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MENTAL HEALTH NURSES' IMAGINATION, POWER, AND EMPATHY:
A DESCRIPTIVE STUDY USING ROGERIAN NURSING SCIENCE

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Maureen B. Doyle

April 7, 1995
DEDICATION

For beauty that transcends the fear of space
For wisdom that envisions love 'midst chaos
For eternal joy in rhythmic discipline
For the dignity of womanly choice
For pain's elegant complexity
For these, and
For the incomparable gift of life,
I gratefully dedicate this dissertation
to the starflight memory of my teacher,
my mother, Emerita T. Bednar (nee Doyle).
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Timing patterns render the invisible effort of energy fields into perceived grace. Several human metronomes kept the flame of rhythm that sparked this project toward grateful resolution. John Phillips, the chairperson of my committee, magically created time to dialogue with gentle dedication to detailed vision while my ideas crystalized. During the quiet that falls over the university when holiday weekends begin, semester breaks occur, or others simply go home for a day's rest, Dr. Phillips carved out time to critique and guide. During a particularly despairing summer when there was dim likelihood that a viable proposal would ever emerge from my distracted life, he called. The surprise of being understood inspired me to rearrange priorities that prevailed even through the watery wisdom gleaned in tears. He channeled time out of time for this study—beyond empathy.

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CHAPTER I
THE RESEARCH PROBLEM

Introduction

Practicing mental health nurses daily face challenges to know that humanness and potential healing are inherent in the behavior of clients that often appears to be bizarre, violent, despairing, grandiose, and noncompliant. They also must be able to identify the invisible turmoil of some clients who appear outwardly successful, pleasant, and cooperative, yet are unable to explain a growing dissatisfaction in their lives. The empathy of a mental health nurse is a powerful means for understanding this diverse behavior (La Monica, 1979; Wheeler, 1988). Thus, the concept of empathy is of importance in the practice of nursing.

Rogers (1970, 1986, 1988, 1990, 1992, 1994a, 1994b) describes a model of Unitary Human Beings in which she provides a vantage point for exploring the empathy of nurses within a unique worldview of nursing science. In Rogers' model, empathy takes place through mutual process whereby nurses seek to know the experiential world of their clients. Clients are
remarkably sensitive to the experience of being understood, which often may precede their capacity to understand themselves (Free, Green, Grace, Chernus, & Whitman, 1985). Both nurses and their clients, not just one or the other, are changing in empathic encounters. This study is a beginning search for factors associated with empathy in a specific group of nurses in mutual process with their clients.

Human imagination is a link to alternate realities which Brustein (1991) describes as an artistic participation with one's own uniquely evolving world and the diverse world of another that is not explained by conventional logic. Rogers (1970) also noted that "imaginative speculation precedes verification" (p. 87). It may be that mental health nurses who are open to careful introspection and the creative flow of their own thoughts and feelings inherent in imagination in the context of therapeutic relationships with clients may manifest higher empathy.

Barrett (1983, 1986, 1988, 1990, 1992, 1994) derived a theory of power from Rogers' model that differs from traditional notions of power as control or dominance. She asserts that people have a capacity to knowingly participate in change and this ability will be manifested by awareness, choices, freedom to act intentionally, and involvement in creating change.
Awareness of options and intentional involvement by which mental health nurses knowingly participate in change with their clients may be associated with their manifestation of empathy. This view of power as enhancing empathy is directly opposite to the traditional view of power as being inversely related to empathy (Clark, 1980; Drew, 1986; McAdams, 1989).

Dubos (1961) stated that "imagination depends upon a state of emotional and intellectual freedom which makes [one] receptive to the impressions from the world in its confusing, but enriching totality" (p. 122). One may infer from references to the power of the human imagination (Capra, 1988; Pope & Singer, 1978) and the imaginative use of power (Boulding, 1989; Cohen, 1989) that an intricate web of relationships unites these factors. Rogers' (1992) concept of pandimensionality, or transcendence, is a characteristic common to each factor. This researcher draws on the association between imagination and power suggested by Dubos and other authors to explore the associations between imagination, power, and empathy in mental health nurses using the lens of Rogers' model.
The Problem

What are the relationships among imagination, power, and empathy in mental health nurses?

Subproblems
1. What is the relationship between imagination and power in mental health nurses?
2. What is the relationship between power and empathy in mental health nurses?
3. What is the relationship between imagination and empathy in mental health nurses?

Definitions
Empathy is understanding that involves a central focus and feeling with and in a client's world, accurate perception of the client's world by the nurse, communication of this understanding to the client, and the client's perception of the nurse's understanding (La Monica, 1981). Empathy will be measured by the Empathy Construct Rating Scale (ECRS) (La Monica, 1981).

Imagination is private thinking and feeling that flows in vivid, pleasant, and creative ways during waking and sleeping dreams, fantasies, memories, and deliberate reflections (Singer & Pope, 1978). Imagination will be
measured by the positive-constructive scale of the Short Imaginal Processes Inventory (SIPI) (Huba, Singer, Aneshensel, & Antrobus, 1982).

Mental Health Nurse is a registered nurse who has specialized in psychiatric-mental health by earning a Master's degree that required supervised clinical experience and the acquisition of knowledge and skill in the practice of psychiatric-mental health nursing (American Nurses' Association, 1982). Basic and advanced levels of this specialty practice are differentiated by educational preparation, professional experience, type of practice, and national certification (Coalition of Psychiatric Nursing Organizations, 1994).

Power is knowing participation in change that characterizes the continuous patterning of human and environmental fields (Barrett, 1983). Power will be measured by the Power as Knowing Participation in Change Tool, version II (PKPCT, vII) (Barrett, 1986).

Delimitation

Nurse participants will be female since there are significant gender differences in relation to empathy (Davis, 1983; Eisenberg & Lennon, 1983; Hanson & Mullis, 1985; Hoffman, 1977), imagination (Giambra & Traynor, 1978; Huba, et al., 1982), and power

**Theoretical Framework**

Nursing conceptual models begin from a worldview that shapes one's perception of reality. In her conceptual model, Rogers (1970, 1994) views people in the context of their unique worlds as constantly changing energy fields characterized by openness, wholeness, and the transcendence of time and space known as pandimensionality. Energy fields are identified by a patterning process that is distinctly different from particulate, dichotomized views. Rogers (1986) identified three homeodynamic principles to describe the process of change as integral, resonant, and helical. According to these principles, change occurs through continuous, mutual process of human and environmental fields that manifest low and high frequency wave patterning and an increase in innovative and unpredictable diversity.

The researcher used the basic concepts and principles of Rogers' (1994) model to structure the present study whereby one studies "holistically, human beings as energy fields" (p. 4). It is axiomatic in Rogers' (1992) model that human field pattern is an
abstraction that can only be perceived indirectly. Each human field pattern is unique and integral with its own unique environmental field pattern. The human field is revealed in manifestations of patterning which are "observable events in the real world" (Rogers, 1992, p. 30) that "provide a link to appropriate operationalization" (Cowling, 1986, p. 71). Human fields continuously change patterning in concert with environmental fields manifesting patterns of increasing diversity. Human field researchers focus on the "acausal flow of energy rather than on subject-object relationships" (Phillips, 1991, p. 142).

Like all human beings, mental health nurses are energy fields characterized in Rogers' (1992) model by openness, wholeness, and pandimensionality. The unique field patterning of mental health nurses emerges from the mutual process in which they engage with their environmental fields. The patterning process of mental health nurses gives rise to constant, accelerating change whereby specific potentials are actualized. Mental health nurses have a particularly high expectation for empathy (Olsen, 1991), and they often intentionally use their personal, subjective experience in their therapeutic involvement with clients (Boguslawski, 1990).

Empathy involves changing understanding and is a
manifestation of the pandimensional mutual process that exemplifies Rogers' (1992) principle of integrality. Like all integral field behavior, empathy requires participation in diverse patterning. Diversity is described in Rogers' (1992) principle of helicy from which Barrett (1983) derived a theory of power in which she focused on the pandimensional nature of change as knowing participation. Imagination flows in rhythmic waves of pandimensional pattern changes that are captured by Rogers (1992) in her principle of resonancy. Imagination opens infinite possibilities.

Rogers (1970) discussed empathy only indirectly in her early writing: "The warm subjective encounter between two persons facilitates change" (p. 69). However, the basic criteria for empathy can be taken from her assertion that persons are "characterized by the capacity for abstraction and imagery, language and thought, sensation and emotion" (p. 73). Olsen (1991) discusses "shared humanity of fields" in his philosophical explorations of the concept of empathy and clarifies that the mutuality of integral fields is both human and environmental and that humanness evolves to the degree that energy is shared. Varner's (1992) description of empathy as a unitary, "rhythmic flow of energy" (p. 8) supports a Rogerian view of empathy. He also used the Empathy Construct Rating Scale (ECRS)
to measure the concept.

La Monica (1981) used the humanistic perspective of Carl Rogers (1961, 1975, 1977/1989) to define nurses' empathy as involving their thoughts, feelings, perceptions, and ability to communicate understanding of and with clients. The concept of empathy is the same, according to La Monica, whether it is reported by nurses themselves, their clients, or the nurses' peers. Manifestations of empathy identified by La Monica (1981) are nonverbal behavior, openness and honesty with oneself and others, sensitive perceiving and listening, responsive communicating, and respect for oneself and others.

Imagination and power may have a complementary relationship. Imagination captures a creative potential that is playful and spontaneous. Power is a deliberate, knowing participation in actualizing specific potentials (Barrett, 1983) that includes four components: awareness, choices, freedom to act with intention, and involvement in creating change. Imagination may be associated with awareness so that more choices are perceived (Margulies, 1989) and with freedom to act with intention so that more diverse involvement in creating change is actualized (Morse, 1991). Power may associate with imagination so that openness and vividness of imagery and concentration are
all heightened (Csikzentmihalyi, 1989).

Power may be associated with empathy by providing a route to understanding via knowing participation in change. Each aspect of power identified by Barrett (1983) may be associated with the empathy of mental health nurses. For example: Awareness focuses the attention of nurses on the thoughts, feelings, and perceptions of relevance to the act of understanding the client's unique world. The perception of choices facilitates thoughts and feelings that are reflected in the experience of freedom to understand with intention and involvement in creating change by communicating responsively and respectfully. Puskar and Hess (1986) described graduate nursing students' experience of power as the ability to assist clients to face painful experiences and create change. Power was associated with the manner in which these nurses used their education, role, and professional and personal experiences to make choices and be involved with their clients.

Imagination may be associated with empathy by creatively bridging the understander and the understood (Margulies, 1989). Adherents of a Rogerian perspective on imagination focus on the creative flow of thoughts, feelings, and perceptions within one's unique world of potentialities. Rogers (1986) postulates that there is
constant flow of the pragmatic with the visionary in imaginative patterning that is creative and unpredictable. Likewise, Singer (1966, 1987) believes that imagination involves the processing of one's unique flow of images with knowledge about the environment as individuals engage with their world.

In several empirical studies based on Rogers' model which are indirectly linked to the theoretical concept of pandimensionality, researchers provide a network of support for the present study. Ference (1986) discusses the transcendence of space and time as human field motion which she made operational by the Human Field Motion Test (HFMT). Barrett (1983) found that 40% of the variance between human field motion and power was accounted for by the squared canonical correlations of .61 for dynamic rhythmicity and .16 for dynamic expansion as measured by Ference's instrument.

Hastings-Tolsma (1992) views the non-spatial, non-linear domain as diversity and designed the Diversity of Human Field Pattern Scale (DHFPS) to measure the concept. She explained 44% of the variance in DHFPS by the addition of HFMT to the predictor variables of the vectorial and oceanic scales of the Time Metaphor Test (Knapp & Garbutt, 1984) and Risk-Taking Questionnaire (Knowles, 1976).
Risk-taking refers to the "innovative choice to participate in change" (p. 3) that expresses an "imaginative pattern of varying rhythmicity" (p. 17).

Butcher and Parker (1990) manipulated the imaginative experiences of their participants by exposing one group to pleasant guided imagery and identifying that this group had Time Metaphor Test scores indicative of the experience of timelessness and higher scores on the HFMT than those in the control group. Alligood (nee Raile) (1986) identified the increasing diversity of human field pattern characterized by evolving human potentialities as actualization. Combined with creativity, actualization accounted for 21% of the variance in empathy measured by Hogan's (1969) cognitive scale in her study. In a later study of elderly persons, Raile (1991) found that the same variables accounted for 48% of the variance in cognitive empathy. Rogers (1992) defines pandimensional as a "nonlinear domain without spatial or temporal attributes" (p. 29) and as "a way of perceiving reality" (Rogers, 1990, p. 7). Raile (1986) studied empathy as a pattern manifestation of the transcendent reality of feelings.

Empathy, power, and imagination are related manifestations of human patterns that are postulated to vary in similar ways relative to each other. Mental
health nurses who score positively in imagination may be expected to score positively in power and in empathy as well. This researcher investigated whether manifestations of imagination as a way of using positive, creative potential, and power as knowing participation in change would be related to the empathy of mental health nurses.

**Hypotheses**

1. Imagination is positively related to power in mental health nurses.
2. Power is positively related to empathy in mental health nurses.
3. Imagination is positively related to empathy in mental health nurses.

**Need for the Study**

Rogers (1970, 1988, 1994) has long held that basic research is essential in identifying a theoretically sound foundation for the science of nursing which has as its focus people viewed as irreducible wholes. The findings of this study may be useful in further elaborating the Rogerian model as a unitary nursing science that includes the concept of empathy as related to the universal human characteristics of imagination and power.
In the vast literature on empathy, there are numerous theoretical and operational definitions of the concept which are conceived in a world view that encompasses closed, dichotomized systems bounded by linear thinking (Surrey, 1990; Wheeler, 1988). In studying empathy as a manifestation of the mutual process of energy fields, a broader perspective of empathy that may be more helpful to practicing mental health nurses may be realized.

Imagination is the well-spring of human creativity which may inspire nurses in their quest to participate in the ineffable and pandimensional aspects of their workaday worlds. Imagination and empathy have often been associated in the literature (Frank, 1978; Margulies, 1989; Rabinowitz & Heinhorn, 1984); however, little is known about the manifestation of these variables in nurses. In a study of imagination relative to empathy in nurses, a researcher may identify a rhythmic patterning process in human understanding.

Nursing power resides in the rich diversity of nurses. Two pattern manifestations of nurses with particular salience for the present study are the commitment implied in their formal education and the kind of health issues they select on which to focus their practice of nursing. These choices about
practice specialization are made at the graduate level, and they reflect a special willingness to care for particular clients. Therefore, the participants in this study are Master's-prepared practicing nurses. Pike (1990) notes that "the ability to empathize is heavily influenced by maturity and experience" (p. 238).

Forsyth (1979), Williams (1990), Birdsall (1991), and Alligood (1992) all strongly recommend that future researchers of empathy in nurses give careful attention to the level of their formal education and the length and type of their clinical experience. Jaffe-Johnson (Personal communication, Nov. 7, 1992) also strongly recommends that future researchers of power in nurses focus on advanced practitioners exclusively after she and several colleagues failed to find support for their hypothesized relationships between perceived power, flexibility, and interpersonal competency in nursing graduate students and faculty.

Leaders in mental health nursing (Loomis, 1992; McBride, 1990) frequently urge practitioners to be open to change in relational patterns, totally accepting of the client's reality, and knowing participants in the therapeutic process. However, no researchers have reported whether mental health nurses incorporate this
advice into their practice. The conclusions of this study may begin to close this knowledge gap for this specific group of nurses. In so doing, one may also extend the knowledge of Barrett’s theory of power to their empowerment.

In the present era of massive health care reform, there are many who advise that the focus of nursing researchers must be sharply pointed on patient outcomes and cost effectiveness, and that research on nurses is superfluous. Citing Boyle (1985), Barrett (1994) counters that we must continuously change ourselves and thereby change everything. "For both clients and nurses, power is the password in the Rogerian revolution" (p. 71).

Mental health nurses are especially aware of an imperative to correct past errors, such as the integration of specialty knowledge across nursing curriculums, and to delineate specialty-specific facets in their practice (Church, 1991). The need for theory in mental health nursing practice has never been so urgent as at present. It is projected that 80% of the nation's population will receive their health care through managed care by the year 2000, and that mental health nurses will be the gatekeepers of the delivery system for mental health care (Haber, 1994).

Knowledge about empathy and factors related to
its generation and nurturance will be needed to
guide mental health nurses in participating fully
and imaginatively with clients. No researchers have
as yet investigated these relationships. Exploring
the factors of imagination, power, and empathy opens
a new vista on nursing's humanism. It is hoped that
future researchers will either focus on specific
forms of nursing practice diversity, or they will
seek more comprehensive knowledge.
CHAPTER II
REVIEW OF RELATED LITERATURE

Imagination

Rogers (1992) states that artful nursing practice "demands vision, flexibility, curiosity, courage, and imagination" (p. 33). She describes the rhythmic manifestation of human creativity as flowing in pragmatic, imaginative, and visionary patterns of human evolution. The transcendent characteristic of all fields is referred to as "pandimensionality" (Rogers, 1992), which provides a conceptual distinction between the three manifestation of creative patterning. Human imagination flows with visionary peaks and pragmatic ebbs in the ceaseless motion of life whereby one creatively understands oneself, others, and the world. The quantity and quality of human experience of the pandimensional varies to include the practical, logical, verbal, concrete, and finite and the impractical, illogical, pictorial, abstract, and infinite.

Imagination, then, is a way of translating the visionary into pragmatic discursiveness and infusing the mundane with vision. Epstein (1986) parallels...
Rogers' (1986) regard for imagination as creative patterning in his belief that imagination is an interface between the concrete or pragmatic world of everyday reality and the non-substantial or visionary world that informs it.

Rapacz and Cowling (1986), who are Rogerian scholars, postulated that imagery is a "prototype activity involving human-environmental field patterning" (Cited by Rapacz, 1990, p. 291). Phillips (1990) coined the term "human field image" (p. 14) to capture the transcendent patterning by which human fields can perceive integrality with environmental fields. Johnston (1994) defined human field image as an individual's awareness of the infinite wholeness of the human field manifested by one's experience of potential and of the integral nature of one's human and environmental fields.

Johnston developed the Human Field Image Metaphor Scale (HFIMS) and used it to operationalize the concept. She found a significant relationship ($\chi = .6647, \leq .01$) between human field image and Gueldner's (1993) Index of Field Energy, a pictorial form of the Human Field Motion Tool (HFMT), the first instrument designed by Ference (1986) to measure diversity using Rogers' model. The validation study in the development of the HFIMS included 358 adults whose
scores Johnston factor analysed to yield a 25 item instrument with three factors and a Cronbach's alpha of .9131 in its final form.

Although the HFIMS represents a valid and reliable instrument developed within Rogers' model, there is a need for additional psychometric refinement. In addition, the concept of human field image is more theoretically congruent with one's general self-esteem, self-image, and/or body image as indicated by one's feelings of identification with visual images only rather than the creative flow of images in all sensory modes that this researcher seeks to capture in the concept of imagination. Johnston's findings do support the present research, however, by positioning imagination as an integral field process.

Butcher and Parker (1990) investigated the subjective feelings of increased imagination, motion, and timelessness experienced during pleasant guided imagery as a manifestation of Rogers' (1986) principle of resonancy. They supported a relationship \( (F = 4.358, \text{df} 1,118, p < .05) \) between imagination and timelessness in a convenience sample of 60 adult volunteers randomly assigned to either a treatment or control group. Although their findings have limited generalizability based on their sampling, Butcher and Parker's findings do support a relationship between...
imagination and pandimensional manifestations of diversity in Rogers' model.

Butcher (1992) subsequently proposed that "Imaging turbulence empowers knowing participation in change toward synchronous rhythms" (p. 8). In other words, imagination can fire creative change whether as a pleasant experience or as a risky choice to encounter the terror and fascination of chaos and set goals.

Several authors share a view of imagination as a resonant flow of creativity that is congruent with Rogers' model. James (1890/1961), for example, describes imagination as an aspect of private experience characterized by the constantly changing personal experience of unique, private thoughts or a flow of images. This private world evolves relative to daily, perhaps even fleeting, experience with the world of others and the world at large. Horowitz (1978) defines the creative process of imagination as thinking and feeling in pictures "that enable us to dream and know reality" (p. 43). Epstein (1986) describes images as a private reality amenable to discovery through special senses that help us to fully see ourselves, others, and our respective possibilities.

Jerome Singer (1966, 1974a, 1975a, 1987) based his model of private experience on a view of information
processing in which facts from the ongoing flow of images are creatively patterned with data about the environment as individuals engage with their world. Congruence with Rogers' model is noted in his description of imagination as a creative process whereby feelings and thoughts contribute to shaping private experience in a goal-directed way. Rogers (1970) maintains that the life process is goal-directed toward diversity (p. 64). Singer (1977) sees the imaginal processes of life as primarily concerned with relationships and goals in daily life although this theme may not be immediately apparent.

Magan (1985) used the three scales of Singer's lengthy original instrument, the Imaginal Processes Inventory (IPI), in her nursing study of imagination in 122 adult males. She identified the imagination variable as "daydreaming" that occurs in three styles corresponding to the respective scales. She found no significant relationship between the use of positive-vivid daydreaming style and subjective well-being. However, significant negative correlations emerged between guilty-dysphoric ($r = -.48, \ p \leq .001$) and anxious-distractible daydreaming ($r = -.39, \ p \leq .001$) styles and subjective well-being. Magan (1985) conceptualized imagination differently from the way this researcher does, but in her study she does
open nursing inquiry into the creative realm of imagination.

The human capacity for "abstraction and imagery, language and thought, sensation and emotion" identified by Rogers (1970) is congruent with Singer's (1987) five domains in imaginative process: 1) tendency to structure private experience using imagery in any sensory or verbal mode; 2) style of thinking such as impulsive/controlled, logical/associational, concrete/abstract; 3) focus of thought on oneself, others, or the world; 4) likelihood that the content of thought can happen; and 5) emotional context. The Positive-Constructive scale of the SIPI (Huba et al., 1982) was used in the present study since it most closely captures Rogers' (1992) decidedly "optimistic view of life's potentials (p. 28)... [whereby]...A positive attitude towards change will be generated while vision and imagination grow" (p. 33). High scorers on this scale believe that imaginal processes are worthwhile, help generate original ideas and solve problems, and often generate pleasant thoughts. Their imaginings have a vivid visual and aural quality, a future time-frame, and help to plan alternatives.

imagination as relational dialogue that occurs in two forms: verbal and mixed visual/verbal imagery and has three functions: understanding, rehearsal, and catharsis. Their findings also support the use of the Positive-Constructive scale of the SIPI in the present study. Mixed visual/verbal imagery is associated with more pleasantness ($t = -3.5, p \leq .001$) and less focus on oneself ($t = 4.03, p \leq .001$), which suggests a stronger empathic experience of the other. Purely verbal imagery is associated with more understanding ($t = 2.41, p \leq .017$) and more rehearsal of actual communication ($t = 2.19, p \leq .029$), but according to their findings, these associations occur only during highly conflictual, problem-solving situations. Rogers (1970), however, focuses on "evolutionary creativity" (p. 71), not on adaptation to conflict.

**Power**

Barrett (1988) defines power as "the capacity to participate knowingly in the nature of change characterizing the continuous patterning of human and environmental fields" (p. 50). In this theory of power, derived from Rogers' model (1970, 1994), Barrett views human beings as not reducible to parts and changing mutually with their environments with increasing diversity of field patterns. Barrett's
theory of power represents a major shift away from prior views of power as domination and control (Galbraith, 1983; Weber, 1921/1947; Wertenberg, 1990) to one of participating knowingly.

Four major concepts are central to Barrett's (1983) theory of power: awareness, choices, freedom to act intentionally, and involvement in creating change. Carl Rogers' (1977/1989) influence is evident in her discussion of awareness as "the focusing of attention on that which one is capable of perceiving and a reflection on something of the flow of the organism" (p. 25). Csikzentmihaly (1989) describes an experience of centered oneness in his social psychological formulation of the concept of flow that suggests strong similarity to Barrett's notion of awareness. Barrett's awareness and Csikzentmihaly's intense concentration of flow are both characterized by a pandimensional sense of timelessness whereby one loses oneself in a task. When there is a match between one's skill and the requirements of a task, a "peak experience" evolves.

Decision-making among alternatives and creative selection from all possible potentials constitute choices. According to Margulies (1989), our ability to sense options or other possibilities provides us with a chance to transcend ourselves, to imaginatively know others. Further, the more informed our choices are,
the more we knowingly participate.

The atmosphere in which one makes responsible choices is described by freedom to act intentionally. Whether under duress or an exuberantly permissive feeling of entitlement, the experience of freedom is essential to power manifestations and shapes one's participation in change. May (1969) notes that all liberation requires acceptance of responsibility that is directly proportional to the freedom experienced. Likewise, intentionality, or the perception of deliberate choice, requires creative waiting and active participation with awareness of what one waits for.

Literally acting on choices made in freedom captures actual involvement in creating change. Barrett (1983) asserts that humans "share in the creation of the reality of themselves and their environment" (p. 30) in the way they knowingly participate in change and thereby actualize some potentials rather than others.

The involvement in creating change aspect of power has special meaning for mental health nurses as an indicator of their investment in relations with their clients. The literature is primarily directed at the dangers of becoming over- or under-involved with clients. Heifner (1993), however, speaks of positive connectedness of nurses and clients whereby involvement
is expressed in behavior like the amount of time spent with clients, being available at critical moments in the recovery of clients, bringing a book or suggesting other resources like group to promote connection. Morse, Bottorff, et al. (1992) state that when nurses are "wittingly involved with clients" (p. 820), they use more energy than in a rote professional engagement, yet such involvements are innately more rewarding and their reciprocal nature prevents burnout. "Intensity of encounter" where one is "wholly involved" is a hallmark of creativity (May, 1975, p. 43).

Three studies of Barrett's concept of power in nurses support the present study. Trangenstein (1988) found a significant (p ≤ .001) canonical correlation (.53) among the predictor variables of power and job diversity and the criterion variables of job satisfaction and job involvement which accounted for 28% of the variance. Staff nurses (N = 325) reported a feeling of well-being and identification with their jobs when they perceived themselves to be knowing participants in a diverse job. If so, then perhaps nurses who participate knowingly may also be open to the specific job task of being empathic with their clients. Further, it may be that nurses who freely intend to provide specialized care for particular clients may also identify freely with the diverse ways
in which these clients manifest well-being.

Trangenstein's ancillary findings included the fact that seven descriptive variables accounted for 18.7% of the variance of power: Years of experience, specialty area, educational degree, age, state, population of the city in which the participants resided, and work hours. Only 6% of the nurses in her study held graduate degrees and 8% worked in mental health, but 70% had at least seven or more years of experience.

Caroselli-Dervan (1991) found a small, but significant relationship ($r = .244, p \leq .01$) between the freedom to act intentionally scale of Barrett's power instrument and feminism in 89 chief nursing executives in acute care hospitals. Nurse executives who promote the autonomy and independence of themselves and their staff also opposed stereotypical sex roles that oppress them. If so, then perhaps nurses in specialized mental health practice who freely and intentionally act will seek to optimize their understanding of and with their clients' experiences, including oppression. And perhaps female advanced practitioners in mental health nursing will optimize choices by imaginatively participating in diverse patterning. The nurse executives whom Caroselli-Dervan studied included 83% with graduate degrees and 79% with
at least five or more years of executive experience.

Trangenstein (1988) and Caroselli-Dervan (1991) provide interesting data about power manifestations in nurses engaged in different levels and settings of practice. Although both samples were composed of very experienced nurses, they differed widely in their levels of formal education. The need for additional knowledge of the effects of both formal education and practice setting of nurses relative to their power manifestations gave impetus to Moulton's (1994) study of power and empathy in nurse executives in three different settings.

Moulton's (1994) findings support small but significant relationships between two aspects of empathy, perspective-taking ($r = .1817$, $p < .05$) and the personal distress scale ($r = -.1467$, $p = .048$) of Davis' (1980) Interpersonal Reactivity Index (IRI) and total power on the PKPCT, vII using a random national sample of 182 nurse executives. Moulton also found significant interaction effects for basic nursing preparation and highest degree on total power ($F = 1.912$, df 10, 163, $p < .04$), power as choice ($F = 2.038$, df 10, 163, $p < .03$), and power as freedom ($F = 1.863$, df 10, 163, $p < .05$) which suggest that educational experience has a significant impact on the ability of nurse executives to participate in
change.

Caroselli-Dervan (1988) and Moulton (1994) focused on the administrative functional role specialty. Both samples were Master's-prepared and practiced in hospitals, institutions where nurses often experience paternalism (Ashley, 1976) and limited job satisfaction (Williams, 1989); nevertheless, their knowing participation was associated with their feminism and their empathy. In addition, Moulton (1994) found no significant difference in the total power and power subscale scores of nurse executives across the practice settings of acute, long term, and home care facilities.

Because neither level of practice nor practice setting have been associated with power scores of nurses, this researcher incorporated findings about specialty area from Trangenstein (1988) and formal education from Moulton (1994) by focusing on specialized mental health nurses. Mental health nurses enhance their knowing by choosing the clients with whom they willingly participate. They also may bring focused awareness, shaped by their education and experience, to the task of intending to understand themselves in mutual involvement with their clients regardless of the setting or their level of practice.
Imagination and Power

The pandimensional (transcendent) aspect of imagination is linked with power by three Rogerian studies. Barrett (1983) states that human field motion is an experience "that transcends time and space as well as movement and stillness" (p. 175). She supported relationships between dynamic rhythmicity and dynamic expansion as measured by Ference's (1986) Human Field Motion Tool (HFMT) and the awareness and choices scales of the PKPCT. The squared canonical correlations of .61 (p ≤ .001) and .16 (p ≤ .02) accounted for 40% of the shared variance between motion and power. Ference derived the HFM construct from Rogers' model to test the principle of resonancy.

Hastings-Tolsma (1992) developed the Diversity of Human Field Pattern Scale (DHFPS) and used the scale with a convenience sample of 173 adult men and women. Her findings support relationships between human field pattern and risk-taking (r = .39, p ≤ .001), and with the vectorial (r = .21, p ≤ .01) and oceanic (r = .19, p ≤ .05) subscales of the Time Metaphor Test (TMT) (Knapp & Garbutt, 1984). Risk-taking was also related (r = .16, p ≤ .05) to the vectorial subscale of the TMT.

Pandimensional human participation in change is the focus of the constructs measured by both the PKPCT
and the DHFFB. Hastings-Tolstoa's (1992) definitions of diversity of human field pattern and risk-taking link her study to both power as participation and the imagination literature. She defines diversity of human field pattern as "field potential which promotes field design that is more varied and of greater innovation and refers to individual awareness of field dynamics representing involvement and sensitivity to change" (p. 2). Risk-taking refers to "the innovative choice to participate in change and is the willingness to enter into challenging situations" (p. 3). "Use of risk-taking strategies are an expression of an imaginative pattern of varying rhythmicity" (p. 17).

Wynd (1992) used two types of guided imagery, power and relaxation, in studying the effects of imagination on power for smoking behavior changes. Wynd randomly assigned 84 volunteer adult smokers to one of three treatment conditions: guided power imagery, relaxation imagery, or no-treatment control in a quasi-experimental, longitudinal pre- and post-treatment design with repeated-measures components to investigate differences among the study groups over time. A self-report of smoking behavior plus salivary thiocyanate levels and the PKPCT constituted the dependent variables.

Wynd (1992) found significant differences among
the three groups at post-treatment on scores for the dependent variables ($F = 13.92, \text{df} \ 8,158, p \leq .05$). Both types of imagery had a significant effect when compared with the control group. The repeated measures multivariate analysis performed on data collected from the two treatment groups at three different times showed that the combined effects of treatments and trials were also associated with significant changes in the dependent variables ($F = 24.67, \text{df} \ 2,127, p \leq .05$). Guided power imagery was more effective than relaxation imagery for increasing power scores. Both imagery treatments were equally effective in reducing smoking rates and enhancing smoking behavior change. These empirical findings support Barrett's (1992) assertion that "innovative imagery...is a form of exercising our capacity to participate knowingly in the nature of change...[and] a unitary experience that transcends the Cartesian mind-body dichotomy" (p. 158).

Morse, Bottorff, Anderson, O'Brien, and Solberg (1992) provide theoretical support for a relationship between imagination and the choice and involvement aspects of power. The choice to imagine is intricately linked with the nurse's involvement in creating change in mutual process with her clients. Morse, Bottorff, et al. (1992) describe involvement in creating change within the nurse-client mutual process according to
four types: Genuine involvement, pseudo-involvement (professional), anti-involvement (defensive), and uninvolved (clinical). The nurses' use of imagination requires flexible and rhythmic levels of involvement with optimal awareness of one's intended choices. For example, the uninvolved nurse-client rapport is characterized by imagining with great effort or intention what it is like for each other. By contrast: "Some feelings may be so intense that caregiving would be impossible or disabling if the nurse permitted herself to imagine and therefore become genuinely involved in the client's [world]" (Morse, Bottorff, et al., 1992, p. 817).

Findings from studies of college students also support a relationship between imagination and power in mental health nurses. Taft and Gilchrist (1970), for example, found that 112 female and 81 male college students who described themselves as imaginative on Taft's (1969) inventory of peak experiences and other related phenomena also scored high on Zimmerman and Guilford's (1963) Creative Interests Scale ($r = .39, p < .01$) and on a measure of creative productivity ($r = .42, p < .01$). One may infer parallels between these aspects of imagination and the awareness and involvement aspects of Barrett's power concept. The students identified creativity in their awareness-of-
self patterning and actually expressed themselves in creative work. In additional findings from this study the researchers describe imaginative students who are also creatively productive as impractical and low on control. This view is congruent with Rogers' openness to the unconventional (visionary) and participation rather than control.

Anderson (1983) found support for several relationships between imagination and the intention that undergirds the freedom to act aspect of power in his experimental study of 93 college students. Imagining oneself performing (or not performing) a target behavior produced corresponding changes in intentions toward that behavior ($t = 2.95$, df = 29, $p \leq .01$). The more frequently one imagines oneself in a behavioral script, the more intention changes ($t = 1.92$, df = 29, $p \leq .007$ after two trials, $t = 2.03$, df = 29, $p \leq .005$ after three trials). Changes in personal intentions did not occur when the main character of the script was not oneself ($t = 3.05$, df = 29, $p \leq .005$). Anderson (1983) contributes to the present study by empirically supporting the links between creatively holding ideas about potential realities in awareness and the changes in intentions required for creative participation in change.

Johnson (1986) describes the concept of Active
Imagination as a special use of the power of the imagination that Jung (1928/1953) originally developed. Congruence of Active Imagination with the awareness aspect of power (Barrett, 1983) is evident in Johnson's description of imagination as being neither aware nor unaware but having aspects of both that flow with each other. Imagination is like "two rivers that merge to form one powerful stream...where one's totality forms into a unity" (p. 140). He adds that the dialogue between awareness and unawareness gives rise to the transcendent function that stands as a synthesis. "In being fully aware, the imagination acts with power. The essence of Active Imagination is [knowing] participation in imaginative experience" (p. 140).

**Empathy**

Empathy is the understanding that mental health nurses have in mutual process with their clients. To understand and to be understood encompass human field phenomena that cannot be fully explained by biology, psychology, sociology, physics, or any other reductionistic view. Because Rogers (1970, 1994), in her unitary model, focuses on the whole, particulate knowledge is of very limited usefulness in reviewing the literature on empathy. Nevertheless, common themes of empathy as participation or change toward diversity
are compatible with Rogers' model.

Living systems organize themselves into patterns of "ordered unfolding of complexity" (Capra, 1982, p. 285). The constant motion "at the edge of chaos" gives rise to emergent, novel properties according to Waldrop (1993). This idea adds contemporary affirmation to Rogers' (1970) original premise that the life process involves continuous "irreversible and unidirectional" (p. 59) change. Rogers (1990) states that: "The evolution of human beings is a dynamic, irreducible, nonlinear process characterized by increasing diversity of energy field patterning" (p. 9). Viewed as a manifestation of human field patterning, empathy is constantly changing. The literature on the human evolution of empathy describes both an ontogenic (Basch, 1983) and a phylogenic process (Humphrey, 1983) albeit from a biologic perspective. This researcher assumes change in empathy is continuous and seeks to find beginning support for continuously changing factors that may be associated with its patterning in mental health nurses.

The philosophic roots for the concept of empathy can be traced to Lipps (1885/1960), who adapted the German word "Einfühlung," which loosely translates to "feeling into," from the discipline of aesthetics where it was used as a mode of perception. Many thinkers
from different disciplines have studied empathy intensely over the past century.

Psychologists tend to focus narrowly on either one or several aspects of empathy as a personality trait in empirical studies. For example, Hogan (1969) views empathy in his cognitive theory as an intellectual understanding of others. Mehrabian and Epstein (1972), in contrast, view empathy as an affective response or feeling attribute in which there is a sharing of the emotions of others. Truax and Carkhuff (1967) and Barrett-Lennard (1962) developed relational measures in which they focus on the communication and perceived aspects of empathy.

Several researchers define empathy as a multidimensional construct and use multiple measurements in their study of empathy (Davis, 1983; Free, 1985; Williams, 1989, 1990). These researchers not only view empathy as a static characteristic, but also equate complexity with increasing numbers of criterion variables. Defeo (1990) and Parse (1987) refer to this perspective as one of totality, which implies a summation of parts. A researcher using a unitary nursing model requires a simultaneity perspective of mutual field processing. Therefore, these findings provide only weak theoretical support for the present study which differs by viewing empathy
as a pattern manifestation of the whole.

In psychoanalytic and humanistic psychology literature, there are several perspectives on empathy that are congruent with Rogers' (1992) model. Freud (1921/1955) saw empathy as a process of identification and imitation by means of which we participate in creating our attitudes toward ourselves and others. Kohut (1977) discusses empathy as an organizing pattern in the process of one's self-development. Carl Rogers (1980) defined empathy as a dynamic process with another person wherein one "enters the perceptual world of another...with sensitive involvement in the felt meanings which flow in the other person" (p. 142). An empathic way of being implies that one participates with another without making value judgments, with "privileged intimacy" (Kraus, 1987, p. 3), and with frequent reference to one's own ongoing flow of experiencings (Gendlin, 1962).

Maslow (1971) positions empathy at the center of full human development where "reciprocal isomorphism" (p. 161) of the communicative relationship between the person and the world is characterized by mutual forming of understanding. This view applies to the present study to the extent that mental health nurses may be open to changing themselves with their clients relationally.
Traditionally, empathy theorists have focused on change that unidirectionally occurs in either of the participants in a relationship and emerges from the need for and the need to be understanding. Surrey (1990) adds the motive "to be empathic with others" (p. 2) in mutuality or dynamic relationship "towards increasing possibilities of connection" (p. 4). The integrative experience of "being in and for the relationship" (p. 11) promotes growth of both persons according to Jordon (1990), who also specifies the ways that caregivers change in the relational context with clients. Like M. Rogers (1992), the designers of the self-in-relation model reject the old world view of differentiation and individual separation as pivotal to human maturity/diversity. Unlike M. Rogers (1994), neither the proponents of self-in-relation nor any psychological theory address the unique concerns that nurses bring to caring relationships, such as personal constancy across settings and alterations in health, or nurturance across the life span of unitary irreducible individuals and in systems.

Diverse methods characterize nursing inquiry of empathy. Zderad's (1969) qualitative study of empathy became the cornerstone for her later phenomenological nursing science. Carper (1978) inspires ongoing study of empathy within nursing with her view of empathy as
an aesthetic pattern of knowing through which nurses gain knowledge of another's unique experience. Rogerian nursing scholars conceptualized empathy as "rhythmic complexity" (Madrid & Winstead-Fry, 1986, p. 8) and "shared wave-like rhythm" (Wheeler, 1988, p. 100).

In two Rogerian studies of empathy investigators provide empirical support for the present study. Raile (1982, 1986) studied empathy from Rogers' model using Hogan's (1969) scale and found significant ($p \leq .001$) but low correlations with creativity ($r = .269$) and actualization ($r = .391$) using a sample of 236 volunteers between 18 and 60 years of age. Although Raile used a cognitive measure of empathy derived from a theory of moral development, she defined empathy as feeling and emphasized the distinction between feeling and communicating empathy. Also, the reliability coefficient Raile reports of .50 for the Hogan scale compromises the overall validity of her study.

Johnson, Cheek, and Smither (1983) also raised serious questions about the face validity of some items of the Hogan instrument, and Cross and Sharpley (1982) reported that 43 of the 64 items either did not correlate or correlated negatively with the total score. However, Sanchez (1986) claimed that the large sample size and acceptable statistics enhance the
credibility of Raile's findings.

Raile (1986) defined creativity as "innovative human field pattern characterized by the tendency toward variety" (p. 147) which connects to Barrett's (1986) description of involvement in creating changes: "The spontaneous, free flow of activity and creative endeavor interplay in the human-environment (process)" (p. 175). Raile (1986) defined actualization as "increasing diversity of human field pattern characterized by evolving human potentialities" (p. 147) which reflects Barrett's (1986) view that choices demonstrate intent: "No matter how limited choices may be, by means of choices humans participate in actualizing some developmental potentials rather than others. Because creativity and actualization combined accounted for 21% of the variance in empathy, Raile's study does provide theoretical and empirical support for the present study which uses empathy as an indicator of the diversity of human patterning manifest in mental health nurses to the extent that they participate knowingly and imaginatively in change.

Alligood (nee Raile, 1992) encourages researchers to distinguish between raw or innate empathy and clinical or learned empathy. Although this distinction does little to compensate for the limitations introduced by using the Hogan scale, she does call
attention to the importance of formal education and/or life experience variables in assessing the metric integrity of the empathy instruments. Using one-way ANOVA, Moulton (1994), for example, found significant differences in empathic concern based on basic nursing preparation ($F = 4.01$, $p \leq 0.009$) and perspective-taking ($F = 2.59$, $p \leq 0.04$) based on highest degree in her sample of 182 nurse executives on Davis' (1980) IRI multidimensional empathy instrument.

Lewis (1976) failed to identify two measures of intuition as predictors of empathy as measured by Mehrabian and Epstein's (1972) Affective Sensitivity Scale using a sample of 85 undergraduates. Lewis (1976) concluded that either there is a distinction between clinical and the universal forms of intuition proposed by Jung (1974) and Wescott (1968) or the empathy instrument was too difficult for undergraduates who had a mean score of 29.7 out of a possible 66. This researcher views empathy as a complex and unitary phenomenon that will manifest with increasing diversity depending on one's life experience, formal education, and practice intent.

Sanchez (1986) found only weak ($r = .17$, $p < .05$) support for the negative relationship she hypothesized between the personal distress subscale of Davis' (1983) multidimensional empathy measure and telepathy in her
Rogerian nursing study of 118 mother-daughter dyads. An unanticipated finding of this study was that belief in one's own extrasensory ability was significantly ($p \leq .005$) related to telepathy. When added to the independent variables of diversity and four empathy subscales in multiple regression, this personal belief accounted for 50% of the variance in telepathy. Since telepathy is pandimensional, Sanchez (1986) adds to the view of empathy as a diverse pattern manifestation that may be related to the pandimensional aspects of imagination and power. Her finding regarding belief in one's unique abilities also suggests that mental health nurses may enhance their empathy by believing they can understand their clients even if the clients are highly bizarre or resistant. The route to achieving this belief, however, lies in optimizing awareness of self and other in intentional, freely chosen, and imaginative participation in change.

La Monica (1981) derived her conceptual definition of empathy from Carl Rogers' work (1961) as operationalized by Truax and Carkhuff (1967). She reformulated the definition for greater relevance to nursing by including communicative action and the client's perception of being understood. Williams (1990) notes that the ECRS has particular potential for nursing studies because it was developed using a sample
(N = 600) of nurses and the items emphasize empathic nursing behaviors. La Monica (1981) used five subscales for content validity when designing the ECRS: openness, respect, perceptual sensitivity, verbal responsiveness, and nonverbal behavior. Because none of the subscales emerged during factor analysis, La Monica (1981) concluded that "empathy exists as a whole and all elements must be present for empathy to occur" (p. 399). Congruence with Rogers' model is seen whereby the subscales, considered as manifestations of theoretical dimensions of the process of empathy, identify the pattern of the human field.

The first manifestation of empathy on the ECRS is openness, honesty, and flexibility that involve a willingness to share feelings and to respond to situations that occur outside the norm, in accordance with one's ethical beliefs (La Monica, 1987, p. 9). Different approaches are used by the participant to encourage others to be open with their feelings whenever the possibility arises. Priorities are often rearranged according to the immediate needs of others. Openness is a basic assumption in Rogers' (1970, 1992) model. Although values are culturally imposed according to Rogers, there is little doubt that a pervasive questioning of so-called norms is of pivotal importance for Rogerian thinkers. If so, then
accepting clients in their unique wholeness is axiomatic so long as one also accepts that the traditional concept of self viewed as separate from the environment, which includes the mental health nurse, is an irrelevant illusion as Rogers indicated (Sarter, 1986).

The second manifestation of empathy on the ECRS is respect for the uniqueness of individuals. Rogers (1992) states, "Not only is field pattern diversity relative for any given individual, but also there is a marked increase in diversity between individuals" (p. 31). La Monica (1987) defines respect for self and others as the belief that one always has a rationale for feelings and behaviors. "Respect is at work when a participant accepts each facet of another—what is said, done, and felt. There is neither a right nor wrong way of behaving since the needs of the whole individual are a unique picture" (p. 9).

The third manifestation of empathy on the ECRS is perceptual sensitivity which is implied by Rogers' (1990) position that noninvasive modalities like humor, therapeutic touch, sound, color, and motion will be increasingly useful in nursing practice. The skill of accurate auditory perception which enhances active listening is only one of the many simultaneous perceptions a mental health nurse uses in practice.
grounded in Rogers' model. Rogers, however, preferred the word "experience rather than perception so as not to be limited to the five senses of the body" (Sarter, 1988, p. 131).

La Monica (1987) maintains that the participant's ability and willingness to enter another's world and understand that world as it is believed to be are indicators of perceptual sensitivity. Looking at a situation in the light of another's goals, strengths, and resources requires experiencing feelings and intensive listening.

The fourth manifestation of empathy on the ECRS is responding verbally with accuracy and compassion. In her early (1970) writing, Rogers placed greater emphasis on language than on speech: "...language does provide a singularly human means for transmitting thought, for preserving the past and anticipating the future...for communicating ideas and abstractions" (p. 70). Rogers (1993) was unrelenting in her own search for a language of specificity for her model and makes frequent use of the dictionary: "Efforts to select words best suited to portray one's thoughts are at best difficult because words are often inadequate to fully communicate the meaning of a particular proposition" (p. 31).

Accuracy and compassionate intent of verbal
messages flow from the mutual process of the participants evolving toward diversity in Rogers' model which is more abstract and global than La Monica's (1987) view that verbal responses show the ways a participant gives messages of support and understanding. Verbal responses convey that another has been heard and check for validity. They are, however, the most observable, pragmatic, and least complex aspect of the communicative aspects of empathy. La Monica (1981) states that "Empathy transcends words" (p. 399), which concurs with Rogers' view that the meaning of verbal messages emerges in mutual process of both participants.

The fifth manifestation of empathy on the ECRS is nonverbal behavior which is considered to be the most potent form of human communication (Lamar, 1985). Rogers (1992) takes nonverbal behavior to include a very broad range of human modes of expression. Her theory of the paranormal, based on pandimensionality, for example, brings experiences like deja vu, clairvoyance, and precognition into the range of "normal" human behavior.

La Monica (1986) states that the motion of the body in physical contact like touch and other gestures in specific situations conveys powerful messages that may enhance understanding even without words.
Nonverbal behavior operates with and is intricately woven throughout verbal communications. Birdsall (1991) supported ($p < .01$) moderate and high relationships, respectively, between empathy and nonverbal communication of 80 nurses in self-reports ($r = .37$) and 80 patient reports ($r = .60$) using La Monica's (1981) ECRS.

**Power and Empathy**

Supportive links between the awareness and intention aspects of power and empathy that direct the present researcher are evident in the literature. Dzurec (1986, 1994) used hermeneutic analysis and multiple triangulation in exploring the experience of power measured by Barrett's PKPCT, vII (1983) from the perspective of 15 persons who exhibit chronic schizophrenic behavior. Major themes of integrality and awareness emerged. As the clients felt more connected with themselves, others (especially nurses), and the world, their power increased.

Dzurec's findings have important implications not only in supporting an evolutionary rather than regressive perspective on schizophrenic experience, but also in underscoring the context-rich nature of change even with persons often seen as powerless. Muller and Dzurec (1993) note that stigma exists in a context and
the meaning of the name "power" itself changes in context. Mental health nurses who choose to knowingly participate with clients who have schizophrenia often find their understanding of themselves and the human experience enhanced by the process even when their practice is devalued by society as, for example, in the underfunding of services to the deinstitutionalized persons who constitute one-third of the nation's homeless population (Krauss, 1993).

Krikorian and Paulanka (1982) provide anecdotal evidence that self-awareness is the catalytic agent essential to the success of nursing students in establishing a rapport with psychiatric clients. They describe the transcendence of self-consciousness that is similar to Rogers' (1970) view of the propensity of some humans to "ponder the vastness of the cosmos" (p. 67) and to create "avenues to understanding" (p. 70) through "awareness of self and environment" (p. 71) and active participation in change.

Although Krikorian and Paulanka do not report sample size or any meaningful statistical data, other elements of systematic empirical investigation are present. For example, they adapted an 11 item tool to measure the self-awareness of students both pre- and post-psychiatric nursing. They included a comparison with a self-selecting control group, described the
procedure of the learning experience in detail, and reported theoretically meaningful findings.

Krikorian and Paulanka (1982) report that all students demonstrated increases in aspects of self-awareness whether or not the change had been identified initially as desired. Those students who showed the most quantitative progress toward desired goals also demonstrated the greatest qualitative growth in relationships with clients as ascertained from verbal, written, and observational data. These authors concluded that two simultaneous critical processes are occurring in the dynamic process: As the person is developing, the relationship is developing and vice versa. As self-awareness increased and anxiety was reduced, the student's energy was used creatively to relate more effectively with clients. This effect mirrors the Rogerian view in the present study that awareness emerges in mutual process and is associated with changes in empathy in professionally mature mental health nurses.

Williams (1990) states that empathy is often not volitional but the experience can be fostered by freeing oneself from distractions and intending to understand another. The intention to empathize following instruction is moderately related ($r = .37$, $p \leq .05$) to palmer sweating, a physiological measure
of empathy (Stotland, 1978). This researcher conjectures that the intentional aspect of power in mental health nurses may be all that distinguishes innate from clinical empathy as discussed by Alligood (1992) previously.

Stensrud (1979) used a Taoist perspective on personal power derived from Carl Rogers' (1975) humanistic psychology and phenomenology, in which he maintains that personal Ch'i varies directly with one's ability to empathize or know the world as a manifestation of the process of Tao. Personal power and empathy are actually two aspects of one process or flow. Traditional Westerners view empathy as a characteristic or ability of the therapist that facilitates the experience of power on the part of the client. The Taoist view is especially relevant to Rogers' (1992) model in its position that there is a single flow of vital force (or energy) which promotes the experience of both empathy and power on the part of each person involved in a patterning encounter.

Barrett (1983) describes awareness as "the focusing of attention on that which one is capable of perceiving and a reflection of something of the flow of an organism" (p. 25). As mental health nurses gather and share information in mutual process with clients, their awareness increases. Trust and confidence in the
mutual process itself grows so that the understanding of the mental health nurse opens broader access to information, including the clients’ unspoken thoughts, feelings, desires, and needs. This vicarious or tacit understanding provides a foundation that promotes growth via knowing participation in change.

Imagination and Empathy

Numerous early researchers of empathy in nurses explored the efficacy of various methods to enhance the empathy of students and practicing nurses (Clay, 1984; Kalisch, 1971; La Monica, Wolf, Madea, & Oberst, 1987; Layton, 1979; Morath, 1989; I. Rogers, 1986; Smith & Walker, 1984; Welch-McCaffrey, 1984). Findings were contrary and debate continued until recently as to whether empathy is amenable to change at all.

Morse (1995) presents an extreme position that the concept of empathy simply does not fit nursing. She proposes to correct this gap by replacing the label with the concept of "compathy" (p. 43), which she defines as feeling another's pain rather than suffering. This researcher submits that the lack of a unifying conceptual model of nursing is what limited the early studies of empathy. The link between imagination and empathy derived from Rogers' (1992) model that is explored in this study signifies a new
approach to the dilemma.

Frank's (1978) experimental study of imagination training supports a relationship between imagination and empathy. Frank studied the relationships between cognitive, emotional, and nonverbal empathy in four groups with 20 students in each. Each group was given a different type of training in imagination. The first group, Behavior-Discussion, received training in the contingencies of behavior with a view to discerning how one could decrease unwanted imaginal behaviors by studying the sequence of overt acts and their reinforcement consequences. The second group, Fantasy-Experience, simply came together to share dreams and fantasies and to engage in group fantasizing with no attempt at interpretation or verbal commentary. The third group, Fantasy-Discussion, carried out much the same process as the second except that there was much more intention to understand and share understandings in a cognitive manner. The fourth group, Fantasy-Interest (the control), were individuals interested in theater who had begun training themselves in imagination.

Frank's (1978) findings "solidly support the general hypothesis that individuals can be trained to harness their imaginative activities in order to increase their empathic abilities" (p. 337). The
Behavior-Discussion and Fantasy-Discussion groups scored higher on a cognitive measure of empathy than did participants in the Fantasy-Experience or control groups ($t = 3.35$, $df = 102$, $p < .001$). On empathy as the ability to identify the feelings of others, the pure Fantasy-Experience and Fantasy-Interest groups performed better than the Fantasy-Discussion group ($t = 3.05$, $df = 102$, $p < .01$). The nonverbal communication aspects of empathy correlated ($r = .44$, $p < .001$) with emotional empathy in Frank's study and is similar to Birdsall's (1991) finding of a moderate relationship ($r = .37$, $p < .01$) between nurses' nonverbal communication and empathy measured by La Monica's (1981) ECRS.

Additional findings from Frank's (1978) study are particularly relevant to this study. In post-treatment analysis of participants' logs of their imaginal processes, she found that individuals whose imagery was primarily in the visual mode also demonstrated greater attunement to feelings ($r = .26$, $p < .05$), had greater nonverbal sensitivity ($r = .21$, $p < .05$), and more accurately predicted the behavior of others via their empathy ($r = .18$, $p < .05$). Frank's (1978) findings support the present study by highlighting the comprehensive nature of both imagination and empathy and by validating the
researcher's view that imagination provides a link to empathy.

Rabinowitz and Heinhorn (1984-85) also supported a relationship between imagination and empathy in 141 Israeli adolescents. Using the frequency of day- and night-dreaming scales of the original IPI, they identified participants as low, medium, or high on imagination. Daydream data showed that a behavioral measure of empathy differed according to imagination (F 2,135 = 16.57, p ≤ .001). Nightdream data showed that behavioral empathy not only differed according to imagination (F 2,135 = 24.17, p ≤ .001) but also interacted with an instruction to imagine (F 2,135 = 4.23, p ≤ .01). Scheffé comparisons between groups demonstrated that empathy-evoking instructions elicit greater empathy in high and medium imaginative groups, but they have the opposite effect in the low imaginative group. It appears that individuals who are relatively unimaginative lose empathy when required to "intend" or "work" on it.

Lawroski (1989) explored the relationships of numerous characteristics of thought processes with cognitive, emotional, and imaginal empathy as it was actually occurring. Using a thought sampling procedure she beeped participants (N = 39) while they listened to a tape recording about emotional events.
of others. Their reports to Lawroski helped her to identify the flow of thoughts and feelings in imaginative awareness of the experiences of others. When listeners in Lawroski's study visualized the others' experience, they felt closer to the others and had emotions slightly more like those reported by others. Those who were more overall empathic showed the most empathy when their private images were most spontaneous rather than effortful. Her findings support Binswanger's (1958) existential view of empathy as a complex, deeply subjective expression of a mode of "being-together and co-being" (p. 226) that includes participation, warmth, sensations, and identification and whose possibilities vary only with imagination.
CHAPTER III
THE METHOD

Design

This descriptive study was designed to test the relationships of imagination, power, and empathy using Rogers' (1990, 1994) Nursing Science of Unitary Human Beings wherein she describes a mutual process of human and environmental energy fields. Variables were measured using the Short Imaginal Processes Inventory (SIPI) (Huba et al., 1982) for imagination, Power as Knowing Participation in Change Tool, version II (PKPCT, vII) (Barrett, 1986) for power, and the Empathy Construct Rating Scale (ECRS) (La Monica, 1981) for empathy.

A correlational design was used to provide beginning information about the empathic patterning process in mental health nurses relative to their imagination and power. Pearson product moment correlations were used to test three hypotheses. Additional analyses were conducted on two subscales of the SIPI and a multiple regression technique was used to more fully describe the pattern of relationships among the variables.
Sample

A sample of 68 provided .95 probability of detecting a medium population coefficient (r = .30) with alpha set at .05 (Cohen, 1988). To secure a nationally representative sample, however, 280 mental health nurses were randomly selected from the total (615) membership mailing list arranged in zip-code order that was purchased from the American Nurses' Association (ANA) Council of Psychiatric-Mental Health Nurses. The structure of the ANA Councils has since been redesigned according to functional roles such as education, research, and advanced practice rather than practice specialties (ANA, 1993).

The researcher originally planned to select 70 names from each of the four geographic districts of the United States. Membership, however, is unequally distributed and parallels the national distribution of mental health nursing specialists (Fox & Merwin, 1990). Forty-nine states were represented on the mailing list from four major geographic districts of the United States: West (18%), North Central/Midwest (25%), South (20%), and East (37%). In keeping with the focus of the researcher, only female, Master's-prepared nurses were included. One hundred and ninety-eight (70.7%) responded. Twenty-nine (14.6%) were eliminated from the study as follows: Fourteen
did not meet the study criteria of being Master's-prepared, two were not deliverable, four posed a dilemma regarding ethnicity (two left the item blank, one was Black, one was Hispanic), and nine declined to participate. The final sample consisted of 169 mental health nurses.

Dillman (1978) maintains that a nonresponse is not necessarily a refusal to participate until proven otherwise. If one applies Dillman's recommendations for calculating a response rate by subtracting the ineligible and the unreachable from the total mailed and dividing that number into the number returned, then the response rate for this study is 76.1%. Considering the twenty-page length of the questionnaire, this response rate is quite high. Further, this rate exceeds the recommendations of several statisticians (Babbie, 1973; Cochran, Mosteller, & Tukey, 1953; Lueptow, Mueller, Hammes, & Master, 1977; Sewell & Hauser, 1975).

Douglas, Briones, and Chronister (1994) distinguish between response rate and consent rate. They stress the importance of including as much information as possible in nursing research reports so that factors associated with high rates of consent among responders can be identified based on aggregated data. The reasons for declining to participate given
by nine responders in this study were: Five lacked time and described their busy schedules, two no longer perceived themselves as actively involved in mental health nursing which is in marked contrast with five participants included in the study who described themselves as quite active despite being beyond traditional retirement age, one was hospitalized for serious physical illness, and one was concerned about confidentiality.

Procedure for Data Collection

Dillman's (1978) Total Design Method (TDM) for mail surveys with two follow-ups was used for data collection. The high (76.1%) response rate was expected from these specialized nurses based on reported response rates from nursing generalists ranging from 65% to 94% (Baker, 1985; Betrus & Hoffman, 1992; Buring & Hennedens, 1992; Trangenstein, 1988). The questionnaire (see Appendix A) was arranged to optimize motivation from the most social utility to potentially threatening personal data. The questionnaire was printed as a booklet and included two items to capture attention pictorially, six counterbalanced forms of the three instruments, and a demographic section. The text was printed on off-white paper with a blue cover bearing New York University's
torch and the Nightingale lamp as symbols of nurses' understanding.

A cover letter (see Appendix B) describing the study's purpose, confidentiality assurance, and importance of the nurse's response was included. Codings on a separate return postcard (see Appendix C) were used for follow-up as the questionnaire had no identifying information. Participants who would like to obtain a copy of the results were instructed to print their name on the enclosed, coded postcard. Exempt status from the Human Subjects Committee of New York University was obtained because there was no risk involved for participants in the study. Return of the questionnaire constitutes tacit, informed consent.

Two weeks after the questionnaire was mailed, a postcard (see Appendix D) was sent to all participants to show appreciation to early responders, re-emphasize the importance of the nurse's response, and invite the participants to request a booklet if they had not received one. A second follow-up letter (see Appendix E) with a replacement questionnaire was sent three weeks later to the postcard non-responders. Ninety-four (47.5%) responded to the first mailing, 78 (39.4%) responded to the postcard, and 26 (13.1%) responded to the second follow-up letter. The entire data collection of 198 returns was completed in seven
weeks. Eight returns were received after the cut-off date and, therefore, were not included in data analysis. Four of the eight late responses were unusable even if received on time.

**Instruments**

**Short Imaginal Processes Inventory**

Positive relationships were hypothesized between the Positive-Constructive scale of the Short Imaginal Processes Inventory (SIPI) (Huba et al., 1982) and the other study variables of power and empathy because of the congruence of the SIPI with the patterning of imagination implied by Rogers (1992). Because reliability was established for the SIPI as a whole, the entire 45 item instrument was administered. The 15 items that comprise the Positive-Constructive scale are identified by "PC" before each item (see Appendix A). This distinction was not made on the questionnaire that was mailed to participants. This scale measures aspects of imagination that are open, helpful, and creative. Respondents report how characteristic a behavior is in their experience using a five point scale.

The original, long form of the Imaginal Processes Inventory (IPI) is a comprehensive battery developed by Singer and Antrobus (1970, 1972) from Singer's (1966)
original 400 item questionnaire. The 344 items retained on the IPI consist of 28 scales which measure the style and content of imaginal experience in a broad, general way. Three major patterns of imaginal style (Positive-Constructive, Guilt-Fear of Failure, and Poor Attentional Control) emerged in factor analytic studies done on populations as diverse as college students (Segal, Huba, & Singer, 1980; Singer & Antrobus, 1963, 1972), adults aged 24-91 (Giambra, 1974, 1977), and psychiatric clients (Starker & Singer, 1975a, 1975b). Additional factor analysis using a student sample from the 1980 study confirmed the factor structure to be consistent between both forms of the SIPI (Huba et al., 1982).

The sample for the initial development of the SIPI consisted of 1,080 college students, 844 freshmen, 54.4% female, 94.9% single, and 95.2% aged 21 or less (Huba, Aneshensel, & Singer, 1981; Segal et al., 1980). Coefficient alphas for internal consistency are reported as .80 for the Positive-Constructive scale, .82 for the Guilt-Fear of Failure scale, and .81 for the Poor Attention scale. As expected, the sample for this study are older, more highly educated, and have had more varied relationships than the original sample with whom reliability was established. Nevertheless, there was enough support to obviate the need to pilot
test the instrument. Glambra (1974, 1977), for example, found that one factor, Neurotic-Anxious Absorption in Daydreaming, correlated negatively with age ($r = -0.37$), but all other factors were not related to age in his study of 170 adults aged 21-94. Magan (1985) found a coefficient alpha of .86 for the Positive-Vivid scale in 122 males aged 24 to 44.

The discriminant validity of the SIPI was calculated using item correlations. Correlations between each item and the scale on which it appeared were corrected so that item was not part of the sum. In all reported instances, the items correlated substantially higher with their own scale (range .24 to .57) than with either of the two other scales. Cross-scale item correlations are minimal (range .10 to .23) and few are significant; however, within-scale correlations are all highly significant. The scales are, therefore, quite distinguishable and adequately scaled in the shorter form (Huba et al., 1982).

No major studies of questionnaire convergent validity are reported; however, several authors conclude that construct validity can be reasonably accepted for the total domain based on a network of studies using the IPI (Huba et al., 1982; Pope & Singer, 1978; Segal et al., 1980; Singer, 1974a; 1975a; 1975b; Singer & Pope, 1978).
Huba et al. (1982) assessed scale scores with demographic characteristics and concluded that "the relatively small effects argue that the short form IPI is suitable for all groups studied and that the scale scores are not strongly confounded with such gross classification factors as age, sex, and ethnicity (p. 11). There is, however, a small but significant main effect on the Positive-Constructive scale ($F(1,1071) = 7.433$, $\eta = .083$, $p < .01$) with females scoring slightly higher.

The 45 items of the SIPI are randomly ordered to avoid response sets. Participants choose responses organized on a continuum that indicates frequency of experiences for items on each subscale. The five point scale ranges from "definitely untrue or strongly uncharacteristic of me" to "very true or strongly characteristic of me." The SIPI is scored by first reversing negatively keyed items and then summing the scores for the 15 items. Scores can range from a low of 15 to a high of 75. The higher the score, the more prevalent the characteristic of positive, openness to imagination on the Positive-Constructive subscale.

**Power as Knowing Participation in Change Test**

Barrett (1983, 1986) developed the power instrument (see Appendix A) through use of judges'
studies, a pilot study (N = 267, 68% female), and a validation study (N = 625, 55% female). The instrument is a 52-item semantic differential test using 12 items and one retest item to measure each of four concepts in power: awareness, choices, freedom to act intentionally, and involvement in creating change. The factor that emerged from varimax rotation of principal components in Barrett's (1983) validation study is called Unitary Power. "Unitary signifies the synergistic composite of concepts-contexts-scales, and power reflects knowing participation in change or the way humans knowingly participate in actualizing some potentials for unitary change rather than others" (Barrett, 1983, p. 81). This factor accounted for 43% of the variance.

Barrett (1983) used the congruence coefficients of .99 in her validation study to provide evidence that power generalizes across human and environmental field contexts. Varying the concepts across three contexts of self, family, and occupation did not evoke any difference in participants' responses. This version of the PKPCT (vII) is identical to the original version (vi) but without the contextual modifiers (self, family, and occupation). It was used in the present study because it retains the high reliability and supports the researcher's focus on mutual process
amenable for study from the perspective of either the nurse or the client.

Researchers have used the PKPCT, VII with samples that include both the general population and persons with varied health status (Dzurec, 1986; Rapacz, 1991; Rizzo, 1990; Smith, 1992; Wynd, 1992). Caroselli-Dervan (1991) and Moulton (1994) used the PKPCT, VII with samples of nurse executives. Trangenstein (1988) factor analyzed the PKPCT, VII with 326 registered nurses and found that all 48 items loaded on one factor which had an eigenvalue of 16.8 and accounted for 51.9% of the variance.

Variances of the factor scores obtained for the first factor when Barrett (1983) merged data from the four concepts-contexts into a single factor analysis are the instrument's reliabilities (Kim & Mueller, 1978). Reliabilities for total power ranged from .94 to .97 in several studies conducted by other researchers since Barrett's original study. A retest item is included at the end of each scale to test stability. Retest reliability coefficients ranged from .57 to .93 in the collected studies evidencing that the PKPCT is moderately to highly stable.

Face validity of the instrument was established using two panels of experts and the pilot study. The factor loadings for the four concepts-contexts are
validity coefficients and are the indicators for the construct validity of the scales. Loadings ≥ .40 indicate adequate construct validity (Nunnally, 1978). They ranged from .49 to .78 for the pilot study to .56 to .70 on the validation study.

A seven-point scale describing bipolar adjectives are rated by participants for each of the power concepts. The PKPCT, vII is scored by first reversing the negatively scored items, setting aside the four retest items, and then summing the numbers of responses on the 48 items on the PKPCT. Both total power and scale scores for each power concept can be obtained. Summation scores range from 12 to 84 for each of the power concepts and from 48 to 336 for the total score. The lower the score, the lower the power; and vice versa. The adjectives which indicate higher power are reversed randomly.

**Empathy Construct Rating Scale**

The ECRS is an 84 item questionnaire which assesses the empathy level of an individual (see Appendix A). La Monica (1981) developed the ECRS using a sample of 300 practicing nurses, 300 clients of these nurses, and 300 associates or peers of the nurses. How closely each item captures the respondents' perception of nurses' understanding is
indicated on a six-point Likert type scale.

Reliability coefficients were computed on the ECRS using Cronbach's coefficient alpha as an indicator of internal consistency. The reported alphas for each of the three forms of the instrument are: .96 for self-report, .98 for peer-report, and .97 for client-report respectively using \( n = 300 \). The alpha coefficient for the combined rating scales is .97 (\( N = 900 \)). The instrument is, therefore, considered to have high internal consistency. Quinn (1988) reports .93 alpha for her sample (\( N = 118 \)) of mothers.

Using the multitrait-multimethod matrix, La Monica (1981) studied 19 traits often related with empathy, such as altruism, social insight, and tolerance. Eight instruments which measure these traits were evaluated using the self-, peer-, and client-rating forms. The self-report (\( n = 300 \)) responses were factored using the principal components method with varimax rotation. Six factors emerged and were rotated in the solution to identify meaningful loadings of .40 or higher. The factor matrix demonstrated that Empathy (Factor 1) shares no variance with any other factor and accounts for most (48.2\%) of the variance of all six factors.

A multitrait-multimethod matrix (Campbell & Fiske, 1959) was then used to assess convergent and discriminant validity of the factor results relative to
the ECRS. Discriminant validity of the ECRS was demonstrated since it differentiated empathy from similar constructs (La Monica, 1981). Factor analysis of the matrix placed the ECRS instrument in the primary factor which was shared with no other measured trait. Any correlations with other matrix traits were low.

The six-point Likert scale ranging from "extremely unlike" to "extremely like" is used on the 84 item ECRS. Thirty-five of the individual items are stated in the negative, 49 in positive, to decrease the chances of a response set. The instrument is scored by reversing the scaling on the negative (low or lack of empathy) items and then adding all item scores in an overall empathy score. A possible range from -252, low to +252, high empathy emerges.

Analysis of Data

Means and standard deviations were computed for each of the main variables of the study and for the continuous variables on the personal data inventory like years of experience in mental health nursing and age of participants. These measures of central tendency were then used to fully describe the sample and to identify possible outliers.

Pearson product-moment correlations among the main variables were calculated to test the three hypotheses.
and to explore the zero-order correlations among the main variables. The researcher used the available data to identify additional information regarding the relationships of two scales of the Short Imaginal Processes Inventory with power and empathy although this was not originally hypothesized. Multiple regression analysis was also used to evaluate the relationships of imagination and power, as independent variables, with the dependent variable of empathy.

Categorical variables on the personal data inventory are described as frequency distributions and correlations of the continuous demographic data were computed with the main variables under study. Qualitative responses to three items on the personal data inventory are summarized according to themes.

The reliability of the three instruments was assessed using Cronbach's coefficient alpha. For the PKPCT, the retest item on each scale was used to compute test-retest reliability and comparisons of validity and reliability were also made with the findings of other researchers. A factor analysis of the PKPCT was also conducted to begin to explore its validity with this sample.
CHAPTER IV
ANALYSIS OF DATA

This study was designed to investigate the relationship of imagination, power, and empathy in female mental health nurses using the Short Imaginal Processes Inventory (SIPI), the Power as Knowing Participation in Change Test (PKPCT, v. II), and the Empathy Construct Rating Scale (ECRS). Information about participants was also obtained from a demographic questionnaire. The national sample of 169 participants were members of the ANA Council of Psychiatric-Mental Health Nursing.

Description of the Sample

Participants represented the four geographical regions of the United States, as presented in Table 1, according to states in which the participants live. Thirteen participants lived and worked in different states. The largest percentage (36%) of respondents were from the Eastern region which is consistent with both the ANA Council of Psychiatric-Mental Health Nursing membership and the distribution of mental health nurses identified by Betrus and Hoffman (1992).
Table 1

Geographic Distribution of Sample:
States by Region

(N = 169)

<table>
<thead>
<tr>
<th></th>
<th>North Central/</th>
<th>Midwest</th>
<th>South</th>
<th>East</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
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<td>2</td>
<td>2.4</td>
</tr>
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<td>2</td>
<td>2.4</td>
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<td>0.6</td>
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<td>0.0</td>
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<td>4</td>
<td>2.4</td>
</tr>
<tr>
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<td>4</td>
<td>2.4</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>OR</td>
<td>2</td>
<td>1.2</td>
<td>3</td>
<td>1.8</td>
</tr>
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<td>1.2</td>
<td>6</td>
<td>3.6</td>
</tr>
<tr>
<td>WA</td>
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<td>WY</td>
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<td>3</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Totals

32 19.1 32 19.2 44 26.3 61 36.7

Ages of the participants ranged from 31 to 84
(M = 51.15, SD = 9.07). The majority (65%) were
married or had been married (24%) and had children
(73%) who are at least 25 years old (52%). One hundred
and twenty-three of the parents are the parents of
a total of 165 children. The frequency distribution of
demographic variables pertaining to age, marital
status, and number of children is presented in Table 2.

The sample was an elite group of highly educated
and experienced specialists in mental health nursing.
Table 2
Demographic Information: Age, Marital Status, Number and Ages of Children

(N = 169)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 - 39</td>
<td>18</td>
<td>10.7</td>
<td>Never Married</td>
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<tr>
<td>40 - 49</td>
<td>61</td>
<td>36.0</td>
<td>Married</td>
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</tr>
<tr>
<td>50 - 59</td>
<td>63</td>
<td>37.3</td>
<td>Divorced</td>
<td>31</td>
<td>18.3</td>
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<tr>
<td>60 - 69</td>
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<td>13.0</td>
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</tr>
<tr>
<td>70 - 79</td>
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<td>2.4</td>
<td>Widowed</td>
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<td>3.6</td>
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<tr>
<td>80 &amp; up</td>
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<td>0.6</td>
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<table>
<thead>
<tr>
<th>Number of Children</th>
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<td>3</td>
<td>19 - 24</td>
</tr>
<tr>
<td>4 or more</td>
<td>25 &amp; up</td>
</tr>
</tbody>
</table>

*Note. Many participants have children in more than one age category; therefore, totals exceed 100%.

Seventy-one percent of the participants hold a Master's degree and 29% hold Doctorates. Although the majority (59%) of those who held a Master's degree majored in nursing, there was an almost equal (14%) number who did so at the Doctoral level. This reflects a pattern common during the seventies when many nurses pursued Doctorates in related sciences. The majority (82%) were certified either as generalists or specialists by the ANA or another accrediting body like the
In addition to extensive experience in direct practice, they may have prepared for certification by pursuing formal institute education as reported by 62%; however, some also used graduate course work to meet these requirements. The majority (89%) had over ten years of experience in mental health nursing and most (76%) were experienced in physical health (Medical-Surgical, Pediatrics) nursing as well. The frequency distribution of education and experience demographic variables is presented in Table 3.

The participants practiced mental health nursing in several settings with the largest group (42%) engaging in either full or part-time private practice. Approximately one third (37%) of the nurses had the job title of clinical specialist or psychotherapist and one quarter (25%) used combined titles such as assistant professor at a university and psychotherapist in private practice. The majority (79%) were employed full-time. Their practice characteristics are presented in Table 4.

Additional demographic information that captures both personal and professional involvement of the participants and may be related to the study variables
Table 3
Demographic Information: Education and Professional Experience

(N = 169)

<table>
<thead>
<tr>
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<td>Doctorate in related field</td>
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<td>14.8</td>
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<tr>
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<tr>
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<td>.6</td>
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<tr>
<td>Years of Clinical Experience in Mental Health and/or Addictions Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 10</td>
<td>18</td>
<td>10.7</td>
</tr>
<tr>
<td>11 - 20</td>
<td>77</td>
<td>45.6</td>
</tr>
<tr>
<td>21 - 30</td>
<td>55</td>
<td>32.5</td>
</tr>
<tr>
<td>31 or more</td>
<td>19</td>
<td>11.2</td>
</tr>
<tr>
<td>Years of Clinical Experience in Physical Health Nursing, e.g. Medical-Surgical, Pediatrics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>31</td>
<td>18.3</td>
</tr>
<tr>
<td>1 - 5</td>
<td>69</td>
<td>40.8</td>
</tr>
<tr>
<td>6 - 20</td>
<td>48</td>
<td>28.4</td>
</tr>
<tr>
<td>21 - 45</td>
<td>12</td>
<td>7.2</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>5.3</td>
</tr>
</tbody>
</table>

*Note. Many participants interpreted their graduate/academic course work as relevant to this category.
Table 4  
Demographic Information: Current Practice  
(N = 169)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practice Setting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Private Practice</td>
<td>71</td>
<td>42.0</td>
</tr>
<tr>
<td>Private Practice only (44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Practice combined with another setting (27)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 University</td>
<td>37</td>
<td>21.9</td>
</tr>
<tr>
<td>3 Acute Inpatient Hospital</td>
<td>30</td>
<td>17.7</td>
</tr>
<tr>
<td>4 Outpatient Clinic</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>5 Other - Unspecified</td>
<td>13</td>
<td>7.7</td>
</tr>
<tr>
<td>Combinations</td>
<td>15</td>
<td>8.9</td>
</tr>
<tr>
<td>2 &amp; 3 (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 &amp; 4 (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 &amp; 5 (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 &amp; 4 (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 &amp; 5 (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 &amp; 5 (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Job Title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Clinical Specialist</td>
<td>44</td>
<td>26.0</td>
</tr>
<tr>
<td>2 Asst/Professor of Nursing</td>
<td>30</td>
<td>17.8</td>
</tr>
<tr>
<td>3 Psychotherapist</td>
<td>19</td>
<td>11.2</td>
</tr>
<tr>
<td>4 Educational Specialist</td>
<td>5</td>
<td>3.0</td>
</tr>
<tr>
<td>5 Asst/Director of Nursing</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>6 Other - Unspecified</td>
<td>27</td>
<td>15.9</td>
</tr>
<tr>
<td>Combined Titles</td>
<td>42</td>
<td>24.9</td>
</tr>
<tr>
<td>1 &amp; 2 (5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 &amp; 3 (12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 &amp; 4 (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 &amp; 5 (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 &amp; 6 (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 &amp; 3 (7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 &amp; 4 (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 &amp; 4 (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 &amp; 6 (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 &amp; 6 (6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 &amp; 6 (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>133</td>
<td>78.7</td>
</tr>
<tr>
<td>Part-time</td>
<td>32</td>
<td>19.0</td>
</tr>
<tr>
<td>Volunteer/Retiree</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.6</td>
</tr>
</tbody>
</table>

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is presented in Tables 5 and 6. Sixty-nine percent of the sample belonged to one or more professional organizations in addition to the ANA Council on Psychiatric-Mental Health Nursing. This implies a very high level of professional commitment.

Seventy-four percent of the sample had been in personal psychotherapy, although only 4% reported having had a mental health or addiction problem. It is also impressive that 58% reported that someone they love had experienced such problems. Apparently this sample of nurses accepted the belief that the intense personal scrutiny experienced in psychotherapy may enhance one's capacity to use oneself therapeutically. This belief, however, continues to be controversial and is not supported by empirical findings as yet (Gladstein, 1987; Society for Education and Research in Psychiatric-Mental Health Nursing, 1994). The anguish of living with a mentally ill loved one may have provided motivation for entering mental health nursing specialty practice and sustained the rather high level of professional commitment of the participants.

Information about participation in activities that may enhance understanding of clients was requested in both a yes or no format and in an open-ended item on the demographic questionnaire.
Table 5
Demographic Information: Professional Memberships in Addition to ANA Council on Psychiatric-Mental Health Nursing

\( (N = 169) \)

<table>
<thead>
<tr>
<th>Organization</th>
<th>( n )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>87</td>
<td>36.1</td>
</tr>
<tr>
<td>American Psychiatric Nursing Association</td>
<td>39</td>
<td>16.2</td>
</tr>
<tr>
<td>Association of Child and Adolescent Psychiatric Nurses</td>
<td>38</td>
<td>15.8</td>
</tr>
<tr>
<td>Society for Education and Research in Psychiatric-Mental Health Nursing</td>
<td>28</td>
<td>11.6</td>
</tr>
<tr>
<td>Other(s)</td>
<td>49</td>
<td>20.3</td>
</tr>
<tr>
<td>State Networks of Mental Health Nurses</td>
<td>(19)</td>
<td></td>
</tr>
<tr>
<td>American Association of Marriage and Family Therapists</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>American Group Psychotherapy Association</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>American Orthopsychiatric Association</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>Psychiatric Consultation-Liaison Nursing, ANA</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>American Counseling Association</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>American Association of Emergency Psychiatry</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>Employees' Assistance Professional Association</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>Holistic Nurses' Association</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>Mental Health Association, Board Member</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>National Alliance for the Mentally Ill</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>National Association for Spiritual Values</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>National Nurses' Society on Addictions</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>North American Nursing Diagnoses Association</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>North American Society of Adlerian Psychology</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>Nurses United for Reasonable Service (NURS)</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>Oncology Nursing Society/Psychoneuroimmunology</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>State Nurses for Health Education</td>
<td>(1)</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** Percentages are not reported as valid percent since eighty-two (66.6%) of the participants belong to more than one organization.
Table 6
Demographic Information: Personal Psychotherapy and Health Status

\( \text{(N = 169)} \)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Years in Personal Psychotherapy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 1</td>
<td>44</td>
<td>26.0</td>
</tr>
<tr>
<td>1 - 4</td>
<td>68</td>
<td>40.2</td>
</tr>
<tr>
<td>4 - 6</td>
<td>25</td>
<td>14.8</td>
</tr>
<tr>
<td>7 - 9</td>
<td>20</td>
<td>11.8</td>
</tr>
<tr>
<td>10 or more</td>
<td>12</td>
<td>7.2</td>
</tr>
<tr>
<td><strong>Health Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health/Addiction Problem in Loved One</td>
<td>98</td>
<td>58.0</td>
</tr>
<tr>
<td>Mental Health/Addiction Problem in Self</td>
<td>6</td>
<td>3.6</td>
</tr>
<tr>
<td>Physical Health Problem in Self (Stabilized)</td>
<td>45</td>
<td>26.6</td>
</tr>
</tbody>
</table>

The responses reported in Tables 7 and 8 pose interesting contrasts. For example, although 65% of the participants used guided imagery and relaxation techniques when asked as yes or no, none reported these when asked how they achieve, sustain, or enhance understanding of clients or themselves. Likewise, 61% said yes, they meditated, but only two nurses reported this spontaneously. Twenty-two...
Table 7
Demographic Information: Participation in Activities That May Enhance Understanding

(\(N = 169\))

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided Imagery/Relaxation</td>
<td>110</td>
<td>65.1</td>
</tr>
<tr>
<td>Clinical Supervision</td>
<td>80</td>
<td>47.9</td>
</tr>
<tr>
<td>Meditation</td>
<td>66</td>
<td>60.9</td>
</tr>
<tr>
<td>Support Group(s)</td>
<td>37</td>
<td>21.9</td>
</tr>
<tr>
<td>Psychotherapy (currently)</td>
<td>26</td>
<td>15.4</td>
</tr>
<tr>
<td>Dream Journal</td>
<td>22</td>
<td>13.0</td>
</tr>
</tbody>
</table>

Note. Participants reported all of the activities in which they engaged; therefore, totals exceed 100%.

percent said yes, they attended support groups, but only three mentioned them specifically. It may be that the participants interpreted the open ended item as a request for general tendencies, while the specific techniques represent ways of achieving those goals. Another interpretation is that the respondents used strategies like guided imagery, meditation, and support groups to promote relaxation which is generally considered to be a necessary condition to enhancing understanding and creativity.
Table 8  
Methods of Achieving, Sustaining, or Enhancing Understanding of Clients and Self  
(N = 169)  

<table>
<thead>
<tr>
<th>Method</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading broadly from both professional and other literature</td>
<td>95</td>
<td>56</td>
</tr>
<tr>
<td>Attending conferences, earning CEU's, seminars, workshops</td>
<td>81</td>
<td>48</td>
</tr>
<tr>
<td>Participating in supervision with peers and experienced clinicians, consults</td>
<td>77</td>
<td>46</td>
</tr>
<tr>
<td>Reflecting on self (In therapy and in solitude)</td>
<td>62</td>
<td>37</td>
</tr>
<tr>
<td>Listening actively with clients</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Praying and valuing spirituality</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Teaching, role modeling, mentoring, supervising others, e.g. Graduate students, writing, speaking</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>32</td>
<td>19</td>
</tr>
<tr>
<td>Balancing work/leisure pursuits</td>
<td>(7)</td>
<td></td>
</tr>
<tr>
<td>Strengthening personal relationships</td>
<td>(7)</td>
<td></td>
</tr>
<tr>
<td>Conducting research</td>
<td>(6)</td>
<td></td>
</tr>
<tr>
<td>Exercising physically, e.g., dance, yoga</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>Participating in 12 Step and other support groups</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>Meditating</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>Volunteering in the community</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>Using humor</td>
<td>(2)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Most participants reported more than one method, therefore totals exceed 100%.
There was a consistent response to both the yes/no and the open-ended item format regarding the use of clinical supervision to enhance understanding by 48% and 46% of the sample respectively. Because a primary purpose of supervision is to explore the mental health nurse's personal experience with specific clients to ensure optimal therapeutic usefulness, this finding supports the view that the mutual process of nurses with clients requires ongoing support and scrutiny even though they are experienced professionals or what Benner (1984) would call experts. When used effectively, supervision invites ongoing openness to self-awareness in relationships with clients (Dombeck & Briody, 1995; Farkas-Cameron, 1995; MacKrell, 1987).

The participants reported that they read extensively and attend conferences quite frequently according to the 56% and 48% who identified these as methods of enhancing understanding. The more cognitive focus implied in reading and scholarly dialogues is balanced by the report of 52% who simply listen to themselves via self-reflection and therapy and to their clients with active, concentrated listening. Listening skills have long been recognized as the most essential component in therapeutic rapport and the most difficult to master (Kurtz, 1989; Reik, 1964).

The researcher asked participants about their most
frequently recurring dream or fantasy in order to validate the imaginative processes assessed by the SIPI. One hundred-thirteen (67%) nurses reported at least one dream. The content of dream reports was further classified according to Singer's (1987) three dream styles: Positive-Constructive, Guilt-Fear of Failure, and Poor Attentional Control. The majority (78%) of reported dreams have positive-constructive features. The specific content of the three dream styles are reported in Table 9. The total of 124 dreams reported are listed in Appendix F.

Several participants provided unsolicited information about the frequency, vividness, and general usefulness of their imaginal experiences. While these reports are not easily classifiable, nevertheless they suggest an underlying self-awareness that may be related to the high (72%) percentage of participants who also reported that they followed their own interests and perceived talent in choosing mental health nursing for their practice specialty.

Although 58% reported having a loved one who had (or still has) a mental illness, only 7% identified this fact as a motivator in their selecting mental health nursing. Curiously, this fact is not reflected in their reported dreams. It may be that their professional involvement provides an opportunity to
Table 9

*Most Frequently Recurring Dream or Fantasy*

(N = 113)

<table>
<thead>
<tr>
<th>Dream/Fantasy Style</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive-Constructive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleasant fantasies re: future</td>
<td>97</td>
<td>78.2</td>
</tr>
<tr>
<td>goals, problem solving, wishes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td>(62)</td>
<td></td>
</tr>
<tr>
<td>Money</td>
<td>(7 )</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>(7 )</td>
<td></td>
</tr>
<tr>
<td>Beach, ocean waves</td>
<td>(6 )</td>
<td></td>
</tr>
<tr>
<td>Retiring</td>
<td>(4 )</td>
<td></td>
</tr>
<tr>
<td>Combinations, e.g. travel &amp; money</td>
<td>(3 )</td>
<td></td>
</tr>
<tr>
<td><strong>Guilt-Fear of Failure</strong></td>
<td>19</td>
<td>15.3</td>
</tr>
<tr>
<td>Incompetence at work with people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death of self or loved one</td>
<td>(9 )</td>
<td></td>
</tr>
<tr>
<td>Anxiety re: school</td>
<td>(6 )</td>
<td></td>
</tr>
<tr>
<td><strong>Poor Attentional Control</strong></td>
<td>8</td>
<td>6.5</td>
</tr>
<tr>
<td>Interruptions/Preoccupations</td>
<td>(4 )</td>
<td></td>
</tr>
<tr>
<td>Vigilance re: External danger</td>
<td>(4 )</td>
<td></td>
</tr>
</tbody>
</table>

Note. 100% of dreams are reported. Several participants reported more than one dream. There were 124 dreams reported by 113 nurses.
categories and combinations in Table 10. More detailed, specific examples of reasons for choosing mental health nursing are listed in Appendix G.

Table 10
Demographic Information: Reasons for Choosing Mental Health Nursing

(\(N = 163\))

<table>
<thead>
<tr>
<th>Reason</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Self-Perceived Talent/Interest/ Challenge</td>
<td>117</td>
<td>71.8</td>
</tr>
<tr>
<td>2 Talent Perceived by Another Mental Health Professional</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>3 Personal/Family Experience</td>
<td>12</td>
<td>7.4</td>
</tr>
<tr>
<td>4 Negative Experiences in Other Nursing Specialties</td>
<td>5</td>
<td>3.1</td>
</tr>
<tr>
<td>5 Convenience/Lucky Timing</td>
<td>10</td>
<td>5.9</td>
</tr>
<tr>
<td>6 Bewildered/Mystery</td>
<td>2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Combinations

- 1 & 2 \((2)\)
- 1 & 3 \((4)\)
- 1 & 4 \((6)\)
- 1 & 5 \((1)\)
- 2 & 5 \((1)\)
- 3 & 4 \((1)\)
Descriptive Statistics of the Variables

Initial descriptive statistics for the main variables of the study revealed unrestricted ranges of scores. All distributions were approximately normal with no outliers detected. The descriptive analysis for the main study variables is presented in Table 11.

Table 11
Descriptive Analysis of Main Study Variables Including Skewness and Kurtosis

(N = 169)

<table>
<thead>
<tr>
<th>Variable/Instrument</th>
<th>SIPI*</th>
<th>PKPCT</th>
<th>ECRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Range</td>
<td>15 - 75</td>
<td>48 - 336</td>
<td>(-252) - (+252)</td>
</tr>
<tr>
<td>Actual Range</td>
<td>26 - 74</td>
<td>194 - 336</td>
<td>65 - 252</td>
</tr>
<tr>
<td>Median</td>
<td>55.00</td>
<td>287.09</td>
<td>208.00</td>
</tr>
<tr>
<td>Mean</td>
<td>54.54</td>
<td>285.10</td>
<td>200.47</td>
</tr>
<tr>
<td>SD</td>
<td>9.84</td>
<td>29.64</td>
<td>36.65</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.34</td>
<td>-0.60</td>
<td>-1.33</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-0.30</td>
<td>0.35</td>
<td>1.83</td>
</tr>
</tbody>
</table>

*Positive-Constructive Scale only.

The researcher also was interested in information available regarding the four subscales of the PKPCT and all three scales of the SIPI although no relationships were hypothesized between these because
of limited support from the literature consistent with Rogers' model. Measures of variability and central tendency for the PKPCT scales and the SIPI scales are presented in Tables 12 and 13, respectively.

Table 12

Measures of Variability and Central Tendency for the Power Scales

(N = 169)

<table>
<thead>
<tr>
<th>PKPCT Scale</th>
<th>Awareness</th>
<th>Choices</th>
<th>Freedom</th>
<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Range</td>
<td>12-84</td>
<td>12-84</td>
<td>12-84</td>
<td>12-84</td>
</tr>
<tr>
<td>Actual Range</td>
<td>49-84</td>
<td>36-84</td>
<td>46-84</td>
<td>42-84</td>
</tr>
<tr>
<td>Median</td>
<td>71.00</td>
<td>71.00</td>
<td>72.00</td>
<td>72.00</td>
</tr>
<tr>
<td>Mean</td>
<td>71.17</td>
<td>70.38</td>
<td>72.33</td>
<td>71.22</td>
</tr>
<tr>
<td>SD</td>
<td>7.22</td>
<td>8.42</td>
<td>8.23</td>
<td>9.28</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.40</td>
<td>-0.62</td>
<td>-0.60</td>
<td>-0.82</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.23</td>
<td>0.91</td>
<td>-0.07</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Reliability of the Instruments

Table 14 presents the internal consistency reliability estimates (Cronbach's alpha) for each of the scales in the study calculated on the basis of the study sample. The SIPI does not yield a total score; however, all three subscale scores are listed. Alpha coefficients ranged from a low of .77 for the
Table 13
Measures of Variability and Central Tendency for Three Imagination Scales

(N = 169)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Positive-Constructive</th>
<th>Guilt-Fear of Failure</th>
<th>Attention Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Range</td>
<td>15 - 75</td>
<td>15 - 75</td>
<td>15 - 75</td>
</tr>
<tr>
<td>Actual Range</td>
<td>26 - 74</td>
<td>15 - 63</td>
<td>22 - 58</td>
</tr>
<tr>
<td>Median</td>
<td>55.00</td>
<td>33.00</td>
<td>38.00</td>
</tr>
<tr>
<td>Mean</td>
<td>54.54</td>
<td>33.43</td>
<td>37.60</td>
</tr>
<tr>
<td>SD</td>
<td>9.84</td>
<td>8.10</td>
<td>8.16</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.34</td>
<td>0.48</td>
<td>0.14</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-0.30</td>
<td>1.04</td>
<td>0.48</td>
</tr>
</tbody>
</table>

Guilt-Fear of Failure and the Attentional Control subscales to a high of .96 for the PKPCT. All of the measures employed in the study had acceptable reliability estimates.

Retest reliability was further calculated for the PKPCT instrument by evaluating the stability coefficients for the scores on the last item of each of the four subscales which are duplicates of one of the preceding 12 items that are reverse scored. Barrett (1986) maintains that low correlations of the duplicate with the original item indicate possible measurement errors reflected in the inconsistency of response.
Table 14

Reliability Analysis for Instruments and Scales

(N = 169)

<table>
<thead>
<tr>
<th>Instrument/Scale</th>
<th>No. of Items</th>
<th>Mean</th>
<th>SD</th>
<th>Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIPI</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC/Imag</td>
<td>15</td>
<td>54.54</td>
<td>9.84</td>
<td>.89</td>
</tr>
<tr>
<td>GF/Imag</td>
<td>15</td>
<td>33.43</td>
<td>8.10</td>
<td>.77</td>
</tr>
<tr>
<td>AC/Imag</td>
<td>15</td>
<td>37.60</td>
<td>8.16</td>
<td>.77</td>
</tr>
<tr>
<td>PKPCT</td>
<td>48</td>
<td>285.09</td>
<td>29.64</td>
<td>.96</td>
</tr>
<tr>
<td>Awareness</td>
<td>12</td>
<td>71.17</td>
<td>7.22</td>
<td>.84</td>
</tr>
<tr>
<td>Choices</td>
<td>12</td>
<td>70.38</td>
<td>8.42</td>
<td>.89</td>
</tr>
<tr>
<td>Freedom</td>
<td>12</td>
<td>72.33</td>
<td>8.23</td>
<td>.91</td>
</tr>
<tr>
<td>Involvement</td>
<td>12</td>
<td>71.22</td>
<td>9.28</td>
<td>.91</td>
</tr>
<tr>
<td>BCRS</td>
<td>84</td>
<td>200.47</td>
<td>36.65</td>
<td>.95</td>
</tr>
</tbody>
</table>

Note. PC/Imag = Positive-Constructive Imagination
GF/Imag = Guilt-Fear of Failure Imagination
AC/Imag = Poor Attentional Control Imagination.

The researcher found that the stability coefficients for the PKPCT with this sample ranged from .59 to .86, with \( \zeta = .59 \) for the superficial-profound item on the involvement in creating change scale, \( \zeta = .73 \) for the timid-assertive item on choices scale, \( \zeta = .76 \) for the orderly-chaotic on the freedom to act with intention scale, and \( \zeta = .86 \) for the
pleasant-unpleasant item on the awareness scale.

The scores on duplicate items were also examined for acquiescence or the tendency to agree without discrimination according to the item content (Burns & Grove, 1992). Given that the maximum possible difference between two responses on the PKPCT is six because the instrument has a seven point scale, it is generally accepted that responses are free of acquiescence if the duplicate scales differ by only one point or less. The researcher found that responses of the participants in the present study differed by one point or less for 99.4% on the awareness scale, 99.2% on the choices scale, 99% on the freedom to act with intention scale, and 98.5% on the involvement in creating change scale. This indicates highly consistent responses.

The researcher had an academic interest in factor analyzing the PKPCT despite having an insufficient sample size. A four factor solution was generated using varimax rotation. Results are displayed in Appendix H and are noted to be similar to those found by Trangenstein (1988) with a sample of 303. Replication of factor structure is often difficult, particularly without the recommended sample of at least five participants per item (Munro, Visintainer, & Page, 1986).
Tests of Hypotheses

Alpha was set at .05 and one-tailed t-tests were performed to determine significance of Pearson product moment correlations on three hypotheses which stated that:

1. Imagination is positively related to power in mental health nurses.
2. Power is positively related to empathy in mental health nurses.
3. Imagination is positively related to empathy in mental health nurses.

The intercorrelations for the hypotheses are presented in Table 15 which demonstrates that each pair of variables has a statistically significant positive correlation. Therefore, all three hypotheses are supported. Power and empathy has the highest correlation; twice the magnitude of imagination and empathy or imagination and power.

Supplementary Findings

The supplementary data analysis includes findings regarding relationships of selected demographic variables with the main variables and multivariate relationships among the main variables. Findings for the relationships of the PKPCT subscales and the three
Table 15
Pearson Correlation Coefficients among Main Study Variables: Positive-Constructive Imagination, Total Power, and Empathy

(N = 169)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Imagination</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>.2674*</td>
<td>.5155*</td>
</tr>
<tr>
<td>Imagination</td>
<td></td>
<td>.2953*</td>
</tr>
</tbody>
</table>

*p < .001

Scales of the SIPI are also reported.

Because this researcher was interested in factors associated with the empathy of mental health nurses, she explored several demographic variables for possible relationships with the main study variables. For example, age, level of education, years of experience, and certification might be associated with professional maturing and insight that may change empathy. Personal experiences like marital status, parenthood, physical health, mental health of family members might be associated with one's changing sense of power. Use of relaxation, creative imagery, and meditation might be associated with imaginative processes. Therefore, analysis of variance of these factors was conducted among the measures of imagination, power, and empathy.
Demographic Variables

Pearson correlations were calculated between SIPI, PKPCT, and ECRS scores and age, years of nursing experience in mental health nursing, and years of nursing experience in other types of nursing. No significant differences were found using two-tailed tests. Age was positively related to years in mental health nursing ($r = .57, p \leq .0001$) and to years in other types of nursing ($r = .25, p \leq .001$). A small, but significant negative relationship of years in mental health to years in other types of nursing ($r = -.22, p \leq .01$) implies that nurses who enter mental health practice are more likely to remain there.

Independent sample t-tests indicated no significant effect on SIPI, PKPCT, or ECRS scores relative to education, practice setting, employment status, professional memberships, having a mental health problem, use of dream journals, clinical supervision, support groups, or self reflection. There were no significant differences on the guilt-fear of failure imagination scale or on the awareness subscale of power relative to any demographic variables. Several significant differences for scores on seven study variables relative to demographics were detected. Detailed
discussion follows.

Table 16 displays significant findings from independent sample t-tests used to detect differences in scores on all scales of the three variables based on positive or negative responses to whether the mental health nurse had a loved one who experienced a mental health problem and whether the mental health nurse herself had a physical health problem.

Nurses who had a loved one who experienced a mental health problem manifested significantly lower means for empathy and total power, and higher means for poor attentional control imagination than those who did not. Having a high score on poor attentional control indicates that one actually has lower concentration ability than high scorers.

Nurses who had a physical health problem also showed significantly lower means for empathy, total power, and positive-constructive imagination than those who had none. In addition, the means for choices, freedom to act with intention, and involvement in creating changes scales of the power instrument were also significantly different. This signifies that those nurses with higher imagination, power, and empathy scores were less likely to also have a personal physical illness and/or a loved one with mental illness.
Table 16
Comparison of Health Demographic Variables to Main Study Variables Using 2-tailed t-tests

N = 169

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMPATHY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loved One with Mental Illness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>98</td>
<td>194.98</td>
<td>37.52</td>
<td>2.32</td>
<td>167</td>
<td>.02</td>
</tr>
<tr>
<td>No</td>
<td>71</td>
<td>208.04</td>
<td>34.23</td>
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<td></td>
</tr>
<tr>
<td>Physical Health Problem</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>45</td>
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<td>44.56</td>
<td>2.53</td>
<td>166</td>
<td>.01</td>
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<tr>
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<td>123</td>
<td>204.72</td>
<td>32.63</td>
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</tr>
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<td>TOTAL POWER</td>
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</tr>
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<td>.00</td>
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<td>Loved One with Mental Illness</td>
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<tr>
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<td>7.85</td>
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<td>66.80</td>
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<td>3.46</td>
<td>166</td>
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<td>7.61</td>
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</table>

continued
Table 16 continued

\(N = 169\)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREEDOM TO ACT WITH INTENTION</td>
<td></td>
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</tr>
<tr>
<td>Loved One with Mental Illness</td>
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</tr>
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<td>98</td>
<td>71.22</td>
<td>8.51</td>
<td>2.06</td>
<td>167</td>
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<td>7.63</td>
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</tr>
<tr>
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<td>69.36</td>
<td>9.12</td>
<td>2.90</td>
<td>166</td>
<td>.00</td>
</tr>
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<td>123</td>
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<td>7.66</td>
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<tr>
<td>INVOLVEMENT IN CREATING CHANGE</td>
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</tr>
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<td>Loved One with Mental Illness</td>
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</tr>
<tr>
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<td>98</td>
<td>70.02</td>
<td>9.64</td>
<td>1.99</td>
<td>167</td>
<td>.05</td>
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<td>71</td>
<td>72.87</td>
<td>8.55</td>
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<td>Physical Health Problem</td>
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</tr>
<tr>
<td>Yes</td>
<td>45</td>
<td>67.62</td>
<td>10.27</td>
<td>3.10</td>
<td>166</td>
<td>.00</td>
</tr>
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<td>No</td>
<td>123</td>
<td>72.53</td>
<td>8.61</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>POSITIVE-CONSTRUCTIVE IMAGINATION</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Health Problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>45</td>
<td>51.75</td>
<td>11.05</td>
<td>2.22</td>
<td>167</td>
<td>.03</td>
</tr>
<tr>
<td>No</td>
<td>123</td>
<td>55.52</td>
<td>9.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POOR ATTENTIONAL CONTROL IMAGINATION</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Loved One with Mental Illness</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>98</td>
<td>38.64</td>
<td>7.9</td>
<td>-1.99</td>
<td>167</td>
<td>.05</td>
</tr>
<tr>
<td>No</td>
<td>71</td>
<td>36.14</td>
<td>8.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Several differences between means on imagination and empathy were identified relative to the use of imagery and meditation. Mental health nurses who use imagery had a higher mean (56.06) for positive-constructive imagination than those who did not (51.69) (t = -2.81, df = 167, p ≤ .01). Imagery users also had a higher empathy mean (205.45) than those who did not use imagery (191.17) (t = -2.45, df = 167, p ≤ .02). Meditators had a higher mean (56.97) for positive-constructive imagination than non-meditators (52.98) (t = -2.62, df = 167, p ≤ .01). Meditators also had a lower mean (35.88) for poor attentional control imagination than non-meditators (38.69) (t = 2.21, df = 167, p ≤ .03). This finding indicates that meditators were more attentive and less distracted than non-meditators.

The demographic variable of marital status showed significant differences in empathy, involvement, and attentional control using one way ANOVA. Tables 17, 18, and 19 present a summary of these findings. Mental health nurses who were coded as "other," i.e., divorced, separated, living with partners, had the highest mean for empathy, while those who never married had the lowest. For involvement, the married nurses...
Table 17
Differences among Marital Status Groups in Empathy Using a One Way ANOVA

(N = 165)

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>M</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never Married</td>
<td>15</td>
<td>189.07</td>
<td>3.29</td>
<td>.05</td>
</tr>
<tr>
<td>Married</td>
<td>110</td>
<td>198.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
<td>212.83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 18
Differences among Marital Status Groups in Involvement/Power Using a One Way ANOVA

(N = 165)

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>M</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement/Power</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never Married</td>
<td>15</td>
<td>64.73</td>
<td>4.07</td>
<td>.02</td>
</tr>
<tr>
<td>Married</td>
<td>110</td>
<td>71.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
<td>71.65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

had the highest mean, and the lowest mean was obtained by the never married. For attentional control imagination, the never married had the highest mean, while the lowest mean score was obtained by "others."

The demographic variable of number of children
Table 19
Differences among Marital Status Groups in Attentional Control Imagination Using a One Way ANOVA

\( (N = 165) \)

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>M</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attentional Control Imagination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never Married</td>
<td>15</td>
<td>41.13</td>
<td>3.33</td>
<td>.04</td>
</tr>
<tr>
<td>Married</td>
<td>110</td>
<td>38.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
<td>35.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

showed significant differences for choices and guilt-fear of failure imagination. Table 20 presents significant findings for choices. Mental health nurses who have three or more children had the highest mean for choices and those with no children had the

Table 20
Differences among Number of Children Groups to Choices/Power Using a One Way ANOVA

\( (N = 169) \)

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>M</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choices/Power</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 Children</td>
<td>46</td>
<td>67.37</td>
<td>3.06</td>
<td>.02</td>
</tr>
<tr>
<td>1 Child</td>
<td>21</td>
<td>72.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Children</td>
<td>54</td>
<td>69.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Children</td>
<td>28</td>
<td>72.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 or more children</td>
<td>20</td>
<td>72.45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
lowest. Table 21 presents significant findings for
guilt-fear of failure. Mental health nurses with no
children also had the highest mean scores for
guilt-fear of failure, but those with four or more
children had the lowest.

Table 21

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>M</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guilt-Fear of Failure Imagination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 Children</td>
<td>46</td>
<td>36.50</td>
<td>3.23</td>
<td>.01</td>
</tr>
<tr>
<td>1 Child</td>
<td>21</td>
<td>32.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Children</td>
<td>54</td>
<td>33.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Children</td>
<td>28</td>
<td>30.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 or more children</td>
<td>20</td>
<td>30.35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The poor attentional control imagination mean
scores of the mental health nurses differed
significantly according to practice setting and
number of years of being in personal therapy. Table 22
displays these findings regarding practice setting.
Mental health nurses who practice in university
Table 22
Differences among Practice Setting Groups in
Attentional Control Imagination
Using a One Way ANOVA

(N = 111)

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>M</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attentional Control Imagination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>30</td>
<td>39.40</td>
<td>4.29</td>
<td>.02</td>
</tr>
<tr>
<td>University</td>
<td>37</td>
<td>39.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Practice</td>
<td>44</td>
<td>35.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

settings had the highest mean poor attentional control imagination scores while those in private practice had the lowest. Table 23 displays findings regarding years in personal therapy. Mental health nurses who had never been in therapy had the highest mean for the same variable, and those who had seven or more years had the lowest.

Finally, there was also a significant difference between positive-constructive imagination means for those mental health nurses who are certified (53.61) and those who are not (57.55) (t = 1.96, df = 148, p ≤ .05). Certified mental health nurses were less imaginative than mental health nurses without the credential.
Table 23

Differences among Years in Therapy Groups in Attentional Control Imagination Using a One Way ANOVA

(N = 169)

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>M</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attentional Control Imagination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 to 1 year</td>
<td>44</td>
<td>40.30</td>
<td>5.02</td>
<td>.002</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>68</td>
<td>38.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 to 6 years</td>
<td>25</td>
<td>36.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 or more</td>
<td>32</td>
<td>33.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Main Variables

The correlation matrix of the nine study variables of empathy, four power subscales, total power, and three imagination scales is presented in Table 24. All correlations are significant except the relationship between the positive-constructive and poor attentional control imagination variables. Guilt-fear of failure and poor attentional control imagination had consistently low negative relationships with all power and empathy scales as well as with each other.

The empathy scores of participants were regressed on the positive-constructive imagination and total power scores to determine the ability of
Table 24
Intercorrelations and Significance Tests of Nine Study Variables
(N = 169)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware (2)</td>
<td>.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Choices (3)</td>
<td>.48</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freedom (4)</td>
<td>.45</td>
<td>.70</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involve (5)</td>
<td>.43</td>
<td>.62</td>
<td>.74</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power (6)</td>
<td>.52</td>
<td>.84</td>
<td>.91</td>
<td>.92</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC/Imag (7)</td>
<td>.27</td>
<td>.21</td>
<td>.24</td>
<td>.25</td>
<td>.33</td>
<td>.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GF/Imag (8)</td>
<td>-.39</td>
<td>-.19</td>
<td>-.19</td>
<td>-.19</td>
<td>-.21</td>
<td>-.18</td>
<td>ns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC/Imag (9)</td>
<td>-.30</td>
<td>-.24</td>
<td>-.21</td>
<td>-.19</td>
<td>-.17</td>
<td>-.22</td>
<td>-.03</td>
<td>.41</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** All are highly significant p ≤ .0001 unless otherwise indicated. **p ≤ .001 *p ≤ .01
ns = not significant. PC/Imag = Positive-Constructive Imagination, GF/Imag = Guilt-Fear of Failure Imagination, AC/Imag = Attentional Control Imagination.

positive-constructive imagination and power to predict empathy. Consistent with the higher bivariate correlation seen between power and empathy, power was entered first into the equation (F = 6.9, df 2, 166, p ≤ .0001) and accounted for 28% of the variance in empathy (R square = .28). Positive-constructive imagination did not contribute significantly to the
prediction of empathy and was not enter into the regression equation. Table 25 displays the summary of the stepwise regression analysis.

Table 25

<table>
<thead>
<tr>
<th>Variable</th>
<th>R</th>
<th>R²</th>
<th>Beta</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>.53</td>
<td>.28</td>
<td>.48</td>
<td>6.9***</td>
</tr>
<tr>
<td>Positive Constructive (PC) Imagination</td>
<td>.13</td>
<td>.8</td>
<td>1.8</td>
<td></td>
</tr>
</tbody>
</table>

***p ≤ .0001

A second regression analysis was performed that regressed all three subscales of the SIPI and total power on empathy. Power again contributed 27% of the variance in empathy (F = 6.13, df = 1,167, p ≤ .0001) and guilt-fear of failure contributed an additional 9% of the explanation of the unique variance in empathy (R square change = .09). The remaining two imagination scales did not contribute to explaining the variance in empathy. See Table 26 for a display of these results.
Table 26
Stepwise Multiple Regression of Empathy on Power and PC, GF, & AC Imagination Scale Scores
(N = 169)

Analysis of Variance of Regression

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>81826.94</td>
<td>4</td>
<td>20456.74</td>
<td>23.33</td>
</tr>
<tr>
<td>Residual</td>
<td>143783.13</td>
<td>164</td>
<td>867.72</td>
<td></td>
</tr>
</tbody>
</table>

Summary Table

<table>
<thead>
<tr>
<th>Step Variable</th>
<th>R entry</th>
<th>R final</th>
<th>Beta</th>
<th>F</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>.52</td>
<td>.27</td>
<td>.52</td>
<td>7.77</td>
<td>6.13</td>
</tr>
<tr>
<td>GF Imag</td>
<td>.60</td>
<td>.36</td>
<td>-.24</td>
<td></td>
<td>-3.43</td>
</tr>
</tbody>
</table>

Note. PC = Positive Constructive, GF = Guilt-Fear of Failure, AC = Attentional Control Imagination Scales.
CHAPTER V
DISCUSSION OF THE FINDINGS

Rogers' (1990) Science of Unitary Human Beings provides the framework for this investigation of the relationships of imagination, power, and empathy in mental health nurses. According to Rogers (1990), human beings are energy fields identified by pattern. Imagination, power, and empathy were identified as specific human patterning manifestations of mental health nurses characterized by continuous change. Additional factors were explored which describe the mental health nurses' capacity for knowing and active participation in change.

According to Rogers (1992), change is constant, relative, and innovative, and occurs in the mutual process of human and environmental energy fields. Mental health nurses are integral with themselves as well as their clients as the nurses seek to understand the clients' experiential world. Imagination opens unlimited opportunities for creative ways to know oneself and others. Mental health nurses' ability to participate knowingly in change is manifested as power according to Barrett's (1983) Rogerian-derived
theory. Since imagination is innovative knowing and power is participative knowing, each concept can be related to each other as well as to the ability to know clients in mutual process which is manifested as empathy. The researcher hypothesized that imagination, power, and empathy would change relative to each other. Although this study is limited to the self-reports of nurses, the researcher's choice of a conceptual definition of empathy situates her focus on the mutual process of mental health nurses with clients. Together the three variables are a beginning attempt to operationalize a Rogerian view of empathy in nurses who practice in mental health, a specialty where the "real work is, and always will be, the therapeutic use of self" (Rawnsley, 1991).

Hypotheses

**Hypothesis One**

The first hypothesis, in which the researcher postulated a positive relationship between the mental health nurse's positive-constructive imagination score and power score, was supported ($r = .2953, p < .001$). Those who score high on the positive-constructive (PC) subscale of the Short Imaginal Processes Inventory (SIPI) (Huba et al., 1982) believe that imagination is worthwhile, solves problems, helps generate original
ideas, is stimulating, leaves warm feelings and generates pleasant thoughts. Their imaginings have vivid visual and aural qualities and a future time-frame. Sample items from the PC subscale include "I picture myself as I will be several years from now" and "The 'pictures in my mind' seem as clear as photographs." This subscale was noted to be most consistent with the optimism inherent in the Rogerian model. Because the reliability of the instrument was established by administering all three scales of the SIPI, the researcher also administered the three scales but did not hypothesize any relationships. Additional available data will, however, be discussed in the supplementary findings section below.

Barrett (1983) conceptualized power as knowing participation in change that involves awareness and freedom to act with intention. The desire to increase awareness of oneself and other persons is contingent upon readiness or motivation to accept new information. Barrett's (1983) notion of freely intending awareness is, therefore, also pertinent to the concept of curiosity. Segal and Lynn (1992-93) supported significant ($p \leq .01$) relationships between the positive-constructive imagination scale on the SIPI and state curiosity ($r = .38$) and trait curiosity ($r = .35$) measured on the State Personality Inventory.
Ille (spellberger et al., 1979) in their sample of 85 college students. The guilt-fear of failure imagination scores also correlated ($r = .38$) with state and ($r = .33$) with trait curiosity. The poor attentional control imagination scale correlated ($r = -.11$) with both state and trait curiosity in the same study.

Curiosity, like sustained attentiveness and focused awareness, is an important aspect of the mutual process of relationships of mental health nurses with their clients. Imagination often provides a respite from life's tedium. When mental health nurses intend awareness and are involved in creating change with clients it may be that they do so by imaginatively changing otherwise boring aspects of their mutual process into fascinating patterns.

The link between imagination and power in mental health nurses also suggests that imagination could supply choices as well as awareness of one's freedom in acting with intention to create rewarding human involvements. So too, knowing participation sparks imaginative changes in mutual process. Nurses who practice from a Rogerian perspective often use the concept of centering to describe their focused participation in the flow of energy (Krieger, 1981, p. 208) and "awareness of integrality" (Malinski, 1994,
The relationship between imagination and power supported in this study adds to the empirical evidence providing validation for practices, like centering, that so far have been guided solely by the logical and intuitive wisdom some see in Rogers' model. Barrett (1992) describes imagination from the Rogerian model as "an important avenue for participating in creating reality in the moment-to-moment mutual process that unfolds in a health-patternning session" (p. 157) either with self or with clients. In describing the nursing modality of innovative imagery, Barrett (1992) recommends that nurses appraise pattern manifestations by asking clients to "describe on the screen of their imaginations the thoughts and feelings so intensely interwoven into the fabric of whatever is of concern to them" (p. 157). By encouraging clients to share what the nurse cannot see and whatever they believe would help the nurse to understand them, both the nurse and the client enter a pandimensional realm where imagination and power are in mutually related process.

Epstein's (1986) view that imagination operates outside of the traditional realm of cause-and-effect mechanisms is consistent with the relationship found in this study between imagination and power. As an organizing or "coming into order" (p. 29) aspect
of open systems, Epstein maintains that imagination is a lived existential experience that makes awareness of subjectivity possible. Imagination operates in what he calls "no time" (p. 27), in non-logical ways that transcend biological senses and rhythms including waking and sleeping, and with the unique distinction that it can be brought into play by an effort of attention. "Indeed, imagination requires more attention than either hypnosis or meditation" (p. 31). Power channels the intention to imagine in the mental health nurse participants in this study with sharpened awareness of participation in choosing to change.

Although imagination is significantly related to power in the participants' scores in the present study, it is surprisingly low since both imagination and participation are inherent in Rogers' model. Related literature also supported the possibility of the relationship. A possible explanation for the low correlation is in the instruments used to measure imagination and power. Perhaps a mailed, paper and pencil questionnaire does not fully assess the complex flow of creative experience that is indicated by Rogers' model. Several participants also expressed some difficulty in interpreting the directions for the PKPCT although they generally provided appropriate responses.
The educational level of the participants may also have been a factor in the low correlation between imagination and power in this study. Several researchers have demonstrated a positive relationship between power and education, but an inverse relationship is more often manifest between imagination and education which is often described as having an inhibiting effect on creativity. Smith (1990), for example, sees institutions of higher education in America as "killing the spirit of students generally, but especially in disciplines [like psychology and nursing] that try to act like the hard sciences" (p. 282). Smith's view is pertinent to the low correlation found in this study between imagination and power in mental health nurses, if the participants cling to their specialization "at the cost of any capacity for generalization or any awareness of the unity of life... Excessive specialization is a disease of the spirit" (p. 294). The power of knowledge that mental health nurses gained by their education may have been paid for in dampened imaginativeness.

Another explanation for the low correlation found between imagination and power in the present study is reflected in Moulton's (1994) finding of lack of support for a relationship between the fantasy scale of Davis' (1980) Interpersonal Reactivity Index, a
multidimensional measure of empathy, and the PKPCT in her study of 182 nurse executives. Davis (1980) defined fantasy as the tendency to transpose oneself imaginatively into the feelings and actions of fictitious characters in books, movies, and plays. Based on the original work of Stotland et al. (1978), this measure of fantasy is expected to influence emotional reactions toward others and subsequent power to help others.

The relationship between fantasy and power was evident in the early studies of nursing students conducted by Stotland et al. (1978) in which those students who were high on fantasy very strongly identified with an elderly woman in a training film and if they helplessly watched the woman die, they showed no physical signs of emotion. The operative word here is "helplessly," as in powerless to help. The students had also been instructed to "be objective," to mediate feelings with thought, rather than to participate knowingly. Williams (1989) also found that nurses who felt powerless in helping clients in pain quickly became emotionally exhausted or burned out. This researcher submits that based on the finding of this study, when power is low, imagination is low. When a nurse chooses to cease to imagine her client's experience, the nurse's participation decreases.
Likewise, when she imagines choices, the nurse's awareness increases.

Stotland and Smith (1993-94) have criticized the Davis instrument for confusing the distinction between emotional and cognitive aspects of empathy by the indiscriminate inclusion of both emotional and cognitive items on the same scale. The dynamic interplay that is reflected in the correlations between the two types of items "does not capture the alternate expressions of the same underlying entity" (p. 200). However, this researcher maintains that the blurring between imagination and either emotional or cognitive empathy is a more serious weakness in using the Davis instrument in Rogerian studies. An item on the cognitive empathy scale, for example, states "I sometimes try to understand my friends better by imagining how things look from their perspective." In keeping imagination distinct from empathy, assuming that felt, cognizant activity accompanies all mutual process, and finding low, but significant, beginning support for the relationship between imagination and power, the researcher has contributed knowledge that undergirds the complex patterning of empathy.
Hypothesis Two

The second hypothesis, in which the researcher postulated a positive relationship between mental health nurses' power and empathy scores, was supported ($r = .5155, p ≤ .001$). Power was measured by the PKPCT (Barrett, 1986) and empathy was measured by the ECRS (La Monica, 1981). Power was defined as the capacity to participate knowingly in the nature of change characterizing the continuous mutual patterning of the human and environmental fields (Barrett, 1983). Derived from Rogers' (1970, 1990) model, Barrett's power theory encompasses awareness, choices, freedom to act intentionally, and involvement in creating change.

Moulton's (1994) findings support the relationship of power and empathy on the PKPCT and two scales of Davis' (1980) IRI using 182 nurse executive participants. The perspective-taking scale correlated ($r = .1817, p ≤ .05$) with power in Moulton's study. This scale examines the cognitive nature of empathy by measuring the individual's ability to spontaneously adopt the psychological point of view of others. Consistent with this researcher's finding that power and empathy are moderately related, nurse executives may share with mental health nurses a high value placed on cognitive skills in effecting change.
Moulton's findings (1994) also support a negative relationship ($r = -0.1467, p \leq 0.048$) between a nurse executive's level of personal distress and power. This scale measures an affective dimension of empathy which Davis (1983) defines as the feelings of fear, apprehension, and discomfort at witnessing the negative experiences of others. This researcher interprets personal distress to be personal emotional pain evoked in mutual process by awareness of another's pain. The source of personal distress is in the experience of being powerless to help in relieving the other's pain.

Rapacz' (1991) findings regarding power manifestations in persons with and without physical pain are cogent. Rapacz found that human field motion and power, measured by the PKPCT, were highly correlated ($r = 0.71, p \leq 0.0001$) in 113 persons who were living with chronic physical pain. The correlation was even higher ($r = 0.78$) for the control group of 113 persons without pain in Rapacz' study. Likewise, Smith (1992) supported a relationship ($r = 0.34, p \leq 0.005$) between power, measured by the PKPCT, and spirituality in 172 persons with polio and 80 controls. Polio survivors did not, however, have higher power manifestations than controls ($t = 0.44, df = 250, p \leq 0.33$) as hypothesized.

Taken together, these studies support the view that physical and empathically-derived pain decreases
one's knowing participation in change. This researcher attributes the higher correlation found between power and empathy in this study compared to Moulton's findings to two facts: Unlike the IRI, the ECRS does not assess personal distress (although mental health nurses often experience it) or combine both self- and other-focused aspects of empathy.

If personal distress were included on the ECRS, this researcher speculates that the relationship between power and empathy would still exist based on the concept of pandimensionality, provided that the instruments one used were consistently self- or other-focused. The mutual process of continuous energy fields may at times become focused with oneself in pain rather than with oneself in relationship with another who may evoke that pain. However, mental health nurses traditionally take a cognitive perspective and label this phenomenon as countertransference (Miles, 1993; Whalley, 1994).

Although the mutual process of a mental health nurse is constant according to Rogers' model, there is variability in the manifestation of intentional choice to be knowingly involved with a client despite the challenge of personal pain (or joy, for that matter). In addition, because of their direct advanced practice role, mental health nurses may be
more likely than nurse executives to attend to the meaning of pain, including personal distress, rather than its source or intensity. The ECRS is designed to measure the self-reports of nurses regarding their empathy that is totally focused on the client, not on the antecedents or consequences to themselves.

Janssen (1994) provides additional theoretical support for the relationship between power and empathy identified in this study by presenting rich observations from practice with clients who are both mentally ill and chemically addicted. The data can be interpreted from Rogers' model although Janssen relies on Kohut's self psychology for an explanation. A particularly paranoid alcoholic woman attributed great malevolence to powerful others and chose to pattern her own abject impotence into the more comforting reversal of grandiosity. In prolonged empathic listening to her feelings of lack of control, the nurse participated in mobilizing the client using unconditional acceptance.

Empathy requires an open, listening stance on the part of the nurse with willingness to accept without judgment the client's subjective views of reality. Citing Donner (1991), Janssen concluded that "repeated experiences of feeling empathically heard and understood increase the power that the patient invests in the therapeutic process and in the nurse" (p. 385).
From Rogers' model, all control is an illusion and acceptance of wide diversity is enhanced by knowing participation. Power is invested in the mutual process of change in both participants when empathy increases.

Stotland and Smith (1993-94) posit that empathy is not only a way of understanding emotions, but also of generating emotions that may be heavily influenced by one's past experiences of empathizing. They propose that people regulate (power) social relationships so as to optimize empathized emotional experiences as well as to regulate (power) empathic experiences to serve social relationships. Hence, their view is congruent with this researcher's finding regarding power and empathy in mental health nurses.

**Hypothesis Three**

The third hypothesis, in which the researcher postulated a positive correlation between the mental health nurse's score on positive-constructive imagination and her empathy score, was supported ($r = .2674$, $p \leq .001$). Being on friendly terms with one's own inner world of fantasy, dreams, and imaginings can be seen as a prelude to using that capacity to understand others (Klinger, 1990). So too, understanding oneself or another may enhance
imaginative playfulness. All knowing, including empathic understanding, emerges in the mutual process of the knower and the known in Rogers' model (Carboni, 1995). However, the sequencing of knowing is irrelevant based on the pandimensional flow that is assumed in Rogers' model.

The link between imagination and empathy is well established in the literature; however, the link is from a dichotomous worldview in which people are assumed to be separate, even in relationships. Dymond (1948), for example, defined empathy as imaginatively transposing oneself into the thoughts, feelings, and actions of another. Hostorf and Bender (1952) maintained that empathy combined sensing, imagining, and intellectual processes. Carl Rogers (1957) stated that empathy is "a state in which one perceives the internal frame of reference of another with accuracy and with the emotional components and meanings which pertain thereto as if one were the person but without ever losing the 'as if' condition" (p. 99).

Singer (1981-82) maintains that imagination creates an "alternative environment," (p. 20) varied content, or another living pattern in which one can perform and process information. An attentive, curious mental health nurse is temporarily in another environment living vicariously in the setting a client
describes. While drawing obviously on private memories rather than any direct observation of the settings or persons involved in the client's communication, a mental health nurse may tentatively consider actions, experience emotions, or take respite in an alternate environment. Singer (1981-82) asserts that this "miniaturization" (p. 21) of the environment of another via imagination provides the basis for what has in the past somewhat mystically been termed empathic processes. Ehrenwald (1978), for example, noted an air of condescension among scholars regarding paranormal phenomena, despite acceptance of the illusive concept of empathy.

It is essential that the competent mental health nurse is not, however, peopling the patterned miniaturization of another's world with characters from her own life rather than striving to experience fully the client's cast of characters. Empathy requires a flexible, rhythmic self-knowing made manifest via the creative vehicle of imagination in order to avoid self-serving, narcissistic projective patterns. Clinical supervision provides a valuable opportunity to promote optimal and productive patterning of the nurse in mutual process (Dombeck & Briody, 1995).

Sherman and Stotland (1978), as already discussed, proposed that fantasy is an important dimension of
empathy since fantasy enables persons to creatively imagine another's experiences and thereby "catch" their feelings. Participants in their study empathized more when they imagined how another person felt or when they imagined being in that person's place, provided that person was in an authentically painful situation. Although they limit their definition of empathy to emotional contagion, Sherman and Stotland's findings are particularly pertinent to imagination and empathy in mental health nurses.

Emotionally charged imagination can be both enriching and dangerous in mental health nurses, for example, when they are appraising client feelings that are incongruous with the client's expressed feelings or perceived situation or are used to manipulate the nurse for the client's advantage. Peplau (1965) offers a graphic personal description of the danger of an overwhelming degree of empathic anxiety, bordering on dissociative panic, that prevented Peplau's full use of her rational, cognitive abilities. A few hours before a disturbed former client literally set fire to a hospital ward, Peplau had an uncanny, ineffable awareness of the client's malevolence but was unable to act effectively. Although Peplau's experience can also be viewed from Rogers' model as a pandimensional advantage, it does help to explain the low correlation.
that this researcher found between imagination and empathy in practicing mental health nurses.

Frequent close contact with the suffering of persons manifesting mental illness modulates romantic notions about madness that are academically entertaining but vacuous in practice. The correlation between imagination and empathy that this researcher found supports the pandimensional relationship posited based on Rogers' model. The fact that the correlation is low suggests that, for this sample, the connection is more pragmatic than visionary.

Moulton's (1994) nurse executive participants scored below the midpoint ($M = 11.59$) using Davis' IRI instrument, indicating that nurse executives may use little fantasy and more cognitive skills in their work with others. In contrast, Maciorowski (1988) found staff nurses to have noticeably higher ($M = 17.04$) fantasy scores which was exactly the same as the mean for mothers in Sanchez' (1986) study. The mental health nurses in the present study scored moderately high ($M = 54.54$) on imagination measured on the SIPI and are comparable to the mean reported by Segal and Lynn (1992-93) for undergraduates.

Since they often work with clients in pain, it may be that mental health nurses, more so than nurse executives, use their imaginative capacity. Mental
health nurses need to empathize not only with clients who are aware of and experiencing pain, but also at times to acquaint some clients with the client's unknown pain. In so doing, mental health nurses sustain a therapeutic mutual process by enhancing the clients' ability to empathize with themselves. Perhaps mental health nurses also use their imagination to buffer the risk of losing one's equanimity that prolonged contact with those in mental anguish, manic euphoria, or apathy poses for some persons.

The low correlation between imagination and empathy in mental health nurses identified by this researcher may be partially explained by Moulton's (1994) failure to support a relation between the empathic concern aspect of empathy and power in nurse executives. Empathic concern is an individual's ability to experience feelings of warmth, compassion, and concern for others. If imagination is perceived as excessive, it may frighten a mental health nurse whose intention is to protect her client from overwhelming pain, for example, from the loss of a shared reality, therefore the relationship between imagination and empathy would be diminished. Although the mental health nurse would eventually need to increase awareness of her protectiveness towards particular clients, empathic concern may
take precedence momentarily.

The relationship between imagination and empathy supported in this study opens interesting speculations regarding behaviors that are often labeled as aberrant. Although all human energy fields are integral according to Rogers (1990), human relationship patterns differ in several ways, such as, purpose, frequency, closeness. If one can enhance connection to another via empathy, it is also possible to use empathy pan-dimensionally to create distance in the integral process of relationships. Taken to an extreme, the tendency to withdraw from oneself and others is referred to as dis-sociation and can be seen as the opposite of empathy. Lynn, Rhue, and Green (1988), for example, argue that "dissociation may be thought of as an imagination-based cognitive strategy" (p. 140).

Dissociation is not necessarily pathological and involves the use of imagination and attention-regulating behaviors like going blank, or selectively forgetting, to create a credible feeling of distance from aversive events outside the realm of one's perceived control. Imagination serves an active and functional role in disavowing painful feelings or disowning aspects of oneself and can evolve into an idiosyncratic "believed-in-self" (Segal & Lynn, 1992-93, p. 288). Dissociation then serves to
distance rather than connect, to disguise rather than clarify understanding of oneself or others. Dissociation convolutes empathy. Perhaps dissociation arises in an atmosphere of empathic failure.

This researcher interprets the lack of empathy factor on the ECRS as equivalent to the concept of dissociation. La Monica (1981) found two factors on the ECRS in the factor analysis she conducted during the instrument development. Factor I has 49 items representing well-developed empathy. Factor II has 35 items representing a lack of empathy. These factors were highly correlated ($\rho = .92$) suggesting they are opposites in the same continuum. The lack of empathy items are reversed from negative to positive when scored. She interprets the finding of discriminant validity as supporting her dialectical definition of empathy.

Discriminant validity means that different constructs can be differentiated empirically from one another and unrelated constructs can be identified (Kerlinger, 1973). Sample items from La Monica's (1981) Factor II are: "Does not respect individual differences," "Is negative, cold, and rejecting, all of which are communicated to another," and "Does not listen to what the other person is saying." Another researcher, I. A. Rogers (1986) replicated this factor.
structure and labeled Factor II Insensitivity and Indifference.

Segal and Lynn (1992-93) conceptualize dissociation as ranging on a continuum from common, everyday daydreams to major forms of psychic patterning, such as multiple personality. They administered the SIPI to 85 college students in an attempt to identify predictors of dissociative experiences and confirmed a relationship between imagination and dissociation. The positive-constructive scale accounted for 19% of the variance on the Bliss Scale and 16% of the variance on the Dissociative Experience Scale, two different measures of dissociation. The attentional control scale accounted for 5% and 6% of the unique variance respectively on the same two measures of dissociation ($r = .40$ to $.44$, $p \leq .01$). In addition, the guilt-fear of failure scale also correlated ($r = .36$, $p \leq .01$) with dissociation as measured on the Bliss Scale.

Rogers (1992) invites a different perspective on the increasing diversity of human becoming including that of people whom some mental health nurses encounter with the dissociative pattern manifestation referred to as multiple personality. Phillips (1994) suggests that "the human field of people with multiple personality is of such a high diversity that it can manifest its
potentials in diverse ways through just one physical body" (p. 331). Furthermore, citing Hale (1983), he notes that fusion of the personalities is an unacceptable, imposed solution that misses understanding the advantages to being multiple.

The researcher submits that Phillips' (1994) position is a helpful entre into mutual process with a client manifesting multiple personalities. Caution is indicated, however, against imposing one's own awareness as to how many and what kind of physical body or human field image the client experiences. Based on the findings of the present study, the researcher submits that an imaginative mental health nurse would be more likely to accurately identify the advantages to the client of being multiple as well as the challenges to the nurse in the timing of changes in participation. She also might possibly even experience the advantages and challenges in mutual process with such a client, if she were also highly empathic. The beginning evidence for a link between imagination and empathy which this researcher has identified adds to the limited evidence in the literature that may inform mental health nursing practice using Rogers' model.
Supplementary Findings

SIPI & PKPCT Subscales

Scores on the four subscales of the PKPCT can be summed in order to obtain individual measurements of each of the four power concepts: awareness, choices, freedom to act with intention, and involvement in creating change. In addition, scores on two scales of the SIPI that were not included in hypotheses testing were also available: Guilt-fear of failure and poor attentional control imagination. Potentially useful findings were identified by additional data analysis of all subscale scores.

High scorers on the guilt-fear of failure imagination scale have daydreams that have depressing, frightening, panicky qualities. They also fantasize of winning awards, being expert and in a recognized group, yet they fear responsibilities, not being able to finish a job, failing loved ones, becoming angry, getting even and aggressing toward enemies, having a friend discover lies, feeling guilty and afraid of doing something wrong (Huba et al., 1982). Sample items on the guilt-fear of failure scale are: "I picture myself being accepted into an organization for successful individuals only," "I imagine myself failing those I love."

High scorers on the poor attentional control
imagination scale have tendencies toward mindwandering and drifting thoughts. They easily lose interest, tend to become bored, cannot work at something for a long time, are easily distracted by the telephone, television set, or talking (Huba et al., 1982). Sample items on the poor attentional control scale are: "I tend to be easily bored," "I am the kind of person whose thoughts often wander," "My mind seldom wanders from my work." It was expected that these negatively valenced aspects of imagination would be negatively correlated with both total power and each of the power subscales. Since the opportunity existed to further test the PKPCT subscales and the two SIPI scales, the subscale scores were computed and then correlated with scores from the three imagination scales. Total power scores were also correlated with the two additional imagination scores. (See Table 24.)

The four power subscales were all positively correlated with the positive-constructive imagination scale and negatively correlated with the guilt-fear of failure and poor attentional control imagination scale. The magnitude of all correlations was low and ranged from .17 to .33. Consistent with the optimism Rogers espouses in her conceptual model, the highest correlations were with the positive-constructive imagination scale. However, pandimensionality
encompasses both pleasant and painful aspects of reality and this is reflected in the low negative correlations of the power subscales with guilt-fear of failure and poor attentional control imagination scales. Since imagination opens infinite possibilities for choice, a tentative explanation for these findings is that awareness guides the choice of imaginative possibilities so that one's sense of freedom and involvement optimize creative intention in mutual process.

There was a consistent correlation of -.19 across all four power subscales and the guilt-fear of failure imagination scale. Total power scores correlated -.21 and -.22 respectively with guilt-fear of failure and poor attentional control imagination. These findings reflect the self-denigrating tendency of guilt and fear to render one impotent and suggest that they may often be accompanied by an inability to concentrate when power is low. The two imagination scales that are negatively valenced also are strikingly similar to the frequently associated phenomenon of pessimism and depression (Seligman, 1991) wherein one's worldview or awareness is limited to choices of self-blame that are pervasive and enduring.
SIPI Subscales and Demographics

The poor attentional control aspect of imagination scores is significantly different for participants in this study according to their practice setting. Since this scale measures distracted, unfocused imaginal experiences, high mean scores indicate high distractibility. The highest poor attentional control score was achieved by those mental health nurses who work in a university setting. This finding is not surprising since both hospitals and university settings yielded very similar means indicating high levels of distractibility and boredom. Hospitals are generally considered to be bustling, noisy places where clients often complain of not being able to rest. Academia is hardly an idyllic sanctuary far removed from the distractions and demands of the world (Rosovsky, 1990).

The lowest mean score on poor attentional control imagination relative to practice setting was obtained by mental health nurses in private practice. The researcher suspects that the autonomy possible in private practice may initially challenge the mental health nurse to accept much greater responsibility; however, the reward is in highly focused involvement with clients with whom she is more likely to engage in consistent and sustained mutual process. Nevertheless,
a few participants commented on the loneliness and isolation of private practice indicating that they are aware of a need to intentionally seek out colleagues for peer support. Being self-directed clinicians, however, affords them greater opportunity for creative practice choices.

Poor attentional control imagination mean scores also differed significantly according to number of years in therapy. Mental health nurses who had never been in therapy had the highest mean scores on poor attentional control imagination. This finding provides support for the belief that being a client and actively grappling with one's own inner demons provides valuable preparation to engage with clients in rapt attention.

It is also interesting that there is a clear decrease in means for poor attentional control imagination with increasing years in therapy. In other words, the more the mental health nurse participants invested in the self-exploration of therapy, the greater their ability to stay absorbed in their work and channel their fantasy life deliberately. Although the issue of whether personal therapy is necessary for mental health nursing practice remains controversial (Lego, 1987, 1992), this finding is consistent with the researcher's view that there is a
parallel, creative patterning to the mutual process a mental health nurse conducts with herself and the mutual process in which she participates with clients.

**PKPCT Scales and Demographics**

There are additional findings of interest from the analysis of the four power scales for differences across demographic variables. Scores on the involvement in creating change aspect of power and the poor attentional control aspect of imagination differed according to marital status. The highest mean for involvement in creating change was obtained by those who are married and the highest mean for poor attentional control imagination score, by the never married.

Living one's personal life in any committed relationship whether to one's work or other people requires sustained involvement, openness to change, and focused attention that future researchers may find is correlated with other aspects of one's professional ability in mental health nursing. Literary critic Stade (1979) claims such a link exists in the talent and personal integrity of artists, and Guy (1987) traces a similar theme in the personal and professional lives of psychotherapists. It is equally plausible that single mental health nurses might
manifest even higher power and lower distractibility than their married colleagues since their lifestyle makes greater concentration possible. Perhaps the participants in this study perceived their lifestyles as freely chosen patterns of attentive involvement in continuous change, and the experience of choice rather than marital status per se is what accounts for the difference.

There was a significant difference in participants' scores on the choices aspect of power and the guilt-fear of failure aspect of imagination according to the number of children they have. The highest mean for choices was obtained by those who have three children, and those with no children had the highest mean score for guilt-fear of failure. Can it be that the experience of parenthood, which is itself an important choice, not only inures one to perceiving choices, but also protects one from the ravages of guilt? Despite the popular press that mothers are plagued by guilt (Thurer, 1994), it appears that mental health nurses who are also mothers may bring a valuable experience to enhance their choices in working with clients.

Again, there may be important implications between one's personal and professional patterning process that requires additional investigation. It is
consistent with Rogers' model to consider a continuous flow rather than a dichotomous compartmentalization of life roles. If, as Zderad (1969) and Rawnsley (1985, 1987) maintain, empathy is a critical dimension of the therapeutic use of self, then the significance of power and imagination relative to parenting identified in this study warrants further inquiry regarding the seamless flow of personal with professional selves.

SIPI, PKPCT and ECRS

The ability of the SIPI scales, total power, and the power subscales to predict empathy was investigated using stepwise multiple regression analysis. Preliminary examination of the correlation matrix of eight predictor variables and the criterion variable of empathy revealed that there were significant relationships between all variables with one exception between positive-constructive and poor attentional control imagination scales which did not reach significance. All four power subscale scores were moderately correlated with empathy in a positive direction with a range from .43 for involvement in creating change to .49 for awareness. This finding adds further evidence for the robust ability of the PKPCT scales to predict empathy in mental health nurses. Perhaps the attitude of knowing participation...
in change enhances the ability of the nurses to more fully know the reality of their clients' worlds.

The positive-constructive imagination scale had low but significant positive relationships with power subscales, with total power, and with empathy. In addition, the guilt-fear of failure imagination scale had a moderately negative correlation ($r = -0.39$) and the poor attentional control imagination scale had a low negative correlation ($r = -0.30$) with empathy. This supports the intuitive view that a distracted, guilt-ridden mental health nurse will be hard pressed to be empathically available to her clients. All correlations between power subscales, total power, and guilt-fear of failure and poor attentional control imagination were negative and of low magnitude.

An initial multiple regression analysis of the main study variable scores with empathy regressed on positive-constructive imagination and total power, revealed that power contributed significantly to the prediction of empathy by accounting for 28% of the unique variance in empathy. Positive-constructive imagination failed to enter into the equation.

Stepwise multiple regression analysis was also performed by regressing empathy on all three imagination scales and total power scores. Power again accounted for the largest variance in empathy.
(27%) and guilt-fear of failure imagination also entered the equation and accounted for an additional 9% of the unique variance in empathy. Based on these results, power is an important variable associated with empathy that has some independent, predictive ability. This is the first study that has explored power as an independent variable. In addition, there is beginning support for the assertion that the combination of imagination and power scores which accounted for a total of 36% of the variance in empathy is a better predictor of empathy than either variable taken singly in the present sample of mental health nurses.

These findings regarding imagination, power, and empathy considered simultaneously exists in Stotland and Smith's (1994) theoretical position in which they elaborate a five part process of empathy that includes imaginative process enhancement as well as one's motive for empathy such as pro- or anti-social intentions. Stotland and Smith are primarily interested in emotional empathy; however, they acknowledge the importance of cognitive and physiological changes as inherent in empathy. Although the model they propose is a linear one, they present a persuasive argument for a comprehensive view of empathy that does more than sum up particulate
phenomena. By emphasizing a motivational view of empathy, they suggest that the literature on optimism, altruism, and empathy (Kohn, 1990) is also consistent with the link this researcher explored between imagination, power (to help), and empathy.

Norton, Ross, and Novotny's (1990) findings also are consistent with the relationship that this researcher found between the combination of imagination and power with empathy although from empathy's "dark side" of dissociation. These authors found that Tellegen Absorption Scale (TAS) scores were associated with Dissociative Experience Scale (DES) scores in a college population. The TAS measure of imaginative involvement seems to tap both the focused awareness and involvement aspect of power relative to the use of one's fantasy life in regulating closeness in mutual process. When combined with two other personality and thinking scales, the TAS accounted for 61% of the variance on the DES.

**Main Study and Demographic Variables**

The researcher's interest in identifying factors related to imagination, power, and empathy in mental health nurses that indicate a need for future research prompted additional exploration for possible relationships between demographic variables and the
main study variables. Variables were selected for possible relationship to a Rogerian theory of empathy as suggested in the literature (Moulton, 1994; Raile, 1986; Rawnsley, 1987; Sanchez, 1986; Wheeler, 1988) as well as on the basis of intuitive judgement.

There were no significant differences in the main variable scores with the demographics of age, education, years of experience in mental or physical health nursing, job title, employment status, professional memberships, currently being in therapy, the use of a dream journal, clinical supervision, or support group membership. The lack of significance with chronological age is particularly consistent with the Rogerian model (Cowling, 1990).

Although the finding regarding education appears to conflict with Moulton's (1994), this researcher did not solicit information regarding the basic educational preparation of the participants and therefore made no comparisons regarding entry level and highest degree. It is noteworthy that only 45 (26.6%) of the mental health nurse participants hold degrees from disciplines other than nursing but 82 (45.1%) of the nurse executives in Moulton's study do. Since the ages of the two samples of nurses in these studies is comparable, it is tempting to speculate that the mental health nurses are somewhat more
"dedicated" to nursing. However, the higher proportion of mental health nurses who are involved in teaching may also explain some of the differences. Nurse executives are more likely to feel the need for business knowledge rather than direct practice theory.

The lack of significance found for experience is consistent with Rogers' (1970) view that experience is not a substitute for learning. Rogers often quoted Polanyi (1958) who held that "Almost every systematic error which has deluded [us] for thousands of years relied on practical experience" (p. 183). The findings of this study support the position that academic preparation or direct empathy training probably has little merit without life experience and purposeful involvement that is nurtured. Rawnsley (1980) concurs when she claims that it is unlikely that imagining or postulating many hypothetical interpretations of a simulated situation is little more than an academic exercise for persons who have not "seriously pondered lifestyles, realities, and reactions different from their own" (p. 247).

Interesting findings emerged when data were subjected to analysis of variance. There were significant differences in empathy scores based on marital status, with the highest mean empathy score obtained by participants who were categorized as
"other," i.e., widowed, divorced, separated, living together with same or opposite sex partners. The lowest mean scores were obtained by participants who had never married or otherwise committed to personal relationships with others. There were no members of religious communities and only one from the military among the participants. This was an unexpected finding since the solitude afforded by living alone has the potential to enhance both creativity and empathy provided the solitary life is freely chosen (André, 1991; Koller, 1990). It may be that for this sample of mental health nurses, the condition of chosen solitude did not apply.

Additional demographic findings concern the responses of participants to inquiry about the methods they use to achieve, sustain, or enhance their understanding with clients (see Table 8), their most frequently recurring dream (see Table 9 & Appendix F), and their motivation for entering mental health nursing (see Table 10 & Appendix G). The researcher coded all responses that indicated the use of self-reflection or introspection to the inquiry regarding methods used to achieve, sustain, or enhance understanding with clients. Unfortunately, there was no relationship between this item and any of the main study variables despite an intuitive expectation.
Perhaps a precise measurement scale is required rather than merely inferring introspection from responses to a demographic question.

The openness with which the participants shared their dreams attests to their positive attitude toward imaginative process as an important vehicle for building meaningful mutual process even with an unknown, but trusted researcher. The reported reasons for entering mental health nursing support the importance of choice as an aspect of specialty practice and personal life experience in directing professional choice.

Independent t tests revealed significant differences when participants reported that they hold certification in specialty practice. Certified nurses had lower mean positive-constructive imagination scores. This finding underscores Ehrat's (1991) belief that specialty practice needs to include both rational and creative talent. She cites Davis (1987) who said that: "The faster things change, the more you need imagination" (p. 427). While empathy is required of all nurses, only leaders will possess unflinching optimism and creativity according to Ehrat. Neither education nor experience alone accounted for differences in the scores for any of the study variables. Nurses earn certification in specialty
practice through both education and experience. These requirements are grounded in communication and critical thinking competencies rather than increasing technical skill or creativity.

Certification is available on generalist as well as specialist levels that are currently undergoing revision (ANA, 1994-5). Many experienced mental health nurses who hold graduate degrees, including many in this study, identify themselves as generalists according to certification. There is much potential for confusion amidst current discussions of advanced practice generalists for primary care (Phillips, 1995) versus mental health primary care specialists and practitioners (Haber & Billings, 1994).

Now more than ever the imaginative capacity of certified nurses is essential. Based on the finding of this study, perhaps certified mental health nurses already use their imagination to knowingly participate in ways that transcend their education and experience by choosing their practice diversity. They need to increase their imaginative skills, however, in order to enhance more fully their power and empathy.

Differences in imagination and empathy scores were detected when participants reported that they use guided imagery and meditate. Imagery users scored higher on empathy and positive-constructive
imagination than non-users. Meditators scored higher on positive-constructive and lower on poor attentional control imagination. These findings are consistent with differences in empathy associated with imaginative techniques (Frank, 1978; Wynd, 1992) and with meditation (Lesh, 1970; Sweet & Johnson, 1970) reported in the literature. There were no studies that link meditation and imagery although the two Eastern traditions are often used together in practice since meditation promotes relaxation which is a prerequisite to effective imagery (Stephens, 1993).

Finally, two other variables were statistically related to empathy, total power, three power subscales, and two manifestations of imagination scores. Those who had no personal physical health problem scored higher on empathy, power, choices, freedom to act with intention, and the involvement in creating change scales on power and with positive-constructive imagination. Those who had no loved one who experienced a mental health problem also scored higher on empathy, power, choices, freedom to act with intention, and the involvement in creating change scales on power and lower on poor attentional control imagination.

It may be that the personal challenge of dealing with mental or physical illness dampens one's
professional sensitivity and emotional involvement in caring for those who require skilled intimacy for healing. The 58% of the mental health nurses in this study who reported that they had a loved one who experienced a mental illness, may have brought a life-long wariness rather than instant understanding to their specialized practice. Their sustained commitment to the care of the mentally ill, however, may reflect an important aspect of human motivation and participation that was not assessed by the instruments used.

The researcher interprets the nonsignificant finding for awareness scores relative to experience with personal or familial illness as a greater openness to the unique experience of clients. Kurtz (1989) describes this phenomenon from a psychoanalytic perspective as the art of unknowing. According to Rogers' model, all experience evokes greater awareness of the need to be optimally accepting of diversity.

There is beginning evidence in the supplementary findings that identifies variables relevant for additional study. Knowledge about the interplay of several variables including personal and professional experience regarding imagination, power, and empathy will be useful in more fully understanding individual
participation in the mutual process of change.

Methodological Issues

Several methodological issues surfaced during this investigation concerning each of the instruments. They will be discussed relative to each instrument and then from the specific problems posed by self-report instruments which is common to all three instruments.

The formidable length of the ECRS with 84 items and the wording of the items in the third person when the participant is being asked to rate herself posed awkward challenges. Although the responses from this sample, were generally complete and achieved a high reliability coefficient, a few participants commented on these facts. There is a possibility that what was being measured was high motivation and cooperation by professional peers rather than their actual empathy. Additional refinement of the instrument is indicated to avert this threat to validity. The overall mean for empathy obtained by the mental health nurses in the present study (M = 200.47) is considerably higher than the means reported by Birdsall (1991) for staff nurses (M = 147.50) and Quinn (1988) for mothers (M = 102.26) using the ECRS. Mental health nurses' scores were skewed towards the upper limits of empathy; however, their scores were less dispersed
(SD = 36.65) than those of the mothers in Quinn's study (SD = 41.09).

Several participants expressed some uncertainty about understanding the PKPCT directions and they compensated by adding comments in the margins, e.g., "My awareness includes my colleagues at work, not just my patients." "I'm too busy to be deeply involved in many changes." The use of semantic differential technique seemed to be a source of confusion that needs to be reconsidered in the design of future versions of the PKPCT.

According to Nunnally (1978) an alpha coefficient of .70 is acceptable for instruments measuring behavioral constructs but excessively high alpha of .96 may be indicative that the items are measuring only one aspect of a construct. Moulton (1994) identified this potential lack of precision in the consistently high alpha coefficients reported for the PKPCT. Likewise, this researcher found remarkably similar alpha to those reported by other researchers (see Table 27) including a .96 for total power.

Examination of the item means on the PKPCT reported by several researchers reveals that the instrument may lack measurement precision (see Table 28). The item mean for this sample, 6.0, is the same mean reported by Caroselli-Dervan (1991) and
Table 27
Validity and Reliability Data for the PKPCT

<table>
<thead>
<tr>
<th>Year/Version/Researcher</th>
<th>Power</th>
<th>AW</th>
<th>CH</th>
<th>FI</th>
<th>IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983 VI Barrett</td>
<td></td>
<td>.63</td>
<td>.75</td>
<td>.95</td>
<td>.99</td>
</tr>
<tr>
<td>1988 VII Trangenstein</td>
<td>.96</td>
<td>.86</td>
<td>.88</td>
<td>.89</td>
<td>.92</td>
</tr>
<tr>
<td>1990 VII Rizzo</td>
<td>.94</td>
<td>.87</td>
<td>.81</td>
<td>.87</td>
<td>.87</td>
</tr>
<tr>
<td>1991 VII Caroselli-D</td>
<td>.95</td>
<td>.83</td>
<td>.87</td>
<td>.85</td>
<td>.89</td>
</tr>
<tr>
<td>1991 VII Rapacz</td>
<td>.94</td>
<td>.79</td>
<td>.77</td>
<td>.82</td>
<td>.82</td>
</tr>
<tr>
<td>1991 VII Barrett</td>
<td>.97</td>
<td>.89</td>
<td>.91</td>
<td>.92</td>
<td>.93</td>
</tr>
<tr>
<td>1991 VI Barrett</td>
<td>.97</td>
<td>.91</td>
<td>.91</td>
<td>.92</td>
<td>.93</td>
</tr>
<tr>
<td>1992 VI Smith</td>
<td>.97</td>
<td>.88</td>
<td>.88</td>
<td>.93</td>
<td>.93</td>
</tr>
<tr>
<td>1994 VII Moulton</td>
<td>.96</td>
<td>.84</td>
<td>.90</td>
<td>.91</td>
<td>.96</td>
</tr>
<tr>
<td>1995 VII Present Study</td>
<td>.96</td>
<td>.84</td>
<td>.89</td>
<td>.91</td>
<td>.91</td>
</tr>
</tbody>
</table>

Stability Coefficient Ranges of Retest Items

<table>
<thead>
<tr>
<th>Year</th>
<th>Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983 Barrett pilot</td>
<td>.57 - .90</td>
</tr>
<tr>
<td>1983 Barrett validation</td>
<td>.70 - .78</td>
</tr>
<tr>
<td>1986 Dzurec</td>
<td>.64 - .93</td>
</tr>
<tr>
<td>1988 Trangenstein</td>
<td>.68 - .80</td>
</tr>
<tr>
<td>1990 Rizzo</td>
<td>.58 - .66</td>
</tr>
<tr>
<td>1992 Smith</td>
<td>.72 - .90</td>
</tr>
<tr>
<td>1994 Moulton</td>
<td>.58 - .80</td>
</tr>
<tr>
<td>1995 Present Study</td>
<td>.59 - .86</td>
</tr>
</tbody>
</table>

Note. AW: Awareness, CH: Choices, FI: Freedom to act intentionally, IC: Involvement in creating change

Moulton (1994). The standard deviation of 1.05 for the item mean in this study is a sharp contrast to the .54 and .91 reported by Caroselli-Dervan and Moulton respectively. Perhaps the mental health nurses were more uncertain than nurse executives of their actual power, but it is also possible that the instrument
Table 28
Comparison of Item Means and Standard Deviations in Selected Studies Using the PKPCT

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Population</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988, Trangenstein</td>
<td>Staff nurses</td>
<td>5.5</td>
<td>.72</td>
</tr>
<tr>
<td>1990, Rizzo</td>
<td>People over age 65</td>
<td>5.7</td>
<td>.75</td>
</tr>
<tr>
<td>1991, Caroselli-D</td>
<td>Nurse executives</td>
<td>6.0</td>
<td>.54</td>
</tr>
<tr>
<td>1991, Rapacz</td>
<td>People with pain</td>
<td>5.1</td>
<td>.78</td>
</tr>
<tr>
<td>1991, Rapacz</td>
<td>Comparison group</td>
<td>5.6</td>
<td>.78</td>
</tr>
<tr>
<td>1992, Smith</td>
<td>People with polio</td>
<td>5.4</td>
<td>.76</td>
</tr>
<tr>
<td>1992, Smith</td>
<td>Comparison group</td>
<td>5.4</td>
<td>.76</td>
</tr>
<tr>
<td>1994, Moulton</td>
<td>Nurse executives</td>
<td>6.0</td>
<td>.91</td>
</tr>
<tr>
<td>1995, Present Study</td>
<td>Mental health nurses</td>
<td>5.9</td>
<td>1.05</td>
</tr>
</tbody>
</table>

confused them. Because the mean exceeds the neutral position of four on this seven point scale, there clearly is a tendency of items to cluster at the higher end of the scale. The need to strengthen the PKPCT's ability to discriminate and vary across populations is evident.

Examination of the overall means on the PKPCT also indicates the need for further support for the validity of power as a non-hierarchical phenomenon. Nurse executives have obtained the highest mean total power
scores thus far. Caroselli-Dervan (1991) reports a mean of 289.05 and Moulton (1994) reported a mean of 291.01 for nurse executives. The mean in the present study was 285.10 which situates the mean for mental health nurses between those reported for nurse executives and the lower means that Smith (1992) reported for persons with polio (M = 263.84) and without polio (M = 261.44). Additional information is needed to assess how power as knowing participation in change manifests across varied populations.

The inability of the SIPI to yield a total score despite its thirty year history of being used frequently in an extensive line of inquiry is dismaying to this researcher. There is also an inconsistency in how imagination, imaginal processes, daydreams, and fantasy are used interchangeably in identifying the construct that the instrument measures which makes the task of reviewing the literature overly cumbersome and presents a risk to conceptual clarity. In addition, the congruence with Rogers' (1992) manifestations of creative patterning as pragmatic, imaginative, and visionary needs further validation.

Watson (1994) recently developed a Rogerian-based instrument, Assessment of Dream Experience (ADE), to measure an individual's attitude toward
sleeping dreams. Focusing on awareness patterns across the human sleep-wake dimension, Watson defined dreams as beyond waking phenomena and identified a conceptual relationship with the human field motion tool and time experience which still awaits empirical verification, however.

The ADE assesses feelings about dreams without reference to their content or linking them to creative potential. In addition, the instrument development was limited to females over 60 years of age. With additional refinement and testing, the ADE holds promise of helping to close some of the gaps in imagination measurement within the Rogerian model.

The issue of self-report measures warrants discussion. Polit and Hunglar (1987) raise serious question regarding the validity and accuracy of self-reports. They note the human tendency to want to present oneself in a favorable light that may conflict with the truth. All three instruments use negatively worded items to guard against the risk of response sets, and the PKPCT also incorporates a re-test item on each scale.

Anastasi (1982) describes three common types of response sets to which self-report measures are vulnerable: social desirability, or the wish to look good or bad depending on the circumstances;
acquiescence, or the tendency to answer yes or no; and deviation, or the tendency to give unusual or uncommon responses. Furthermore, judgements of social desirability are not constant for all purposes. The empathy of used car salesmen and mental health nurses, for example, may differ from what is considered desirable in general cultural norms. Therefore, the researcher maintains that the ECRS scores in the present study, are unusually high but not necessarily because of social desirability response sets.

The validity and reliability data for the ECRS were appropriately established on nursing samples. Although there are some scores in this study that indicate acquiescence, the majority do not. It also could be argued that if the mental health nurses wanted to please the researcher, they at least would have to know what constitutes empathy in order to fake responses. However, there may have been a level of test-taking savvy among this sophisticated group that influenced their responses.

In order to address the ceiling effect seen in the scores of oncology nurses in La Monica, Wolf, Madea, and Oberst's (1987) study, La Monica (1986) redesigned the ECRS to use forced choice items. The newer instrument, the La Monica Empathy Profile,
has failed to correlate significantly with the ECRS and yields five subscale scores rather than a total empathy score. Birdsall (1991) found a relationship between the ECRS but not the LEP and a measure of nonverbal communication.

It strikes this researcher as more reasonable to accept the high levels of empathy as accurate and look for factors in what Rawnsley (1987) called facilitative environments and empathic propensities of both nurses and their clients. Although the ECRS can be used as self, client, or peer reports, this researcher seriously questions the validity of those options based on Rogers' model. If empathy emerges in mutual process, then it is equally important to identify empathic readiness, openness, and sensitivity in clients as well as nurses, and not simply ask each empathic partner if the nurse is empathic.
CHAPTER VI
SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

Summary

This descriptive correlational study was conducted in order to identify key variables related to empathy in mental health nurses from the perspective of Rogers' (1970, 1994) model. It was proposed that imagination, power, and empathy are indicators of change in mental health nurses' field patterning. Consistent with Rogers' model, it was postulated that these manifestations are positively related and would change relative to each other. The researcher's purpose was to investigate whether statistically significant positive relationships exist between the imagination, power, and empathy of a national sample of mental health nurses. Additional purposes were to explore selected demographic variables relevant to the sample and to begin inquiry of Rogers' model in this specialty practice.

The sample consisted of 169 female Master's-prepared mental health nurses selected through random sampling from the mailing list of the ANA's Council of Psychiatric-Mental Health Nursing.
Selection followed the geographic distribution of the members and resulted in representation from 44 states in the final sample.

Packets containing a cover letter explaining the research project, a continuously printed questionnaire that included the SIPI, the PKPCT, VII, the ECRS, and a demographic inventory, a coded reply postcard, and return envelope were mailed to 280 potential participants using Dillman's (1978) Total Design Method. Completion and return of the questionnaire constituted tacit consent. Of the 198 returned questionnaires, 29 (14.6%) were eliminated which brought the final sample to 169 with a 76.1% consent rate.

The majority of the participants were between the ages of 40 and 59, were (or had been) married, and were the parents of young adults. Most participants had over ten years experience in mental health nursing and less than six years experience in physical health nursing. They work full time mostly in private practice or a combination of private practice and in another setting where they are identified as clinical specialists or a combination of titles. They earned Master's or Doctoral degrees in nursing as well as ANA certification in the specialty. They are members of professional organizations other than the Council,
have been in psychotherapy, and use several ongoing strategies to enhance their understanding of clients. Over half of them reported having a loved one who experienced a mental health problem. One quarter of them reported having a personal physical health problem. They responded freely to the researcher's inquiry about their common dream experiences and their motivation for entering mental health nursing.

**Hypotheses**

First, the researcher hypothesized that imagination and power would be positively related. This hypothesis was tested using scores from the positive-constructive scale of the SIPI and the PKPCT, vII. A Pearson product moment correlation was calculated, resulting in a coefficient of .2953 which was highly significant \((p \leq .001)\). The hypothesis was supported.

Second, the researcher hypothesized that power and empathy would be positively related. This hypothesis was tested using scores from the PKPCT, vII and the ECRS. A Pearson product moment correlation was calculated, resulting in a coefficient of .5155 which was highly significant \((p \leq .001)\). The hypothesis was supported.

Third, the researcher hypothesized that
imagination and empathy would be positively related. This hypothesis was tested using scores from the positive-constructive scale of the SIPI and the ECRS. A Pearson product moment correlation was calculated resulting in a coefficient of .2674 which was highly significant ($p \leq .001$). The hypothesis was supported.

**Supplementary Analysis**

Analysis of variance of the SIPI, PKPCT, and the ECRS scores according to selected demographic variables revealed significant differences according to marital status on attentional control imagination, power as involvement in creating change, and empathy. Power as choices and guilt-fear of failure imagination differed significantly according to number of children. Attentional control imagination was significantly different according to practice setting and years in therapy. Positive-constructive imagination differed according to use of imagery, meditating, and being certified. Most of the main study variables and three of the power subscales differed significantly according to whether the participants did or did not have a personal physical health problem or a loved one who experienced a mental health problem. The latter varied only with attentional control; the former, with
positive-constructive imagination.

Using stepwise regression analysis of empathy on total power and positive-constructive imagination scores, power accounted for 28% of the variance in empathy but positive-constructive imagination failed to contribute significantly to the prediction of empathy. When a stepwise regression of empathy on total power and the positive-constructive, guilt-fear of failure, and poor attentional control scales of the SIPI was conducted, power accounted for 27% of the variance in empathy and the guilt-fear of failure imagination contributed 9%. Therefore, the combination of imagination and power is a better predictor of empathy than power alone.

Study findings are interpreted to indicate that mental health nurses' empathy with clients is associated with their imaginative and knowing participation in change.

Conclusions

Based on the findings for the 169 mental health nurses in this study, the results for the main variables are:

- Imagination is positively and significantly related to power.
- Power is positively and significantly related
Imagination is positively and significantly related to empathy.

Based on the supplementary findings for the 169 mental health nurses participating in this study:

Power is a stronger predictor of empathy than positive-constructive imagination alone or in combination with guilt-fear of failure and poor attentional control imagination.

Imagination is a better predictor of empathy when combined with power.

There are no significant differences in manifestations of imagination, power, or empathy based on formal education in nursing or a related field, experience, or certification.

Imagination scores are higher with the use of imagery and meditation and lower with certification.

Empathy, total power, and aspects of power and imagination differ according to personal life experiences. Scores are lower for those who have never married or become parents, have a physical illness, or have a mentally ill loved one.

Attentional control imagination is associated with practice setting. Distractability increases in hospitals and university settings and decreases in private practice settings.
Attentional control imagination is associated with years in psychotherapy. Distractability decreases as years in personal therapy increase.

**Recommendations for Future Study**

Investigate imagination in nurses engaged in direct and indirect practice using the three scales of the SIPI, the Human Field Image Metaphor Scale (Johnston, 1993), and the Assessment of Dream Experience (Watson, 1993). This would identify the discriminant validity of the instruments based on the Rogerian model across wide levels of nursing practice.

Conduct further refinements on the SIPI to identify whether a summative score of the items, rather than individual scale scores, would more validly predict empathy scores.

Combine qualitative and quantitative methods to investigate the empathic experience of mental health nurses in the Science of Unitary Human Beings. This would clarify and verify the conceptualization of empathy within Rogers' model.

Replicate this study with male mental health nurses and recent graduates from Master's programs in mental health nursing. This would increase generalizability to more diverse groups.

Replicate this study comparing female
Master's-prepared mental health nurses with different ethnic backgrounds. This would begin to identify the contribution of participants' culture in Rogerian studies.

Replicate this study from the perspective of the client rather than the mental health nurse and from nurse-client dyads. This would validate the mutuality of fields postulated by Rogers.

Replicate this study using mental health care providers other than nurses. This would provide information to validate Rogers' model, and the PKPCT in particular, as relevant with diverse mental health care providers and would increase the knowledge base for interdisciplinary collaboration between mental health nurses and other clinicians.

Triangulate data from other measures of personal awareness, like self esteem and psychic ability, with the PKPCT and naturalistic observations of mental health nurses purporting to use themselves therapeutically with clients. This would validate the awareness aspect of power as manifested in actual practice.

Redesign the PKPCT to use metaphors or rating scales. This would contribute to the refinement of the instrument and clarify the directions.

Conduct a concept analysis of empathy within the
Rogerian model. This would distinguish the concept from related concepts like personal knowing, telepathy, compassion, and intuition, and provide both exemplars and contrary cases.

Investigate the empathy outcomes of a systematic imagination empowerment program in nurses practicing in varied specialties. This could provide information on cost effective strategies to improve quality of care for clients and professional satisfaction for nurses.

Conduct experimental study of imagination, power, and empathy in mental health nurses before and after they actually use Rogers' model in their practice. This would extend the present basic to applied inquiry.

Implications of the Study

Mental health nurses use knowledge that has been generated within nursing frameworks although this is still a fairly recent tendency. The traditional norms of the profession are to borrow extensively from other disciplines like psychology, community health, medicine, philosophy, and the arts. By adding the findings of this study to the body of knowledge about irreducible, unitary human beings, the researcher has opened one small channel of light for mental health
nurses in their struggles identified by Armstrong and Kelly (1995) to use a grand model like Rogers' in their practice. In demonstrating that imagination, power, and empathy are related manifestations of the nurses themselves, a vista becomes possible for future researchers. The congruence, validity, and reliability of the SIPI and the ECRS with Rogers' model has been explored. The data base for the PKPCT, VII has been expanded to include nurses in one specialty practice. A different way of thinking about the mystique of empathy has been suggested.

Almost 30 years ago, Rogers (1966) described nursing's story in *The Education Violet*, the New York University newspaper, as a magnificent epic of service in compassionate concern for human beings that synthesizes many learnings. Rogers (1994b) believed that we exude energy (p.34) and that the energy of imagination is increasingly important in providing the knowledge for creative promotion of well-being (p. 35). Mental health nurses are especially well suited to invite and nurture participation in the process of change in themselves and their clients with imagination and empathy. They may be the only health care providers today with enough knowledge about the wholeness of persons to optimize the continuity of care for those with mental illness and
their families, and for those seeking personal change without clarity of goals, courage of intentions, or choice of means. As knowing participants in change, mental health nurses pattern imaginative mutual process that meets human diversity with empathic flow.


La Monica, E. L. (1986). *La Monica Empathy Profile*. Tuxedo, NY: XICOM.


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Appendices A, B & C
Pages 191-204

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Section D
PERSONAL DATA INVENTORY

Finally, I would like to ask you some questions about yourself to help interpret the results.

Q-1 The state in which you presently live? ______________________________

Q-2 The state(s) in which you currently practice? ________________________

Q-3 Your gender (Please circle the correct number).
   1  Female
   2  Male

Q-4 Number of years of clinical experience in Mental Health and/or Addictions Nursing. _________________________________________________________

Q-5 Number of years of clinical experience in other types of nursing practice, e.g. Med-Surg, Peds, OB. _____________________________________________

Q-6 Highest level of formal education. (Circle number of your answer.)
   1  MASTERS DEGREE IN NURSING (MSN, MA Med)
   2  MASTERS DEGREE IN OTHER FIELD (MA, MS)
   3  DOCTORAL DEGREE IN NURSING (PhD, DNSc, EdD)
   4  DOCTORAL DEGREE IN OTHER FIELD
   5  OTHER _______________________________________________________

   Please specify

Q-7 Number of years of formal psychotherapy/institute education.
   1  NONE
   2  1 TO 2 YEARS (specify type) ______________________________
   3  3 TO 4 YEARS (specify type) ______________________________

Q-8 Type of certification held in Mental Health Nursing.
   1  NONE
   2  ANA GENERALIST
   3  ANA SPECIALIST - Adult or child? ______________________________
   4  OTHER _______________________________________________________

   Please specify

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Q-9 Number of years in personal psychotherapy. (Circle number)
1  NONE
2  1 TO 3 YEARS
3  4 TO 6 YEARS
4  7 TO 9 YEARS
5  MORE THAN 10 YEARS

  Frequency: ____________________  Type: ____________________
  Currently in process? ____________________

Q-10 Are you currently receiving clinical supervision for your work with clients?
1  NO
2  YES - Frequency: ____________________

Q-11 Do you attend any support groups, e.g., nurses' network, self-help AA, OA, Parents Without Partners?
1  NO
2  YES - Please specify: _____________________________________________

Q-12 Do you have any physical health problems?
1  NO
2  YES - Please specify: _____________________________________________

Q-13 Are you currently experiencing any serious mental health or addiction problems?
1  NO
2  YES - Please specify: _____________________________________________

Q-14 Has anyone you love ever experienced serious mental illness or addiction?
1  NO
2  YES - Please specify: _____________________________________________

Q-15 Do you practice any form of meditation?
1  NO
2  YES - Frequency: ___________  Type: ____________________
Q-16 Do you use guided imagery/relaxation techniques?
1 NO
2 YES - Frequency: _______________ Type: _______________

Q-17 Do you keep a journal of your dreams and fantasies?
1 NO
2 YES

Q-18 What is your most frequently recurring dream or fantasy?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Q-19 Why did you choose Mental Health and/or Addictions Nursing practice?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Q-20 Your present marital status. (Circle number)
1 NEVER MARRIED
2 MARRIED
3 DIVORCED
4 SEPARATED
5 WIDOWED
6 OTHER __________________________
   Please specify

Q-21 Number of children you have in each age group. (If none, write "0").

____ UNDER 5 YEARS OLD
____ 5 TO 13
____ 14 TO 18
____ 19 TO 24
____ 25 AND OVER
Q-22 Your present age. _____ YEARS

Q-23 Your ethnic background. (Circle number)
1 ASIAN
2 BLACK
3 CAUCASIAN
4 HISPANIC
5 NATIVE AMERICAN (AMERICAN INDIAN)
6 OTHER

Please specify

Q-24 Your employment status. (Circle number)
1 PART-TIME
2 FULL-TIME

Q-25 Your practice setting(s). (Circle number)
1 ACUTE INPATIENT HOSPITAL
2 OUTPATIENT CLINIC
3 EMPLOYEES'/STUDENT HEALTH SERVICE
4 UNIVERSITY SETTING
5 PRIVATE PRACTICE
6 OTHER

Please specify

Q-26 Your job title? (Circle number)
1 CLINICAL SPECIALIST
2 EDUCATION SPECIALIST
3 ASST./PROFESSOR OF NURSING
4 PSYCHOTHERAPIST
5 ASST./DIRECTOR OF NURSING
6 OTHER

Please specify

Q-27 To which Mental Health and Addictions Nursing organizations do you belong? (Circle number)
1 ANA Council of Psychiatric Nursing
2 American Psychiatric Nursing Association
3 The Society for Education and Research in Psychiatric-Mental Health Nursing
4 National Nurses' Society on Addictions
5 The Association of Child and Adolescent Psychiatric Nurses
6 Other

Please specify

Q-28 How do you achieve, sustain, or enhance your understanding of clients and yourself? __________________________________________

________________________________________

________________________________________

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Is there anything else you would like to tell me about your understanding of yourself, your clients, or your role as a mental health nurse? If so, please use this space for that purpose.

Also, any comments you may wish to make regarding future efforts to study mental health nurses' patterns of understanding would be appreciated, either here or in a separate letter.

**************************************************

Your contribution to this effort is very greatly appreciated. If you would like a summary of results, please print your name and address on the enclosed return postcard. (NOT on this questionnaire.) I will see that you get it.
APPENDIX B

COVER LETTER TO PARTICIPANTS

February, 1994

The nursing profession is "coming of age" at a time of great concern for the quality of health care that clients receive. Mental health nurses in particular are surrounded by questions about their healing potential. If we could identify key factors in our unique expertise that are associated with the quality of care that we give, we may sharpen our identity and importance in the health care arena.

You have been selected as one of a special number of mental health nurses to take part in a study investigating this matter. In order that the findings be truly representative it is important that each questionnaire be completed and returned. Your participation is absolutely essential.

You may be assured of complete confidentiality. The enclosed postcard has an identification number for mailing purposes only. This is so that I can check your name off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire and no identifying information will be reported.

Not only will you be making an important contribution, you may also find the results interesting and valuable. You may receive a summary of the results by checking the appropriate box on the return postcard, and printing your name and address below it. Please do not put this information on the questionnaire itself.

I know your time is valuable. Your cooperation is greatly appreciated. When you have completed the enclosed questionnaire, return it in the enclosed stamped envelope within two weeks. I would be most happy to answer any questions you might have.

Thank you for your assistance.

Sincerely,

Maureen B. Doyle, RN; MEd; CS, CARN
Mental Health & Addictions Nursing Specialist
Doctoral Candidate/NYU

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APPENDIX C

REPLY POSTCARD

Maureen B. Doyle, RN; MEd; CS, CARN
Mental Health & Addictions Nursing Specialist
Doctoral Candidate/New York University

ID # __________________________ Date __________________________

( ) I have completed and returned the questionnaire booklet for your study.
I request that a summary be sent to:

Name: ______________________________________________________

Address: ____________________________________________________

________________________________________________________________

Thank you very much for your time and assistance. If you have any
questions, please call me (Maureen B. Doyle) at [redacted].
APPENDIX D

FOLLOW-UP POSTCARD

Dear Colleague,

Recently I sent you a questionnaire on nurses’ perceptions of themselves and their relationships with clients. Its findings, I think, will be of considerable value to our specialty. You are very important to the success of this project.

If you have already completed and returned it, please accept my sincere thanks. If not, would you please take the time from your busy schedule to complete and return the form? If by some chance you did not receive the questionnaire, or it got misplaced, please call me right now, collect [redacted] and I will get another one in the mail to you today.

Sincerely,

Maureen B. Doyle, Researcher

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APPENDIX E
FOLLOW-UP LETTER

New York University
School of Education, Health, Nursing, and Arts Professions
Division of Nursing

February 1994

About three weeks ago I wrote to you seeking your thoughts and feelings regarding yourself and clients. As of today, I have not received your completed questionnaire.

This study was undertaken because little information exists about how mental health nurses perceive themselves and clients. Unless we understand ourselves and our therapeutic relations with clients, it is difficult to envision how we will mature professionally.

I am writing to you again because of the significance each questionnaire has to the usefulness of the study. In order for the results to be truly representative, your participation is essential. Confidentiality and your anonymity will be strictly maintained.

In the event that your questionnaire has been misplaced, another is enclosed.

Your cooperation is greatly appreciated.

Cordially,

Maureen B. Doyle, RN; MEd; CS, CARN
Mental Health & Addictions Nursing Specialist
Doctoral Candidate/NYU
APPENDIX F

SELECTED EXAMPLES OF REASONS FOR CHOOSING
MENTAL HEALTH NURSING PRACTICE
(N = 163, n = 43)

Self-perceived Talent

- I am an excellent listener, extremely interested in the field. (#015)

- I'm a good listener who believes people can change and can enrich their lives through self exploration and the change it can engender. I like facilitating the process of client's efforts to develop health...(#134)

- ...even as a child I was always interested in what people were thinking and feeling, e.g., in first grade a friend was "left back." The class took a little field trip to the second grade. I later asked my friend if that trip upset her. (#044)

- I felt I could understand the patients but had some difficulty with family's distress and distrust. I wanted to learn more about people, not necessarily the mentally ill. Then I learned to really love the field. My first choice was OB but I never went back. (#097)

- This type of nursing offered an opportunity for creative use of self. I'm a family systems therapist in independent practice. It's very rewarding. I also teach other mental health professionals. (#163)

- I believe I have an uncommonly strong ability to understand emotional/mental suffering which is so often misunderstood. (#183)

- I'm fascinated with understanding human behavior--mine and others. It facilitates my own personal and spiritual growth. It is a forever challenging and learning field. (#227)
Talent Perceived by Another Mental Health Professional

- I was in therapy and started to read a lot. My therapist suggested graduate education saying I would have a knack for therapy. (#035)

- I was told I was a "natural" in 1977. I like to work with patients and enjoy nursing practice which focuses on communication inherent in mental health nursing. (#245)

- I received professional nurturing of my abilities in my first job... (#175)

- On the Myers-Briggs I'm an INFJ... fascinated with relationship dynamics. (#257)

- I had a most interesting role model in undergraduate and mentor in graduate school who supported my fascination with human behavior. (#187)

- I am a valued team member in the psychiatric milieu, not a subordinate. (#270)

Personal/Family Experiences

- My father was a psychiatrist and psychoanalyst and instilled in me a strong desire to understand myself and other people better. (#218)

- My father was mentally ill and I wanted to gain mastery over my childhood fears. (#278)

- Because of my own confusing adolescence. (#132)

- Watching my mother's pain from depression, feeling helplessness during my teens. (#230)

- My first husband was killed suddenly in a wreck in 1975. I had two small sons and was devastated. In the process of my healing, I became more accepting of myself and my feeling. Going into this area of nursing fit with the person I was becoming and has brought some sense or meaning to my losses. (#114)

- My mother died when I was 12 years old in a car accident. My family went down the tubes and I
went into Psych Nursing to help others who experience sudden loss. I had no one to talk to after my mother died. (#096)

- Out of my own therapy and divorce process, fell in love with doing therapy, helping people to heal on a deeper level including the spiritual aspect. (#277)

- A life crisis lead me to use my usual coping with situations I don't understand: I went to the library. I read copiously about mental illness, became intrigued, wanted to know more. Here I am! (#024)

- Fascinated by people, joy in helping them. Influenced by the pain I've seen in those close to me. (#236)

- Initially, 30 years ago, ...as a wounded healer. Now my focus is more holistic and spiritual. (#086)

Wish to Address Negative Experiences in Other Nursing Specialties

- I disliked Med-Surg. (#153)

- ...lack of emotional support for family and patients on cancer research unit. (#075)

- I saw that I could make a difference in the lives of geriatric persons with problems by really using nursing standards and my creativity. (#040)

- Mental health nursing appealed to my holistic orientation. I found patients in ICU recovered more rapidly when not depressed. (#138)

- I got tired of Med-Surg and always being too busy doing things and not able to talk with people...(#158)

- I believe in a holistic approach to nursing. One in which mind, body, and spirit are considered and cared for and the person is viewed as a human being in relationship. Medical areas don't seem to acknowledge this view of reality. (#199)
- I liked how interpersonal and low tech it was and the therapeutic use of self. I was afraid of death and wanted to avoid dying people. (#272)

- While over 50% of hospital beds in USA are occupied by the mentally ill, only 5% of nurses become involved. I decided I would give one year, instead I stayed 21 years. (#045)

- Communication is the central issue of all nursing. One can't hide behind treatment protocols. What a challenge! (#215)

- Needed a change. Burned out in critical care. Too tiring. (#016)

- General desire to help others help themselves, curiosity re: the mentally ill, dissatisfaction with hospital nursing role. (#151)

- I can sit down and talk with patients and not be interrupted. (#026)

- Desired more interpersonal relationships with clients and autonomy of practice. (#140)

- As a director of a student health service, I saw many mental health problems and wanted to be more knowledgable and effective. (#076)

- To have a broader, larger, more varied scope of practice. (#142)

- For job security. (#246)

Convenience/Lucky Timing

- I was tired of general nursing and a new psych hospital opened. (#185)

- The MSN program available at the time. (#267)

- It was my first job after graduation. I had wanted a community health position but was not able to get one. (#092)

- Originally wanted to move into Peds from Med-Surg in 1975 and I was only able to secure
a position in a pediatric psychiatric hospital. (#020)

- Federally funded education. (#232)

- The VA system assigned me and I now wouldn't work anywhere else. (#144)

- It seemed to be where nursing was headed when I entered graduate school in the 1970's. (#265)

Bewildered/Mystery

- I don't know! (#104)

- Good question! (#155)

- My calling. (#010)
APPENDIX G

RESPONSES TO MOST FREQUENTLY RECURRING DREAM
(N = 124)

Positive-Constructive

Pleasant Fantasies

1 049 Women are able to demonstrate and be all that they are without socialized fears.

2 072 Designing and building a home on a piece of waterfront property I own down South.

3 114 To be a clinical nurse specialist in a large institution (job hunter).

4 277 I'm eight months pregnant--dream about having a baby.

5 198a Write fiction and try out plots.

6 024 To run a bed and breakfast at the seashore specializing in Victorian weddings.

7 107 ...have a nice house, children, not to have to work two jobs.

8 134 Maintaining physical and emotional health. Through daily attention to diet, exercise, relaxation techniques, I remain sound in body, mind, and spirit, and become wise with age.

9 197 Having days alone in my home and sustained peace of mind.

10 041 Changes with time--follow my dreams and use active imagination.

11 044 Dream: Being with friends and colleagues, laughing and talking with friends
Fantasy: Decorating a room in my house.

12 170 Moving into a big new house.
Having a busy, economic-driven practice.
Finding a perfect mate.
Making a big contribution to decrease violence and increase the quality of life for the chronically mentally ill.
None recurrently but I dream a lot—always feel recharged even after difficult ones.
Leisure pursuits that are underrepresented in my life.
That I will be able to open a school of nursing serving as dean of that school.
In my log house with deer grazing and boats sailing by.
How my job can impact care.
Meeting interesting people.
That I am effectively communicating with an authority figure.
Spending time outdoors.
Being a prima ballerina and dancing with Barisnnykov.
Writing a bestselling novel that becomes a motion picture and has a positive impact.
Growing old and enjoying life to its fullest with my husband.
I am quite successful.
I am exploring a new situation, house, room.
At a large state hospital—opportunity to further my education.
Reviewing or imagining past or future conversations.
Peace on earth.
Family issues oriented, happy.
33256 Being selected to be part of a project with someone famous, like President Clinton.

34239 Preaching the gospel in foreign lands, praying for others' healing, deliverance, seeing the miraculous happen.

35230 Nursing embraces wellness-health concept and run with it including spiritual care of patients--nursing on the forefront, nurses as true healers. Nursing faculty would buy and implant that we teach and practice wholistically.

36245 Self growth--actualization--unconditional love

37109 Doing floral design out of my house as a small business.

38118 I'm wealthy, beautiful--fly away to a beautiful island with Tom Sellick.

39106 Situations involving strong emotions and positive changes I want to make.

40172 Joyously accepting what happens.

41199 Healing houses where all will be in harmony.

42215 That my parents will accept my marriage to a black man and realize how happy we are.

43052 Pleasant future events in my family.

44026 I have a huge practice earning 3-5 K/month and still have 3-4 days/week with family.

45183 Extremely successful private practice attained through service to the one life and resulting in abundance.

46272a Writing and publishing a paper in nursing that brings recognition and fame.

47066 About happy relationships.

48048 I've lost my purse or my cards and while searching for them, I meet interesting people along the way.
Pleasureful time with loved ones and friends.

I'm successful, recognized, achieving.

Being more influential, powerful, having a greater impact on others.

None recur, all different...

Doing or saying something more effective in a particular situation.

Being a heroine of some sort, acclamation by peers.

Themes develop especially as my current Jungian analysis progresses...the marvelous, loving animus dream. The strong, warm, open, welcoming woman is also a recurring dream.

Administrator and/or owner of treatment facility.

That conservatism becomes a far-reaching reality in this country. That rugged individualism overcomes dependence and irresponsibility.

Rock climbing...my real goal two years ago. Other climbing images or Kayaking...

Changing my career and meeting God.

Conducting meaningful, important research with significant findings.

Graduation.

Graduation.

Travel

Escaping the mundane--living in a villa in Southern France.

Traveling to a third world country, living and helping there.

Sitting in a Swiss Chalet in the Alps with meadows in bloom.
Traveling
5 009 Travel and adventure
6 071 Flying
7 103 Traveling and enjoying the older countries of the world.
8 167 To have plenty of money to travel

Money
1 198b Winning the lotto.
2 257 Winning the lottery.
3 276 Winning something, like money.
4 097 Winning the lottery and figuring how to disburse the millions.
5 187 To be independently wealthy.
6 077 Winning the lottery.
7 060 Win a big jackpot and be free of financial stress but never play any game of chance.

Sex
1 260 Being a lover.
2 271 ? Too personal to share.
3 116 Sexually exciting situations with sensuous people and celebrities.
4 090 Sex.
5 231 Sexual.
6 031 Making love with person I'm attracted to.
7 096 Of making love.
Beach, Ocean, Waves

1 054 Being with my family at the beach on a beautiful late summer afternoon.
2 039 Wandering a beach.
3 006 Ocean waves.
4 210 Standing on a beach, listening to waves, looking at the sky and water.
5 099 Beautiful scenery—lakes, beaches.
6 047a Sitting on a beautiful beach or sailing with friends.

Retiring

1 265 Retiring from academia and beginning a different lifestyle change though maintaining a practice as a CNS.
2 220 I am retired and living in Southern (state).
3 259b Retiring to my house in (state), remodeling, gardening.
4 198c Being able to retire (age).

Combinations

1 169 Being wealthy and traveling a lot.
2 104 Retiring and traveling.
3 177 Going away with husband for relaxing WE at sea or mountains, sailing in Ireland, sexual but also evening home alone.

Guilt-Fear of Failure

Anxiety re: School

1 278 Performance anxiety related to classroom teaching or PhD work.
2 011 Being late to a final exam.

3 017 Teaching a class and being unprepared or attending a class and realizing the semester has passed and I did nothing.

4 272b Even though I graduated from college, I got in without graduating from high school. I was required to go back and graduated but I was flunking out however. I'd miss classes, couldn't find room.

Death of Self or Loved One

1 242a Death and dying of my mother and grandmother.

2 157 Talking with deceased husband.

3 204 Dying suddenly and then overhearing others' grief at my passing.

4 020 That I am able to be with my father in the present though he died (some) years ago.

5 113 My own death—without pain, with comfort.

6 037 I will die of cancer before they find something to help my son lead a productive life.

Incompetence at work with people

1 125 Obsessing—muddling through interpersonal relations or work situation.

2 132 That I am inadequate to do the work I'm hired to do. I'll be discovered as a fraud.

3 262 Regressive—unfinished/unresolved issues--return to former school or work setting.

4 272c Going to airport to fly to wonderful destination with group of people but through errors and delay missing the plane.

5 028 Losing someone, my parents, husband, or self and not handling obligations alone.

6 047b Being lost and late in large city alone
When I am overextended I have variations of an anxiety dream where it is night and I haven't given or even organized medications for the morning.

Not being able to care for a child/infant/fetus that I am supposed to care for.

Frustration (that lingers).

**Poor Attentional Control**

**Interruptions/Preoccupations**

As an adult...unconscious warning to say no more often.

Someone is always interrupting my privacy in some way.

What the future will be like...

Panic and hastily packing for a trip which is completely unlike me as I pack early and with care.

**Vigilance re: External Danger**

As a child, a bear is climbing up the side of the house into my window--related to father's attempt to molest me.

As a child, a strange man came into our kitchen and threw a bottle of white powder which broke and set the house on fire...

Loved ones becoming ill.

Dark stranger dream.
APPENDIX H
FACTOR ANALYSIS OF POWER

The 48 items of the Power as Knowing Participation in Change Test (PKPCT) were factor analyzed together in order to seek confirmation of Barrett's (1983) original factor structure. Eleven factors with eigenvalues greater than 1.0 emerged on the initial factor analysis. All but two items loaded on Factor I with loadings greater than .40. Profound had .38 loading, intentional had a .39 loading, and both items were on the awareness scale. All other factors lacked the minimum requirement of three items that clearly load in order for the factor to be considered viable (Kim & Mueller, 1978).

The first factor had an eigenvalue of 18.2 and accounted for 37.9% of the variance. (See Table 29). There were only two other items loading on Factors I and VI respectively which had loadings greater than .40. These factors accounted for much smaller percentages of variances (range 2.5 to 6.2).

Varimax rotation revealed a four factor solution and that the valuable item on the choices scale failed to load. (See Table 30). None of the
awareness items loaded on Factor I, but six awareness items loaded on Factors II and III respectively. Five cross loads are in the involvement scale and link Factors I with IV and II with IV. These findings are similar to the pattern Trangenstein (1988) reported in factor analyzing PKPCT responses of 303 staff nurses.

Eighteen items constitute Factor I including five choices, six freedom, and seven involvement scale items. Four items (expanding, seeking, pleasant, and leading) loaded on three scales and the freedom item loaded on two scales of this factor.

Factor II appears to combine the six awareness and six choices items. The informed and orderly items loaded on three scales of this factor.

Factor III combines the remaining six awareness with four freedom items. The assertive, profound, and valuable items loaded on two of the scales of this factor.

Factor IV ties eight involvement with three freedom items in addition to the five cross loads described above. The important item loaded on three scales and the intentional item loaded on two scales of this factor.

The four factor solution generated for this sample is similar to Trangenstein's (1988) findings and different from Barrett's (1983) finding of one
common factor in her final study and a two factor solution in her pilot study. Together the four factors found in this study explain 60% of the variance and pose an optimistic outlook for future instrument refinement using a more adequate sample size. Whether the PKPCT varies across populations is still unknown; however, there were several consistencies noted when used with nurses from diverse education and experience backgrounds. Unlike Trangenstein (1988), this researcher found no suggestion of systematic error by participants responding in the same way to any item without regard to the four concepts/scales of awareness, choices, freedom, and involvement.

The recommended number of participants for performing a factor analysis is five per item on the instrument (Munro, Visintainer, & Page, 1986). This factor analysis was performed with 30% fewer than recommended participants. The results are, however, similar to those obtained by Trangenstein (1988). Additional testing with larger samples is strongly recommended to determine if factorial validity can be replicated.
TABLE 29
FACTOR ANALYSIS OF POWER AS KNOWING PARTICIPATION IN CHANGE TEST: UNROTATED FACTOR STRUCTURE MATRIX

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Eigenvalue | 18 | 3 | ... | 1 |
% Variance | 38 | 6 | ... | 2 |

Decimal points are omitted
TABLE 30
FACTOR ANALYSIS OF POWER AS KNOWING PARTICIPATION IN CHANGE TEST: VARIMAX ROTATION

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Decimal points are omitted

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