INTERPERSONAL DECENTERING AND PSYCHOPATHOLOGY IN A UNIVERSITY CLINIC SAMPLE

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This study examined the relationship between interpersonal decentering and symptoms of psychopathology among 48 clients from the Psychology Clinic at the University of North Texas. The Thematic Apperception Test (TAT) and the Symptom Checklist 90-Revised (SCL-90-R®) instrument were administered to clients along with demographic packets. Interpersonal decentering was assessed using Melvin Feffer's Interpersonal Decentering Scoring System for the TAT. It was hypothesized that higher scores of global symptom severity would be associated with lower scores of interpersonal decentering. Higher scores of paranoid ideation, psychoticism, and hostility were also hypothesized to be associated with lower scores of interpersonal decentering. Results did not support these hypotheses. However, exploratory analyses revealed a significant correlation between higher scores of phobic anxiety and lower scores of interpersonal decentering. Results also provided information regarding the three methods for calculating interpersonal decentering summary scores.

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INTRODUCTION

The concept of decentering was first proposed by Piaget (1950) as an essential ability related to cognitive development, primarily in the impersonal domain. Feffer (1959) expanded Piaget's concept of decentering by applying it to the interpersonal realm and later to symptomatology. Feffer (1966) eventually developed a scoring system for the Thematic Apperception Test (TAT) as a means for measuring the construct of interpersonal decentering.

Interpersonal decentering involves being aware of and anticipating another's thoughts, feelings, or actions, and then modifying one's own behavior to enhance social interactions (Jenkins, Dobbs, & Leeper, 2007). Distinguishing between complementary social roles (e.g. leader-follower) and coordinating the viewpoints associated with these roles leads to an accurate and adaptive understanding of interpersonal interactions. Individuals who only consider interpersonal interactions from a single viewpoint have difficulty modulating their social behavior appropriately (Feffer, 1967). Symptomatology manifests to the degree that viewpoints associated with complementary social roles are uncoordinated or are considered in isolation from each other.

A major goal of this study was to contribute to the modest body of literature on Melvin Feffer's Interpersonal Decentering Scoring System for the Thematic Apperception Test (TAT; Feffer, Leeper, Dobbs, Jenkins, & Perez, 2008). Given that this is an understudied area, research should begin with some exploratory studies in the area to try out some theoretical principles and possibly do some theory building.

The present study was designed to clarify the nature of the construct of interpersonal decentering by examining the relationship between interpersonal decentering, as measured by the Interpersonal Decentering Scoring System for the TAT (Feffer et al., 2008), and symptoms of

psychopathology, as measured by the SCL-90-R[®], among 48 clients from the Psychology Clinic at the University of North Texas.

The literature review presents a history of the interpersonal decentering concept, covering Piaget's approach to cognitive development, Feffer's extension of Piaget's decentering concept to the interpersonal realm, and the subsequent extension of the decentering concept to interpersonal aspects of symptomatic behavior. Methods of measuring interpersonal decentering are also reviewed.

Piaget's Approach to Cognitive Development

Piaget (1950) viewed cognitive abilities as tools for gaining and organizing information about the environment and about oneself in relation to the environment. Furthermore, he regarded cognitive functioning as consisting of a relationship between subject and object. He proposed that individuals construct the world along certain principles of organization and such constructions are expressive of particular equilibrium relationships between subject and object. Within Piaget's theory of cognitive development, increases in cognitive abilities over time are considered to coincide with gradual shifts in perspective, providing qualitative change from one stage (or "type") of thinking to another. These stages represent different forms of equilibrium, each successive stage tending toward a more stable, more adaptive type of thinking and more balanced relationship between subject and object.

Cognition is considered to reflect greater maturity to the degree that immediate sensory perceptions are subordinated to conceptual thought in organizing experience. Mature, conceptual thought is associated with increasing ability to form internalized, abstract representations of environmental objects or situations. The structuring of the environment

becomes less determined by the perceptual characteristics of objects and more by internalized cognitive maps, as maturation progresses. The dominance of conceptual thought, according to Piaget, is directly related to the ability to "decenter" or shift focus from one aspect of an object or situation to another in a flexible, balanced manner.

Piaget theorized that children begin with thinking that is concrete and egocentric. As children gain more cognitive ability with age, they eventually overcome egocentric thinking by gaining the ability to "decenter." As children first begin to decenter, their thinking remains concrete and they have difficulty applying this new cognitive ability to non-concrete (abstract) objects or situations. Egocentricity can be understood as the tendency to perceive events and interpret experiences exclusively from one's own perspective (Piaget, 1950).

Intrinsic to the egocentrism construct is the phenomenon of centration, or centering.

Centering refers to a child's tendency to focus (or "center") his or her attention on one aspect of an object or situation. Unilateral focus on one aspect of an object, ignoring other relevant aspects, results in distorted perceptions. Decentering abilities allow a person to recognize various aspects of an object and combine them into a unified mental representation, thus minimizing distortions produced by attending to isolated aspects of an object.

Piaget (1950) suggested that as decentering abilities first emerge, a child begins to shift focus back and forth from one aspect of the object to another (sequential decentering). Each aspect is considered, but in an isolated, sequential manner. This vacillating focus only partially corrects the distorted perception inherent in any given focus. As development advances, thinking changes from shifting focus sequentially among various aspects of an object to a more mature decentering ability, whereby the individual is able to consider multiple aspects of an object at the same time (simultaneous decentering), allowing for a more thorough correction of

perceptual distortion. Simultaneous decentering ultimately leads to balanced thinking, in which all aspects of an object are simultaneously integrated into an internalized representation of the object, free of distortion.

The concept of decentering is exemplified in Piaget's (1950) classic studies of conservation. For Piaget, conservation referred to the concept that the total quantity, number, or amount of something is the same (preserved) regardless of the shape or configuration. The inability to conserve liquid volume is perhaps the most famous example of children's centering. A young child is shown two glasses of milk, identical in shape and size. After the child acknowledges that the glasses contain an equal amount of milk, he or she watches as one of the glasses is poured into a taller, skinnier glass, the other glass serving as the standard. The child tends to focus on only one of the dimensions of the glass (height or width). This leads to distorted perception either way. If the child centers on the height dimension, he or she is likely to assume that there is more milk in the tall skinny glass, even though there is the same amount in both. Likewise, if the child centers on the width dimension, he or she will assume that there is more milk in the original shorter, fatter glass.

Piaget ascribed the young child's lack of conservation to the inordinate influence of one part of the situation on the whole. The exaggerated focus on one aspect of the object (e.g. height) in isolation from other aspects of the object (e.g. width) leads to distorted judgments. Children's fluctuating judgments as to which glass contains more milk can be attributed to an isolated sequential focusing upon one complementary aspect of the object at a time. By coordinating changes along both complementary dimensions of the object, the child is able to correct for distortion inherent in focusing on one dimension and achieve conservation. The older children's attainment of conservation can be attributed to an increased dominance of thought

over immediate sensory perceptions, whereby changes in height are simultaneously considered in relation to changes in width.

Piaget applied his notion of decentering to spatial perspective-taking among children from 4 to 12 years of age, using the Three-Mountain Task (Piaget & Inhelder, 1969). Children were shown a miniature model of three mountains, in different colors and shapes. The model was placed in the middle of a table, with a child and three other people seated around it. The child was asked to describe how the three mountains look taking the perspective of the other people seated at the table. This task involves moving away from one's own viewpoint and requires one to differentiate between one's own and other's perspectives. Piaget & Inhelder (1969) found that older children were more adept at this task.

Extension of Decentering to Interpersonal Realm

Feffer's (1959) extension of Piaget's decentering concept to the interpersonal realm is based on the assumption that the same processes involved in impersonal cognition (relationship between person and thing) are also involved in interpersonal cognition (relationship between person and person). Feffer assumed that the decentering interpretation applied to the child's developing concept of quantity by Piaget (1950) can also be applied to the structuring of interpersonal events at different levels of cognitive maturity. Furthermore, Feffer assumed that the decentering interpretation applied to children's visual perspective-taking by Piaget & Inhelder (1969) could also be applied to cognitive perspective-taking and affective perspective-taking.

Feffer's initial extension of the decentering concept to the interpersonal realm is based on certain views from Mead (1934) and Asch (1952), particularly those regarding the nature of

interpersonal interactions and those regarding the nature of the self-structure.

The more primitive form of interpersonal decentering (sequential decentering) stems from Mead's (1934) view of interpersonal interactions, more specifically the language of gesture. This involves a series of alternating stimulus-response exchanges, in which each subject in turn acts as a stimulus to the other's response. Mead (1934) used the example of a dog-fight as an illustration:

The act of each dog becomes the stimulus to the other dog for his response. There is then a relationship between these two; and as the act is responded to by the other dog, it, in turn, undergoes change. The very fact that the dog is ready to attack another becomes a stimulus to the other dog to change his own position or his own attitude. He has no sooner done this than the change of attitude in the second dog, in turn, causes the first dog to change his attitude. We have here a conversation of gestures (p. 43).

Mead's conversation of gestures is an example of a primitive interpersonal relationship, characterized by sequential decentering, in which the behavior of each individual is influenced by the reactive behavior of the other. The more mature form of interpersonal decentering (simultaneous decentering), stems from Asch's (1952) analysis of a more advanced interpersonal relationship: the cooperative effort of two men carrying a log. In this interaction, the behavior of each man is influenced by the anticipation of the other man's response to the intended action on his part. Each man then modulates his intended action in response to his anticipation of the other man's response.

This is consistent with Feffer & Suchotliff's (1966) suggestion that effective social interaction requires a dovetailing of responses in which each participating individual modifies his or her intended behavior in anticipation of the other's response to this behavior. Each individual considers her or his intended behavior from the viewpoint of the other person and anticipates the other's reaction. This allows the individual then to modify his or her intended behavior considering the other's viewpoint and her or his own viewpoint simultaneously. Thus, effective

social interaction requires multiple viewpoints to be represented simultaneously within each individual's psychological organization (Feffer, 1967).

The concept of self is an important aspect of Feffer's (1967) extension of the decentering concept to the interpersonal realm. Feffer's theory incorporates the conceptualizations of self proposed by Mead (1934) and Asch (1952). Mead (1934) considered the self as subject ("T") to be spontaneous and free, while he considered the self as object ("me") to be the cognitive representation of the "role of the other." The "role of the other" consists of group values assimilated as one's own, which serve to control the impulsive, spontaneous aspect of the self. When taking the role of the other (e.g. considering the other's reaction to an intended action), the individual is simultaneously serving as the subject and as the object of experience.

Asch (1952) viewed the 'self' as unique among objects within the psychological field because of this capacity to serve simultaneously as both a subject and object. Asch viewed interpersonal interactions as being comprised of participants occupying specific roles and role-reciprocals (e.g., leader-follower, talker-listener, giver-taker, etc.). These reciprocal roles of the self and the other are represented intra-psychically within an individual's psychological self-organization. Effective social interaction is dependent on the coordination between and mutual regulation of these reciprocal role polarities.

Feffer (1970) proposed that individuals construct the world in the form of complementary polarities, experienced in the impersonal realm as physical dimensions and experienced in the interpersonal realm as role dimensions. These role dimensions are of special significance in that they are represented within the individual's psychological structure as different aspects of the self-organization.

Mature (simultaneous) decentering involves the coordination of complementary

polarities. Decentering related to impersonal objects requires the coordination of physical polarities (e.g., height and width) in order to comprehend the physical environment more accurately. Interpersonal decentering requires the coordination of role polarities (e.g., role and role-reciprocal), in order to accurately comprehend the social environment.

Piaget (1950) suggested that conservation of quantity is achieved through the coordination between and mutual correction of complementary physical dimensions, represented within the child's cognitive organization. Feffer (1967) suggested that interpersonal conservation is achieved through the coordination between and mutual correction of complementary roles, represented within an individual's self-organization.

Effective social interaction is determined by a person's ability to consider his or her behavior from different viewpoints simultaneously in relation to one another, such that the distortion engendered by a particular perspective is corrected by a reciprocal perspective. The individual's ongoing behavior and attitudes in a given role are influenced and, therefore, modulated by the simultaneous interpretation of the corresponding reaction and attitudes of the reciprocal role. This process is evident in socially adaptive behavior in which, for example, an aggressive impulse is modified by the simultaneous realization of the victim's perspective. In contrast, individuals who are only able to focus sequentially upon their behavior from a single viewpoint at a time have difficulty in modifying their responses in social interaction appropriately.

Extension of Decentering to Interpersonal Aspects of Symptomatic Behavior

The defining characteristic of primitive cognition or "sequential decentering" is the relative isolation or lack of contact between relevant aspects of experience. Such isolation leads

to distorted perceptions and results in a symptomatic construction of the world. Feffer (1967) suggested that there are three essential characteristics of symptomatic interpersonal behavior: isolation, exaggeration, and fluctuation. Interpersonal role polarities are inherently in potential conflict with each other. When disjunctively isolated from each other, they assume exaggerated proportions. The resulting behavioral symptoms are typically characterized by an oscillation between exaggerated, antagonistic polarities, which at best serve to partially balance each other in a fluctuating manner.

The structuring of interpersonal content, as so formulated, provides a vantage point from which to view schizophrenia. The hallucinations and delusions associated with schizophrenia are particularly germane in this regard. Feffer (1967) suggested that hallucinations and delusions represent fissures along the lines of roles and role-reciprocals. Feffer conceptualized the hallucination of a schizophrenic individual as consisting of interpersonal content that has "precipitated out" into an externalized form, observed by the individual as an "other," disjunctively isolated from the "self." The role of the self and the role of the other, which in mature cognition would be experienced simultaneously as aspects of self-organization, are experienced as a sequential relationship between an internally represented "T" and an externalized "other," in which there is inadequate corrective modulation. Certain content is experienced as ego-syntonic, while other content is experienced as ego-alien.

The isolation between role and reciprocal are further evidenced in Cameron's (1951) interpretation of delusional thought. Cameron suggested that if an individual is unable to accept some aspect of the self, the unaccepted aspect may take an exaggerated form, which in the delusion is experienced as an externalized "other" interacting with an exaggerated form of an "I." According to Cameron, the presence of any specific role within an individual's self

structure requires the simultaneous presence of its reciprocal. If one imagines himself or herself in the role of an aggressor, he or she will at the same time experience the role of the victim in his or her perceptual organization. A role and its reciprocal are both necessarily within the same person's behavioral repertory at the same time. For example, the persecutory thinking, characteristic of paranoid schizophrenia, involves both the wish to persecute and its reciprocal, fear of being persecuted. However, the wish to persecute is disavowed and becomes externally ascribed. Cameron reported that if a schizophrenic individual is unable to accept the hostile aspect of the self, the delusion allows this aspect of self to take the exaggerated form of an external "persecutor," interacting sequentially with the exaggerated, internalized form of a victim.

Cameron's (1951) views are congruent with a decentering formulation regarding primitive self-organization, in which a psychological conflict between role-reciprocals leads to their disjunctive isolation from each other, and subsequent assumption of exaggerated proportions. Role dimensions, which in mature psychological organization are represented simultaneously within psychological self-structure, are experienced sequentially as isolated, antagonistic polarities, lacking in reciprocal modulation. Cameron made an additional observation that the communication deficit of individuals with schizophrenia is related to their difficulty taking the role of the "other," which he suggested is necessary for one to understand another's attitude or perspective adequately. This observation also seems descriptive of deficient decentering. To the degree that a single aspect of an interpersonal situation is focused upon, without an internalization of the "other," there is at best a mere reactive modification of behavior, as opposed to a modulation based on reciprocal anticipation.

A decentering interpretation of symptomatic behavior is not limited to schizophrenia.

Less severe symptom expression can also be viewed from the vantage point of a decentering interpretation of interpersonal cognitive development or adaptation. An otherwise adaptive and modulated role will take on a distorted, exaggerated form of expression, due to a lack of simultaneous consideration of the reciprocal role. A focus on a given role to the exclusion of other perspectives is considered to be a maladaptive or symptomatic expression of that role.

Such a formulation is consistent with concepts proposed by Horney (1945), who advanced a conceptualization of psychopathology in terms of three exaggerated role orientations:

1) "Moving toward people" (the compliant type), 2) "Moving away from people" (the detached type), and 3) "Moving against people" (the aggressive type). The "moving against people" orientation is characterized by a sadistic and assaultive disposition, which can be viewed as an exaggerated focus on the role of "dominance," which takes on brutal form of expression due to a lack of modulation from its reciprocal role of "submissiveness." Similarly, one could view the symptomatic insatiable demand for affection and support of an exaggerated "moving toward people" orientation as a primitive structuring of an interpersonal event in which an otherwise adaptive and modulated role of "taking" assumes distorted form of expression due to a lack of simultaneous focusing upon the reciprocal role of "giving."

The three exaggerated role orientations determine a person's basic attitude toward the self, attitude toward others and philosophy of life. Horney proposed that these three incompatible role orientations simultaneously existence within a child's developing personality and set up a basic conflict, which in conjunction with increasing difficulties in living, force the neurotic child to adopt one predominant role orientation. Horney viewed the adoption of a dominant role orientation as a desperate attempt to solve the conflict and obtain a sense of unity and closure. To the degree that the child fails to reconcile the polar dimensions of role and

reciprocal, he or she behaves in an exaggerated helpless, isolated, or hostile fashion, according to the dominant role orientation, to the exclusion of its complementary counterpart.

In line with Horney's approach to psychopathology, Phillips and Rabinovitch (1958) examined empirically the relevance of role orientation to symptom expression. The results indicated that the symptoms of hospitalized patients tend to appear in statistically independent clusters, which Phillips and Rabinovitch characterized in term of three role orientations: 1) "Avoidance of others," 2) "Self-indulgence and turning against others," and 3) "Self-deprivation and turning against the self." The "Avoidance of others" cluster consisted of symptoms such as perplexity, suspicion, hallucinations, apathy, and withdrawal. The "Self-indulgence and turning against others" cluster included behaviors, such as drinking, robbery, assault, and rape. The "Self-deprivation and turning against the self" cluster included the symptoms of tenseness, bodily complaints, not eating, fear of one's hostile impulses, suicidal ideation, and suicidal attempts.

Later research by Zigler and Phillips (1961) and Phillips and Zigler (1964) examined the relationship between these role orientations and classical diagnostic categories. The "Avoidance of others" orientation was positively related to the diagnostic category of schizophrenia. The "Self-indulgence and turning against others" orientation was positively related to character disorders. The "Self-deprivation and turning against the self" orientation was positively related to both manic-depression and the "psychoneurotic" category. The patterns of symptoms that comprised the three role orientations did not overlap, but instead tended to fall within one role orientation or another. This is suggestive of the exaggeration inherent in a symptomatic role expression to the exclusion of other roles. This is consonant with the conceptual framework of interpersonal decentering.

Measuring Interpersonal Decentering

In accord with Werner's (1957) principles of differentiation and hierarchic integration,

Melvin Feffer developed two interrelated but distinct measures of interpersonal decentering.

These measures index qualitative differences in interpersonal decentering along a developmental continuum, reflecting the degree of complexity of social interaction.

The first measure of interpersonal decentering developed by Feffer (1959) was the Role-Taking Task (RTT). The RTT is a projective technique in which a participant is first required to tell an initial TAT-type story to an ambiguous scene. The participant is subsequently required to retell the story from the viewpoint of each of the characters in their initial story. For example, if the participant tells a story about an aggressor and a victim, he or she is subsequently required to retell the story from the aggressor's point of view and from the victim's point of view.

Decentering is evaluated in terms of the degree to which the participant is able to focus upon his or initial story from the particular perspective of each of the characters, while at the same time, coordinating different versions of the story.

Feffer's (1959) RTT scoring involves the evaluation of two aspects of decentering activity: the complexity of character description and the extent of perspective taking.

Complexity of actor description is measured on three levels: concrete descriptions, internalized states, and characterizations. Concrete descriptions refer to story characters that are described as having certain physical characteristics or engaging in specific actions. Internalized states refer to story characters that are described as thinking about others. Characterizations refer to story characters that are described as being involved in general actions with others or as having an emotion. Extent of perspective-taking is also measured on three levels: simple refocusing, consistent elaboration, and change of perspective. Simple refocusing refers to inconsistent

decentering, while consistent elaboration refers to a more balanced form of decentering. Change of perspective includes the preceding levels and, in addition, displays balanced decentering from all viewpoints taken.

Feffer and Jahelka (1968) developed a second measure of interpersonal decentering, a scoring system for the TAT. Similar to the RTT, the TAT scoring system takes into consideration the complexity of actor description and the extent of role-taking. However, instead of assessing coordination between parallel versions of a story, the TAT system measures decentering based on the maturation of the relationships depicted in the initial story. This system has nine levels of increasing sophistication of decentering ability, which captures the structure of sequential and simultaneous decentering.

Action-reaction statements represent the more primitive sequential decentering, and are given lower scores (1-4) because the character's behavior changes in response to the other's action, instead of anticipating the other's behavior. Anticipating or recalling another character's behavior indicates internalization, representing the more advanced simultaneous decentering. These interactions are given higher scores (5-9) because they demonstrate that the subject has the capability to think in more abstract, less egocentric, multi-dimensional terms. According to the TAT decentering categories, the ability to differentiate the characters while simultaneously maintaining a complex relationship between them displays a high level of decentering. As a mature social cognition, higher levels of decentering represent an advance over more concrete social perception.

The TAT scoring system should allow interpersonal decentering to be measured more accurately and efficiently than the RTT method, as the category descriptions are concrete and require less inference. However, the TAT scoring manual was an incidental byproduct of

Feffer's research into the phenomenon of decentering using the Role Taking Task and has only recently been published (Feffer et al., 2008). However, it is well grounded in theory, intuitively appealing in content validity as an illustration of internalization processes, easy to grasp, and efficient to learn and score (Jenkins et al., 2007). Furthermore, it shows promise for clinical use in treatment planning and can be shared readily with clients in collaborative or therapeutic assessment.

Many other tasks and/or methods have been developed based on Piagetian theory to assess social role-taking. Enright & Lapsley (1980) provide a detailed review of these measures. Most of these methods fall into one of two categories: cognitive role-taking or affective role-taking. Cognitive role-taking refers to a person's understanding of what another is thinking. Affective role-taking refers to a person's understanding of what another is feeling. Feffer's Role-Taking Task (Feffer, 1959) and Feffer's Interpersonal Decentering Scoring System for the TAT (Feffer et al., 2008) involve a combination of both of these categories, measuring a person's understanding what another is thinking and feeling. Affective role-taking is sometimes confused with empathy, which refers to a person's ability to share the feelings of another, which is distinct from a person's ability to infer what another is feeling (Enright & Lapsley).

Empirical Findings Related to Interpersonal Decentering

A number of studies have been designed to evaluate selected aspects of this formulation of interpersonal behavior. The first of these (Feffer, 1959) was primarily concerned with providing a measure of self-organization as so conceptualized. Using the RTT, Feffer (1959) confirmed that Piaget's theory can be related to role-taking, taking the perspective of another, and to role-expectation (expecting certain things from another in a given role). Role-taking and

role-expectation can be equated with extent of perspective taking and complexity of actor description, respectively. Interpersonal decentering, as measured by the RTT, was also shown to be significantly related to developmental indices scored from Rorschach protocols (Feffer, 1959).

Feffer and Gourevitch (1960) provided a direct examination of the developmental implications of the RTT. Children ranging in age from 6 to 13 years were given the RTT and several impersonal cognitive tasks developed by Piaget and his colleagues. Performances on both the RTT and Piaget tasks were analyzed in terms of the balanced decentering. The two independent measures of decentering were positively related to each other and positively related to chronological age. Older children demonstrated a greater degree of balanced decentering than did younger children in their structuring of impersonal cognitive tasks, as well as in their role-taking behavior. Wolfe (1963) also found the ability to coordinate different perspectives, as measured by the RTT, to be associated with chronological age. These studies provide evidence of construct validation for the RTT as an index of cognitive maturity.

The concordance between decentering scores on impersonal tasks and interpersonal tasks (role-taking) suggest that the processes involved in the organization of impersonal events are parallel to those involved in the organization of interpersonal events; that is, just as physical dimensions are schemas underlying the structuring of impersonal objects, roles and role-reciprocals are schemas underlying the structuring of interpersonal events.

Feffer & Suchotliff (1966) paired college students into dyads on the basis of their ability to coordinate perspectives on the RTT. Dyads were then given a "password" communication task in which one participant in the role of donor was required to communicate a word using one-word association clues to his or her partner who did not know the word and who responded

with one-word guesses; the donor, in turn responded with a subsequent clue. Results indicated that the dyads comprised of those with higher RTT scores communicated words more quickly and utilized fewer clues than did the dyads comprised of those with lower RTT scores. This is evidence that more mature decentering abilities are associated with more effective social interaction skills.

In a follow-up study, Suchotliff (1970) analyzed the performance of schizophrenic and normal participants on both individual cognitive tasks, designed to reveal decentering deficits, and the password communication task. He found that schizophrenics made significantly more total decentering errors than normals. Furthermore, schizophrenics who structured the individual cognitive task in terms of uncorrected decentering showed a similar decentering deficit in their password interaction: for example, in focusing on the word to be communicated, they typically lost sight of the other's response to their previous clue. The results indicate that the formal thought disorder and social communication deficit associated with schizophrenia can be interpreted in terms of the decentering construct. Additionally, the deviant process underlying performance in both areas is an inability to focus simultaneously on various aspects of a situation such that a reciprocal and mutually corrective influence exists.

Feffer and Jahelka (1968) empirically examined the association between the participant's initial TAT performance and subsequent RTT performance. Two studies were designed to evaluate the nature of the relationship between the characteristics of the individual's initial story and the adequacy of subsequent role-taking. In the first part of this study, participants completed the normal RTT procedure. Analysis of these data revealed a significant association between initial TAT score and RTT score. This provides evidence that the initial TAT story alone is as accurate a measure of interpersonal decentering as the RTT. The more an individual portrays

reciprocal social interaction in the initial story, the better he or she is able to coordinate the viewpoints of the characters in role-taking.

A second study evaluated alternative interpretations of this empirical relationship. The subjects were required not only to take roles based upon their own initial stories, but also to take roles based upon the initial stories produced by others. First, participants provided initial TAT stories. These stories were scored for decentering and separated into high and low decentering groups. Then a few weeks later, the participants were given their original story, and also randomly assigned a low and a high decentering story told by others to the same picture, and asked to retell each story from the viewpoint of each of the characters. These retellings were scored using the RTT criteria. The participant's own decentering level, scored from their own initial TAT story, was then compared to the RTT scores from these retellings of the other two participant's initial stories, to see if the characteristics of the participant's initial TAT story were related to subsequent RTT role-taking. Participants' role-taking performance on his or her own initial story did not differ from his or her role-taking performance on someone else's initial story, regardless of differences in quality between the two initial stories. Results supported the position that a participant's initial story performance and subsequent role-taking performance is a function of a common dimension of decentering activity rather than a function of the stimulus properties of the initial story. These findings were interpreted as providing further evidence that the level of cognitive structuring of social content is a reflection of the capacity to coordinate role-reciprocal perspectives.

Lowenherz & Feffer (1969) explored the possibility that a failure to coordinate perspectives on the RTT occurs when the TAT stimulus figures represent defensively isolated aspects of the self-structure. College women were given the RTT and their statements

representing characterizations of TAT figures were later ranked by participants from "most like me" to "least like me." Participants also indicated the degree to which these characterizations were "personally acceptable" and "not personally acceptable." An attribute was considered to be defensively isolated if the participant considered it "not personally acceptable" and ranked in the "more like me" direction. Six months later, participants were asked to generate stories and take role perspectives for two attribute statements, one defensively isolated and the other non-isolated. The participants had more difficulty coordinating defensively isolated role-reciprocal perspectives than non-isolated role-reciprocal perspectives.

Olshansky (1971) later replicated this study with another sample of college women, using the Edwards Personal Preference Schedule (EPPS) as a means of assessing defensively isolated aspects of self-organization. The EPPS provides measures of fifteen personality descriptions. From each of a number of paired personality descriptions, the subject is required to choose the alternative which he or she considers most characteristic of himself or herself. Olshansky required participants to create one story based on non-isolated (conjunctive) role content and another story on isolated (disjunctive) role content. Her results were consistent with those of the Lowenherz and Feffer study. Thus, her study provides further support for the notion that defensive isolation between aspects of the self-structure results in primitive decentering (inability to coordinate perspectives) in the structuring of interpersonal content.

Using RTT, Buxer (1974) found that self-indulgent and self-depriving psychiatric patients both had more difficulty coordinating roles when taking the perspective opposite their own or the "ego-alien role perspective." Buxer suggested that the self-indulgent role orientation of "turning against others" reaches a symptomatic magnitude when one disavowed the reciprocal role of "victim" as being "not like me." In her study, participants recruited from three different

psychiatric wards (two in prisons) were considered to have a "turning against others" role orientation if they had a history of engaging in associated hostile behaviors, such as assault, rape, attempted murder, and/or murder. Results showed that participants with a "turning against others" orientation, as compared to those with a "turning against self" orientation," had difficulty coordinating the perspectives of aggressor and victim on the RTT, as well as on a non-verbal line drawing task. They had particular difficulty assuming the perspective of the victim (while taking the role of the aggressor).

Ward (1975) sought to provide a direct test of the extension of the decentering concept to the interpersonal dimensions of symptom expression by documenting participants' delusions and then examining their ability to take different perspectives represented within their delusions. Participants evidenced a greater degree of sequential decentering in taking the perspectives of the defensively isolated reciprocal roles embodied in their delusion than in taking the perspectives of their non-isolated reciprocal roles.

The hypothesis that schizophrenia represents a form of egocentrism or primitive decentering was tested by Strober (1979). He compared 14 schizophrenic adolescents with non-schizophrenic psychiatric controls, similar in age, IQ, and socioeconomic background. Interpersonal decentering was measured in Thematic Apperception Test (TAT) stories using the Initial Story TAT Scoring Categories (Feffer, 1966). Schizophrenics demonstrated significantly lower levels of interpersonal decentering than controls, providing support for Strober's (1979) hypothesis.

Carberry (1982) examined how well Interpersonal Decentering scores predicted social skills and treatment status of children at high risk of psychosis. Although none of the relationships she had predicted were significant, in an exploratory analysis, she found that

decentering at time 1 predicted teacher-assessed social interaction at time 2 with number of siblings in the study controlled; but this relationship was not found for uncontrolled individual scores.

Most recently, Jenkins et al. (2007) studied the association of interpersonal decentering with social network involvement, having a confidant, and scores on the Inventory of Interpersonal Problems for a sample of college students. Results indicated that those higher in decentering were modestly more engaged with their social networks, and men were more likely to have a confidant. Furthermore, people who reported more problems with domineering had lower decentering scores and people who reported a lack of assertiveness had higher decentering scores. In the second part of this study, using a clinical sample, Jenkins and her colleagues (2007) found that clients who had been victims of violence in a close relationship scored higher on decentering and those who had been a perpetrator of violence scored significantly lower.

From these relatively few studies, there are indications that the RTT and TAT scoring methods measure a shared construct of interpersonal decentering as evidenced by their concurrent validity. Furthermore, interpersonal decentering demonstrates some concurrence with other developmental constructs and seems to be related to effective interaction. In addition, participants have more difficulty with interpersonal decentering when asked to take the role of characters with attributes opposing those the individual identifies with (this is particularly difficult for psychiatric patients). There is further evidence that interpersonal decentering may be related to schizophrenia in adolescents, the symptomatic exaggeration of role orientations, and violent behavior.

Present Study and Hypotheses

The present study was designed to clarify the nature of this construct, as measured by

Melvin Feffer's Interpersonal Decentering Scoring System for the TAT (Feffer et al., 2008), by examining the relationship between clients' interpersonal decentering ability and symptoms of psychopathology, as measured by the SCL-90-R[®] instrument (L. Derogatis, Symptom Checklist 90 - Revised, Towson, MD).

The scoring system shows promise for clinical use in treatment planning and can be shared readily with clients in collaborative or therapeutic assessment. The SCL-90-R is a commonly used clinical assessment instrument, which is quick and easy to administer.

Understanding the relationship between these two measures may help to expedite the incorporation of the concept of interpersonal decentering into the therapeutic mainstream.

The relationship between these two measures also has implications for the diagnosis, treatment, and theory of psychological symptomatology. Feffer's (1967) theoretical extension to interpersonal aspects of symptomatic behavior has largely focused on the hallucinations and delusions associated with schizophrenia. His suggestion that delusions result from disjunctive isolation between aspects of the self-structure has been supported by previous research (Ward, 1975). Furthermore, individuals with schizophrenia have been shown to employ more primitive decentering than normals (Strober, 1979; Suchotliff, 1970). Thus, it was also hypothesized for this study that higher scores of psychoticism and paranoid ideation will be associated with lower scores of interpersonal decentering.

The variable of hostility has also been a major consideration, in regards to both theory and research, related to interpersonal decentering. Cameron (1951) suggested that the disjunctive isolation involved in the persecutory delusion of schizophrenia results from being unable to accept the hostile aspect of the self. Ward's (1975) findings were consistent with this suggestion. Horney (1945) suggested that the exaggerated role orientation of "moving against"

people," characterized by a hostile and assaultive disposition, occurs due to a lack of modulation from its reciprocal role of "submissiveness." Phillips & Rabinovitch (1958) found the exaggerated role orientation of "turning against others" to be associated with hostile behaviors, such as assault and rape.

Buxer (1974) suggested that the hostile role orientation of "turning against others" reaches a symptomatic magnitude when one disavowed the reciprocal role of "victim" as being "not like me." Results showed that participants with a "turning against others" orientation, as compared to those with a "turning against self" orientation," had difficulty coordinating the perspectives of aggressor and victim on the RTT, as well as on a non-verbal line drawing task. They had particular difficulty assuming the perspective of the victim (while taking the role of the aggressor). In addition, Jenkins et al. (2007) found that perpetrators of violence scored significantly lower on interpersonal decentering than did victims of violence. Thus, it was also hypothesized for this study that higher levels of hostility will be associated with lower scores of interpersonal decentering.

It was hypothesized that higher scores of global symptom severity will be associated with lower levels of interpersonal decentering. Higher scores of paranoid ideation, psychoticism, and hostility were also hypothesized to be associated with lower scores of interpersonal decentering.

There are four hypotheses that were tested by this study.

- 1. Higher scores of global symptom severity will be associated with lower scores of interpersonal decentering.
- 2. Higher scores of paranoid ideation will be associated with lower scores of interpersonal decentering.
- 3. Higher scores of psychoticism will be associated with lower scores of interpersonal decentering.
- 4. Higher levels of hostility will be associated with lower levels of interpersonal decentering.

METHODS

Participants

The participants of the study included forty-eight volunteers whose data were previously collected in An Exploration of Object Relations and the Early Working Alliance in a University Clinic Sample, a dissertation by Kristin M. Niemeyer (2004). Of the 48 participants, 35% (n =17) were males and 65% (n = 31) were females. Age of the participants ranged from 19 to 70 years (M = 32, SD = 13.37). Ethnically, 73% (n = 35) were non-Hispanic Caucasian, 8.3% (n = 35)4) were African American, 6.3% (n = 3) were Asian or Pacific Islander, 4.2% (n = 2) were Hispanic, and 8.3% (n = 4) categorized their ethnicity as "other." In regards to marital status, 46% (n = 22) were single (never married), 23% (n = 11) were divorced, 19% (n = 9) were married, 10% (n = 5) were in a committed relationship, and 2% (n = 1) were widowed. Thirtyone percent (n = 15) of the participants had children. In regards to education level, 10% (n = 5)had masters' degrees, 13% (n = 6) had bachelor's degrees, 71% (n = 34) had completed some college, 2% (n = 1) had high school diplomas or general education diplomas, and the remaining 4% (n = 2) had completed the 10^{th} grade. In regards to employment status, 23% (n = 11) were full time students, 21% (n = 10) were employed part time, 15% (n = 7) were employed full time or more, 13% (n = 6) were unemployed, 13% (n = 6) were full time students and employed part time, 6% (n = 3) were retired or disabled, 6% (n = 3) were self-employed, and 4% (n = 2)described themselves as "homemakers" (Niemeyer, 2004).

Materials

Demographics Questionnaire. The demographic questionnaire used consists of questions regarding gender, age, ethnicity, marital status, level of education, and employment status, as

well as previous therapy experience, and physical health. (See Appendix).

UNT Psychology Clinic Intake Packet. Standard intake procedure for therapy clients at the clinic required participants to complete intake forms, which are kept in their clinic files.

Some information contained in these packets was used to obtain supplemental demographic data, for instances in which questions were left unanswered on the demographic questionnaire.

Symptom Checklist 90-Revised (SCL-90-R®) instrument. The SCL-90-R instrument (Derogatis, 1994) is a self-report inventory designed to assess current psychological symptoms. It contains 90 items, each rated on a 5-point scale, ranging from 0 ("Not at all") to 4 ("Extremely"). The ratings reflect the degree to which each symptom had distressed the respondent in the past week. The Global Severity Index (GSI), the average score of all 90 items, is an overall measure of current psychological distress. The GSI combines information about the amount of symptoms reported along with the intensity of distress perceived. The validity and reliability of the GSI is well established (Derogatis, 1994; Derogatis, Rickels, & Rock, 1976). The reported coefficients for both test-retest reliability and internal consistency of the GSI are .84.

There are also nine symptom dimensions, including Paranoid Ideation (PAR),
Psychoticism (PSY), Hostility (HOS), Interpersonal Sensitivity (I-S), Depression (DEP), Anxiety
(ANX), Phobic Anxiety (PHOB), Obsessive-Compulsive (O-C), and Somatization (SOM).
These symptom dimensions were developed through a combination of empirical/analytic and clinical/rational procedures (Derogatis, 1994) and each dimension has been empirically verified (Derogatis & Clearly, 1977).

Internal consistency coefficients for the nine symptom dimensions were developed from two studies: the first collected data from 209 volunteers experiencing symptoms (Derogatis et al.,

1976) and the second collected data from 103 psychiatric outpatients (Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988). Both studies used the coefficient alpha. For the Derogatis et al. study (1976) coefficients ranged from .77 for Psychoticism to .90 for depression. For the Horowitz et al. study (1988) coefficients ranged from .79 for Paranoid Ideation to .90 for Depression. Test-retest reliabilities coefficients for the symptom dimensions, following a one week interval, were between .80 and .90 (Derogatis et al., 1976).

Descriptions of the SCL-90-R symptom dimensions are listed below:

- Paranoid Ideation (PAR): Contains 6 items that specifically address symptoms of paranoia, such as suspiciousness, projective thought, and delusions. Example items include "Feeling that most people cannot be trusted" and "Feeling that you are watched or talked about by others."
- Psychoticism (PSY): Contains 10 items that address symptoms on a graduated continuum from mild interpersonal withdrawal (loneliness, lack of close relationships) to severe psychotic symptoms related to schizophrenia (thought control, hallucinations). Example items include "Feeling lonely even when you are with people," "The idea that someone else can control your thoughts," and "Hearing voices that other people do not hear."
- Hostility (HOS): Contains 6 items addressing thoughts, feelings, and behavior related to the negative affective states of anger, resentment, irritability, aggression, and rage. Example items include "Temper outbursts that you could not control" and "Having urges to beat, injure, or harm someone."
- Interpersonal Sensitivity (I-S): Contains 9 items address feelings of inferiority and inadequacy in comparison with others, such as self-doubt, self-depreciation, and discomfort

during interpersonal interactions. Example items include "Your feelings being easily hurt" and "Feeling very self-conscious with others."

- Depression (DEP): Contains 13 items addressing a range of manifestations of clinical depression, including dysphoric affect, feelings of hopelessness, loss of interest in life activities, loss of energy, and thoughts of suicide. Example items include "Feeling hopeless about the future," "Crying easily," and "Thoughts of ending your life."
- Anxiety (ANX): Contains 10 items addressing common symptoms of anxiety including, nervousness, trembling, apprehension, dread, and feelings of terror. Example items include "Nervousness or shakiness inside" and "Spells of terror or panic."
- Phobic Anxiety (PHOB): Contains 7 items addressing persistent fear responses to and avoidance of specific people, places, things, or situations. Some example items include "Feeling afraid to go out of your house alone" and "Having to avoid certain things, places, or activities because they frighten you."
- Obsessive-Compulsive (O-C): Contains 10 items that address persistent unwanted thoughts, impulses and actions. Example items include "Repeated unpleasant thoughts that won't leave your mind," "Having to check and double-check what you do" and "Having to repeat the same actions such as touching, counting, or washing."
- Somatization (SOM): Contains 12 items addressing distress related to perceptions of physical dysfunction, including muscular pain and discomfort, as well as complaints related to the respiratory, cardiovascular, gastrointestinal systems, which are strongly associated with autonomic medication. Example items include "Pains in lower back," "Nausea or upset stomach," "Trouble getting your breath," and "Faintness or dizziness."

Interpersonal Decentering. Interpersonal Decentering scores are derived from TAT

stories using the criteria outlined in the Scoring Manual for Interpersonal Decentering (Feffer et al., 2008), the revised version of Feffer's Interpersonal Decentering Scoring System (1966).

Each TAT story is first divided into social interaction units. Each unit must involve at least two characters. The two characters may be present in the scene described or one character may be thinking about the other(s). Interaction units are only separated by changes in time, place, or characters present. A series of actions or thoughts remain one unit until one of these changes occurs. Each interaction unit is then given a separate decentering score.

The scoring categories range from 1 to 9, with 1 representing the lowest level of decentering and 9 representing the most advanced level of decentering. If more than one level of decentering is present within a single interaction unit, the highest decentering score is given.

Category 1 represents an undifferentiated relationship, in which both characters are involved in the same activity or are described as being alike in some way. There is no decentering present in this level (e.g. "They went out to dinner").

Categories 2, 3, and 4 involve differentiated characters, but only sequential decentering. A score of 2 is given when the activity of one character is directed toward the other, but evokes no reaction (e.g. "She told him a joke"). If the object character reacts to the subject character (e.g., "She told him a joke and he laughed."), the interaction receives a score of 3. If this reaction in turn evokes a counter-reaction from the original character, it becomes an interactive directional relationship, increasing that unit's score to 4 (e.g. "She told him a joke and he laughed, so she smiled).

The higher levels of interpersonal decentering, categories 5 through 9, utilize simultaneous decentering and involve a character or group of characters internalizing the attributes of another character. Basically, one character is represented as the object of another

main character's thoughts or feelings. In category 5, the character is represented as the simple object of the main character's internalized state (e.g. "He thought about his father"). In category 6, the object character is elaborated by external attributes or behaviors, (e.g., "He remembers the kindness of his father"). In category 7, the object character is elaborated by having his or her own internalized state ("He thought it would make her happy"). A category score of 8 indicates that the main character is internalizing two other characters, in which one of them is the object of the internalized state of the other (e.g., "He feels that she is wrong in believing that Bill is a mean person"). In category 9, the highest level of decentering, the object of the internalized state is the self in an interactive relationship with another (e.g., "He is thinking about playing outside with his friends," or "She's feeling sad because she can't hold him back"). See Table 1 for a list of scoring categories with example interaction units. See Table 2 for examples of scored stories.

There are three methods of calculating a person's decentering summary score. These methods have been referred to as the "best effort" method, the "mean of highest" method, and the "overall mean" method (Jenkins et al., 2007). The "best effort" score is simply the highest single decentering score obtained from all stories. The "mean of highest" score is calculated by taking the highest decentering score from each story and then averaging them. The "overall mean" is the mean of all decentering scores: first, all of the decentering scores obtained throughout all stories are summed, and then this sum is divided by the number of interaction units obtained throughout all stories.

Each method of deriving a summary score aligns with different assumptions about the construct of interpersonal decentering (Leeper, Dobbs, & Jenkins, 2008). If decentering is strictly conceptualized as an ability, the "best effort method" is preferable, as it provides the single highest score of decentering obtained. If decentering is conceptualized more as a

performance (something that emerges sporadically in normal interaction), than the "mean of highest scores" method is preferable. Averaging the highest score for each story, in essence, neutralizes the impact of the more primitive sequential decentering interactions if any simultaneous decentering interactions are present. If decentering is conceptualized as something similar to a personality trait, consistent across situations and over time, the "overall mean" method is preferable. All decentering scores within and across stories bear influence on the summary scores, just as personality traits are thought to bear influence across all aspects of all situations.

The "overall mean" method is comparable to methods used in previous research (Carberry, 1982; Feffer & Jahelka, 1968; Strober, 1979). This suggests that interpersonal decentering has traditionally been assumed to be a trait-like construct, which would display cross-situational consistency. Feffer & Jahelka (1968), using just one TAT card in their study, calculated the final decentering summary score by averaging all of the decentering scores obtained within that story (mean of all scores). Carberry (1982) used three TAT cards in her study and calculated the final decentering summary score by first obtaining the mean of all the scores for each card and then summing these mean scores. Strober (1979) also used three TAT cards in his study, but calculated the final decentering summary score by first obtaining the mean of all the scores for each card and then averaging these mean scores. However, a recent study (Jenkins et al., 2007) compared the three methods for deriving decentering summary scores and found the "best effort" method to be somewhat preferable, as it tended to show slightly stronger associations with test variables and was less influenced by gender and response productivity. In the study by Jenkins et al. (2007) stories lacking interactions were entered as missing data. The same procedure was used in the present study. The average scores combined scores for stories

with scorable interactions so they could remain in analyses without create a downward bias of the average scores.

Procedure

The data used in this study was previously collected for a different study done by Neimeyer (2004). For Neimeyer's study, data was collected from both therapy clients and student therapists at the UNT outpatient Psychology clinic. Data was collected from therapy clients at two different points in time. Only information collected from therapy clients during time 1 was used in the current study.

During Time 1, which occurred prior to the third therapy session, clients were administered the demographic questionnaire, the TAT and SCL-90-R. The Adult Attachment Scale (AAS) and the short-form of the Marlowe-Crowne Social Desirability Scale (MCSD) were also administered at this time, although they will not be used in the analyses for the current study.

Due to the vulnerable nature of the population (therapy clients), precautions were taken to avoid potential hazards. Clients who were acutely suicidal or whose risk might otherwise be increased by participating in this study were excluded from participation. This determination was made by therapists and their supervisors following the intake session. It was made clear in the informed consent forms that, if at any point the client experienced distress a result of participation in the study, his or her participation would be discontinued. No participants were dropped from the study due to these factors. All data collection occurred in the clinic setting in which the client was usually seen, at hours when the clinic was open.

TAT cards 1, 2, 3BM, 4, 6BM, 7GF, 10, 12M, and 13MF were used. These particular

cards were chosen for use in the original study by Niemeyer (2004). The TAT was administered following the standard procedures outlined by Murray (1943).

After administration of the TAT, the narratives were transcribed and grouped by card number to facilitate ease of scoring. These narratives were scored for the current study using the criteria outlined in the Scoring Manual for Interpersonal Decentering (Feffer et al., 2008), by two raters trained in this scoring system. Each narrative was scored independently by two raters. Upon completion of independent scoring, the same two raters met to compare scores and reconcile discrepancies by discussion. These consensus scores were used for data analysis.

RESULTS

Descriptive Statistics

Reliabilities amongst each of the scores and the consensus scores were computed based on Spearman's Rho. All inter-rater reliabilities were above .90 (ranging from .92 to 1.00) and were significantly correlated (p<.001). These values are higher than those found in previous studies (Jenkins et al., 2007; Strober, 1979), which was expected due to the use of the elaborated, revised version of the scoring manual (Feffer et al., 2008). These reliability scores included the total number of interaction units, highest decentering score, and mean decentering score for each TAT card, see Table 3.

One participant was removed from data analysis, due to missing data. Only three of the nine TAT stories were available for this participant. Thus, the sample size was reduced for the following data analyses (N=47).

All variables were examined for range, mean, standard deviation, kurtosis, skew, and modality using frequency distributions. With one exception, all variables had approximately normal distributions with no significant outliers, thus no transformations of the distributions were necessary and the data were assumed to be normal. The distribution of "best effort" decentering summary scores was highly skewed (skew = -5.19) and had a high level of kurtosis (kurtosis = 29.02). This was due to the fact that 44 of the 47 participants (94% of the sample) obtained the highest decentering score of 9 and there was an individual outlier with a highest decentering score of 2. For univariate descriptive statistics see Table 4.

Mean scores for the SCL-90-R[®] Global Severity Index, as well as the 9 symptom dimension scores, were compared to an outpatient norm group (Derogatis, 1994). No significant differences were found between the current sample and the outpatient norm group sample on any

of the SCL-90-R scores. A side-by-side comparison of the mean scores found in these two samples is provided in Table 5.

The three decentering summary scores used in the present study were compared to those used in two recent studies, which also calculated all three decentering summary scores (Jenkins, et. al. 2007). The participants of the first study conducted by Jenkins et al. (2007) included 166 college students. The current study has a significantly higher mean for the "best effort" decentering summary score [t(46)=5.72, p<.001]. No significant differences were found for the "mean of highest" decentering summary score [t(46)=-.33, p=.74], "overall mean" decentering summary score [t(46)=-.23, p=.82], or average number of interactions on TAT stories [t(46)=-.15, p=.88]. Participants of the second study conducted by Jenkins et al. (2007) were more similar to participants of the current study and consisted of 61 outpatients of the UNT Psychology Clinic who reported being involved in violent relationships. The current study had significantly higher means for the "best effort" decentering summary score [t(46)=12.38, p<.001] and the "mean of highest" decentering summary score [t(46)=2.56, p<.05]. No significant difference was found for the "overall mean" decentering summary score [t(46)=-.23, p=.82]. The current study also had a significantly higher mean for the average number of interactions on TAT stories [t(46)=5.88, p<.001], see Table 6.

The measure of interpersonal decentering is based upon TAT stories produced by the participant. Potential correlations might represent error variance due to response fluency (McClelland, 1980). Thus, the possibility that variation in response productivity constituted a source of measurement method error variance in decentering summary scores was examined. Using Pearson correlations, the three decentering summary scores were tested for association with the two measures of response productivity: average number of words on TAT stories and

average number of interactions on TAT stories.

The "mean of highest" decentering summary score was highly correlated with both measures of response productivity: average number of words (r=.57, p<.001) and average number of interactions (r=.75, p<.001). The other two decentering summary scores, "best effort" and "overall mean," were not significantly correlated with either measure of response productivity, see Table 7. This differs from the findings of the Jenkins et al. study (2007), which found all three decentering summary scores to be significantly correlated with response productivity.

None of the SCL-90-R[®] scales were correlated with response productivity, so there was no apparent need to control for response productivity. However, to be on the safe side, all analyses involving any of the SCL-90-R[®] scales were rerun with response productivity partialled out of the "mean of highest" decentering summary score. Controlling this variable for response productivity had little to no influence on the results found and did not impact the significance levels of any findings.

The two measures of response productivity were highly correlated with each other (r=.81, p<.001), see Table 7. Thus, longer stories tended to have more interactions. This is similar to previous findings (Jenkins et al., 2007). However, the correlation is stronger in the current study.

All three decentering summary scores were significantly correlated with each other. The "overall mean" and "mean of highest" summary scores were most highly correlated with each other (r=.63, p<.001), followed by "overall mean" and "best effort" summary scores (r=.45, p<.001). The significant correlation between the "mean of highest" and "best effort" summary scores was the least strong (r=.42, p<.001), see Table 7. The relative strengths of correlations

between the decentering summary scores followed the same order as in the Jenkins et al. (2007) study.

In order to screen for the possibility of confounding associations among the variables, Pearson correlations were calculated between the demographic variables and the three decentering summary scores, as well as the two measures of response productivity. No significant associations were found for these variables, see Table 8.

Hypothesis Testing

In order to examine the four formal hypotheses, associations were examined between all three decentering summary scores and the SCL-90-R[®] Global Severity Index, as well as the SCL-90-R[®] symptom dimensions of Paranoid Ideation, Psychoticism, and Hostility, using a Pearson correlation with a one-tailed test of significance.

With a sample size of 47, the following analyses had 40% power to detect a population r of .20 and about 66% power to detect rs of .30 (Kraemer & Thiemann, 1987).

- 1. It was hypothesized that higher scores of Global Severity Index would be associated with lower scores of interpersonal decentering. No significant relationships were found, see Table 9.
- 2. It was hypothesized that higher scores on the symptom dimension of Paranoid Ideation would be associated with lower scores of interpersonal decentering. No significant relationships were found, see Table 9.
- 3. It was hypothesized that higher scores on the symptom dimension of Psychoticism would be associated with lower scores of interpersonal decentering. No significant relationships were found, see Table 9.
- 4. It was hypothesized that higher scores on the symptom dimension of Hostility would be associated with lower scores of interpersonal decentering. No significant relationships were found, see Table 9.

Exploratory Analysis

In order to further investigate the potential relationship between specific symptoms of psychopathology and interpersonal decentering, additional exploratory analyses were conducted on the remaining SCL-90-R[®] symptom dimensions scores. Associations were examined between all three decentering summary scores and scores on the remaining SCL-90-R[®] symptom dimensions of Interpersonal Sensitivity, Depression, Anxiety, Phobic Anxiety, Obsessive-Compulsive, and Somatization, using a Pearson correlation with a two-tailed test of significance.

With a sample size of 47, the following analyses had about 28% power to detect a population r of .20 and about 55% power to detect rs of .30 (Kraemer & Thiemann, 1987).

The SCL-90-R[®] symptom dimension of Phobic Anxiety was significantly related to two of the decentering summary scores: the "best effort" decentering summary score (r= -.35, p<.05) and the "overall mean" decentering summary score (r= -.32, p<.05). According to Cohen (1992), these are considered to be moderate effect sizes. No other significant relationships were found, see Table 10.

DISCUSSION

This study contributes to the modest body of literature on Melvin Feffer's Interpersonal Decentering Scoring System for the TAT (Feffer et al., 2008). Results of this study help to clarify the nature of the construct of interpersonal decentering by providing information about the measure's empirical relation to symptoms of psychopathology, as measured by the SCL-90-R[®], in a clinical outpatient sample. The results are also useful for comparing the three methods of calculating decentering summary scores.

Although the hypotheses of this study were not supported (interpersonal decentering was not related to global symptom severity, paranoid ideation, psychoticism, or hostility), there was an important finding within the exploratory analyses: Interpersonal decentering was significantly related to phobic anxiety. Two of the overall decentering scores ("best effort" and "overall mean") were negatively correlated with the SCL-90-R® symptom dimension of phobic anxiety. Higher scores of phobic anxiety were correlated with lower scores of interpersonal decentering. This raises questions about the relationship between phobic anxiety and decentering. It should be noted that this finding is based on exploratory analysis and will require replication for validation. Also, due to the high number of correlations run, this finding may be due to chance factors.

However, this finding does make theoretical sense. Phobic anxiety involves a persistent fear response – to specific people, places, objects, or situations – that is irrational, disproportionate to the stimulus, and leads to avoidant or escape behaviors (Derogatis, 1994). The SCL-90-R[®] symptom dimension that measures phobic anxiety includes items that focus on the manifestations of phobic behavior. Individuals suffering from phobic anxiety seem to place a disproportionate (or exaggerated) amount of focus on isolated aspect of an object (impersonal or

interpersonal). This exaggerated focus (according to the literature and theories regarding decentering) leads to distorted perceptions of the object and/or situation, leading to difficulties in modulating behavior appropriately. Individuals with phobic anxiety may tend to ignore other relevant aspects of objects and/or situations, which would otherwise minimize the distorted perceptions inherent in attending to isolated aspects.

Individuals with higher scores of phobic anxiety generally did not attain higher scores of decentering. Higher scores reflect cognition with a greater degree of maturity, in which immediate sensory perceptions are subordinated to conceptual thought in organizing experience. It may be that phobic anxiety reflects a tendency to react to immediate sensory perceptions (initial fear responses) and engage in egocentric thinking, in which experiences are interpreted exclusively from one's own perspective.

The results of this study also have implications regarding the three methods of calculating decentering summary scores. The "best effort," "mean of highest," and "overall mean" methods were used, in order to assess the properties of the construct. Longer stories had more interactions, such as experienced clinicians might elicit more often than novice graduate students, yielding greater differences between the methods for calculating summary scores than reported by Jenkins et al. (2007). In this study, the "mean of highest" method for calculating decentering summary scores suffered greatly from this possible source of systematic measurement bias. For clinical purposes, the "mean of highest" decentering scores may not be a good source for comparison, as two clients with the same raw scores may act differently. For a more accurate comparison using this score, response productivity would need to be taken into account. The "best effort" method for calculating decentering summary scores was not significantly associated with response productivity, although the resulting distribution of scores

using this method was highly skewed, and there is evidence that this method is highly susceptible to outliers. This study provides evidence for preferring the traditionally used "overall mean" method of calculating decentering summary scores; it was not related to response productivity, maintained a normal distribution, and tended to show stronger associations with test variables. This finding is in agreement with the previous literature, which has traditionally used comparable "overall mean" methods for determining decentering summary scores. This method for calculating decentering summary scores suggests that the construct of interpersonal decentering can be conceptualized as something similar to a personality trait. However, findings from the Jenkins et al. study (2007) suggest that the "best effort" method may be slightly preferable, as it tended to show slightly stronger associations with test variables and was less influenced by response productivity.

Limitations of the Study

Limitations of this study are due to several factors. The results can not be generalized with much confidence due to the small sample size. Also, these findings may not generalize beyond outpatients. Furthermore, the fact that acutely distressed participants were screened out also places limitations on the findings of this study.

Furthermore, all participants were paid volunteers. This impacts the legitimacy of comparing results to studies of unpaid participants, who completed the psychological evaluation measures as part of therapy, such as the Jenkins et al. (2007) archival study of outpatients. Also, in comparison to the general population, a disproportionate number of participants were Caucasian, single, and female.

Directions for Future Research

There are several recommendations for future research regarding this topic. Although the hypotheses for this study regarding the relationship between interpersonal decentering and overall symptom severity, paranoid ideation, psychoticism, and hostility were not supported, the theoretical link between schizophrenia and decentering is relatively strongly established in the existing literature and should be explored further, perhaps using a different measure of psychopathology and/or different samples. Also, the relationship between phobic anxiety and decentering should be explored further and future studies should also attempt to replicate the significant findings of the current study, using a larger, more representative sample.

Future studies should include all three methods of calculating decentering summary scores, in order to further clarify the potential usefulness of each method. Differences in validity associations for the varying methods might be useful for some clinical purposes, such as differentiation clients who are able to decenter, but rarely do so to their fullest potential, from those who consistently decenter at their fullest potential.

This study has provided some pathways for future researchers to explore in order to provide a better understanding of Interpersonal Decentering TAT scores and symptoms of psychopathology. Knowledge gained from future studies should lead to more effective use of Melvin Feffer's Interpersonal Decentering Scoring System for the TAT.

Table 1
Scoring Categories for Interpersonal Decentering

#	Type of Decentering	Name of Category	Example
1	None	Undifferentiated relationship	"They like sports."
2	Sequential	Non-reactive directional relationship	"She gives him food."
3	Sequential	Reactive directional relationship	"She gives him food which he appreciates."
4	Sequential	Interactive directional relationship	"She gives him food that he likes. She is glad."
5	Simultaneous	Internalized other, simple representation	"He plans on telling her later."
6	Simultaneous	Internalized other, surface characteristics	"He plans on telling her how she looks."
7	Simultaneous	Internalized other, internalized state	"He plans on telling her when she feels better."
8	Simultaneous	Internalized others	"He plans on telling her that Bill likes her."
9	Simultaneous	Internalized self-other	"He felt he was wrong in telling her that."

Note. Scored once for each interaction segment (same characters, time, and place) in the story.

Table 2

Two Examples of Decentering Scoring

Score Card 2: There's a young woman who has a crush on the farmer guy -- the guy who's

- working. She pretends not to notice him. She's well educated because she has books and pretends not to be in love with him, but she is.// They had a secret affair in the
- past where they met in the barn or house and <u>had a romantic encounter.</u>// The other
- 6 woman is the <u>mother and doesn't approve that they're in love</u> and has to watch very closely because <u>she might suspect that they're in love</u>, and she doesn't approve.// And
- eventually they'll run away together, and <u>she'll admit her love for him</u> and they will be happy.

Highest score = 9 Interaction Units = 4 Average = 18/4 = 4.5

- 5 **Card 2:** This lady decided to go off to college and <u>leave her family</u>.// Then she finds out that her mother is pregnant and she can't decide on whether to go to college or not
- 9 because she thinks she needs to stay and help her mother on the farm.// Her mother
- 2 <u>reassures her</u> that everything will be okay on the farm.// So she ends up going to college and becoming a teacher. Right now she's feeling confused about her obligations.

Highest score = 9 Interaction Units = 3 Average = 16/3 = 5.33

Note. Interaction units are demarcated by double slashes indicating changes in time, place, or person(s). Underlined text indicates the phrase within each interaction unit that determines its decentering score. The first story is unusually repetitive; each of the first three interaction units has two repetitions of the same scorable material, which does not change its score. The last segment of the second story has no interaction. *Note.* Adapted with permission from Feffer et. al. (2008), p. 159 Table 9.1

Table 3

Inter-rater Reliabilities

TAT Card #	1	2	3	4	6	7	10	12	13
Number of Interactions									
Scorer 1 & Scorer 2	.98*	.99*	.98*	.98*	.99*	.97*	.96*	.99*	.99*
Scorer 1 & Consensus	1.00*	.99*	.99*	.98*	.99*	.99*	.99*	.99*	1.00*
Scorer 2 & Consensus	.99*	1.00*	.98*	.99*	.99*	.98*	.97*	1.00*	.99*
Highest Decentering Score									
Scorer 1 & Scorer 2	.92*	.95*	.98*	.93*	.94*	.95*	.97*	.97*	.95*
Scorer 1 & Consensus	.99*	.95*	.99*	1.00*	.96*	.97*	.98*	1.00*	1.00*
Scorer 2 & Consensus	.93*	.97*	.98*	.93*	.99*	.97*	.99*	.97*	.95*
Mean Decentering Score									
Scorer 1 & 2	.96*	.96*	.98*	.95*	.97*	.96*	.97*	.95*	.98*
Scorer 1 & Consensus	.99*	.97*	.99*	.99*	.99*	.99*	.98*	.99*	1.00*
Scorer 2 & Consensus	.97*	.98*	.97*	.97*	.99*	.98*	.98*	.95*	.98*

Note. Spearman's rho correlation coefficients. I would like to thank Luis E. Perez for his scoring. *p < .001.

Table 4

Descriptive Statistics

	M	SD	Range	Skew	Kurtosis
Decentering					
Best Effort	8.75	1.13	2 to 9	-5.19	29.02
Mean of highest	5.30	1.90	1.22 to 9	.12	70
Overall Mean	3.83	1.02	1.57 to 6.22	.18	15
Response Productivity					
Mean # of interactions	2.96	1.71	.78 to 9.33	1.68	3.58
Mean # of words	97.31	50.77	39.89 to 225.22	1.13	.37
Symptom Checklist-90-R ^a					
Global Severity Index	1.27	.63	.13 to 2.41	13	-1.11
Paranoid Ideation	1.06	.83	.00 to 2.83	.44	82
Psychoticism	1.07	.63	.10 to 2.70	.24	65
Hostility	1.05	.88	.00 to 3.33	.74	15
Interpersonal Sensitivity	1.44	.86	.00 to 3.11	.02	-1.01
Depression	1.85	.85	.23 to 3.23	36	89
Anxiety	1.27	.79	.00 to 2.60	.11	-1.18
Phobic Anxiety	0.56	.71	.00 to 2.43	1.32	.69
Obsessive-Compulsive	1.72	.88	.20 to 3.40	08	-1.01
Somatization	0.92	.70	.00 to 2.92	.98	.51

 $^{^{\}mathrm{a}}$ Rating scale from 0 = "not at all" to 4 = "extremely"

Table 5

Mean Scores of SCL-90-R® Scales for Current Study & Outpatient Norm Group

	Current Study (<i>N</i> =47)		SCL-90-R® Norm	Group (N=1,002)
SCL-90-R [®] Scales ^a	M	SD	M	SD
Global Severity Index	1.27	0.63	1.26	0.68
Paranoid Ideation	1.06	0.83	1.16	0.92
Psychoticism	1.07	0.63	0.94	0.70
Hostility	1.05	0.88	1.10	0.93
Interpersonal Sensitivity	1.44	0.86	1.41	0.89
Depression	1.85	0.85	1.79	0.94
Anxiety	1.27	0.79	1.47	0.88
Phobic Anxiety	0.56	0.71	0.74	0.80
Obsessive-Compulsive	1.72	0.88	1.47	0.91
Somatization	0.92	0.70	0.87	0.75

^a Rating scale from 0 = "not at all" to 4 = "extremely"

Table 6

Mean and Standard Deviation of Response Productivity and Decentering Scores

			<u>Je</u>	enkins et	al. (2007)	
	Current (N=	•	Stud (<i>N</i> =1,	•	Stud (<i>N</i> =6	•	
	M	SD	M	SD	M	SD	
Decentering							
Best Effort	8.75	1.13	7.8	1.32	6.7	2.0	
Mean of highest	5.30	1.90	5.4	1.13	4.6	1.5	
Overall Mean	3.83	1.02	3.8	.83	3.8	1.3	
Response Productivity							
Mean N of interactions	2.96	1.71	3.0	.97	1.5	1.1	

Note. Participants for Study 1 were undergraduates at UNT. Participants for Study 2 and the current study were outpatients from the Psychology Clinic at UNT. However, Study 2 used archival data, whereas participants for current study were volunteers and the acutely distressed were screened out.

Table 7

Inter-correlation of Decentering Scores and Response Productivity

	1	2	3	4	5
1. Best Effort					
2. Mean of highest	.42*				
3. Overall Mean	.45*	.63*			
4. Mean <i>N</i> of interactions	.23	.75*	.23		
5. Mean <i>N</i> of words	.16	.57*	.22	.81*	

Note. Pearson's correlation coefficients.

^{*}*p* < .001.

Table 8

Correlation of Demographic Variables with Decentering Scores and Response Productivity

	Decentering Scores			Response Pr	roductivity
Demographic Variables	Best Effort	Mean of Highest	Overall Mean	Mean N of Interactions	Mean N of Words
Gender ^a	17	02	23	.03	02
Age (in years)	.07	.19	.13	.20	.22
Ethnicity ^b	13	09	09	10	15
Marital Status ^c	.12	02	01	.06	.13
Number of Children	.05	03	11	.09	.07
Education Level ^d	.10	.07	.15	03	07
Employment ^e	14	.07	.06	.07	.21

Note. Pearson's correlation coefficients. ^a 0 = male; 1 = female. ^b 1 = African-American/Black; 2 = American Indian/Alaskan Native; 3 = Asian/Pacific Islander; 4 = Caucasian; 5 = Hispanic/Latino; 6 = Other. ^c 1 = Single (never married); 2 = Married; 3 = In committed relationship; 4 = Widowed; 5 = Divorced; 6 = Separated. ^d 1 = Less than 10th grade; 2 = Completed 10th grade; 3 = High school graduate or GED; 4 = Some college, associate degree; 5 = Bachelor's degree; 6 = Masters degree; 7 = Ph.D., doctorate, M.D., J.D.; 8 = Other. ^e 1 = Employed full time or more; 2 = Employed part-time (less than 35 hours per week); 3 = Self-employed; 4 = In school full time; 5 = Homemaker; 6= Unemployed; 7 = Retired or disabled.

Hypothesis Testing: $Correlation \ of \ SCL-90-R^{@} \ Scales \ with \ Decentering \ Scores \ and \ Response \ Productivity$

	Dec	centering S	Scores	Response Pr	roductivity
SCL-90 Scales	Best Effort	Mean of Highest	Overall Mean	Mean N of Interactions	Mean N of Words
Global Severity Index	20	.12	16	.08	.08
Paranoid Ideation	23	.14	15	.15	.08
Psychoticism	18	.11	05	.09	.09
Hostility	.03	.13	04	.12	.19

Note. Pearson's correlation coefficients. One-tailed test of significance.

Table 9

Table 10 $Exploratory\ Analyses:$ Correlation of SCL-90-R® Scales with Decentering Scores and Response Productivity

	Decentering Scores			Response P	roductivity
SCL-90 Scales	Best Effort	Mean of Highest	Overall Mean	Mean N of Interactions	Mean N of Words
Interpersonal Sensitivity	14	.11	18	.01	07
Depression	23	.06	21	.09	.01
Anxiety	17	.02	18	02	02
Phobic Anxiety	35*	13	32*	10	05
Obsessive-Compulsive	12	.16	04	00	.09
Somatization	14	.15	.04	.11	.23

Note. Pearson's correlation coefficients. Two-tailed test of significance. *p = .05.

APPENDIX DEMOGRAPHICS QUESTIONNAIRE

Demographic Questionnaire

Please answer these questions by marking one line	e .
1. Gender: 0) Male 1) Female	
2. Years of age:	
 3. In which group do you mostly place yourself? 1) African-American/Black 2) American Indian/Alaskan Native 3) Asian/Pacific Islander 	4) Caucasian 5) Hispanic/Latino 6) Other
4. What is your current marital status?1) Single (never married)2) Married3) In committed relationship 5. Do you have any children?0) No	4) Widowed5) Divorced6) Separated 1) Yes (including step or adopted)
6. How many children?	
7. How far did you go in school? 1) Less than 10 th grade2) Completed 10 th grade3) High school graduate or GED4) Some college, associate degree 8. Current employment:1) Employed full time or more2) Employed part-time	5) Bachelors degree6) Masters degree7) Ph.D., doctorate, M.D., J.D8) Other
10. Have you ever received outpatient psychothera Psychology Clinic? 0) No 1) Yes	
11. If yes, how many different therapists have you	seen?
12. How long would you estimate your total time is	in therapy?
13. Have you ever been an inpatient in a psychiatr	ic hospital or unit? 0) No 1) Ye

REFERENCES

- Asch, S. (1952). Social psychology. New York: Prentice Hall.
- Buxer, C. G. (1974). Symptomatic behavior as an expression of isolation between role schemata. Unpublished doctoral dissertation, Yeshiva University.
- Cameron, N. (1951). *Perceptual organization and behavior pathology*. In R. R. Blake & G. V. Ramsey (Eds.), Perception, an approach to personality. New York: Ronald Press, 283-306.
- Carberry, A. T. (1982). *Interpersonal decentering, social interaction, and treatment status in children at risk for psychosis.* Unpublished doctoral dissertation, Saint Louis University.
- Cohen, J. (1992). A power primer. Psychological Bulletin, 112 (1), 155-159.
- Derogatis, L. R., & Cleary, P. (1997). Confirmation of the dimensional structure of the SCL-90: A study in construct validation. *Journal of Clinical Psychology*, *33* (4), 981-989.
- Derogatis, L. R. (1994). Symptom Checklist 90-R: Administration, scoring, and procedures manual. Minneapolis, MN: National Computing Services.
- Derogatis, L. R., Rickels, K., & Rock, A. (1976). The SCL-90 and the MMPI: A step in the validation of a new self-report scale. *British Journal of Psychiatry*, 128, 280-289.
- Edwards, A. L. (1953). *Edwards Personal Preference Schedule*. New York: Psychological Corporation.
- Enright, D., & Lapsley, D. (1980). Social role-taking: A review of the constructs, measures, and measurement properties. *Review of Educational Research*, 50 (4), 647-674.
- Feffer, M. (1959). The cognitive implications or role taking behavior. *Journal of Personality*, 27, 152-168.
- Feffer, M. (1966). *Initial story (TAT) scoring categories*. American Documentation Institute No. 10032. Washington, DC: Library of Congress.
- Feffer, M. (1967). Symptom expression as a form of primitive decentering. *Psychological Review*, 74 (1), 16-28.
- Feffer, M. (1970). Developmental analysis of interpersonal behavior. *Psychological Review*, 77 (3), 197-214
- Feffer, M. & Gourevitch, V. (1960). Cognitive aspects of role-taking in children. *Journal of Personality*, 28, 383-396.

- Feffer, M. & Jahelka, M. (1968). Implications of the decentering concept for the structuring of projective content. *Journal of Consulting and Clinical Psychology*, 32(4), 434-431.
- Feffer, M., Leeper, M., Dobbs, L., Jenkins, S. R., & Perez, L. E. (2008). Scoring manual for Interpersonal Decentering. In S. R. Jenkins, *Handbook of clinical scoring systems for thematic apperceptive techniques*. Mahwah, NJ: Lawrence Erlbaum.
- Feffer, M. & Suchotliff, L. (1966). Decentering implications of social interactions. *Journal of Personality and Social Psychology*, 4 (4), 415-422.
- Horney, K. (1945). Our inner conflicts. New York: Norton.
- Horowitz, L., Rosenberg, S., Baer, B., Ureno, G., & Villasenor, V. (1988). Inventory of interpersonal problems: Psychometric properties and clinical applications. *Journal of Consulting and Clinical Psychology*, 56 (6), 885-892.
- Jenkins, S., Dobbs, L., & Leeper, M. (2007). Feffer's interpersonal decentering TAT scoring system and social relationships in college and clinical samples. Unpublished manuscript, University of North Texas.
- Kraemer, H. & Thiemann, S. (1987). *How many subjects? Statistical power analysis in research*. Newbury Park, CA: Sage.
- Leeper, M., Dobbs, L., & Jenkins, S. (2008). Melvin Feffer's Interpersonal Decentering. In S. R. Jenkins, *Handbook of clinical scoring systems for thematic apperceptive techniques*. Mahwah, NJ: Lawrence Erlbaum.
- Lowenherz, L. & Feffer, M (1969). Cognitive level as a function of defensive isolation. *Journal of Abnormal Psychology*, 74 (3), 352-357.
- McClelland, D. (1980). Motive dispositions: The merits of operant and respondent measures. In L. Wheeler (Ed.), *Review of personality and social psychology*, Vol. 1. Beverly Hills, CA: Sage Publications.
- Mead, G. (1934). Mind, self and society. Chicago: University of Chicago Press.
- Murray, H. A. (1943). *Thematic Apperception Test manual*. Cambridge, MA: Harvard University Press.
- Niemeyer, K. M. (2004). An exploration of object relations and the early working alliance in a university clinic sample. Unpublished doctoral dissertation, University of North Texas.
- Olshansky, P. M. (1971). *Cognitive parallels re self-structure*. Unpublished doctoral dissertation, Yeshiva University.

- Phillips, L. & Rabinovitch, M. (1958). Social role and patterns of symptomatic behavior. *Journal of Abnormal and Social Psychology*, *57*, 181-186.
- Phillips, L. & Zigler, E. (1964). Role orientation, the action-thought dimension, and outcome in psychiatric disorder. *Journal of Abnormal and Social Psychology*, 68 (4), 381-389.
- Piaget, J. (1950). The psychology of intelligence. New York, Harcourt, Brace.
- Piaget, J. & Inhelder, B. (1956). *The child's conception of space*. London: Routledge & Kegan Paul.
- Strober, M. (1979). The structuring of interpersonal relations in schizophrenic adolescents: A decentering analysis of Thematic Apperception Test stories. *Journal of Abnormal Child Psychology*, 7 (3), 309-316.
- Ward, C. A. (1975). *Delusions as a form of primitive decentering*. Unpublished doctoral dissertation, Yeshiva University
- Werner, H. (1957). *The comparative psychology of mental development*. New York: International Universities Press.
- Wolfe, R. (1963). The role of conceptual systems in cognitive functioning at varying levels of age and intelligence. *Journal of Personality*, 31, 108-123.
- Zigler, E. & Phillips, L. (1961). Psychiatric diagnosis and symptomatology. *Journal of Abnormal and Social Psychology*, 63 (1), 69-75.