russo, Kelz, & Hudson, 1964). Discovering associated personality traits allows for a refined definition of empathy, which may result in a better understanding of the construct, as well as expanded knowledge regarding factors that can predict counselor performance and potentially improve counselor training.

The variety of definitions and approaches to measuring empathy (Gladstein, 1983; Duan & Hill, 1996) suggests that empathy is a complex trait that bears further study. Empathy is defined by Davis (1983) as the

individual's tendency to identify with or understand the feelings of another.

This is a limited notion of empathy in that it does not include Roger's requirements of being able to express that feeling back to the other (Rogers, 1959). Even so, this is an important concept to understand for counselor training since any empathic interaction must begin with an understanding of the client's feelings by the counselor.

It is possible to discover more than one axis in the literature upon which empathy is defined. One axis could be termed the interpersonal response axis, ranging from emotional empathy to cognitive empathy. Duan and Hill (1996) use the terms "empathic emotions" and "intellectual empathy" to emphasize that each individual moves within a continuum of empathy that includes both emotional and intellectual understanding of the other. Bohart and Greenberg (1996, p. 168) define another axis in terms of the function of empathy in the therapeutic alliance between counselor and client. One end of this axis defines empathy as a sympathetic, warm attitude that assists the client and therapist in establishing a working relationship. At the other end of this axis, empathy is defined as a deep connection by the counselor with the world of the client which, in itself, is therapeutic for the client.

It is important to discover other traits that indicate levels of empathy in individuals because self-report empathy measures are often influenced by

social desirability. For example, this may be true for counselor trainees who are taught the importance of empathy throughout their education.

Openness to experience has been hypothesized to be a major component of individual personality in the Five-Factor personality model (Costa & McCrae, 1992). The Five-Factor model of personality has emerged from efforts to identify basic factors that describe personality attributes through statistical analysis of personality questionnaires and lists of personality trait adjectives (McCrae & John, 1992; Briggs, 1992). Openness to experience emerged as a factor that "is seen structurally as individual depth, scope and permeability of consciousness, and motivationally in the need for variety and experience" (p. 198, McCrae & John, 1992). The NEO-PI-R personality inventory was developed by Costa & McCrae (1992) to measure the Five-Factor personality model, including openness to experience.

Research of empathy and openness to experience has discovered several traits that are correlated with both constructs. The two instruments that will be used in this study, the Interpersonal Reactivity Index (IRI, Davis, 1983) and the openness to experience scale of the NEO-PI-R (Costa & McCrae, 1992) have been associated with several common personality traits. Both have been correlated with creativity, open mindedness, and cognitive complexity. The shared characteristics that have been observed between the constructs suggest a relationship between them.

The Interpersonal Reactivity Index (IRI) is a measure of empathy that was designed to measure both affective and cognitive forms of empathy. The IRI is composed of four different scales. Perspective Taking (PT) describes the individual's ability to adopt the psychological point of view of others.

Empathic Concern (EC) assesses the tendency to experience feelings of sympathy and compassion for unfortunate others. Personal Distress (PD) is the tendency for a person to feel distress in response to distress in others.

Fantasy (FS) measures the person's tendency to imaginatively feel fictional situations.

The NEO-PI-R personality inventory was developed through rational and factor-analytic methods to measure the Five-Factor personality model, a taxonomy of personality dimensions (Costa & McCrae, 1992). The five domains as measured in the NEO-PI-R are: Neuroticism (N), Extraversion (E), Agreeableness (A), Conscientiousness (C), and Openness (O). Neuroticism is defined as the tendency to experience negative feelings such as fear, sadness, embarrassment, anger, guilt, etc. Extraversion includes sociability, assertiveness, energy, etc. Agreeableness is a measure of the interpersonal, altruistic tendencies of an individual. Conscientiousness is the extent to which an individual engages in planning, organizing, and carrying out tasks. Openness measures the extent to which individuals are curious and willing to explore new things, both in their inner world and their external experience.

The openness to experience scale is divided into six facet subscales: Fantasy (O1), Aesthetics (O2), Feelings (O3), Actions (O4), Ideas (O5), and Values (O6). Fantasy measures openness to imagination and daydreaming.

Aesthetics measures appreciation for art and beauty. Feelings indicates the extent and depth of emotional states felt. The individual's willingness to try different activities or do other novel things is measured by Actions. Ideas measures the extent to which an individual is willing to pursue intellectual activities for their own sake. Values indicates the readiness to examine social, political, and religious values.

Problem Statement

Research has shown several common relationships between empathy and openness to experience. This study will examine these two traits to see if they are related in counselor trainees. This study will examine both affective empathy and cognitive empathy by using a multi-modal measure of empathy. It is expected that additional information will be gained by exploring the relationships among the subscales of each instrument. Other questions to be addressed include the following: Are levels of empathy higher in more experienced students? Are levels of openness higher in more experienced students? Does age or gender affect the relationship? The impact of gender on levels of empathy is important to measure because researchers have reported conflicting information. For example, some have found no difference in empathy in men and women (Carlozzi & Hurlburt, 1982; Eisenberg &

Lennon, 1983; Fong & Borders, 1985). While others (Davis, 1992) observed consistent differences in empathy levels between men and women.

Hypothesis

It is hypothesized in this study that there is a positive relationship between empathy and openness to experience in counselor trainees. More specifically, those who score high on the IRI empathy scales will score high on the NEO-PI-R Openness to Experience Scale. Those who score low on IRI empathy scales will score low on the Openness to Experience Scale. This relationship is expected both for overall openness to experience and for the openness to experience facets. Some variance is expected due to covariates such as gender, number of hours of graduate counseling training, ratings of various components of the counseling relationship, and theoretical orientation. This relationship is hypothesized to be due to these two constructs' shared relationship to other traits such as creativity, dogmatism, and intellectance.

This relationship is anticipated based on the rationale that a counselor trainee who is able to imagine him or herself in the position of a client and who is open to that experience will be better able to establish a relationship with the client and will subsequently will be better able to understand that person. This will contribute to the real relationship (Gelso & Carter, 1985, 1994), an important component of therapy. Theoretical orientation is included because of the hypothesized relationship between empathy and views of aspects of the counseling relationship (Gelso & Carter, 1985).

Significance of the Study

This study will contribute to the body of knowledge that supports the contention that empathy is related to certain qualities or characteristics of personality. Although other factors contribute to the counseling relationship, (e.g., client personality, client presenting problem, counseling setting), research suggests that the level of empathy of the counselor is an important factor as well.

One of the reasons that researchers have such varying opinions about the importance of empathy is the lack of definition of what empathy is and how it is measured. By using a measure of empathy that includes both affective and cognitive aspects, this study will ensure that a more comprehensive notion of empathy is considered. In addition, more information about the nature of empathy and the kind of openness to experience that co-occurs with it will be achieved by examining the six subscales of the NEO-PI Openness to Experience measure.

It would be helpful to identify personality factors that could contribute to effective counseling. By using two instruments that have been extensively validated, this study will demonstrate the degree to which the traits measured by those instruments are related in counselor trainees. If it could be shown that these measures are related and that what they measure increases over the course of counselor training, it would be an important piece of information for counselor training programs to consider in evaluating candidates and in developing training. A more detailed and nuanced understanding of the relationship between empathy and openness to

experience will be provided by examining the relationship of the subscales within each measure.

Limitations

An empirical relationship may be discovered without necessarily indicating the two instruments are measuring the same construct. It may be that some other common aspect is measured by both instruments and therefore causes a correlation between scores. There is a great deal of controversy (Duan & Hill, 1996; Gladstein, 1983) over the definition and measurement of empathy. Both instruments use participant self-report exclusively, and therefore may be influenced by social desirability. This might especially be true for counselor trainees who are taught a particular theoretical orientation that values empathy highly (e.g., Rogerian humanist). The other independent variables being measured (views of the counseling relationship and views of theoretical approaches to counseling), have not been empirically validated, alone or in relationship to one another (Sexton & Whiston, 1994).

Definitions

Behavioral - Theoretical approaches to counseling that are based on learning theories (Corey, 1991).

Cognitive Behavioral - Theoretical approaches to counseling that assume that mental health problems stem from incorrect ideas or selfperceptions of the world, and that clients benefit from examining and changing those ideas, beliefs, and perceptions (Beck, Rush, Shaw, Emery, 1979).

Creativity - A trait that is associated with individuals' ability to solve problems in a variety of ways and with their sensitivity to environmental stimuli (Barron, 1969; Carlozzi, et. al, 1995).

Dogmatism - Intolerance of those with opposing beliefs, a closed conformity with traditional ideas (Rokeach, 1960).

Empathic Concern (EC) - One of four empathy types measured by the IRI. EC assesses the tendency to experience feelings of sympathy and compassion for unfortunate others Davis (1983).

Empathy - A multi-faceted term that is used to describe one person's reactions to the observed experiences of another. That reaction may be cognitive, based on the ability to understand the perspective of another, or it may be a more emotional reaction to the other's experience (Davis, 1983).

Fantasy (FS) - One of four empathy types measured by the IRI. FS measures the person's tendency to imaginatively feel fictional situations (Davis, 1983).

Humanistic/Existential - Those approaches to counseling that value most highly the individual's own ability's to change, and that depend on the authenticity of the relationship between client and counselor or change in clients (Gelso & Carter, 1985).

Openness to Experience - A dimension of the Five-Factor model of personality. Open individuals are curious, experience emotions more keenly, are less conventional, and more willing to entertain new ideas (Costa & McCrae, 1992).

Openness to Experience Actions Facet - Facet 4 of the NEO-PI-R

Openness to Experience scale. The OE Actions facet measures the individual's willingness to try different or novel activities (Costa & McCrae, 1992).

Openness to Experience Aesthetics Facet - Facet 2 of the NEO-PI-R

Openness to Experience scale. OE aesthetics facet measures appreciation for art and beauty (Costa & McCrae, 1992).

Openness to Experience Fantasy Facet - Facet 1 of the NEO-PI-R

Openness to Experience scale. High scorers are open to imagination and
daydreaming, and inner life, low scorers are more prosaic (Costa & McCrae,
1992).

Openness to Experience Feelings Facet - Facet 3 of the NEO-PI-R

Openness to Experience scale. The OE feelings facet indicates the extent and
depth of emotional states felt by an individual (Costa & McCrae, 1992).

Openness to Experience Ideas facet - Facet 5 of the NEO-PI-R

Openness to Experience scale. The OE Ideas facet measures the extent to which an individual is willing to pursue intellectual activities for their own sake (Costa & McCrae, 1992).

Openness to Experience Values Facet - Facet 6 of the NEO-PI-R

Openness to Experience scale. THE OE Values facet gives an indication of an individual's willingness to examine social, political, and religious values.

Personal distress (PD) - One of four empathy types measured by the IRI. PD measures the tendency for a person to feel distress in response to distress in others (Davis, 1983).

Perspective taking (PT) - One of four empathy types measured by the IRI. PT describes the individual's ability to adopt the psychological point of view of others (Davis, 1983).

Psychoanalytic - Those approaches to counseling that are based theoretically on Freudian theory and assume that unconscious motives and desires are most important in understanding and treating clients (Gelso & Carter, 1985).

Real Relationship - The relationship that develops between client and therapist as a result of their interactions with one another as individuals. The attitudes, perceptions, and actions of each toward and with the other that are not part of the working alliance or the transference relationship (Gelso & Carter, 1985).

Systemic - Those approaches to counseling that have their roots in cybernetic and communication theories. Clients are assumed to benefit from insight into and change of family or other dysfunctional systems (Piercy, Sprenkle, Wetchler, 1996).

Transference Relationship - The relationship between client and therapist based on the client's past issues with significant others, and the therapist's response to such issues in the relationship (Gelso & Carter, 1985).

Working Alliance - The collaborative relationship between client and therapist that allows the client to work purposefully with the therapist toward mutually determined goals (Gelso & Carter, 1985).

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This chapter reviews the literature regarding empathy and openness to experience. Parallels in research of related personality constructs between the two are highlighted. The theoretical foundations of counseling theories and the views of the counseling relationship are examined as they relate the this study.

Most theoretical approaches to counseling agree on the importance of empathy to psychotherapy (Bohart & Greenberg, 1996; Kohut, 1984; Patton & Meara, 1992; Rogers, 1975). However, there is not a clear agreement in the literature about what empathy is and the development of the concept has seen many different definitions and approaches to measurement (Duan & Hill, 1996; Gladstein, 1983). One approach to increasing the understanding of empathy is to examine it in relationship to other individual traits. Related individual traits such as creativity, open mindedness, gender, gender role and intellectance have been examined with respect to their relationship to empathy. The relationship between client and counselor has been suggested as another important contributing factor to successful counseling (Gelso & Carter; 1985, 1994).

Davis (1996) traces the earliest development of the concept of empathy as follows. An early conceptual discussion of one person knowing the feelings Sentiments in which he gave an account of sympathy as a tendency to experience a "fellow-feeling" when observing another experiencing a powerful emotional state. This feeling was said to come to the observer through the use of imagination. In The Principles of Psychology in 1870, H. Spencer postulated sympathy as a means of communication that enabled survival of the individual. By observation and experience, certain behaviors were learned that allowed observation of another's emotion and appropriate response. In 1908, William McDougal suggested, in Introduction to Social Psychology, two different ways to induce emotion: through a biologically adequate cause such as a loud noise or through perception of the emotion in action. These modes of inducing emotion were called "primitive passive empathy" and were different from Smith's imaginal observation and from Spencer's learned responses.

Davis (1996) describes the emergence of the term as follows: the original term that led to "empathy" was the German Einfühlung used by as a way of describing the tendency of an individual to identify with an observed object (usually physical). Theodore Lipps used the term in a more psychological sense in the study of optical illusions and later, in the study of the process by which we come to know others. Paget also used the term sympathy but used empathy for the same concept by 1913. In 1909 in Elementary Psychology of the Thought Processes, Titchener was the first to use empathy as a translation for einfühlung as "acting in the mind what we see" (Wispé, 1986b). Both Lipps and Titchener used the term to describe the process in which the individual imitates (interiorly) the emotional queues of the observed person or object. This was also known as inner Nachahmung.

The new term was distinguished from the older term in that empathy had a more active sense, with the observer overtly attempting to understand the inner state of the other, while sympathy was a more passive reception of the feelings of the other (Davis, 1996).

Subsequent research focused on this more cognitive, active process. Kohler presented the idea that the observer could cognitively view and interpret the other's feelings without sharing the affect of the other. George Herbert Mead suggested in 1934 that the observer can take on the role of the other as a way of trying to understand them. The emergence of this ability was said to be an important development used to understand the other and tailor one's own reactions, to operate effectively in society (Davis, 1996). Jean Piaget's concept of decentering as detected in the three mountain test was another developed cognitive process that emphasized the individual's ability to take the point of view of the other in some way (Gladstein, 1983). Mead also suggested a cognitive process of empathy in which an individual takes on the role of others in order to understand their world. Empathy was equated with an ability to accurately imagine others' viewpoints by Chapin in 1942. (Davis, 1996). Stotland (1969) suggested a more affective view of empathy in which "an observer's reacting emotionally because her perceives that another is experiencing or is about to experience an emotion".

Truax & Carkuff (1967) investigated empathy from the perspective of predictive accuracy with the Relationship Questionnaire. Hogan (1975) studied empathy as an aspect of social intelligence. Mehrabian and Epstein (1972) developed a measure of emotional empathy.

Another view of empathy was suggested in the 1980's that was limited to emotional reactions that are congruent to the experience of the observed person (Barnett, 1987, Eisenberg & Strayer, 1987; Hoffman, 1984). Batson limited the definition of empathy even further to only compassion and concern for others as a result of watching them suffer (Batson, 1991, Batson, Fultz, & Schoenrage, 1987). Wispé (1986a) used a broader and more cognitively-based definition that used empathy to describe an "attempt by one self-aware self to comprehend unjudgementally the positive and negative experiences of another self". Sympathy, as distinguished from empathy, was described as "heightened awareness of the suffering of another person as something to be alleviated." Hoffman (1987) defined empathy as "an affective response more appropriate to someone else's situation than to one's own", and he defined cognitive role-taking as "personal feelings of distress for others' feelings."

Variables Suggesting a Relationship Between Empathy and Openness to Experience

Research of empathy and openness to experience has discovered several traits that are correlated with both constructs. The two instruments that will be used in this study, the Interpersonal Reactivity Index (IRI, Davis, 1983) and the openness to experience scale of the NEO-PI-R (Costa & McCrae, 1992) have been associated with several common personality traits. Both have been correlated with creativity (Baron, 1969; Carlozzi, et. al. 1995, Gallo, 1989; Kalliopuska, 1992; McCrae, 1987; Piedmont, McCrae, & Costa, 1991), open mindedness (Carlozzi et al. 1992; Carlozzi, et al, 1982; Carlozzi

et al, 1978; Harris & Rosenthal, 1986; Kemp, 1962; McCrae, 1987; McCrae, 1992; Mezzano, 1969; Milliken & Paterson, 1967; Piedmont, McCrae & Costa, 1991; Rokeach, 1960; Russo, Kelz, & Hudson, 1964), and cognitive complexity (Heck & Davis, 1973; Lutwak & Hennessy, 1982; McCrae, 1987; Passons and Olsen, 1969). These shared characteristics that have been observed between the constructs suggest a relationship between them. Other research has found a relationship between openness and empathy (Schag, Loo, & Levin, 1978) and Davis (personal communication, 1996) reported finding a relationship between IRI empathy traits and NEO-PI-R openness to experience.

Creativity

It has been suggested that creative people are more sensitive to environmental stimuli (Barron, 1969), that might allow them to be more empathic toward others. It has also been suggested that individuals develop empathy through role-taking (Hoffman, 1975), an exercise that would require the individual to be creative or imaginative in order to deduce the other's feelings.

Studies have found a relationship between empathy and creativity (Carlozzi, et. al. 1995, Gallo, 1989; Kalliopuska, 1992). Carlozzi et al. (1992) studied the relationship between empathy and creativity, dogmatism, and expressiveness. The authors defined empathy as an internal condition rather than a communication skill. The subjects were 56 graduate students enrolled in counseling and educational psychology courses at a large southwestern

(U.S.) university. They were given the Affective Sensitivity Scale (Campbell, Kagan, & Krathwihk, Danish & Kagan 1971; Petro & Hansen, 1977) to measure empathy; creativity was measured with The Statement of Past Creative Activities (Bull & Davis, 1980); dogmatism was measured with the Opinion Scale (Kleiber, Veldman, & Menaker, 1973); and expressiveness was measured with the Extended Personal Attributes Questionnaire (Spence, Helmreich, & Holahan, 1979). The study found statistically significant Pearson product-moment correlation coefficients between affective sensitivity and creativity (.44) and dogmatism (-.32), while the relationship with expressiveness was not statistically significant. The authors conclude that there is support for a positive relationship between empathy and creativity and a negative relationship between empathy and dogmatism. They suggest further research with different populations and larger samples to explain the lack of observed relationship between empathy and expressiveness.

Openness to Experience has also been related to creativity (McCrae, 1987; Piedmont, McCrae, & Costa, 1991). McCrae (1987) looked at openness to experience of the NEO-PI-R and the Creative Personality Scale of the Adjective Check List (ACL). In this study, McCrae used tests of divergent thinking to explore the relationship of creativity to openness to experience. Data were collected as a part of the Baltimore Longitudinal Study of Aging (BLSA). Subjects were male volunteer participants, predominantly white, recruited through friends or relatives already in the study. Comparisons are said to have shown that this sample is similar to a national sample in the personality dimensions tested (neuroticism, extraversion, and openness to experience). Tests given were the Associational Fluency I, Form A, Expressional Fluency Form A, Ideational Fluency, Form A, Word Fluency,

form A, and Consequences Divergent Thinking Test. The NEO-PI-R was given to measure the personality characteristics of agreeableness, conscientiousness, neuroticism, extraversion, and openness to experience. Subjects were also given components of the California Q-Sort inventory. The Creative Personality Scale is a 30-item scale that asks judges to rate the creativity of the subjects. In addition subjects were given the EPQ Psychoticism scale to measure psychotic and psychopathic personality disorders. The data analysis found openness to experience to be correlated with all measures of divergent thinking except the Obvious component of the Consequences divergent thinking test, and none of the other personality components of the NEO-PI-R correlated significantly. Openness to experience as measured by self-report and peer rating was more correlated with the divergent thinking tests than openness to experience as measured by spouse rating. Openness to experience was significantly correlated with Self-Directed Search (SDS) factors as follows: Artistic (.50), Investigative (.34), Realistic (.17), and Social (.16) factors.

On the basis of these findings, McCrae (1987) concludes that there is a significant relationship between openness to experience and creativity. However, he tempers this conclusion by pointing out that many other factors are associated with creative abilities. These include adjustment, sociability and productivity. In addition, McCrae pointed out that the testing conditions have been shown to effect results if subjects are specifically instructed to be creative. Another problem occurs in the variety of definitions of creativity and the author suggests that openness to experience and divergent thinking may be two different components which, together, contribute to the individual's creativity. Finally, the developmental nature of the relationship between

these two variable was not observed in this study. McCrae speculates that this may be due to the earlier onset and cumulative nature of the development of creativity.

In another study (Piedmont, McCrae & Costa 1991), volunteer undergraduate students were given the Adjective Check List scale (ACL) and the NEO-PI. Results were computed using factor analysis with varimax rotation. The "Creative Personality" scale of the ACL was most highly correlated with the Openness to Experience scale of the NEO-PI. A second study was reported in which the subjects were adult volunteers tested as a part of the BLSA. Again, the Creative Personality scale was most highly correlated in factor analysis with the Openness to Experience scale. In addition, peer ratings and spouse ratings were also significantly correlated in the same way.

Open Mindedness

Rokeach (1960) suggested an important set of attitudes in individuals toward different ideas or groups that extends from dogmatism to openness to experience or open mindedness. Empathy has been negatively correlated with dogmatism in several studies (Carlozzi et al. 1992; Carlozzi, et al, 1982; Carlozzi et al, 1978; Harris & Rosenthal, 1986; Kemp, 1962; Mezzano, 1969; Milliken & Paterson, 1967; Rokeach, 1960; Russo, Kelz, & Hudson, 1964). Openness to Experience has also been negatively correlated with dogmatism scales in the CPI and ACL (McCrae, 1987; McCrae, 1992; Piedmont, McCrae & Costa, 1991).

Carlozzi, Campbell, & Ward (1982) studied the relationship of dogmatism and externality to facilitative responding in a large group of subjects from three different counseling training programs. Facilitative responding is a measure of interpersonal functioning ability measured by the Gross Rating of Facilitative Interpersonal Functioning Scale (GRFIF). This study is relevant to the current effort because of the similarities between facilitative functioning and empathy expressed by the counselor to the client. The authors used the Opinion Scale (Kleiber, Veldman, & Menaker, 1973) to measure dogmatism in the participants. In addition, the study examined the following covariates: (religious affiliation, race, university, sex, age, and graduate credit hours in counseling). It was found that dogmatism was significantly correlated, (inversely), with the GRFIF scores. In addition, number of graduate hours in counseling made a significant contribution to the difference in GRFIF scores, but the authors caution that conclusions about the relationship between hours of credit in counseling and facilitative interpersonal functioning can only be tentative without more in-depth, longitudinal studies.

Tosi (1970) examined the relationship of levels of dogmatism in counselors and clients to the client's rating of the relationship with the counselor. Clients were high school and college students seeking vocational and educational counseling. Clients and counselors were given the Rokeach Dogmatism scale prior to the first interview. Each counselor was assigned 2 high, 2 medium and 2 low dogmatism score clients. After six interview sessions, clients were asked to rate the quality of the counseling relationship using the Barrett-Lennard Relationship Inventory. Low and medium dogmatic clients rated the counseling relationships considerably higher than high dogmatic clients. Relationships with low dogmatic counselors were rated significantly higher than for other level counselors. The highest ratings of the

relationship occurred when low dogmatic counselors were paired with low and medium dogmatic clients.

Cognitive Complexity

Cognitive complexity or divergent thinking are two similar descriptions of an individual's intellective ability. Studies that correlate empathy with higher cognitive complexity (Heck & Davis, 1973; Lutwak & Hennessy, 1982) and correlations between divergent thinking and openness to experience. McCrae (1987) further suggests a relationship between openness to experience and empathy.

McCrae (1987) examined the relationship between creativity, divergent thinking and openness to experience. Six different measures of divergent thinking were used that measure subjects' ability to provide synonyms, write sentences with words beginning with designated letters, name objects in specific classes, write words containing a designated letter, and imagine possible consequences of unusual situations. The NEO-PI was used to measure openness to experience. In addition, an adjective rating form and the California Q-Sort (CQS) were used to measure openness to experience. The Creative personality scale (CPS) was used to measure creativity. Openness to experience was correlated positively with all the divergent thinking measures except the obvious consequences portion of the "unusual situations" measure. Correlations with openness to experience and divergent thinking did not differ by age. Openness to experience was also positively correlated with the CPS for both self-reports and peer ratings.

Passons and Olsen (1969) examined open mindedness, cognitive flexibility, peer ratings on ability to sense feelings (ASF), willingness to communicate about feelings(WCF), and positive self-concept with ratings of counseling student empathic sensitivity. Open-mindedness was measured with the Rokeach dogmatism scale, cognitive flexibility was measured with the color-word test, a measure of ability to handle contradictory and ambiguous stimuli. ASF and WCF were measured with peer ratings. Positive self concept was measured with the P score of the Tennessee self concept scale. Empathic sensitivity was measured two ways: by practicum supervisors who supervised the counselor trainees in the study (ESR) and by judges trained in the Empathic Sensitivity Scale who observed the counselors responding to a film called "A Clinical Picture of the Claustrophobic" (ESF). The analysis of data found no significant relationship between dogmatism and ESF nor ESR. Cognitive flexibility was correlated positively with ESF (.41, p<.05) but not with ESR. ASF was correlated with ESR (.31, p<.05), but not ESF. WCF was correlated with ESR and ESF, no relationship was found with positive self concept and ESR nor ESF.

Empathy and Openness

A more direct relationship between openness to experience and empathy is suggested by a study by Schag, Loo, and Levin (1978). This study found a high correlation between empathy in an "understander" and openness in a "discloser". This relationship supports the notion that openness and empathy may be related.

In an unpublished study, Davis (personal communication, 1996) compared NEO-PI-R Openness to Experience scores and IRI scores in college freshmen. The IRI FS scale was most highly positively correlated with openness to experience, IRI PT and IRI EC were also positively correlated. In

examining the subscales of the openness to experience scale, IRI FS was significantly correlated with O1 (fantasy), O2 (aesthetics), O3 (feelings), O5 (ideas), and O6 (values). IRI PT (perspective taking) was significantly correlated with O2, O3, and O5. IRI EC (empathic concern) was most highly correlated with O2 and O3.

Gender Differences

In a meta-analysis and literature review of gender differences in empathy, Eisenberg and Lennon (1983) reported no significant differences in infant reflexive crying, one study reported higher physiological responses by men, mixed results in facial, gestural and vocal measures of empathy, mostly higher scores for women on picture/story techniques, and consistently higher values for females for self-report empathy questionnaires. The authors summarized the research by stating that self-report and other-report methods rate females higher in empathy, but non-obtrusive measures such as physiological or facial/gesture measures do not show sex differences.

Studies of counselor empathy found no differences in empathy by gender (Carlozzi & Hurlburt, 1982; Fong & Borders, 1985). However, differences were found in empathy by gender role. Both studies found a higher level of empathy associated with those who identified more strongly with female gender roles than those who identified more with male gender roles.

Hatcher, Nadeau, Walsh, Reynolds, Galea, & Marz (1994) investigated the teaching of empathy to high school and college subjects. They found that the IRI empathy scores (PT and EC scales) did increase for the college students who received training. None of the high school students scores

increased significantly. Although the females started with higher empathy scores in all groups, they did not increase significantly more than the males.

Davis and Franzoi (1991) examined stability and change of empathy in adolescents. They found increases over time in Empathic Concern (EC) and perspective Taking (PT), and declines in Personal Distress (PD). They found significant differences between males and females, with females consistently scoring higher on the affective EC, PD, and FS scales. The smallest difference, although significant, was found for the cognitive PT scale. Because self-consciousness scale scores stayed consistent while the empathy scores increase, the researchers concluded that the personality of the subjects was consistent, but their tendency to engage in empathy increased.

Finally, Costa & McCrae (1989) report no significant differences by gender for any of the facet scales of the NEO-PI. However, on a shortened form of the NEO-PI, the NEO-FFI, women tend to score higher than men on the Neuroticism facet and the Agreeableness facet.

Importance for Counseling

Current views in psychotherapy span the spectrum from those who view empathy as a "kindly and supportive posture" (Snyder, 1992) and those who see a deeper aspect of empathy. Bohart and Greenberg (1996) describe a "deep and sustained psychological contact with another" that includes attentiveness, and awareness of the uniqueness of the other. They also emphasize the sense of "immersing oneself in the experience of the other".

Bohart and Greenberg (1996) attempt to describe the process through which empathy contributes to the healing process. These processes include the process of co-constructing symbols for experience. The empathic responding of the therapist assists the client in symbolizing their experience, allowing the client to understand better she or he is experiencing. This understanding is hypothesized to lead to reflection that results in "reorganizing, explaining, and exploring further", leading to new meaning and new narrative constructions. Empathy allows clients to become aware of their internal experience and label it explicitly in a way that allows a new organization to emerge for the client.

Patton and Meara (1992) list three functions of empathy in psychoanalytic counseling. The first is an observing and understanding of the client by the counselor, also described by Heinz Kohut as "vicarious introspection". The second function is empathy as an intervention. The communication of empathy can, in itself, be beneficial to the client. The third function is as a way to build the relationship and encourage the client to prepare them for difficult interventions later in the therapy.

Components of the Counseling Relationship

Gelso & Carter (1985) define three components of the counseling relationship: the working relationship, the transference relationship, and the real relationship. The working relationship is defined as "the alignment that occurs between the reasonable side of the client ... and the counselor's working or therapizing side." The transference relationship is defined to include both transference by the client and countertransference by the counselor. Transference is defined as "a repetition of past conflicts (usually but not always beginning in early childhood) with significant others such that feelings, behaviors, and attitudes belonging rightfully in those early relationships are displaced; in therapy, the displacement is onto the therapist". Countertransference is defined as "the counselor's transference to the client-both to that client's transference and non-transference communications". The real relationship is defined as the relationship between counselor and client "that exists and develops ... as a result of the feelings, perceptions, attitudes, and actions of each toward and with the other". The real relationship includes two defining features: Genuineness and realistic perceptions" (Gelso & Carter, 1994). Sexton and Whiston (1994) define the real relationship as the interactions between client and counselor that are based on direct, genuine, & undistorted interactions. Hill (1994) uses the term "genuineness" to describe the ability of each participant to be him or herself in the relationship and feeling able to express him or herself freely.

Gelso & Carter (1985) examine the interaction between the relationship components and three theoretical perspectives: psychoanalysis, humanism, and learning approaches. Psychoanalysis is defined as "all approaches that place a premium on making the unconscious conscious and that at least use Freudian personality theory as a basic starting point". Counselors with a more analytic view of counseling are expected to place a higher emphasis on the value of transference. Humanism is defined to include those approaches that focus on "here-and-now" functioning, and the

"client's inherent trustworthiness and capacity for actualization. Counselors operating from a humanistic perspective are expected to be more sensitive to immediate experience in relationships. Learning approaches are those that "subscribe to a learning model of human functioning", including "behavior therapy", "behavior modification", "cognitive behavior therapy", "social learning theory", "reinforcement therapy". Counselors working from the learning perspective are expected to place the greatest focus on behavioral changes and see the relationship as a means to an end rather than an end in itself.

Gelso & Carter (1985) suggest that counselor theoretical orientation and views of the components of the counseling relationship are associated through the course of therapy in different ways. The psychoanalytic approach values the working alliance from beginning to end of therapy, countertransference is always in the background, and the real relationship is only a factor at the end of counseling. The humanistic approach values the real relationship most highly, transference is acknowledged and may be used by some, the working alliance is less important. Learning approaches view the real relationship as a means to an end, the transference relationship is given minimal attention, and the working relationship is most highly valued.

In a later review, Sexton & Whiston (1994) assessed current research into the relationship components. They concluded that little research has been conducted into the importance of the real relationship because of the difficulty in defining and measuring it. They suggest that empathy is related, but the relationship is unclear because of the difficulty in defining empathy and because empathy changes over the course of the relationship. They found little research on transference, but say that the impact may be

mediated by other variables such as insight. They found most recent research on the counseling relationship has focused on the working relationship. The studies reviewed suggest that the working relationship may contribute as much as 45% to measurable outcome of counseling.

Citing an earlier study by Gelso & Peabody (1982), Gelso & Carter (1985) propose a relationship between the empathy of counselors and their attention to the transference/countertransference relationship (pp. 179, 182). They also suggest that counselors' personality would impact their focus and comfort level with the real relationship (p. 188). Finally, among their suggestions for future research is to investigate the relationship of clinician's valuing of the transference relationship to counseling effectiveness (p. 205).

Summary

In summary, this review of the literature supports the notion of a relationship between empathy and openness to experience. A transitive relationship is suggested by the common relationship between empathy, openness to experience and other constructs. Both empathy and openness to experience have been found to be related in a similar way to creativity, divergent thinking, and dogmatism. In addition, a direct relationship was found (Davis, 1996, personal communication), between openness to experience and empathy in a population, (freshman college students), that is different from the population sampled in this study.

The literature review also supports the importance of empathy to counseling effectiveness. There are still many questions about the definition and measurement of empathy and about the role that empathy plays in the counseling process. It has been suggested in the literature that there is a link between counselor empathy, view of the counseling relationship and theoretical approach to counseling.

The research is less clear about the relationship of gender to empathy or to openness to experience. The impact of gender is measured differently depending on the definition of empathy and means of measuring. This inconsistency makes it important for this study to capture the potentially confounding gender variable.

CHAPTER III

METHOD

This chapter discusses the procedures and methods used in the study. Information is provided about the subjects and demographic information. The instruments used and methods to collect data are described. The statistical hypotheses and the statistical analysis procedures are described. This study used extensively validated instruments to measure empathy and openness to experience in counselor trainees. A demographic questionnaire was used to gather additional independent variables about each participant. Participation was voluntary and the identity of all participants is anonymous.

Participants

Participants in this study were 106 students enrolled in graduate counseling programs at several southwestern U.S. universities. The mean age of the participants was 34.7, standard deviation was 9.7. Most participants were female (92%). Mean number of hours of graduate counseling classes was 33.1, standard deviation was 19.8. Instructors of graduate counseling classes were asked permission to administer the instruments to their classes for part of a class period. Some classes completed the survey immediately, and some took them home to be completed and returned the following class period. Students who were in more than one

class were asked to participate only once. Each packet was collected, numbered with a unique serial number and scored. Informed consent forms were filed separately.

Dependent Variables

The dependent variables for the research project were the four types of empathy as measured by the Interpersonal Reactivity Index (Davis, 1983).

Those variables are Empathic Concern (EC), Personal Distress (PD), Fantasy (FS), and Perspective Taking (PT).

Independent Variables

To investigate whether empathy is related to openness to experience in counselor trainees, the study considered NEO-PI-R openness, NEO-PI-R openness facets (fantasy, aesthetics, feelings, actions, ideas, values), gender, credit hours in graduate training program, agreement with theoretical approaches to counseling (behavioral, cognitive behavioral, humanistic, psychodynamic, systemic), agreement with components of the counseling relationship (working alliance, real relationship, transference relationship).

Instruments

Interpersonal Reactivity Index

The Interpersonal Reactivity Index (IRI, Davis 1983) is a multi-modal measurement of both intellectual empathy and empathic emotions. The IRI is composed of four different scales. Perspective taking (PT) describes the individual's ability to adopt the psychological point of view of others.

Empathic concern (EC) assesses the tendency to experience feelings of sympathy and compassion for unfortunate others. Personal distress (PD) is the tendency for a person to feel distress in response to distress in others.

Fantasy (FS) shows the person's tendency to imaginatively feel fictional situations. The IRI consists of 28 questions, with 7 questions for each scale, and takes about 10 minutes to complete. Test-retest reliability has been reported at .62 to .71, and internal reliability ranged from .71 to .77 (Davis, 1980). Franzoi and Davis (1991) found evidence for external validity in comparing the IRI with other tests of empathy.

NEO-PI-R

The NEO-PI-R personality inventory (Costa & McCrae, 1992) is an instrument, developed through rational and factor-analytic methods, that is intended to discover an individual's psychological functioning from the perspective of the Five-Factor personality model. The Five-Factor model is a

taxonomy of personality dimensions of: Neuroticism (N), Extraversion (E), Openness to experience (O), Agreeableness (A), and Conscientiousness (C). The NEO-PI-R consists of five 12-item scales that measure each domain. Each scale is of the NEO-PI is composed of facets. The Openness to Experience scale of the NEO-PI-R is composed of six facets: Fantasy (O1), Aesthetics (O2), Feelings (O3), Actions (O4), Ideas (O5), Values (O6). There are two versions of the NEO-PI-R. Form S is used for self-report and Form R is used for observer-report. This study will use Form S only. Form S consists of 240 questions and takes about 30 minutes to complete. (Costa & McCrae, 1992) report coefficient alpha for the 5 subscales as follows: Neuroticism: .92, Extraversion, .89, Openness .87, Agreeableness .86, Conscientiousness .90. Long-term retest reliability was reported by Costa & McCrae (1992) to range from .68 to .83 for Neuroticism, Extraversion, and Openness, .64 and .79 for brief versions of the Agreeableness & Conscientiousness scales.

Demographic Questionnaire

The demographic survey included questions about the age, gender, number of hours of graduate counseling training completed, theoretical orientation and importance of aspects of the counseling relationship.

Respondents' theoretical orientation was determined through their ranking from 1 (Not at all) to 5 (To a very great extent) of the extent to which they identified with each of five counseling theories (behavioral,

cognitive/behavioral, humanistic/experiential, psychodynamic, and systemic). The importance to the respondents of the three aspects of the therapeutic relationship (working alliance, transference relationship, real relationship) was measured by their ranking of each of the aspects from 1 (most important) to 5 (least important). The demographic survey had a tear-off segment with the researcher's address participants could use to write and request results after the study is complete.

Procedures

Procedure for Data Collection

Instructors of counseling classes at area graduate counseling programs were asked to allow testing of their students for about an hour during one class period. The test administrator gave a brief explanation that the tests are being given as part of a research project on counselor trainees and distributed the envelopes to those who wished to participate.

The demographic survey and the IRI were printed on white paper and the NEO-PI-R was given using the self-grading scoring sheets provided by the test publisher. Each person received a package with the three instruments in an envelope, along with an informed consent form. The instruments were arranged in a counterbalanced order to prevent the responses from being influenced by the order the instruments are given.

Participants were asked to complete each instrument and return them all in the provided envelope, separate from the informed consent form. Each packet was collected, numbered with a unique serial number and scored. Informed consent forms were filed separately.

Data were entered and analyzed using the Statistical Package for Social Sciences for PC (SPSS/PC, 1996). NEO-PI-R Openness scores were converted to T scores using means and standard deviations for form S with adult populations as reported in Costa & McCrae (1992) using Microsoft Excel (Microsoft Excel, 1991) software. The IRI scores were computed using the method reported in Davis & Franzoi (1991). The computed values were imported back into SPSS/PC for statistical analysis.

Statistical Hypotheses

The following statistical (null) hypotheses were generated based on a review of the relevant literature and the objectives of this study. Each hypothesis was tested at the .05 alpha level of significance.

1. IRI Empathic Concern scale scores are not related to overall NEO-PI-R Openness to Experience scores in counselor trainees; there is no contribution to the relationship by demographic variables of age, gender, hours of counseling training; there is no contribution to the relationship by views of theoretical approaches to counseling; and

- there is no contribution to the relationship by views of components of the counseling relationship.
- 2. IRI Fantasy scores are not related to overall NEO-PI-R Openness to Experience scores in counselor trainees; there is no contribution to the relationship by demographic variables of age, gender, hours of counseling training; there is no contribution to the relationship by views of theoretical approaches to counseling; and there is no contribution to the relationship by views of components of the counseling relationship.
- 3. IRI Personal Distress scores are not related to overall NEO-PI-R Openness to Experience scores in counselor trainees; there is no contribution to the relationship by demographic variables of age, gender, hours of counseling training; there is no contribution to the relationship by views of theoretical approaches to counseling; and there is no contribution to the relationship by views of components of the counseling relationship.
- 4. IRI Perspective Taking scores are not related to overall NEO-PI-R Openness to Experience scores in counselor trainees; there is no contribution to the relationship by demographic variables of age, gender, hours of counseling training; there is no contribution to the relationship by views of theoretical approaches to counseling; and

- there is no contribution to the relationship by views of components of the counseling relationship.
- 5. IRI Empathic concern scores are not related to any of the six facets of NEO-PI-R Openness to Experience scores (fantasy, aesthetics, feelings, actions, ideas, values) in counselor trainees; there is no contribution to the relationship by demographic variables of age, gender, hours of counseling training; there is no contribution to the relationship by views of theoretical approaches to counseling; and there is no contribution to the relationship by views of components of the counseling relationship.
- 6. IRI Fantasy scores are not related to any of the six facets of NEO-PI-R Openness to Experience scores (fantasy, aesthetics, feelings, actions, ideas, values) in counselor trainees; there is no contribution to the relationship by demographic variables of age, gender, hours of counseling training; there is no contribution to the relationship by views of theoretical approaches to counseling; and there is no contribution to the relationship by views of components of the counseling relationship.
- 7. IRI Personal Distress scores are not related to any of the six facets of NEO-PI-R Openness to Experience scores (fantasy, aesthetics, feelings, actions, ideas, values) in counselor trainees; there is no

contribution to the relationship by demographic variables of age, gender, hours of counseling training; there is no contribution to the relationship by views of theoretical approaches to counseling; and there is no contribution to the relationship by views of components of the counseling relationship.

8. IRI Perspective Taking scores are not related to any of the six facets of NEO-PI-R Openness to Experience scores (fantasy, aesthetics, feelings, actions, ideas, values) in counselor trainees; there is no contribution to the relationship by demographic variables of age, gender, hours of counseling training; there is no contribution to the relationship by views of theoretical approaches to counseling; and there is no contribution to the relationship by views of components of the counseling relationship.

Statistical Analysis

This is a correlational study designed to expand the knowledge of the nature of empathy in the counselor trainee population. The statistical analysis was conducted to explore the relationship of openness to experience, views of counseling theories, and views of the counseling relationship to a multi-faceted definition of empathy. Blockwise, stepwise multiple regression was used to test the linear relationship of empathy to each of the

independent variables. A blockwise method, as suggested by Stevens (1986), was used to allow for variables to be entered into the equation in the order of their theoretical importance.

Summary

This chapter presented the methodology used in this study. Subjects, instruments, independent, and dependent variables were discussed. Students in graduate counseling programs were given a demographic survey, the Interpersonal Reactivity Index (Davis, 1983), and the NEO-PI-R (Costa & McCrae, 1992). Of the surveys handed out, 93 usable responses were obtained. Table 1 in Appendix D shows the number of responses, mean, and standard deviation for each independent variable. Table 2 in Appendix D shows the distribution of responses regarding level of identification with each of the theoretical approaches to counseling. Table 3 in Appendix D shows the distribution of responses regarding level of importance participants gave aspects of the counseling relationship.

The four dimensions of empathy, (Empathic Concern, Perspective Taking, Personal Distress, and Fantasy) were selected as the dependent variables. NEO-PI-R Openness to experience and the six facets composing openness to experience, views of theories of counseling, views of components of the counseling relationship as defined by Gelso and Carter (1985), age,

hours of graduate counseling training, and gender were included as independent variables. The statistical (null) hypotheses were tested at the .05 alpha level of significance with blockwise, stepwise multiple linear regression.

CHAPTER IV

RESULTS

Introduction

This chapter presents the statistical analyses of the data collected, along with the evaluation of each hypothesis proposed for the study. Linear regression results are included for each hypothesis to show the relationship observed between the independent and dependent variables.

Tests of Assumptions and Limitations

The assumptions of normality, homoscedasticity, and linearity were tested by plotting the predicted values against the residual scores for each of regression equations as recommended by Stevens (1986). The plots appeared to be evenly distributed, indicating that assumptions for linear regression are satisfied for this data.

Characteristics of Respondents

Means and standard deviations were computed for each of the variables measured. Table 1 in appendix D displays the valid N (usable responses), maximum, minimum, mean, and standard deviation for the independent variables used in the study.

Pearson Correlation Coefficients

Pearson product moment correlation coefficients were computed for each empathy type, overall openness to experience, openness to experience facets, gender, and hours of graduate credit completed in counseling. Views of counseling theories and views of aspects of the counseling relationship were also included. Pearson correlation coefficients are reported in Appendix D, Table 4. Significant correlations were found between IRI empathic concern (IRI_EC), Fantasy (IRI_FS), and perspective taking (IRI_PT) and overall openness to experience. No relationship was found between IRI personal distress (IRI_PD) and overall openness to experience.

Correlations were found between IRI empathic concern (IRI_EC) and openness to experience facets 2 (Aesthetics, p < .001), 3 (Feelings, p < .001), and 6 (Values, p = .035). IRI Fantasy (IRI_FS) was correlated with openness facets 1 (Fantasy, p < .001), 2 (Aesthetics, p = .014), and 3 (Feelings, p < .001). IRI perspective taking (IRI_PT) was correlated with openness to experience facet 2 (Aesthetics, p = .008), and facet 6 (Ideas, p = .001). IRI Personal Distress was not correlated with any of the openness to experience facets. Openness to experience facets 4 (Actions), and 5 (Ideas) were not correlated with any of the empathy scales.

There were no significant correlations between empathy scales and demographic variables age, gender or hours of graduate counseling training. Level of identification with Humanistic theory was correlated with IRI Empathic Concern (p = .008), and Overall openness to experience (p < .001). Level of identification with Systemic theory was correlated with IRI Personal Distress (p = .036). No other significant correlations were found for respondent's identification with counseling theories. No significant correlations were found for respondent's agreement with aspects of the counseling relationship.

Linear Regression

The hypothesized relationships were tested using blockwise, stepwise multiple linear regression. Stevens (p. 58, 1986) recommends no more than a 5:1 ratio of sample size to predictor variables. The largest number of predictor variables in any of the multiple linear regression equations is 14. With an N of 93 (usable), the ratio is almost 7:1, well within the recommended limit. To conduct the stepwise multiple linear regression, variables were selected using the procedure recommended by Stevens (1986).

IRI Empathy Types and Overall NEO-PI-R Openness to Experience

Each of the four types of empathy were entered into separate linear
regression equations with overall NEO-PI-R Openness to Experience T
scores. Independent variables of interest were entered in blocks. Overall
openness to experience was entered in the first block. Gender, age, hours of

experience were entered in the next, then views of theoretical approaches to counseling, then views of aspects of the counseling relationship. A separate linear regression summary table is included in Appendix D for each Null hypothesis in the study. Table 5 summarizes the linear regression equation for null hypothesis 1, table 6 summarizes null hypothesis 2, and so on. The final step in each table shows all of the variables that qualified for inclusion in the linear regression equation. R^2 values for the initial step and Δ R^2 (change in R^2) for each subsequent step are included as well.

H₀1: Empathic Concern and Openness to Experience

Null hypothesis one stated that IRI empathic concern is not related to overall openness to experience in counselor trainees. Multiple regression results reported in table 5 indicate that IRI empathic concern and gender (inversely) were related to openness to experience with an R² of 0.13.

Therefore, the null hypothesis was rejected. Because women were coded 1 and men were coded 2, the negative coefficient for gender indicates that women were correlated with higher levels of IRI_EC, and men reported lower levels of IRI_EC.

H₀2: IRI Fantasy and Openness to Experience

Null hypothesis two stated that IRI Fantasy is not related to overall openness to experience. Multiple regression results reported in table 6

indicate that IRI Fantasy was related to openness to experience with an R² of 0.17.. Therefore, the null hypothesis was rejected.

H₀3: Personal Distress and Openness to Experience

No variables met the criteria for inclusion in the regression equation for the Personal Distress empathy type. Therefore, the null hypothesis was not rejected.

H₀4: Perspective Taking and Openness to Experience

Null hypothesis four stated that IRI perspective taking is not related to overall openness to experience. Multiple regression results reported in table 7 indicate that IRI perspective taking, along with gender (inversely), was related to openness to experience with an R² of 0.14. Because women were coded 1 and men were coded 2, the negative coefficient for gender indicates that women were correlated with higher levels of PT, and men reported lower levels of PT.

IRI Empathy Types and NEO-PI-R Facets

Each of the four types of empathy were entered into separate linear regression equations with each of the NEO-PI-R facet T scores. Variables of interest were entered in blocks. Openness facets 1-6 were entered in the first block. Gender, age, hours of experience were entered in the next block, then

identification with theoretical approaches to counseling, then views of aspects of the counseling relationship.

H₀5: IRI Empathic Concern and NEO-PI-R Facets

Null hypothesis five stated that IRI Empathic concern is not related to any of the six facets of openness to experience in counselor trainees (fantasy, aesthetics, feelings, actions, ideas, values), and there is no contribution to the relationship either by the demographic variables, views of theoretical approaches to counseling, or by views of the counseling relationship. Linear regression results reported in table 8 indicate that IRI empathic concern was related to openness to experience facet 3 (Feelings), facet 2 (Aesthetics), gender, cognitive behavioral theory (COGBEHAV), and systemic theory (SYSTEMIC) with an R² of 0.30. Therefore, the null hypothesis was rejected. Because women were coded 1 and men were coded 2, the negative coefficient for gender indicates that women were correlated with higher levels of EC, and men reported lower levels of EC.

H₀6: IRI Fantasy and NEO-PI-R Facets

Null hypothesis six stated that IRI Fantasy is not related to any of the six facets of openness to experience in counselor trainees (fantasy, aesthetics, feelings, actions, ideas, values), and there is no contribution to the relationship neither by the demographic variables, views of theoretical